

VERTICAL RESTRAINTS AND LABOR MARKETS IN FRANCHISED INDUSTRIES

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ABSTRACT

This article combines 530 digitized Franchise Disclosure Documents and standard contracts with employer-identified job ads from Burning Glass Technologies to establish stylized facts about franchising labor markets and their relation to the vertical restraints and contractual provisions that limit the autonomy of franchisees vis a vis their franchisors. We report novel findings about the application of vertical restraints like Resale Price Maintenance, Exclusive Dealing, and No-poaching Restrictions, among many others, to a low wage workforce. A legal regime that favors the franchising business model incentivizes franchisees to profit at the expense of workers and to limit egalitarian tendencies operating in the workplace.

Keywords: Vertical restraints; franchising; monopsony; market power; antitrust

1. INTRODUCTION

The franchising business model consists of legally independent but economically inter-related firms. The franchisor is typically a nationally- or regionally known brand, and local franchisees either distribute the franchisor's centrally-

manufactured output or perform the function associated with its brand, offering standardized products and services (sometimes at standardized retail prices) and operating by a standard set of procedures.¹

Vertical restraints incorporated in a standard contract and operators' manual issued by the franchisor to its franchisees are integral to the business model. The claim at the core of this article is that exercising economic control at a distance, across the legal boundary of the firm, by means of vertical restraints, is a strategy whereby labor can be kept separate from profits, diminishing internal pressure for pay equity or access to corporate benefits that might operate in a unitary firm. At the same time, vertical control by the franchisor incentivizes middle management (i.e., franchisees in this application) to earn their profits by extracting surplus from workers rather than making demands on other counterparties, most especially the franchisor (and its own stakeholders).

The term vertical restraints refers to contracts or other arrangements between actors in adjacent markets that preempt a material business decision by one or the other party (e.g. with whom to deal, or what prices to set), pertaining to a transaction or economic relationship other than the bilateral one between the contracting parties themselves (Paul, 2023). Vertical restraints include

- *Resale Price Maintenance*: one firm sets the retail price at which a different firm sells its own product to consumers.
- *Exclusive Dealing*: one firm requires that as a condition of doing business with it, the counterparty must not buy from or sell to its competitors.
- *Exclusive Supply*: one firm requires that its counterparty source its inventory through contracts negotiated by the former.
- *Full-line Forcing*: one firm mandates that the counterparty sell *all* of the products it sells or sources, as opposed to picking and choosing among them.
- *Exclusive Territories*: one firm grants the counterparty sole distribution rights in a given territory, usually though not necessarily defined geographically.

as well as others that are explained below.

The legality and scope of vertical restraints has historically been the subject of competition policy. In the United States, between 1967 and 1977, the legal status of vertical non-price restraints such as exclusive dealing, exclusive supply contracts, and exclusive territories shifted from de facto illegality to de facto legality (Callaci, 2021a). By 2007, vertical price restraints, i.e. Resale Price Maintenance, had also become legal in functionally all cases, at least under federal antitrust jurisprudence.²

The economic justification for the shift in policy toward vertical price and non-price restraints was that they typically serve to enhance rather than reduce competition. "Restricted dealing is a way to compete," according to Judge Frank Easterbrook, because "restricted dealing is a form of cooperation. One firm (the retailer) agrees to do things the way a manufacturer specifies, just as an employee does things within an integrated firm. The agreement is not a displacement of the market. Such contracts are the market at work" (Easterbrook, 1984). The reasoning is that vertical restraints are analogous to within-firm coordination,

and within-firm coordination is by definition efficiency-enhancing or else it wouldn't take place within the firm (Coase, 1937). Ergo vertical restraints between legally separate but economically related firms are also efficiency-enhancing and by dint of that, pro-competitive. One reason why is that greater control by the manufacturer (franchisor, in this application) enhances the ability of the chain as a whole to compete with other chains. For example, if McDonalds franchisees aren't competing against one another by picking and choosing which McDonald's products to carry, what prices to charge, or how to configure their stores, McDonalds as a whole will be a more effective competitor against Burger King.

Much of the literature on vertical restraints focuses on "product distribution" franchising, in which one firm (for example, General Motors or Exxon) enters an exclusive contracting arrangement with a downstream distributor to sell its branded goods, through auto dealerships or retail gasoline stations, respectively. In contrast, under "business format" franchising, of which the archetype is the fast food industry, a firm licenses a franchisee to operate an entire "business format" under its brand name. McDonalds franchisees are not dealers of McDonalds manufactured goods, but are rather units of a chain operating under a shared brand. While much of the economic logic carries over from product distribution to business format franchising, the reader should keep in mind that the evidence presented in this article comes almost exclusively from business format franchising contracts. For example, when we use the phrase Resale Price Maintenance to refer to the vertical restraint in the McDonalds franchise chain we mean a centrally imposed retail price for a given product, like a Big Mac or the "Dollar Menu." No good is actually "resold."

Exactly what constitutes the greater efficiency of within-firm coordination, or in the case of franchising, within-franchise-chain coordination, enabled by vertical restraints, according to the literature that prefigures the change in legal status? One argument is that vertical restraints solve a principal agent problem: the franchisor gets paid via a royalty on gross revenue, hence it wants to maximize revenue, which (if demand is elastic in a national output market) means selling at a low retail price. The franchisee, by contrast, maximizes profit in its market where its residual demand curve may be less elastic, which means a high per-unit profit margin and therefore a higher retail price than the franchisor would desire. Thus, legally enabling the franchisor to mandate lower retail prices and margins for the franchisee would cause more product to be sold in the final output market. That is the so-called "Elimination of Double Marginalization" or EDM (Spengler, 1950), which aligns the interests of consumers with those of the franchisor, at the expense of franchisees. For example:

When double marginalization is an issue, the imposition of vertical restraints will not only increase the overall efficiency of the vertical structure but also lead to lower prices for customers. Thus restraints are usually welfare enhancing when used to solve the successive-monopoly problem. (Lafontaine & Slade, 2005)

A different but related argument is that the efficiency resulting from vertical restraints may come from obtaining more effort from franchisees the more

dependent they are on a single franchisor. For example: “The supplier may get improved product promotions from those with exclusive contracts. There will be added incentive to promote the seller’s product vigorously if that is all the buyer has to sell to the final consumer” (Blair & Kaserman, 1983). This argument also posits the existence of a principal agent problem, to which vertical restraints are the solution. The difference between this argument and the one in the previous paragraph is which variable the franchisee is assumed to adjust against the franchisor’s interest: retail price, in the first case, or effort, in the second. Where both arguments align is in positing that greater control by the franchisor over a franchisee (removing the franchisee’s discretion over retail prices on the one hand and effort on the other) operates against the franchisee’s interest but in favor of that of consumers.

What this overlooks is that the dependence, and the greater control that franchisors may derive from it, shifts the incentives for franchisees toward other business practices, e.g., reducing labor costs, as opposed to raising prices by constraining output.

Franchisees are frequently managers of workers, and one of the types of opportunism they may engage includes “overpaying” workers. For that reason, franchising contracts that give franchisee owner managers a stake in establishment profits incentivize such managers to discipline their workforce more closely (Krueger, 1991). Vertical restraints therefore may align distributor incentives with suppliers at the expense of workers.

A more recent interpretation of vertical restraints concerns their use as a means of excluding rivals at the upstream level from the market by cutting off their channels of distribution (Asker & Bar-Isaac, 2014). The idea is that incumbent dominant suppliers would bind their distribution network to themselves using price- and non-price restraints that reward retailers with higher profits for excluding upstream rivals. The restraints operate, in effect, to share the franchisor’s monopoly profit with its affiliated distributors, which works if that shared profit is larger than what the distributors would earn from accommodating entry at the upstream level. Rather than desiring franchisees to compete fiercely against one another to lower consumer prices, in other words, a franchisor wants to reward franchisees for cooperating in keeping out a competitor to the franchisor, which it does by extending the fruits of its market power to its franchisees.

The mechanism modeled by Asker and Bar-Isaac (2014) contraposes the “Chicago” critique of antitrust liability for exclusive dealing provisions or their equivalents, namely that they cannot have the anticompetitive effect of excluding a discounting entrant, because the incumbent wouldn’t be willing to pay the retailers it’s trying to bind enough to make it worth their while to cooperate in the exclusion. But Asker and Bar-Isaac (2014)’s mechanism is similar to the argument from Blair and Kaserman (1983) in the following sense: in addition to an upstream monopoly, part of the franchisor’s profit may come from marking down wages below workers’ marginal product in what amounts to a nationwide chain. Vertical restraints that cause franchisees not to compete against one another in the labor market in effect share out that monopsony profit with franchisees. The coordination to suppress

labor market competition is a carrot that induces franchisees to accept a reduction in their autonomy (for example, to accommodate upstream entry by sourcing from a different franchisor), as opposed to the stick of an exclusive dealing contract to enforce franchisees to act in the way a franchisor would want, as contemplated by [Blair and Kaserman \(1983\)](#).

In this article, we focus on the application of vertical restraints to franchising labor markets. We bring a novel dataset to bear on the question: We link 530 digitized standard Franchise Disclosure Documents and their appended contracts (at the chain/franchisor level) with employer-identified job ads that are informative about the workers and labor markets out of which franchisees hire. That enables us to characterize the presence or absence of an array of vertical restraints used in franchising. We also use the job ads data to describe the franchising labor force by industry, occupation, and job title. We report employer concentration in franchised industries and occupations, as well as *prima facie* findings about the effect of vertical restraints on labor market competition in franchised industries.

This article contributes to the rather sparse empirical literature on vertical restraints between related business entities ([Blair & Lafontaine, 2005](#); [Felstead, 1993](#); [Lafontaine & Slade, 2005](#); [MacKay & Smith, 2014](#); [Overstreet, 1983](#); among others), all of which focus their welfare analysis on consumer-facing effects. [Krueger and Ashenfelter \(2022\)](#), [Callaci \(2021b\)](#), and [Norlander \(2025\)](#) are the closest analogs to this article, in that they all use digitized franchising contracts to characterize the share of either franchise chains or the share of workers subject to different types of vertical restraints. [Krueger and Ashenfelter \(2022\)](#) focus solely on no-poaching provisions of franchising contracts, and includes only about 25% of the contracts/franchising chains covered here. [Norlander \(2025\)](#) uses a much larger set of franchise chains whose FDDs are analyzed by machine learning. That article focuses solely on those restraints that directly implicate labor mobility: noncompete clauses and no-poach provisions. This article uses the same dataset of digitized contracts as [Callaci \(2021b\)](#), covering many different restraints in addition to no-poaching. Unlike any of the aforementioned articles, the dataset this article introduces links franchise chains directly to job ads posted by employers affiliated with the chain.

[Krueger and Ashenfelter \(2022\)](#) and [Callaci \(2021b\)](#) rely on labor market data from publicly available, non-employer-identified sources at the industry level.

Our findings could thus be viewed as a contribution to the labor literature on firm-specific pay setting: why do some firms pay more and some less, even in the same industry or occupation and to workers who appear to be quite comparable? In short, what determines firm-level pay policies ([Card, 2022](#); [Song et al., 2019](#))?

These findings also speak to the growing literature on labor market monopsony and employer market power, driven by finite firm-level labor supply elasticities ([Azar, Berry, & Marinescu, 2022](#); [Bassier et al., 2022](#); [Dube et al., 2019](#); [Dube et al., 2020](#); [Webber, 2015](#); [Yeh et al., 2022](#)). Employer concentration in particular appears to be associated with market power and firm-level discretion to set pay ([Azar et al., 2019](#); [Arnold, 2021](#); [Benmelech et al., 2022](#); [Guanziroli, 2022](#); [Rinz, 2022](#); [Prager & Schmitt, 2021](#); [Thoresson, 2024](#)), partly summarized in

Ashenfelter et al. (2022)). And beyond the concentration of employers, both horizontal no-poach agreements between them and noncompete clauses, which are conditions of employment that forbid workers from working for a different employer after the employment relationship is ended, are potential mechanisms by which competition in labor markets for workers appears to be less than perfect (Balasubramanian et al., 2022; Callaci et al., 2023; Gibson, 2024; Lafontaine et al., 2023; Lipsitz & Starr, 2022; Starr et al., 2021).

This article can be seen as building on the latter literature by investigating the prevalence of all sorts of vertical restraints and contractual provisions, in addition to no-poaching and noncompete agreements, that might suppress labor market competition in the franchising sector and, through that mechanism or otherwise, shift bargaining surplus in favor of employers. Part of the motivation for this work is to expand the definition and indicia of employer power in labor markets beyond the focus on either the horizontal concentration of employers in a labor market, or the explicit limits on worker mobility implied by both horizontal no-poaching agreements or vertical noncompete clauses explicitly binding workers to one employer, to consider other mechanisms that either create employer market power or are themselves constitutive of the exercise of employer power, such as vertical restraints and other contractual provisions in the franchising context that incentivize employers to extract surplus from workers.

