The Balance of Power in Franchising*

Ulrich Atz† Blake Eliason‡ Michael Lipsitz§ Peter Norlander¶

Sérgio Pinto|| Marshall Steinbaum‡

March 25, 2026

Abstract

We measure how the contractual balance of power between franchisors and franchisees has shifted over 2009-2024 by analyzing a large corpus of Franchise Disclosure Documents and a survey of over 300 franchisees. Coding more than 20 provisions across 4,500 chains, we find that franchisee autonomy declined systematically: exclusive territories fell from a majority of chains to around 20%, while restrictions on pricing, sourcing, product offerings, and post-term competition each rose to near-universal prevalence. Franchisees appear not to have been compensated for this loss of autonomy: franchise fees rose with franchisor control, chain growth did not increase, and complaint rates to the Federal Trade Commission did not decline. Chains that adopt franchisor-favoring provisions became 2-5 percentage points more likely to be acquired by private equity within five years. We interpret this finding as one plausible explanation for reductions in franchisee autonomy.

JEL: J42, K21, L42, J31

Keywords: Vertical restraints, franchising, text analysis, survey

*The authors thank Charlie McCurdy for diligent research assistance and Lorenzo Luisetto for insightful and detailed comments. Attendees at the Labor and Employment Relations Association / Allied Social Science Associations Annual Meeting (LERA/ASSA 2025), the International Industrial Organization Conference (IIOC 2025), the Western Economic Association International Annual Conference (WEAI 2025), and the Fordham Conference on Data Science and Law provided helpful comments. Some of the work for this paper was performed while Michael Lipsitz was an employee of the Federal Trade Commission. The views expressed in this article are those of the authors, and do not necessarily reflect the views of the Federal Trade Commission or any individual Commissioner.

†Bocconi University

‡University of Utah

§University of Pennsylvania

¶Loyola University Chicago, Quinlan School of Business

||OECD

1 Introduction

Is the capacity to exercise independent business judgment held in fewer and fewer hands? In this paper, we adopt a novel text-based data source—standard-form franchising contracts and related mandatory disclosures—and open-source software to systematically classify and interpret concepts in text corpora to answer this empirical question with respect to the franchising sector in the United States for the period 2009-2024. In 2017, franchise establishments accounted for $1.7 trillion in sales and 9.6 million workers in the United States.[1]

Business format franchising is an *outsourced* business model wherein a franchisor (a corporation that owns one or more brands or trademarks) licenses intellectual property to legally vertically dis-integrated local operators (franchisees). In exchange, franchisees typically pay the franchisor an upfront fee and royalties on gross revenue. Franchisees distribute the product or service associated with the brand or trademark to local retail customers, subject to some degree of control by the franchisor, codified in standard contracts and operating manuals. That control—embodied in so-