This work also builds on Wilmers (2018), which investigates the effect of vertical market power in supply chains on wages. In that case, the question is whether workers are paid less in supply networks where downstream retailers or manufacturers are more dominant. This article looks at the labor market on the other end of the supply chain, namely, among the retailers and distributors who are subject to the control of dominant franchisors. The use of vertical control techniques that disadvantage workers is central to the narrative of the “Fissured Workplace” recounted by Weil (2014), wherein a lead firm is able to control and direct the labor of a network of contractors who worsen labor standards and working conditions, compared to a model in which all the work that a lead, branded firm does is done by employees of that lead firm.

Vertical restraints in an important sense create the fissured workplace, since without the ability to control franchisee operations through vertical restraints, lead firms would be forced to directly own and operate local establishments to present a uniform brand image to the public, or else cede valuable consumer-facing brand recognition to retailers. Franchising in particular is a type of fissured workplace that has long been characterized by low wages and bad working conditions. Krueger (1991) finds that franchised restaurants pay lower wages and offer workers a flatter tenure-earnings profile than company-owned restaurants. Meanwhile Ji and Weil (2015) find that franchised fast food outlets are more likely to violate labor laws than comparable company-owned establishments. Vertical restraints, especially price restraints, seem likely candidates for mechanisms contributing to bad working conditions at franchised establishments. For example, a McDonalds franchisee reports that the company told her to “just pay your workers less” to maintain profitability in the face of the franchisor’s mandatory cut-price promotions (DePillis, 2014).

A related motivation for franchising is to ring-fence unionization and collective bargaining efforts by workers, since the enterprise bargaining system that is dominant under US labor law prohibits workers from formally negotiating with, or taking action against, entities that are not their legal employer. The currently ongoing unionization effort at Starbucks offers a telling example of the utility of franchising as a means of curtailing worker organization, since Starbucks does not employ the franchising model, unusually for its industry. If it did, it would be hard or impossible to spark a unionization “wave.” If a franchised establishment were to unionize, a franchisor would probably face no legal bar to simply terminating it, whereas closing stores that are in fact part of a national chain like Starbucks faces legal risk for retaliation.³ And the benefits to workers from unionizing a franchised establishment are far lower even absent overt retaliation, since workers at the franchisee cannot bargain with the franchisor, and the purpose of the franchising contract is to direct most of the profits to the franchisor. Moreover, some of the chains reported on in this article have existing collective bargaining agreements covering employees in the core aspect of their business, and so one motivation to employ a franchising business model for other parts of it is likely to exclude some of its workforce from having collective bargaining or other labor rights, and associated collectively bargained pay scales.

Patterns such as this motivate the present project and research agenda: to document the effect of franchising restraints on outcomes for workers, as well as labor markets generally, not just consumers, as has been typical in the economic analysis of vertical restraints. This article makes a start on that by reporting on characteristics of the labor force working in franchised industries and the application of the many restraints and contractual provisions embedded in the franchising relationship to that labor force.

Section 2 describes the matched franchise contract-job ads dataset. Section 3 reports the industry, occupation, and job title-level breakdown of the matched dataset, computes industry- and occupation level labor market concentration in that dataset, and most importantly, reports the prevalence of each restraint or contractual provision in the dataset, as well as by industry and occupation. Section 4 reports on the competitive significance of franchise no-poach clauses specifically, building on [Krueger and Ashenfelter \(2022\)](#). Section 5 reports regression results for the effect of each restraint/contractual provision on chain-level wages, net of controls. Section 6 places our findings in a larger discussion of competition policy. Section 7 concludes.

2. DATA

This article relies on matching two datasets: a dataset of digitized Franchise Disclosure Documents (FDDs) and appended contracts taken from [Callaci \(2021b\)](#), and a dataset of employer-identified job advertisements from Burning Glass Technologies (BGT).⁴

Franchising is regulated by the Federal Trade Commission under its Franchise Rule, which requires franchisors to provide an FDD to all prospective franchisees

in advance of entering into any agreement. The purpose of the regulation is to inform prospective franchisees in advance about the contract they are entering into and the obligations it places on them. For that reason, the mandatory disclosures cover how much financing they are expected to put in upfront and over time, what royalties they have to pay to the franchisor, and what business decisions they have discretion over versus where they must defer to the franchisor's policies.⁵ The essence of the Franchise Rule is that franchisees are akin to consumers at risk of being deceived into an economically disadvantageous relationship by franchisors. Hence, by disclosing the terms of the relationship in advance in a standard form, which a franchisee could in principle compare across chains with which he might consider affiliating, the risk of adverse outcomes is mitigated and franchisee-consumers are protected.⁶

Some state regulatory agencies further require franchisors to register these FDDs. The chains included in this study are all those with over 80 locations nationwide who registered their FDDs with the State of Wisconsin in 2016. Those FDDs are coded for franchisor and industry characteristics, as well as numerous binary and some continuous variables representing the presence and extent of various types of contractual provisions. Some of those provisions correspond to received notions of competition-relevant vertical restraints and some to more general aspects of the franchisor's business model, its degree of control over the franchisee, and how much control the franchisee is also expected to exert over the business. This article focuses on those provisions and/or disclosures that we think are relevant to the labor-management aspect of the franchisee's operations, or could impact workers indirectly.⁷ Appendix A explains what each restraint or provision is in detail and gives sample contract/disclosure language interpreted as signifying the presence or absence of each restraint.

FDDs also include the name of the franchisor, plus sufficient other identifying information, that it is possible to match the chain-level FDD/contract data to employer-identified job ad data from BGT, covering the entire year 2007 and the period January 2010–December 2021. The BGT data includes employer names where available (approximately 65% of postings), industry, occupation, job title, location, and annual wages for around 15% of postings until early 2018, when the share of job ads reporting salaries jumps to around 30%. The dataset created by this matching consists of all the online job ads posted by the chains whose FDDs are in the [Callaci \(2021b\)](#) dataset. We treat each FDD as corresponding to a separate franchisor/national chain, even though in many cases there is common ownership of chains by a given holding company or investor. We do not analyze that higher level of ownership in this article.

Throughout this article, we refer to the dataset of job ads created by that matching procedure as the “matched dataset.” It does not include job ads from other employers that may be affiliated with chains whose contracts are not included in that dataset, nor employers hiring in the same industries or occupations that are not affiliated with any chain whose FDD we have digitized. In Section 4, we bring in a larger universe of job ads from industries in which franchise chains hire, in order to analyze how franchise no-poaches affect employer concentration, where employers need not be franchise employers.

Typically, job ads posted by the franchisee will feature the name or brand of the franchisor, since the franchisor's trademark and brand are exactly what's valuable to the franchisee.⁸ Our matching procedure consists of parsing the employer name variable in the BGT data for identifying strings that relate that employer to the chain in the FDD data, then sifting out false positives of employer names that match those strings but which are not part of the franchising chain. Thus, we identify job ads that are related to the entire franchising network (though we may overlook false negatives in which the job ad does not identify the franchisor with which the job in question is, in fact, associated, because the employer named in the job ad does not use any trademark associated with the overall chain with which that employer is affiliated.) We cannot differentiate between ads posted by franchisees and franchisors (in particular, for company-owned units in the franchising network). But typically the vast majority of jobs posted throughout a given chain will be in occupations that correspond to that chain's core function, as opposed to "corporate" jobs posted by the franchisor for its central operations. Some chains operate solely through franchised outlets, some have a mix, and for some, the franchised aspect of the business is a subset of the chain's overall operations.

To give one example, we designate a job ad as being affiliated with the franchise chain Panera Bread if the employer name in the job ad data includes the string "panera," including "Panera Bread" and "Panerabread." We then weed out employers that have that string in their name but which appear not to be affiliated with that franchise chain, such as "Paneratech." According to Panera Bread's (2016) FDD, it had 1906 outlets nationwide, 861 of which were company-owned and 1,045 operated by franchisees. This procedure designates job ads posted by both company-owned and franchisee-owned establishments as affiliated with the chain.

Fig. 1 plots the number of job ads in the matched dataset as a monthly time series.⁹ The prevalence of online recruitment has expanded since 2010, particularly in low-wage occupations, though the coverage of online recruitment differs across occupations and industries even now. That is probably the main reason for the upward trend, although a secondary reason may be the increasing importance of franchising chains, and specifically the chains covered in our dataset, since there has been consolidation in many heavily franchised industries like fast food and hotels.

3. RESULTS

Since different chains operate in different industries and make use of workforces with different occupational breakdowns, there is a good deal of variation in the types of jobs they post. For example, the restaurant industry accounts for almost half the jobs posted, but even so, fast-food workers appear to be hired through online recruiting at a lower rate than workers in other low-wage sectors. Job ads for the restaurant sector are also less likely to include posted wages. Fig. 2 plots the share of all job ads in the matched dataset that include a posted wage, over time.

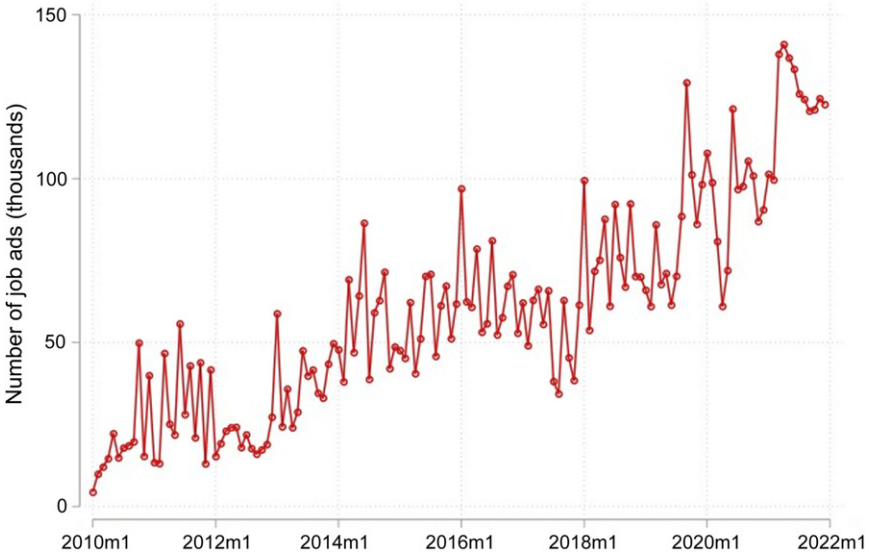


Fig. 1. Total Number of Job Ads in the Matched Dataset Over Time. The Prevalence of Online Job Ads as a Recruitment Mechanism Generally Increased From 2010 to 2022, Particularly Among Low-Wage Industries. This Plots the Time Series of the Count of Job Ads in the Matched Dataset, at a Monthly Frequency.

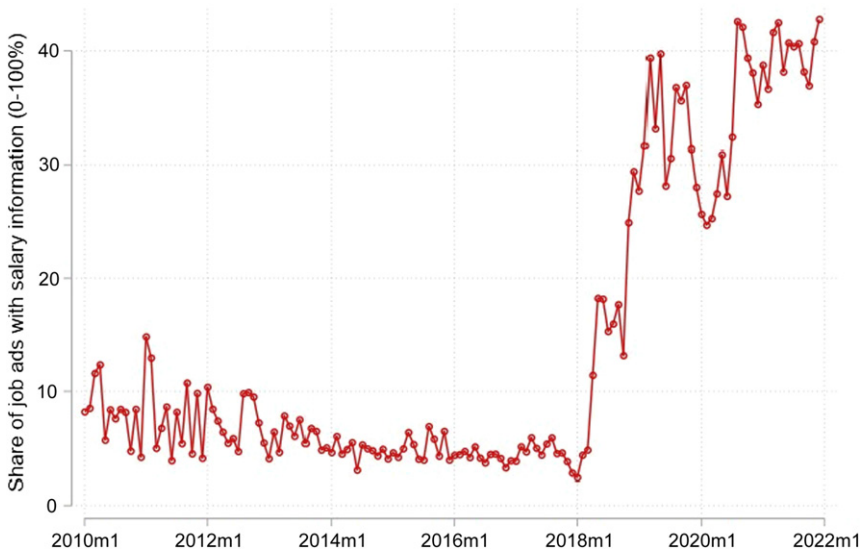


Fig. 2. Share of Job Ads With Salary Information. The Share of the Posted Job Ads that Contain Salary Information Hovers Just Under 10% Until 2018, When It Increases to Between 30 and 40%.

The discontinuous increase in the percent of job postings reporting a wage in 2018 and 2019 is driven by the introduction of new job boards with a higher prevalence of including such information than other scraped job posting sources into the source material for the Burning Glass web crawler.

Before describing the coverage of each restraint or contractual provision in the FDDs, we first report on the characteristics of the top industries, occupations, and job titles represented in the matched dataset. Industry is a characteristic of a firm or employer, while occupations are a characteristic of a worker (hence, a job ad connecting an employer to a vacancy or a worker are classified both by industry and occupation.) Job titles, which are subordinate to occupations, are also reported in the BGT data.

We follow the Burning Glass data in using 6-digit occupations according to the Standard Occupational Classification (“SOC-6”), which enables us to compare the matched dataset to Bureau of Labor Statistics Occupational Employment and Wage Statistics (OEWS) data, a nationally representative survey of establishments. [Table 1](#) lists the top 20 occupations in the matched dataset, average wages according to both BGT and OEWS data, the share of job ads that report salary information for each of the top occupations in the matched dataset, and the ratio of the count of job ads for each occupation to the total

Table 1. Top Occupations in the Matched Dataset.

Rank	Occupation	SOC-6 Code	Average Annual Earnings (BGT)	Average Annual Earnings (OEWS)	BGT Ads/Total Employment in OEWS (%)	BGT Ads with Salary Info (%)
1	Food service managers	11-9051	39,622	55,643	48	11
2	Food prep/ Serving workers	35-3021	25,156	19,435	1	13
3	Food prep/ Serving supervisors	35-1012	33,550	34,124	3	12
4	Driver/Sales workers	53-3031	33,303	28,631	6	16
5	Waiters/ Waitresses	35-3031	26,425	23,485	1	9
6	Customer service representatives	43-4051	31,589	34,928	1	14
7	Retail salespersons	41-2031	37,318	27,124	1	16
8	Supervisors of R/S workers	41-1011	47,613	43,059	2	18
9	Cooks, restaurant	35-2014	26,694	25,601	1	11
10	Hospitality desk clerks	43-4081	26,038	23,527	7	21

(Continued)

Table 1. (Continued)

Rank	Occupation	SOC-6 Code	Average Annual Earnings (BGT)	Average Annual Earnings (OEWS)	BGT Ads/Total Employment in OEWS (%)	BGT Ads with Salary Info (%)
11	Personal care aides	39-9021	31,046	21,664	1	21
12	Auto technician/ Mechanic	49-3023	37,690	41,529	2	23
13	Hairdressers/ Hairstylists	39-5012	38,486	29,253	4	6
14	Maids/ Housekeepers	37-2012	28,073	23,847	1	21
15	Janitors/ Cleaners	37-2011	28,906	26,992	0	24
16	Maintenance/ Repair workers	49-9071	34,660	39,761	1	15
17	Sales representatives	41-4012	53,691	66,988	1	18
18	Tax preparers	13-2082	56,382	44,434	12	6
19	Hosts/ Hostesses (rest/Cafes)	35-9031	23,723	21,424	2	12
20	Bakers	51-3011	28,251	27,196	4	10

Notes: This table reports the top 20 most-frequently appearing occupations in the matched dataset, along with average salaries in both the BGT and Occupational Employment and Wage Statistics (OEWS) data, as well as the ratio of the count of job ads to total employment in the occupation, according to OEWS. That ratio is computed using the OEWS annual data in 2007 and 2010–2021, and all of the BGT job ads posted in those years.

occupational employment count in OEWS, a measure of how representative the BGT data is for each occupation. In addition to variation in turnover (and hence the frequency of recruitment) across occupations, some occupations are more frequently recruited with online job postings.

Table 1 appears to suggest that among restaurant occupations, BGT data frequently mis-codes nonmanagerial occupations as managerial (SOC 11-9051), given the outsize ratio of BGT job ads to total OEWS employment in that occupation and the fact that the average earnings of BGT job ads in that occupation are substantially below average earnings in that occupation according to OEWS. This anomaly likely reflects the restaurant industry's tendency to classify non-managerial workers as managers to avoid paying them overtime. Cohen et al. (2023) document this phenomenon in much greater detail, also using the BGT data. Those authors show that it is more prevalent at employers where workers have fewer outside options and employers who face a greater likelihood of being penalized for overtime violations.

Table 2 reports the top 10 most-frequently appearing NAICS four-digit industries among all the job ads in the matched dataset and the prevalence of

Table 2. Industry and Occupational Breakdown of the Matched Dataset.

Industry Name	NAICS Code	Contracts Share (%)	Job Ads Share (%)	Top Occupations	Occ. Share of Industry Ads (%)	Average Salary (\$)
Restaurants and similar	7225	28	49	Food service managers	29	39,476
				Food prep/Serving workers	20	25,089
				Food prep/Serving supervisors	8	29,679
Traveler accommodation	7211	7	13	Hospitality desk clerks	16	25,715
				Maids/Housekeepers	11	24,587
				Waiters/Waitresses	7	24,217
Personal care services	8121	3	4	Hairdressers/Hairstylists	40	38,499
				PS workers' supervisors	17	42,275
				Massage therapists	14	57,146
Individual and family Services	6241	3	4	Personal care aides	53	31,032
				Nursing assistants	14	30,771
				Home health aides	10	31,409
Accounting-Tax Bookkeeping	5412	1	3	Tax preparers	42	56,451
				Receptionists/Information clerks	15	34,012
				Office/admin support supervisors	12	46,686
Automotive parts and accessories	4413	1	3	Auto technician/Mechanic	43	37,639
				Retail salespersons	12	64,457
				Tire repairers and changers	12	30,736
Travel arrangement and reservation	5615	1	2	Managers (all other)	8	81,090
				Sales managers	8	90,797
				Software developers	8	96,935
Automotive equip. rental and leasing	5321	2	2	Supervisors of R/S workers	14	38,785
				Vehicle operators (all other)	10	19,752
				Sales representatives	10	54,536
Building equipment contractors	2382	3	2	Janitors/Cleaners	34	25,315
				Maintenance/Repair workers	5	46,618
				Sales representatives	4	66,668
Automotive repair and maintenance	8111	3	2	Auto technician/Mechanic	44	37,004
				Customer service representatives	17	37,078
				First-line supervisors of mechanics, installers, and repairers	5	53,635

(Continued)

Table 2. (Continued)

Industry Name	NAICS Code	Contracts Share (%)	Job Ads Share (%)	Top Occupations	Occ. Share of Industry Ads (%)	Average Salary (\$)
Other	N/A	49	15	Retail salespersons	12	30,543
				Supervisors of R/S workers	9	41,627
				Customer service representatives	8	35,680

Notes: This table gives the top 10 NAICS 4 digit industries represented in the matched contracts-job ads dataset, the top three most-frequently appearing occupations within each industry, and the average annual salary for each occupation among those employed in that industry, not for the occupation in general.

each industry in both the job ads and franchising chains/FDDs. We use the industry associated with the franchising chain, according to the FDD data, as opposed to the industry reported in the job ads. There is a much larger range of industries reported in the latter, but since industry is a characteristic of an employer and the point of the matching procedure is to link together job ads posted by different nominal employers to the same chain, we prefer the industry classification based on information contained in the FDD. 49% of the matched dataset is from the restaurant industry, and a further 13% from Traveler Accommodation. Every other industry accounts for 5% or less of the matched dataset, with 15% of job ads from industries outside the top 10.

For each of the top 10 industries, [Table 2](#) then reports the top three occupations which employers affiliated with chains in that industry hire for, the share of job ads associated with that occupation (where the denominator is all job ads in the industry), and average annual salaries for that occupation-within-industry. (The same occupation can appear in multiple industries. For example, “Sales Representatives” is a top occupation for several different industries in the matched dataset.)

[Table 3](#) is structured similarly, except it lists the top 10 most-frequently-appearing occupations (6digit SOC) in the matched dataset (regardless of industry) and the top three most-frequently-appearing job titles within each occupation, along with average salaries for each occupation and job title. As previously mentioned, we can compare salaries from BGT job ads to the nationally representative salaries in OEWS. There is no equivalent nationally representative data on job titles.

The top occupations are nearly all from the restaurant/food service, hospitality, or retail sectors.

None of the top occupations has an average salary over \$50,000. The highest, for Supervisors of Retail Sales Workers, is \$47,613. Altogether, the labor force in franchised industries is a low-wage workforce.

Finally, in [Tables 4](#) and [5](#), we compute national chain-level market shares (of job ads), as well as concentration at both the national and commuting zone levels

Table 3. Occupation and Job Title Breakdown of the Combined Dataset.

Rank	Occupation (SOC-6)	Job Ads Share (%)	Average Salary (\$)	Top Job Titles	Job title Share of Occ. Ads (%)	Average Salary (\$)
1	Food service managers	15	39,622	Assistant manager	21	35,484
				Assistant restaurant manager	17	41,650
				Restaurant general manager	14	47,652
2	Food prep/ Serving workers	10	25,156	Restaurant crew	6	23,834
				Fast food team member	3	24,794
				Food team member	2	23,883
3	Food prep/ Serving supervisors	5	33,550	Restaurant shift supervisor	8	34,285
				Restaurant manager	2	43,871
				Restaurant shift leader	2	26,085
4	Driver/Sales workers	4	33,303	Delivery driver	89	33,133
				Pizza delivery driver	8	33,232
				Catering driver	0	27,781
5	Waiters/ Waitresses	3	26,425	Restaurant server	18	27,446
				Skating carhop	5	22,692
				Banquet server	5	25,166
6	Customer service repr.	3	31,589	Customer service representative	45	33,723
				Customer service associate	11	29,058
				Customer service advisor	6	43,424
7	Retail salespersons	3	37,318	Sales associate	40	30,048
				Retail sales associate	18	29,731
				Store team member	17	23,257
8	Supervisors of R/ S workers	3	47,613	Store coordinator	18	36,987
				Store manager	16	50,604
				Retail store manager	10	63,133
9	Cooks, restaurant	2	26,694	Cook	46	25,850
				Line cook	25	27,037
				Prep cook	13	24,794

(Continued)

Table 3. (Continued)

Rank	Occupation (SOC-6)	Job Ads Share (%)	Average Salary (\$)	Top Job Titles	Job title Share of Occ. Ads (%)	Average Salary (\$)
10	Hospitality desk clerks	2	26,038	Front desk agent	19	25,603
				Night auditor	17	26,079
				Guest service agent	12	26,556

Notes: This table gives the top 10 SOC 6-digit occupations represented in the matched contracts-job ads dataset (not conditional on industry), the top three most frequently appearing job titles within each occupation, and the average annual salary for each job title among those employed in that occupation, not for the job title in general.

Table 4. Market Shares and Market Concentration by Industry.

Industry	1	2	3	4	5	6	7	8	9	10	HHI (National)	HHI (local)
Restaurants and other eating places	14	11	7	7	5	4	3	3	3	3	516	1086
Traveler accommodation	36	21	7	5	5	4	4	4	2	2	1861	2489
Personal care services	50	28	7	5	3	3	1	1	1	1	3356	5139
Individual and family services	46	13	8	6	6	4	4	4	3	2	2468	4405
Accounting, tax preparation, bookkeeping, and payroll services	91	8	1	0							8380	8132
Automotive parts, accessories, and tire stores	96	3	1	0							9227	9276
Travel arrangement and reservation services	100	0	0	0							9905	9400
Automotive equipment rental and leasing	90	9	1	0	0	0	0	0	0		8136	9276
Building equipment contractors	77	11	5	3	1	1	1	1	0	0	6144	6595
Automotive repair and maintenance	45	23	8	5	5	3	3	2	2	1	2728	4596
Other amusement and recreation industries	29	29	11	6	5	3	2	2	2	2	1894	3946
Health and personal care stores	63	34	2	0	0	0	0	0	0	0	5166	7942
Gasoline stations	51	48	1								4887	7883
Furniture stores	98	2	0								9584	9495
Offices of other health practitioners	91	5	2	1	1	0	0				8378	8502
Other financial investment activities	65	35									5456	7527
Services to buildings and dwellings	23	9	9	9	8	7	6	6	4	4	1023	2608
Employment services	77	14	4	4	1	0	0				6112	7481
Offices of real estate agents and brokers	31	29	14	10	5	5	3	1	1	1	2126	4452
Other schools and instruction	39	12	11	10	7	6	5	3	3	1	1982	3904

Notes: This table gives the market share (of job ads) of each of the top 10 chains, by industry, as well as the national and commuting-zone-average (“local”) Herfindahl-Hirschman Index in each industry. In several industries among the top 20, there are fewer than 10 chains in the matched dataset. All chains are included in the HHI calculation, even where there are more than the top 10 market shares reported here.

in the top 10 industries and occupations in the matched dataset. The reported local Herfindahl-Hirschman Index (HHI) of concentration reports a simple average of HHIs across commuting zones, by either industry or occupation. Since industry is a

Table 5. Market Shares and Market Concentration by Occupation.

Occupation	1	2	3	4	5	6	7	8	9	10	HHI (National)	HHI (Local)
Food service managers	19	11	11	6	5	4	4	4	3	3	746	1288
Food prep/Serving workers	16	9	6	6	6	5	4	4	4	3	576	1095
Food prep/Serving supervisors	11	9	8	6	6	5	5	4	3	3	460	1043
Driver/Sales workers	36	21	11	11	6	5	2	1	1	1	2035	3231
Waiters/Waitresses	20	11	9	8	7	7	6	4	4	3	874	2166
Customer service representatives	17	14	10	6	6	6	3	3	3	3	747	1612
Retail salespersons	24	17	14	11	9	5	2	2	2	1	1277	2100
Supervisors of R/S workers	19	15	11	10	9	7	5	4	2	1	956	1759
Cooks, restaurant	15	11	7	6	5	4	4	3	3	2	561	1544
Hospitality desk clerks	20	10	10	9	8	4	3	3	3	2	808	1645
Personal care aides	53	7	6	6	4	3	3	3	3	2	2984	4496
Auto technician/Mechanic	55	18	7	4	4	3	2	2	1	1	3447	4780
Hairdressers/Hairstylists	81	14	2	2	1	0	0	0	0	0	6745	7193
Maids/Housekeepers	23	14	7	7	5	4	4	4	3	3	927	1841
Janitors/Cleaners	50	6	4	4	4	3	3	3	3	2	2617	3084
Maintenance/Repair workers	40	10	6	4	4	4	3	2	2	1	1772	2788
Sales representatives	20	14	7	5	3	3	3	3	3	3	765	1964
Tax preparers	86	13	1	0	0	0	0	0	0	0	7592	7809
Hosts and hostesses, restaurant, lounge, and coffee shop	16	14	12	7	7	7	6	5	4	3	858	2049
Bakers	72	5	4	3	2	2	2	2	1	1	5321	5408

Notes: This table gives the market share (of job ads) of each of the top 10 chains, by occupation, as well as the national and commuting-zone-level (“local”) Herfindahl-Hirschman Index in each occupation. In several industries among the top 20, there are fewer than 10 chains in the matched dataset. All chains are included in the HHI calculation, even where there are more than the top 10 market shares reported here.

characteristic of a chain, industry concentration tends to be significantly higher than occupational concentration. Several industries are only represented by a few chains in the contracts data, and all of the job ads associated with a given chain are interpreted as being within that chain’s industry (as with previous tables and industry-level statistics). By contrast, the same chain frequently hires workers in multiple occupations, which de-concentrates occupation-defined labor markets by construction. Because these computations are undertaken *only* using the matched dataset, they should not be interpreted as representing overall employer concentration in a given industry or occupation (unlike [Azar et al. \(2020\)](#), for example). In Section 4, we bring in a wider universe of job ads posted by employers in the same industries where franchise chains hire in order to test the effect of franchise no-poach provisions posited by [Krueger and Ashenfelter \(2022\)](#), meaning the concentration reported in [Tables 9 and 10](#) (discussed below) is comparable to economy-wide concentration estimates.

3.1 Restraints

In this subsection, we explain what each of the vertical restraints and contractual provisions in the digitized FDDs signifies for the organization and balance of

power in labor markets in the franchising sector. The restraints and contractual provisions that characterize the subordination of franchisees to franchisors in the FDDs and appended contracts are as follows:

- *No Poaching of Employees Within Franchising Network*: Franchisees are enjoined from hiring workers currently or recently employed by other franchisees (or the franchisor) in the same chain.
- *Resale Price Maintenance*: Franchisors have the power to dictate maximum or minimum retail prices for products offered to consumers by franchisees, including mandating they honor chain level promotions. Note that “resale” in this context is inexact, since most franchising chains are not strictly manufacturers selling to distributors to resell to consumers, but rather trademark-holders licensing a brand and operators’ manual to local service-providers.
- *Franchisor Selects Inventory*: Franchisees are obliged to offer only those products or services prescribed by the franchisor. This provision from the FDDs/contracts subsumes *exclusive dealing* and *exclusive supply* as defined in the introduction.
- *Full Line Forcing*: Franchisees are mandated to carry the entire product line offered by the franchisor, and cannot decline to offer disadvantageous products.
- *Independent Franchisee Association*: An organization of franchisees exists and is not under the control of the franchisor. Formal collective bargaining is prohibited for franchisees, but associations can advocate to franchisors on behalf of their member franchisees.¹⁰
- *Mandatory Opening Hours*: Franchisees are required to maintain hours as prescribed by the franchisor, for example 24-hour service.
- *Franchisor Access to Franchisee Data*: Franchisees are required to grant the franchisor access to point-of-sale data.
- *Franchisor Selects or Must Approve Franchisee Site*: The franchisee’s specific place of business is subject to the franchisor’s approval (or prior selection).
- *Franchisee Must Operate Directly*: The franchisee must personally manage the franchise establishment(s).
- *Mandatory Arbitration*: Disputes arising under the franchisor-franchisee contract are referred to arbitration rather than litigation.
- *Franchisor Right to Terminate Without Cause*: The franchisor has the right to terminate the franchise without cause. This is atypical in franchising contracts, but state-level franchising laws vary in whether just-cause termination is required. Over time franchisors have had increasing success defending themselves in improper termination suits (Emerson, 2016).
- *Franchisor Right to Assign the Contract to a Different Franchisor*: The franchisor can transfer the franchise contract and its rights to a different franchisor. In effect, the franchisor has the right to merge or transfer its assets without gaining the franchisee’s approval for the new counterparty.
- *Franchisor Right to Purchase Assets at Expiration*: A right of first refusal to purchase the franchisee’s assets at the conclusion of the franchise term, if the

franchise is not renewed. This can be understood as a partial noncompete clause, since it precludes the franchisee from transferring to a different franchisor when one franchising relationship expires, without the prior franchisor's consent.¹¹

- *Automatic Withdrawal of Franchisee Fees*: The franchisor is granted access to the franchisee's bank account for the purpose of automatically withdrawing franchise fees.
- *Franchisee Personal Guarantee*: The franchisee is required to put up a personal (and, in some cases, spousal) guarantee for obligations to the franchisor, even if the franchisee is incorporated.
- *Franchisor Restriction on Transfers*: The franchisee cannot transfer its obligations to a different franchisee without the franchisor's approval.

Appendix A gives a more complete explanation of the meaning of each restraint/contractual provision, including sample language from the FDD and appended contract that signifies the presence or absence of each.

Table 6 reports the prevalence of each restraint or contractual provision among the franchising contracts and job ads (the latter from the matched dataset), irrespective of industry or occupation. Prevalence in the job ads data can be

Table 6. Share of Observations in Each Dataset for Which a Given Restraint or Contractual Provision Is Present.

	(1) Chains	(2) Job ads
No poaching of employees within franchising network	0.592	0.601
Resale price maintenance	0.442	0.416
Franchisor selects inventory	0.908	0.918
Full line forcing	0.868	0.864
Independent franchisee association	0.123	0.291
Mandatory opening hours	0.643	0.766
Franchisor access to franchisee data	0.790	0.851
Franchisor selects or must approve franchisee site	0.819	0.955
Franchisee must operate directly	0.349	0.371
Mandatory arbitration	0.579	0.382
Franchisor right to terminate w/o cause	0.023	0.044
Franchisor right to assign contract to different franchisor	0.845	0.842
Franchisor right to purchase assets at expiration	0.491	0.424
Automatic withdrawals of franchisee fees	0.815	0.829
Franchisee personal guarantee	0.932	0.868
Franchisor restriction on transfers	0.994	0.999
Observations	530	8,691,518

Notes: The first column gives the share of franchising chains imposing each restraint. The second column gives the share of job ads in the matched dataset which are subject to each restraint. The shares differ between the two columns because of variation in the number of job ads associated with each chain.

understood loosely as employment-weighted prevalence of each restraint, “loosely” because the number of job ads posted by a chain isn’t necessarily exactly proportional to its employment share among franchising chains.

Tables 7 and 8 report the prevalence of each restraint for the top 10 industries and the top 10 occupations in the matched dataset.¹² It’s difficult to summarize how “controlled” franchisees are by industry or occupation since the many restraints/contractual provisions don’t reduce to a single index, but there are big differences across industries in the use of each restraint/contractual provision individually, suggesting that franchising performs somewhat different functions across industries. On the other hand, most industries, and most chains, use exclusive dealing and/or supply provisions, suggesting that franchisees play the role of captive distributors operating to bring the franchisor’s branded goods or services to market as though vertically integrated while segmenting the labor force that actually performs that function in the economy from formal affiliation with the franchisor, or in Weil (2014)’s parlance, the “lead firm.” Keeping in mind Asker and Bar-Isaac (2014)’s interpretation of vertical restraints, then, in addition to exclusive territories or Resale Price Maintenance as a means of ensuring distributor loyalty by sharing monopoly profits, we could also see no-poaching clauses as similar carrots by which franchisors guarantee a profit to franchisees in return for loyalty and cooperation – only at the expense of workers, rather than consumers.

By contrast, Blair and Lafontaine (2005) write that “franchisors occasionally require that their franchisees buy a variety of inputs from the franchisor or its dedicated supplier.” Those authors find that around 30% of franchising contracts included mandatory purchase requirements such as these in 1988 and 1989, whereas we find around 90% have exclusive dealing or supply contracts in 2016 and 86% have full-line forcing. The possibility that exclusive dealing-type provisions have increased in prevalence over time is an intriguing possibility suggesting shifting bargaining power toward franchisors. That bears further investigation.

Moreover, about half of the contracts, and 42% of job ads, include the Franchisor Right to Purchase Assets at Expiration provision. That breaks out as 48% of the restaurant industry, 98% of personal care services, and 68% of individual and family services (home healthcare agencies and the like). Franchisees subject to that provision are bound to their current franchisor by the equivalent of a non-compete clause, which bears on the inferred balance of power between franchisor and franchisee. Blair and Lafontaine (2005) claim that franchisors rarely possess market power because franchisees can always switch to a different chain, and many chains offer franchising contracts to qualified applicants. These results suggest otherwise.

4. COMPETITIVE EFFECTS OF FRANCHISE NO-POACH CLAUSES

Section III of Krueger and Ashenfelter (2022) analyzes the competitive effect of franchise no-poach clauses in light of two different theories of power imbalance in labor markets. First, in what might be called an “old monopsony” model,

Table 7. Share of Observations in Each of the Top 10 Industries for Which a Given Restraint/Contractual Provision Is Present.

Industry	No Poaching	RPM	Excl. Dealing	Full Line Forcing	Indep. Franchisee Assoc.	Mand. Hours	Data Access	Franchisor Site Approval	Franchisee Must Operate	Transfer Restriction	Mandatory Arbitration	Franchisor Right to Terminate w/o Cause	Franchisor Right to Merge	Franchisor Right to Purchase Assets	Automatic Fee Withdrawal	Franchisee Personal Guarantee
Restaurants and similar	81	35	99	100	43	81	91	100	43	100	31	7	89	48	90	83
Traveler accommodation	5	89	81	99	2	91	98	93	7	100	22	0	53	2	47	100
Personal care services	49	87	100	99	78	95	100	100	28	100	90	1	100	98	100	100
Individual and family services	86	57	100	54	13	44	86	88	60	100	41	0	78	68	94	94
Accounting-Tax/Bookkeeping	99	8	100	100	1	100	100	100	91	100	8	0	99	9	99	9
Automotive parts and accessories	0	0	3	4	0	3	4	100	0	100	4	1	100	3	100	100
Travel arrangement and reservation	0	0	100	0	0	100	0	100	100	100	100	0	100	0	100	100
Automotive equip. rental and leasing	91	1	90	1	0	90	91	100	0	100	90	0	91	91	0	91
Building equipment contractors	4	4	18	84	2	1	6	88	9	100	86	0	95	6	84	100
Automotive repair and maintenance	85	16	97	71	38	96	90	100	14	100	51	0	100	86	76	100

Notes: This table gives the share of job ads in each of the top industries which are covered by a given restraint. The restraints are sorted into two categories for ease of presentation. The first set concerns restrictions on franchisee autonomy. The second set concerns the contractual relationship between franchisors and franchisees.

Table 8. Share of Observations in Each of the Top 10 Occupations for Which a Given Restraint/Contractual Provision Is Present.

Occupation	No Poaching	RPM	Excl. Dealing	Full Line Forcing	Indep. Franchisee Assoc.	Mand. Hours	Data Access	Franchisor Site Approval	Franchisee Must Operate	Transfer Restriction	Mandatory Arbitration	Franchisor Right to Terminate w/o Cause	Franchisor Right to Merge	Franchisor Right to Purchase Assets	Automatic Fee Withdrawal	Franchisee Personal Guarantee
Food service managers	77	27	99	99	48	77	93	100	37	100	24	3	85	36	90	87
Food prep/ Serving workers	71	32	98	100	34	85	90	100	50	100	33	6	84	41	86	79
Food prep/ Serving supervisors	66	33	97	98	29	92	91	100	55	100	37	11	77	49	86	85
Driver/Sales workers	97	42	99	99	84	63	97	100	48	100	28	6	99	59	98	99
Waiters/ Waitresses	69	60	96	100	34	71	92	99	9	100	30	0	80	37	79	92
Customer service representatives	85	38	98	88	49	86	93	98	42	100	42	8	92	79	89	93
Retail salespersons	60	50	89	86	32	73	86	98	20	100	41	1	95	21	93	99
Supervisors of R/S workers	69	29	90	78	45	81	89	99	14	100	36	0	97	45	86	98
Cooks, restaurant	66	69	97	99	15	91	80	99	19	99	30	1	80	48	77	82
Hospitality desk clerks	21	78	77	98	10	85	95	90	13	100	24	0	69	16	57	100

Notes: This table gives the share of job ads in each of the top occupations which are covered by a given restraint. The restraints are sorted into two categories for ease of presentation. The first set concerns restrictions on franchisee autonomy. The second set concerns the contractual relationship between franchisors and franchisees.

no-poach agreements may increase effective employer concentration by combining each franchisee-employer in the market. Without a no-poach agreement, the franchisees would be bidding against one another for workers. Put differently, a worker employed by any one franchisee loses access to outside franchisee-employers in the same franchising chain if there is a franchise no-poach in place, reducing her residual labor supply elasticity vis a vis her current employer (alternatively: her threat point in bilateral bargaining over wages and working conditions) by virtue of the elimination of otherwise-available outside options. Second, in a dynamic “new monopsony” model, employers set wages optimally to trade off the markdown against turnover: reducing the wage means the employer earns a larger wage markdown on each unit of labor hired, but at the cost of higher labor turnover/smaller firm size (since workers depart for other employers). A no-poach provision has the effect of pushing down the wage-turnover tradeoff schedule. In other words, employers can get away with paying lower wages for a given level of turnover, since workers have fewer other places to go. [Card \(2022\)](#) elaborates on each of these classes of theories and their scholarly antecedents. Most importantly, both theories hinge on the concept of finite residual labor supply elasticity, either on the part of individual workers or of labor more broadly. Any one employer can unilaterally dictate a wage reduction without losing all of his workers.

In this section, we report *prima facie* evidence of the empirical plausibility of the first theory. We cannot test the second theory because we lack data on employer-specific labor turnover. Earlier, in [Tables 4 and 5](#), we computed labor market concentration *in the matched dataset* and assumed that each franchising chain constitutes a unitary employer for the purposes of computing employer concentration, which amounts to the assumption that every chain has a perfectly enforceable franchise no-poach in place covering all workers at any franchisee, or at the franchisor, and that franchise employers only compete against other franchise employers (in their industry or occupation). Here, we expand the scope by using a larger dataset of job ads that includes all employers in any industry in which franchise employers hire.¹³ The idea here is that franchise employers and non-franchise employers probably compete in the same industry- or occupation-defined labor market. We call that dataset the “full dataset.” Using the full dataset, we attempt to measure employer concentration at the *franchisee* level, then see how that measure of employer concentration changes when we combine all the franchise employers in a chain into a single employer only if that chain has a franchise no-poach reported in its FDD. Since non-franchise employers are not part of any franchise chain, they remain independent in the concentration computations that follow.

This analysis is complicated by the fact that we do not observe distinct franchisees. In fact, most employers affiliated with a chain will use the franchisor’s trademark in recruiting workers, just as they do marketing to consumers. That is the basis of the franchising business model, not to mention the text-based matching procedure we employ to construct the matched dataset. Thus, to assume each separate employer name constitutes a separate franchisee (as, for example, is done in [Azar et al. \(2020\)](#) for employers more broadly) would

erroneously combine distinct franchisees because they appear with the same name in the BGT data.¹⁴ Instead, within a franchise chain, we assume that each distinct combination of employer name and exact geographic location in the BGT data constitutes a separate franchisee.¹⁵ However, many franchisees in fact operate multiple locations and likely appear with the same employer name for each location, so a definition of franchisee-employer that distinguishes each employer name by geographic location underestimates the degree of employer concentration operating at the franchisee level, in effect assuming that every franchisee is a single-unit operator. For non-franchise employers, those in the full dataset but not the matched dataset, the definition of an employer is the same as in [Azar et al. \(2020\)](#), i.e., an employer name.

Notwithstanding this weakness, the results shown in [Table 9](#) (for the top 20 industries) and 10 (for the top 20 occupations) are consistent with the mechanism outlined by [Krueger and Ashenfelter \(2022\)](#). Effective concentration increases significantly when franchisees are combined in chains that use no-poach restraints. For example, the average local (commuting zone level) concentration in the Accounting, Tax Preparation, Bookkeeping, and Payroll Services industry when franchisees are distinct employers is 1,381, and it is 2,161 when franchisees are combined for chains that use no-poaches. That is close to the HHI of 2165 when entire franchise chains are taken to be unitary employers, because 99% of the franchisors in that industry use no-poaches (per [Table 7](#)), and franchise chains (that use no-poaches) constitute a high share of the overall workforce in that industry. By contrast, franchisee-level concentration is 1952 for the automotive parts and accessories industry, and it is 1953 when franchisees in chains with no-poaches are combined, much less than the 2,504 computed for franchise-chain-level concentration. That is because barely any chains in the industry employ franchise no-poaches. By and large, for industries and occupations where no-poaches are prevalent, effective employer concentration increases significantly as a result.

5. WAGE REGRESSIONS

In this section, we report on binary regressions of (log) posted annual salary on an indicator for whether the chain posting a vacancy does or does not have a given restraint or provision in its FDD/franchising contract. For each regression, the identifying variation is between jobs posted by different chains that either do or do not include a given provision.

The regression equation is as follows:

$$\log(w_{ijkmt}) = \alpha + \beta D_j + \gamma_k + \delta_m + \lambda_t + \epsilon_{ijkmt} \quad (5.1)$$

where $\log(w_{ijkmt})$ is the log wage in job i by franchisor (chain) j for occupation k in commuting zone m at time t . We observe a binary variable D_j at the chain (j) level, which is constant over job ads, occupations, commuting zones, and time (since we observe this for FDDs governing all franchisees in a network, filed by

Table 9. Change in Effective Labor Market Concentration due to Franchise No-Poach Clauses, By Industry.

Rank	Industry	HHI (National, Franchisee based)	HHI (National, Franchisor-based If No-Poach Chain)	HHI (National, Franchisor- based)	HHI (Local, Franchisee- based)	HHI (Local, Franchisor-based If No-Poach Chain)	HHI (Local, Franchisor- based)
1	Restaurants and other eating places	59	203	217	154	345	362
2	Traveler accommodation	355	356	439	723	727	818
3	Personal care services	51	295	985	344	627	1265
4	Individual and family services	104	287	292	653	940	973
5	Accounting, tax preparation, bookkeeping, and payroll services	767	1080	1080	1381	2161	2165
6	Automotive parts, accessories, and tire stores	1250	1250	1592	1952	1953	2504
7	Travel arrangement and reservation services	188	188	4504	2656	2656	3927
8	Automotive equipment rental and leasing	1342	1587	1589	1907	2205	2232
9	Building equipment contractors	89	90	358	332	333	598
10	Automotive repair and maintenance	237	348	352	568	743	764
11	Other amusement and recreation industries	164	202	203	783	907	917
12	Health and personal care stores	1590	1608	1613	1841	1861	1880
13	Gasoline stations	1433	1509	1595	2689	2955	3929
14	Furniture stores	463	1230	1231	1748	3379	3458
15	Offices of other health practitioners	73	73	170	374	374	486
16	Other financial investment activities	264	264	332	1161	1161	1302
17	Services to buildings and dwellings	168	172	174	341	351	358
18	Employment services	88	89	231	827	841	1098
19	Offices of real estate agents and brokers	63	68	75	618	633	653
20	Other schools and instruction	116	137	243	569	636	877

Notes: This table reports three different concepts of labor market concentration by industry in the full dataset, both nationally (columns 1–3) and by commuting zone (columns 4–6). Columns 1 and 4 report concentration based on franchisee-level job ad shares, where each franchisee is the combination of an employer name and exact geographic location. Columns 3 and 6 report chain-level (franchisor-based) concentration. Columns 2 and 5 report a combination of the two, in which franchisees linked to the chains that use no-poach clauses are combined for the purposes of computing market shares. For the chains that don't use no-poaches, market shares are computed at the franchisee level.

Table 10. Change in Effective Labor Market Concentration due to Franchise No-Poach Clauses, by Occupation.

Rank	Occupation	HHI (National, Franchisee-based)	HHI (National, Franchisor-based if No-Poach Chain)	HHI (National, Franchisor-based)	HHI (Local, Franchisee-based)	HHI (Local, Franchisor-based if No-Poach Chain)	HHI (Local, Franchisor-based)
1	Food service managers	14	330	366	125	496	559
2	Food prep/Serving workers	149	312	350	333	586	657
3	Food prep/Serving supervisors	468	526	558	672	800	874
4	Driver/Sales workers	112	941	941	385	1350	1375
5	Waiters/Waitresses	103	184	209	323	501	542
6	Customer service representatives	164	246	248	417	562	584
7	Retail salespersons	245	315	347	439	537	612
8	Supervisors of R/S workers	332	373	383	559	633	683
9	Cooks, restaurant	144	186	207	439	556	603
10	Hospitality desk clerks	370	379	443	666	694	789
11	Personal care aides	348	1931	1968	881	2690	3314
12	Auto technician/Mechanic	164	204	490	479	570	852
13	Hairdressers/Hairstylists	158	210	1985	611	690	2117
14	Maids/Housekeepers	403	407	459	698	710	787
15	Janitors/Cleaners	42	48	221	293	312	505
16	Maintenance/Repair workers	66	174	186	237	421	449
17	Sales representatives	85	92	97	248	260	275
18	Tax preparers	2	6308	6308	801	6057	6058
19	Hosts & hostesses, restaurant, lounge, and coffee shop	117	177	186	456	560	591
20	Bakers	72	2118	2132	812	2705	2766

Notes: This table reports three different concepts of labor market concentration by occupation in the full dataset, both nationally (columns 1–3) and by commuting zone (columns 4–6). Columns 1 and 4 report concentration based on franchisee-level job ad shares, where each franchisee is the combination of an employer name and exact geographic location. Columns 3 and 6 report chain-level (franchisor-based) concentration. Columns 2 and 5 report a combination of the two, in which franchisees linked to the chains that use no-poach clauses are combined for the purposes of computing market shares. For the chains that don't use no-poaches, market shares are computed at the franchisee level.

each chain at a single point in time). We include fixed effects (γ , δ , and λ) designed to filter out overall market characteristics, like business cycles, geographic earnings premia, and occupation average earnings from chain-specific pay. This specification implicitly defines a labor market by commuting zone, occupation, and quarter, drawing on Azar et al. (2020) and Azar, Berry, and Marinescu (2022). ϵ_{ijkmt} is an error term.

The coefficient estimate on each restraint is reported in Fig. 3, where the covariates in each case are fixed effects for year-quarter, commuting zone, and 6-digit SOC occupation. Overall, most of the restraints that give franchisors greater control over the operation of the franchisee’s business correlate with lower wages for workers, including no poaching provisions, resale price maintenance, exclusive dealing/supply (“franchisor selects inventory”), full-line forcing, mandatory opening hours, and franchisor access to franchisee data. For the restraints that pertain more directly to the contract between franchisor and franchisee, the coefficient estimates are negative but the confidence intervals overlap zero, which is not surprising given the only variation is between chains (and standard errors are clustered at the chain level). Franchisor restriction on transfers and franchisor right to terminate without cause both correlate positively with earnings, but in each case there is little variation between chains: almost every chain restricts

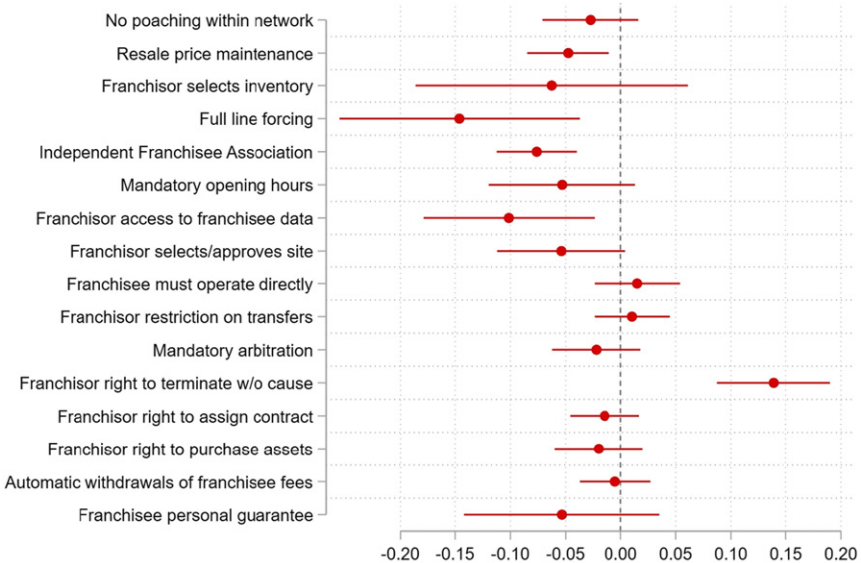


Fig. 3. Summary of Coefficient Estimates on Each Restraint. Notes: This figure plots the coefficient estimates on each binary restraint listed in Table 6 in a regression where the outcome of interest is log annual earnings. Variation is within labor markets defined by commuting zone, SOC-6 occupation, and quarter, between chains.

transfers between franchisees, and few chains reserve an explicit right to terminate franchises without cause.¹⁶

Fig. 4 complicates any inference from the earnings regressions by also including fixed effects for NAICS 4-digit industries. As a result, very few of the coefficient estimates are significantly different from zero, since in many cases there are few chains per industry and thus little variation in the application of each restraint within labor markets defined by quarter, commuting zone, occupation, and industry. And because it is difficult to disentangle industry-level wage effects from the effect of each restraint, given strong patterns in the use of restraints by industry, we can't form any conclusion about the effect of restraints on wages by varying their application and holding industry constant.

The results reported here are not causal estimates of the effect of vertical restraints between franchisors and franchisees on wages for workers in franchise chains. For that, we need plausibly exogenous variation in the application of each of the vertical restraints over time or across workers, which we leave to further work, including Callaci et al. (2023). However, the negative salary coefficients reported in Fig. 3 may indicate that greater franchisor control over franchisee business decisions pushes franchisees to worsen labor standards relative to employers with greater autonomy, perhaps because they operate on thinner profit margins and must therefore employ a lower-wage workforce. The welfare

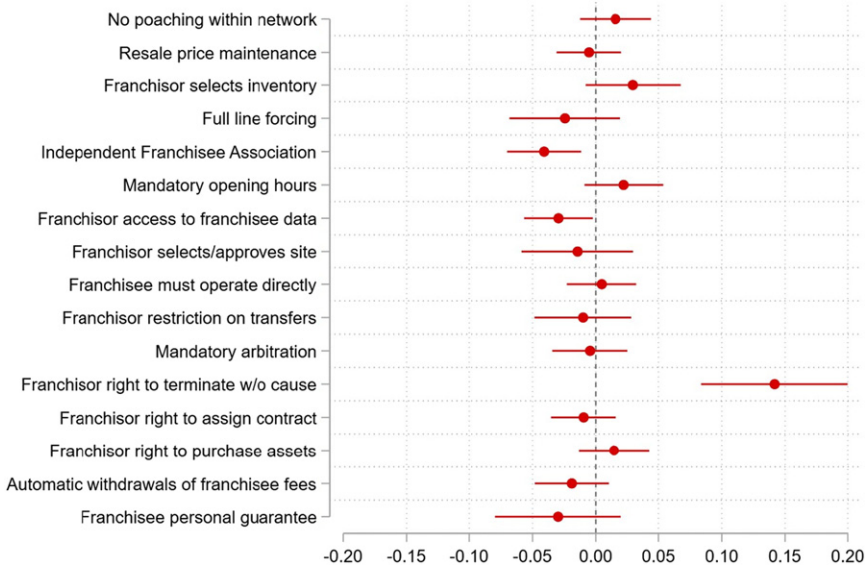


Fig. 4. Summary of Coefficient Estimates on Each Restraint, With Industry Fixed Effects. Notes: This figure plots the coefficient estimates on each binary restraint listed in Table 6 in a regression where the outcome of interest is log annual earnings. Variation is within labor markets defined by commuting zone, SOC-6 occupation, NAICS 4-digit industry, and quarter, between chains.

implications of such a finding are not straightforward, since the ostensible purpose of vertical restraints is to improve product market competition in order to thin profit margins (e.g., prevent franchisees from exploiting local market power to increase price), so the restraints might benefit consumers at the expense of workers.

6. DISCUSSION

The franchising business model is to a large extent the creation of the post-1970s revolution in antitrust jurisprudence that legalized vertical restraints between dominant upstream franchisors and subordinate downstream franchisees (Callaci, 2021a). Paul (2019) refers to this as the extension of antitrust's "firm exemption" (permitting economic coordination within a firm) across the legal boundary of the firm, to economic subordinates under a logic of hierarchy-as-economically-efficient visible in Coase (1937) and analyzed more overtly by Williamson (1980). Part of the rationale for that legal revolution is that consumers benefit when economic production takes place under a unified locus of control, and that regulatory regimes, including antitrust, should not throw up obstacles to the exercise of that control. To take the most ideologically extreme rendition of this principle, the idea that franchisees should retain legal independence has been viewed as elevating the uneconomic principle of promoting small business at the expense of the "economic" preference for productive efficiency inherent in large firm domination.¹⁷

Notably, that legal revolution never rested on a basis of empirical verification for its core theories: that vertical control by dominant firms in supply chains benefits consumers by making the process of production and distribution more efficient, reducing prices and markups. Recently, the conclusions of that legal revolution have been brought into question. In December 2021, the Federal Trade Commission indicated its interest in rule-making on the subject of exclusive contracting provisions such as those documented in this article (Federal Trade Commission, 2021b, 2023). In response, critics have maintained that questioning the legal status quo is not grounded in any empirical documentation of the harms from those provisions (Wilson, 2021), notwithstanding the significant public comment the FTC's call for evidence about their effects garnered (Federal Trade Commission, 2021a). This article begins to fill the gap documenting the coverage of such provisions (as well as others). But since policy has historically veered wildly in response to theoretical innovations without very much empirical verification, for example when non-price vertical restraints were made subject to antitrust's Rule of Reason under the 1977 Supreme Court case *Continental Television v. GTE Sylvania*, there is scope for a good deal of further research regarding their effects.

Legalizing vertical restraints while simultaneously weakening standards for joint employer liability in labor law draws an inconsistent conceptual boundary of the firm: antitrust grants broad powers to a lead firm to control its subordinates, as though they are part of the same economic entity, while labor law

narrows the responsibility of lead firms to those workers who work directly for it.¹⁸ Franchisors erect franchisees as middlemen tasked with supervising and controlling workers essential to the franchisor's core function, but which the franchisor prefers to keep outside the legal boundary of the firm lest it otherwise be responsible for providing minimum labor standards, since a single workplace can create egalitarian social expectations, which it is easier for employers to transgress when workers are nominally (and legally) segmented (Weil, 2017).

Furthermore, the formal schematization of the franchising relationship as vertical effectively immunizes practices like no-poaching agreements from anti-trust liability, even where they are standardized across a chain and thus have identical economic effects as a horizontal no-poaching agreement would. The ongoing litigation *Deslandes v. McDonalds* exemplifies this point. In 2022, a federal district court (Alonso, 2022) held that franchise no-poach provisions are vertical and hence must be analyzed under antitrust's Rule of Reason, requiring that the defendant's market power be shown as part of making the case. Since franchising labor markets are unconcentrated, so the ruling goes, franchise employers must not have market power, hence the no-poach provisions are not presumptively anti-competitive. For that reason, the district court granted the defendant's motion to dismiss the case.

That court's reasoning belies the economic intuition that agreements between employers not to hire one another's workers, especially where the parties to the agreement are the most likely but-for source of outside job offers, are very likely to reduce labor market competition. That is why that ruling was recently reversed by the 7th Circuit Court of Appeals – that franchise no-poaches are in fact horizontal agreements not to hire workers, hence potentially subject to a per se rule.¹⁹ As of this writing, the *Deslandes* defendants appealed that ruling to the US Supreme Court on the grounds that antitrust caselaw establishes Rule-of-Reason treatment for *all* vertical restraints in franchising chains, and since no-poach provisions are such a vertical restraint, they must be analyzed under that framework (McDonalds, 2023). This varying treatment of provisions of franchise relationship only highlights that most control exercised across the legal boundary of the firm is virtually unregulated when it takes the form of a dominant chain dictating terms to disempowered subsidiaries.

This article considers the effect of franchising on workers, empirically grounding intuitions about the incentive structure facing franchisees (to exploit workers) when their profit-maximization decision is attenuated by the application of obligations that close off their autonomy over most business decisions.

Insofar as the Industrial Organization literature contemplates competitive harm arising from vertical restraints imposed by dominant firms in a supply chain, the scope for harm has been limited to cases where the terms of one bilateral economic relationship or contract affects the terms of third-party transactions. For example, in the standard case of foreclosure, a contract that says one supplier must be exclusive to a dominant distributor is deemed anti-competitive only if it withholds must-have inputs from a competing distributor (i.e., a would-be third party), weakening price competition at the distributor level. If it merely disadvantages the bound supplier (counterparty to

the bilateral contract), then that is not sufficient to establish harm to competition. The implication of analyzing the labor market impact of vertical restraints in franchise chains (and more generally) is that workers are a relevant third party, and labor market competition is an arena where the anti-competitive effect of vertical restraints may be manifested.

7. CONCLUSION

This article creates a novel dataset by matching 530 digitized Franchise Disclosure Documents and appended franchising contracts with employer-identified job ads. It thus permits a novel empirical investigation in two respects: first, a comprehensive picture of the provisions of franchising contracts, across all major US chains and sectors in which the franchising form is used. Second, the ability to match those provisions to labor market outcomes.

We report on characteristics of workers and labor markets in franchised industries and occupations, including average earnings and national and local labor market concentration. Following and building on [Krueger and Ashenfelter \(2022\)](#) and [Callaci \(2021b\)](#), we associate the restraints and contractual provisions contained in each franchise chain's FDD with labor market conditions, which enables us to estimate the share of workers subject to each provision by industry and occupation. We investigate the mechanisms by which franchise no-poach provisions in particular contribute to employer power and worker dependence. We also conduct correlational regressions of annual earnings on each restraint, but any causal interpretation of the restraints on labor market outcomes awaits further work.

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NOTES

1. Franchisors can in fact own multiple brands, either directly or as part of a holding company. In this article, we treat Franchise Disclosure Documents as the equivalent of a franchisor, conceived as a corporate firm that owns a brand.

2. *Leegin v. PSKS* held that minimum RPM would be evaluated under the Rule of Reason, for which defendants have a win rate between 97 and 99% ([Carrier, 2009](#)). Vertical price restraints are still evaluated under a per se standard in the antitrust statutes of some states.

3. Unless it were found to be a joint employer within the purview of the National Labor Relations Act.

4. See [Hershbein and Kahn \(2018\)](#), [Modestino et al. \(2016\)](#), and [Azar et al. \(2020\)](#) for prior studies using the BGT job ads data.

5. One major weakness in the Franchise Rule is that the FDD can say the franchisee is obligated to abide by an operating manual, and the operating manual can be altered at any time. As long as the franchisor discloses that fact upfront, they are at liberty to change the terms of the franchise going forward.

6. Another weakness of the Franchise Rule is that it implicitly immunizes adverse conduct by the franchisor, since if the terms of the relationship are disclosed in advance, the franchisee cannot have been a victim of unfair or deceptive conduct *ex post*.

7. An example of FDD disclosures that are not part of our analysis is Item 19, in which franchisors can (optionally) make representations about the financial performance of franchisees. The purpose of putting such representations in the FDD is to make explicit what they are, to preclude franchisor financial representations elsewhere that may otherwise be plausibly deniable. Some states require that franchisors do in fact make financial representations in Item 19.

8. We drop job ads that do not identify an employer.

9. All the figures and tables in this article rely on the two datasets mentioned in Section 2: digitized FDDs and appended contracts taken from [Callaci \(2021b\)](#), and an employer-identified job advertisements from BGT.

10. Pending litigation in California and Massachusetts, and possibly in other states that employ an “ABC test” for employment status, allege misclassification of franchisee-employees as independent contractors on the grounds that the degree of control exercised by franchisors is tantamount to an employment relationship. If the plaintiffs’ allegation is correct, that could lead to permissible collective bargaining by franchisees against dominant franchisors. See [Dolan et al. \(2021\)](#).

11. As discussed earlier, the premise of the Franchise Rule is that franchisees are akin to consumers who need to be protected from unscrupulous dealing on the part of the franchisor. This analogy of the right-to-purchase-assets to a noncompete clause likens the franchise relationship to that of employment. As prior research has shown, employees are frequently forced to agree to noncompete clauses *after* accepting a position, whereas franchisees enjoy the modest protection that this provision (right to purchase assets) is disclosed in advance, in the FDD. However, franchisees are also often bound by explicit noncompete provisions, which under the current version of the Franchise Rule are not subject to mandatory prior disclosure.

12. Several other publications in this literature, including [Callaci \(2021b\)](#), [Norlander \(2025\)](#), [Blair and Lafontaine \(2005\)](#), and [Krueger and Ashenfelter \(2022\)](#) report the frequency of different restraints and contractual provisions at the franchising chain level using FDD-derived data, but to our knowledge, this is the first to do so using a dataset that in effect weights by each chain’s, and therefore each provision’s, importance in the labor market or the overall economy.

13. These distinct datasets are introduced at greater length in [Callaci et al. \(2023\)](#).

14. Employer names by themselves are standardized within national chains in the BGT data, even though in some cases employer names signify geographic specificity (e.g. “McDonalds of Fourteenth Street”).

15. The BGT data includes coordinates for latitude and longitude, so a franchisee consists of an employer name latitude–longitude combination.

16. In fact, the right to terminate without cause differentiates an employment relationship from a contractual franchising relationship in some legal applications, in which case franchisors would not want to claim an explicit right to terminate franchisees without cause, lest they be liable for employment misclassification.

17. For examples of this view, see [Shapiro \(2018\)](#) and especially [Muris and Nuechterlein \(2019\)](#). For intellectual historical analysis of it, see [Popp Berman \(2022\)](#). Of course, vertical domination is not the only possible organization of a non-unitary chain. Cooperatives of semi-independent outlets like Ace Hardware are examples of horizontal coordination among retailers. Ocean Spray, Cabot Creamery, and Sunkist are co-ops of agricultural producers.

18. For example, [Graber \(2019\)](#).

19. Easterbrook (2023), who nonetheless appears to agree with the district court ruling on the point that workers in franchise chains have many opportunities for employment in other chains, and thus, with the implication that franchise employers do not have labor market power.

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APPENDIX A: DESCRIPTION OF FRANCHISE DISCLOSURE DOCUMENT VARIABLES

Under the Federal Trade Commission's Franchise Rule, 16 CFR Parts 436 and 437, franchisors must provide prospective franchisees with a Franchise Disclosure Document (FDD) containing information about the offered franchise, its officers, and other franchisees. Certain mandatory disclosures are contained in a series of 23 "items." Item 22 contains a complete copy of the 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 with a state regulator. Wisconsin is one of these. We collected all 1,029 FDDs filed in the state of Wisconsin in 2016. (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.) We created a data set from a sample of 530 of these contracts. Rather than take a random sample, we elected instead to exclude all franchise chains with fewer than 80 outlets nationwide.

This Appendix describes our coding decisions for each FDD-derived variable in the data set, using sample language from FDDs to illustrate. In each case, the excerpt quoted comes from the named chain's 2016 FDD, which, as we have explained in the above paragraph, is an unpublished document obtained by the authors and in their personal possession.

ITEM 11: FRANCHISOR'S ASSISTANCE, ADVERTISING, COMPUTER SYSTEMS, AND TRAINING

Item 11 includes the disclosure on site selection. We code this variable a 1 if the franchisor must approve the site of the franchisee's business, 0 otherwise. We are interested in whether the franchisee must seek approval for the specific site of

their establishment, so it is not sufficient for the franchisor to merely specify a geographic zip code or other more general territory.

As an example of contract language that we code a 0, see the Item 11 disclosure of Caring Transitions:

Before you open your business, we will: Approve or disapprove the boundaries that you submit for your franchise territory. Your territory must be a single, undivided geographic area delineated by postal ZIP Code. If the US Postal Service alters the boundary or number of the ZIP Code(s) assigned to you, we will re-define the boundaries of your territory to correspond as nearly as possible to your original territory. Our decision on this matter will be final.

Because the language specifies a zip code and not a specific site, we code this a 0. As an example of contract language that we code a 1, see the Item 11 disclosure of Aireserv:

You are responsible for finding and purchasing or leasing a site that meets our site selection guidelines and standards and is located in the Territory.

Because the franchisor specifies site guidelines in addition to a territory, and presumably checks to ensure the site meets those guidelines, we code this a 1.

ITEM 15: OBLIGATION OF THE FRANCHISEE TO PARTICIPATE IN THE ACTUAL OPERATION OF THE FRANCHISE BUSINESS

Item 15 contains the language we rely on to code our “Franchisee Must Operate Directly” variable. In Item 15, franchisors must disclose to franchisees whether franchisees are obligated to personally manage the establishment. Put another way, Item 15 tells franchisees whether they must supply labor in addition to investment capital to the franchisor.

We code this variable a 1 if the franchisee does have an obligation to participate directly in the operation of the establishment, 0 otherwise. In coding this variable, we set the following criteria:

- We code a 1 only if the franchisee has the obligation to personally operate the establishment throughout the contract term. We code a 0 if at any time in the franchise term the franchisee does not have the obligation to operate. For example, if the franchisor only requires the franchisee to personally operate the establishment for the first year of the contract term, we code a 0.
- We code a 1 if the franchisor retains the right to decide whether the franchisee can delegate to a non-owner. Since in such cases the ultimate discretion lies with the franchisor, the franchisor can impose the obligation to operate at any time.
- If there are differing criteria for single versus multi-unit franchisees, we take the criteria for a single unit franchisee, since these are the bulk of the franchisees.

As an example of contract language where we code a 0, see Nhance Wood Restoration's Item 15 disclosure:

While you are not required to participate in the direct or daily operation of the business, at least one of the franchise owners must successfully complete NHI's training program.

As an example of contract language where we code a 1, see the Item 15 disclosure of AdvantaClean Systems:

As an AdvantaClean franchise owner, you must personally participate in the direct operation of your AdvantaClean franchise. The agreement requires that you be directly involved in the day-to-day operations and work in your business for at least 40 (40) hours per week during the first two years you are in business. In certain situations, we may permit you to employ a manager that has completed our Initial Training Program to operate the day-to-day operations of your Franchised Business (the "Designated Manager"). Your Designated Manager must be approved by us prior to commencing management duties of your Franchised Business and you must notify us within five business days if the Designated Manager leaves your employ. Any replacement Designated Manager you hire must also be approved by us prior to taking over the operations of your Franchised Business in any manner.

According to our criteria, because the decision to delegate to a manager must be approved by the franchisor, the franchisor retains the right to re-impose an obligation to operate at any time.

ITEM 16: RESTRICTIONS ON GOODS AND SERVICES OFFERED BY THE FRANCHISEE

Item 16 contains information on vertical restraints pertaining to product offerings. We are concerned with two types of product restrictions. In the first, the franchisor *prohibits* the franchisee from offering any products the franchisor has *not* approved. In the second, the franchisor *requires* the franchisee to offer all the products (the "full line") that the franchisor *has* approved.

Franchisor Selects Inventory

We code this a 1 if the franchisor retains the right to prohibit the franchisee from offering products not specifically approved by the franchisor, 0 otherwise. For example, we code Floors to Go a 0:

With regard to the FTG System, there are no restrictions on the goods and services which may be offered by you, including competing floor covering products, except that you may not participate in a competing marketing and merchandising system which offers products similar to those offered by the FTG System while a member of the FTG System.

Because the franchisee is permitted to offer products not specifically approved by the franchisor, we code a 0.

As an example of an instance where we code a 1, see Firehouse Subs: "You may not offer for sale any products or perform any services that we have not authorized." The majority of FDDs contain straightforward bans on non-approved products similar to this.

Full Line Forcing

In addition to disclosing whether the franchise contract bars the franchisee from offering any products the franchisor has not approved, it also discloses whether the franchisee must offer *all* the products and services that are part of the franchisor's system. This is sometimes known as "full line forcing." We code this a 1 if the franchisee is required to offer the franchisor's full line of products, 0 otherwise. Because a franchisor that has the right to change the list of required products retains the right to force the franchisee to carry the full line at any time, we code cases where a franchisor can alter the list of required products as a 1. Vision Trends provides an example of language that we code as a 0:

We do not restrict the goods or services that you may offer. However, we require that you offer and sell only those goods and services that relate to the practice of optometry and eye care. You may not offer any products or services that have are deemed [*sic*] unacceptable or disapproved by any government or professional agency. The Company does not have the right to require you to dispense any particular brand of product in your store, and we cannot change the nature of your office in that your office will always carry eye care dispensary items and products.

Because the franchisor does not have the right to require the franchisee to sell specific brands of products, we do not consider this full-line forcing and code a 0. Sbarro, meanwhile, provides an example of language that we code as a 1:

A Franchisee must sell those items for which the franchise has been granted, and all other food, menu items and other products required by Sbarro. . . . Franchisees must participate in Sbarro's promotional programs for all Restaurants operating under the System, as prescribed by Sbarro in the Manuals or otherwise in writing, including all limited time offerings and selling and offering for sale gift cards which may be used at any Sbarro Restaurant for menu items or products, and permitting customers who purchased gift cards from another Sbarro Restaurant or Sbarro to use their gift cards for menu items or products at your Restaurant. There is no limit in the Franchise Agreement on the number of programs in which you must participate or the costs that you must incur. Sbarro has the right (without limitation) to modify these requirements from time to time in its sole discretion.

In this case, the franchisor has the right to force the franchisee to sell any product or participate in any promotion the franchisor chooses. We code a 1.

ITEM 17: RENEWAL, TERMINATION, REPURCHASE, MODIFICATION, AND/OR TRANSFER OF THE FRANCHISE AGREEMENT, AND DISPUTE RESOLUTION

Item 17 of the FDD informs the franchisee of the conditions under which either party may terminate the contract, obligations on both parties after the contract is terminated or expires, and spells out the conditions under which either party can renew, sell, or assign the franchise to others. From Section 17, we code each contract for whether the franchisor can terminate the contract without cause, whether the franchisor has the right to purchase the franchisee's assets at expiration of the contract term, whether the franchisor has the right to assign the contract to a different franchisor, and whether the franchisor imposes a mandatory arbitration clause on the franchisee.

Franchisor Termination Without Cause

Item 17(e) contains the conditions under which the franchisor may terminate the relationship. We code this a 1 if the franchisor has the right to terminate without cause, 0 otherwise. For an example of where we code a 0, the Pure Barre franchise agreement contains the following language in Item 17(e):

“We may not terminate without cause.” The language is typically as straightforward as that.

For an example of a case where we code a 1, see the Medicap Pharmacy FDD:

Subject to state law, we may terminate your franchise agreement, without cause, on 90 days notice to you.

Since the franchisor can terminate without cause, with only a notice requirement, we code a 1.

Franchisor restriction on transfers

Item 17(m), “conditions for franchisor’s approval of transfer,” details the conditions under which the franchisee may transfer the franchise to another franchisee. We code this a 1 if the franchisor’s approval is required before the franchisee can transfer the franchise, 0 otherwise.

For an example of where we code a 0, see Newpoint Learning Centers:

You must be in compliance with the agreement, pay the transfer fee and all amounts owed by you, and execute a general release of any claims against us. Any financing you offer the transferee shall be subordinate to any obligations of the transferee to us. The transferee must promptly provide all information we request and meet all of our qualifications. The transferee must agree to assume your liabilities, assume your Franchise Agreement (subject to our consent) or otherwise execute the current form of Franchise Agreement, complete our training program, pay the transfer fee and all other applicable fees.

Because these are all objective criteria, not contingent upon the franchisor’s judgment, we code this a 0.

For an example of a case where we code a 1, see Pandora:

New franchisee qualifies, you agree to comply with all post-term obligations, you are not in default under the Franchise Agreement, transfer fee paid, all amounts owed by you are paid, training completed, new franchise agreement signed, you and new franchisee supply information we request and you sign a general release (subject to state law).

Because “franchisee qualifies” is a subjective criterion, over which the franchisor has some discretion, we code this a 1.

Franchisor Right to Purchase Assets at Expiration

Item 17(O) contains information on whether the franchisor has the right to purchase the franchisee’s business upon expiration of the contract. There is some variety among FDDs in what “franchisee’s business” means. While it does not include goodwill (which always accrues to the franchisor), it may include the land, building, equipment, fixtures, inventory, or some combination of those.

There is also variety in the valuation methods: liquidation value, book value, or fair market value. We code Item 17(O) a 1 for any instance where the franchisor has a right to acquire some or all of the franchisee's assets upon expiration of the agreement, 0 otherwise. Baskin Robbins is an example of Item 17(O) coded a 0:

If your Franchise Agreement is terminated due to your default, you must sell to us (if we elect) any or all equipment, signs, trade fixtures, and furnishings used in the Restaurant, at the then-current fair market value less any indebtedness on the equipment, and indebtedness to us.

Because the right to purchase is only triggered in the event of a default, not contract expiration at the end of the term, we code this a zero.

An example of a contract that we code a 1, see Batteries Plus: "When the Franchise Agreement expires or terminates, we may purchase assets at book value."

Franchisor Right to Assign Contract to Different Franchisor

Item 17(J) contains information on the franchisor's right to assign the contract to another franchisor, as in the event of a merger or buyout of the franchisor by another firm. As some FDDs spell out the conditions under which the franchisor may assign the contract, we simplify matters by coding a 1 if and only if the franchisor's right to assign is absolute and unrestricted. If the FDD places any conditions on the franchisor's right to assign, we code it a 0. As an example of where we code a 0, see Hobby Town's FDD:

The Company can assign and transfer the Franchise Agreement to a third party as long as third party assumes obligations.

As the right to assign requires the third party assume obligations, and is therefore not absolute and unrestricted, we code a 0.

Mister Sparky is an example of a contract that we code a 1:

We can sell, assign, transfer or otherwise dispose of the Franchise Agreement, or any or all of our rights and obligations under the Franchise Agreement, to any one in our sole discretion.

As this right to assign is absolute and unrestricted, we code a 1.

Mandatory Arbitration

Item 17(U) contains information on dispute resolution. There is some variation in which disputes must be arbitrated, so for simplicity we code a 1 if any type of dispute must be arbitrated, 0 otherwise.

An example of 17(U) coded a 0 is Maid Brigade, which simply states "No provision" in the required field. As an example of Item 17(U) coded a 1, see Acti-Kare:

Except for certain claims, all disputes must be arbitrated at the office of the American Arbitration Association closest to our headquarters.

ITEM 20: INFORMATION ABOUT FRANCHISE OUTLETS

Item 20 of the FDD includes a disclosure of whether an independent franchisee association (that is, an association not affiliated with or controlled by the franchisor) is present at the chain. For an example of where we code a 0, see Jet's Pizza: "To the best knowledge of Jet's, currently there is not a franchisee organization associated with the franchise system being offered." For an example of where we code a 1, see Church's Chicken:

The following independent franchisee association has requested that we include their contact information in this Franchise Disclosure Document: Church's Independent Franchisee Association.

CONTRACTUAL PROVISIONS NOT DISCLOSED IN FRANCHISE DISCLOSURE DOCUMENTS

Six further contract provisions: No Poaching of Employees within Franchising Network, Resale Price Maintenance, Mandatory Opening Hours, Franchisor Access to Franchisee Data, Automatic Withdrawal of Franchise Fees, and Franchisee Personal Guarantee are not among the mandatory disclosures included in the 23 Items of the franchise agreement. Fortunately, Item 22 of the franchise agreement requires that a copy of the full franchise contract be attached to the FDD. By searching the full text of the contract for key words and reading the surrounding prose in context, we can code for the presence or absence of these contract provisions.

No Poaching of Employees within Franchising Network

This is a contract provision wherein a franchisee pledges not to hire employees that are currently employed at another establishment of the same franchisor. Under no poaching agreements, the McDonalds on the east side of town promises it will not consider for employment workers who are employed by the McDonalds on the west side of town.

To code the presence or absence of this contract provision, we run a text search of each FDD, including the contract, for the word stem "employ" and synonym word stems "work," and "staff." We code each contract a 1 if there is language restricting the franchisee's ability to hire employees of other franchisees in the chain, and 0 if, after searching the entire document for the relevant word stems, we can find no such language. We code a 1 if hiring of employees from other franchisees is restricted in *any* way. That includes outright prohibition, or financial penalties for doing so. We also code a 1 if *any* class of employee is covered by a no-poaching agreement. We code a 0 if franchisees are enjoined from hiring workers employed by the franchisor, but not restricted from hiring workers employed by other franchisees.

Some examples of language of no-poaching agreements, all of which we code 1:

- **AlphaGraphics:**

You and we covenant and agree that, during the term of this Agreement, and for a period of two (2) years thereafter, you and your Owners will not, directly or indirectly: . . . employ or seek to employ any person employed by you or us, or any other person who is at that time operating or employed by or at any other ALPHAGRAPHICS Business Center, or otherwise directly or indirectly induce such persons to leave their employment.

- **Five Guys:**

If you employ any individual as general manager or in a managerial position who is at the time employed in a managerial position by us or by another of our franchisees, you must pay the former employer for the reasonable costs and expenses the employer incurred for the training of the employee.

- **Mosquito Squad:**

During the Initial Term (including any Interim Period) of this Agreement and for a period of 2 years thereafter, Franchisee, Franchisee owners, and the Designated Business Manager shall not attempt to attain an unfair advantage over other franchisees or Franchisor or any Affiliates thereof by soliciting for employment any person who is, at the time of such solicitation, employed by Franchisor, other franchisees or any Affiliates, nor shall Franchisee directly or indirectly induce or attempt to induce any such person to leave his or her employment as aforesaid.

- **World Gym:**

During the term of this Agreement and for one year after its Termination, you may not disrupt, damage, impair or interfere with our business or that of any member of the Franchise Network by directly or indirectly soliciting their employees to work for you or their members to join your Facility or any individual or company then in competition with the Franchise Network.

Resale Price Maintenance

Resale price maintenance is a practice in which a franchisor reserves the right to set maximum or minimum prices for the franchisee's products and services. To code the presence or absence of this contract term, we run a text search of each FDD, including the contract, for the terms or word stems "pric," "rate," "charg," and "fare." We code the contract a 1 if the franchisor retains the right to set maximum or minimum prices across all customers, 0 otherwise. We code a 0 if the franchisor only has the right to set maximum or minimum prices for a subset of customers, such as corporate clients of the chain. We code a 1 if the franchisor has the right to compel the franchisee to participate in pricing promotions and discounts, such as a "dollar menu."

Some examples of language imposing resale price maintenance:

- **Ascend Hotels:**

[Franchisee must] Participate in and honor the terms of any loyalty, discount or promotional program . . . that we offer to the public on your behalf

and any room rate quoted to any guest at the time the guest makes an advance reservation.

- Jamba Juice

Company reserves the right, to the fullest extent allowed by applicable law, to establish maximum, minimum or other pricing requirements with respect to the prices Franchisee may charge for products or services.

- Screen Mobile:

We may, from time to time, make suggestions to you regarding your pricing policies in compliance with applicable laws. We retain the right to establish minimum and maximum prices to be charged by you, subject to applicable laws, but any exercise of that right will be specifically set forth in writing. It is furthermore understood and agreed that any list or schedule of prices furnished to you by us may, unless otherwise specifically stated as to the minimum or maximum price, be treated as a recommendation only, and failure to accept or implement any such suggestion may not in any way affect the relationship between you and us.

- Tutor Doctor:

We may periodically suggest prices to be charged by you that, in our judgment, would constitute good business practice. You do not need to accept this advice or guidance and you have the sole right to determine the prices to be charged. The integrity and goodwill developed in your business and the System may depend upon the sale of Products and Services at competitive prices and that, therefore, we may specify maximum or minimum prices for your Products and Services and you must comply with these directions from us concerning maximum and minimum prices. If we set a maximum price on a particular Product or Service, then (subject to applicable law) you may charge any price for that Product or Service, up to and including the maximum price we have set. If we impose a minimum price on a particular Product or Service, then (subject to applicable law) you may charge any price for that Product or Service, down to and including the minimum price we have set. The suggested retail price for Products and Services may vary from region to region if necessary to reflect differences in costs and other factors applicable to these regions.

Mandatory Opening Hours

A mandatory opening hours restriction exists when the franchisor retains the right to specify specific hours of operation that the franchisee must be open. To code the presence or absence of this contract term, we run a text search of each FDD, including the contract, for the terms “hour,” “tim,” “open.” We code the contract a 1 if the franchisor retains the right to require specific opening hours, 0 otherwise.

Some examples of language imposing a mandatory opening hours restriction:

- Charles Schwab:

In operating the Independent Branch, you must adhere to the comprehensive standards and specifications comprising the Schwab System, including: (i) client service standards; (ii) privacy policies; (iii) appearance, design and trade dress

standards for the Independent Branch; (iv) use of the Schwab Marks; and (v) minimum operating hours. By setting minimum service requirements and uniform standards, we strengthen customer confidence in the Charles Schwab® brand. We explain these specifications in the Confidential Manuals. We may revise our specifications in our discretion as frequently as we believe is necessary through written or electronic bulletins or supplements to the Confidential Manual or through communications sent or available to you on our Intranet. You must conform to all changes in our specifications at your cost within the time we allow.

- **Krispy Kreme:**

Franchisee agrees that the STORE will not be closed for five (5) or more consecutive days without Franchisor's prior written consent and that the STORE will be open and in operation during such hours and such days as Franchisor may specify from time to time in writing.

- **Planet Fitness:**

A PLANET FITNESS franchise offers fitness training facilities, including exercise machines and free weights, fitness training services, tanning services, related services and ancillary related merchandise as we may authorize periodically. The PLANET FITNESS franchisee must provide these services on a 24 hour per day 7 day per week basis unless prohibited by law or authorized by us in writing.

- **Thrifty Car Rental:**

You shall keep each Location open the hours and days specified in the Operations Guide.

Franchisor Access to Franchisee Data

- Some franchise contracts give franchisors independent, remote access to data stored on franchise computer systems, such as through the "point-of-sale" system employees use to process customer orders. To code the presence or absence of this contract term, we run a text search of each FDD, including the contract, for the terms and stems "data," "computer," "access," "point of," "point-of." We code the contract a 1 if the franchisor has automatic access to franchisee data, 0 otherwise. Some examples of language that we code a "1":

- **Applebee's:**

All Applebee's Restaurants must have a POS [Point of Sale] computer system that meets Applebee's specifications. The POS systems approved by Applebee's are specifically designed for tracking information relevant to the Restaurant's business. The POS systems are integrated with support and reporting tools that enable us to have independent immediate access to the information monitored and stored by the POS system, and there is no contractual limitation on our use of the information we obtain.

- **Mister Sparky:**

We will use the SuccessWare21 (ASP Option) software program or other software package we specify to gather information on the entire franchise system. We may use this information to monitor your compliance with

Minimum Sales Performance Standards (as defined below) and may use it to develop a financial performance representation for our Disclosure Document. We have independent access to the information and data. By signing the Franchise Agreement, you grant us the right to access that data. We reserve the right to independently access, gather, use, and share customer data maintained in the SuccessWare21 (ASP Option) software program (or other software program specified by us and which may be modified, updated, or replaced from time to time) for any legitimate business purposes, including, but not limited to, cross-selling One Hour and Ben Franklin products and services. You will be required to take all action necessary to allow us to access, gather, use, and share such information as we may specify in the Operations Manual (Franchise Agreement, Section 9.2.). There are no contractual limits on our independent access to the information and data stored on your computer.

- College Nannies:

The computer system will be used in the day-to-day operation of the business primarily to access our proprietary internet based database system named CNeT and must utilize the supported browser of our discretion. The system will also be used to report and communicate with us for your accounting and record keeping and for other uses as we designate. You must maintain your systems network and you must promptly update and otherwise change your computer hardware and software systems as we require, at your expense. You must pay all amounts charged by any supplier or licensor of the systems and programs used by you, including charges for use, maintenance, support and/or update of these systems or programs. We will have direct access to the data regarding the Franchised Business.

- CRDN:

You must purchase a “Point of Sale Software System” or “POS” that we approve and that meets our requirements, as may be modified from time to time in the Operations Manual, from such vendor as we require. You will also need to purchase certain other software and hardware in connection with this interface, as we require from time to time. You may also need to pay to install the POS and related software and hardware. Your POS must interface with our current proprietary software system and you may need to purchase certain other software or hardware in connection with such interface, as we require from time to time.

We will have independent access to all data recorded or stored in your POS.

AUTOMATIC WITHDRAWAL OF FRANCHISE FEES

Some franchise contracts require franchisees to give franchisors the right to withdraw money directly and automatically from franchisee bank accounts. To code the presence or absence of this contract term, we run a text search of each FDD, including the contract, for the terms “account,” “debit,” “automatic clearing,” “electronic funds,” and “withdraw.” We code the contract a 1 if the

franchisor has the right to automatically withdraw money from franchisee bank accounts, 0 otherwise. Some examples of language that we code a “1”:

- **Minuteman Press:**

Upon execution of this Agreement and/or at any other time thereafter at Minuteman’s request, Franchisee shall sign an authorization substantially in the form attached to this Agreement as Schedule B and all other documents necessary to permit Minuteman to withdraw funds from your designated bank account by electronic funds transfer in the amount of the Royalty Fee and all other fees and amounts described in this Agreement.

- **Transworld Business Advisors:**

Upon execution of this Agreement and/or at any other time thereafter at Franchisor’s request, You shall sign an authorization substantially in the form attached to this Agreement as Schedule C and all other documents necessary to permit Franchisor to withdraw funds from Your designated bank account by electronic funds transfer in the amount of the Royalty Fee, the Marketing Fee and all other fees and amounts described in this Agreement.

- **Worldwide Express:**

WWE may require Franchisee to execute an Authorization Agreement for Direct Deposits (Attachment 6 or any comparable document) to allow WWE to effect an automatic bank draft or electronic funds transfer on all future freight obligations. If the designated due date is not a business day, WWE will draft Franchisee’s account on the next business day. If Franchisee’s account does not have sufficient funds to pay the draft on the designated date, Franchisee’s failure to pay is an event of default that will result in immediate suspension of access to the freight program technology and will result in a notice of default under Section 26.3(a) and/or (d) of the Agreement.

- **IHop:**

Upon request of Franchisor, Franchisee must participate in Franchisor’s then-current electronic funds transfer program authorizing Franchisor to receive payments from Franchisee by pre-authorized bank draft, wire transfer, automated clearinghouse (ACH) transfer, or otherwise, as Franchisor specifies from time-to-time in Franchisor’s sole and absolute discretion, in accordance with procedures that may be set forth in the Operations Bulletins.

Personal Guarantee

- Some franchise contracts require franchisees to sign a personal guarantee, meaning that even if the franchisee incorporates, they still grant the franchisor recourse to their personal assets for all obligations under the franchise agreement. Some chains also require the franchisee’s spouse to sign a personal guarantee as well. To code the presence or absence of this contract term, we run a text search of each FDD, including the contract, for the stem “guarant.” If the franchise agreement states that the franchisor refuses to accept incorporated

entities as franchisees and only franchises to natural persons, we code that as a 1. Some examples of language that we code a 1:

- Little Caesar’s (personal and spousal guarantee):

Any individual or entity that owns any direct or indirect interest in your entity must sign the Guarantee included as Exhibit A to the Franchise Agreement. In addition, we require any individual who is or becomes the spouse of any natural person who signs the Guarantee to also sign the Guarantee, jointly and severally with the spouse. If you or any owner holds or later acquires any interest in any other Little Caesars® restaurant, you and your owners must also unconditionally guarantee full performance and discharge of all of the franchisee’s obligations under the franchise agreement for the other Little Caesars® restaurant, including the payment of all royalty fees, advertising fees, and other obligations.

- Culver’s (personal and spousal guarantee):

If you are a corporation, partnership, or limited liability company, each shareholder, partner or member owning a 10% or greater interest in the franchisee entity, along with his or her spouse, must personally guarantee your obligations under the Franchise Agreement (or, if applicable, the Development Agreement) and also agree to be personally bound by, and personally liable for the breach of, every provision of the Franchise Agreement (or, if applicable, the Development Agreement). A copy of this “Guaranty” is included as an exhibit to the Franchise Agreement attached to this disclosure document.

- Fresh Healthy Vending (personal guarantee only):

If you are a corporation, partnership, limited liability company or other entity, we will require all of your owners to sign a guaranty of your obligations under your Franchise Agreement and your owners’ spouses may be required to consent to the guaranty.

- Jimmy John’s (personal guarantee only):

If you are a corporation, limited liability company, or partnership, your owners must personally guarantee your obligations under the Franchise Agreement and agree to be bound personally by every contractual provision, whether containing monetary or non-monetary obligations, including the covenant not to compete. This “Guaranty and Assumption of Obligations” is the last 2 pages of the Franchise Agreement.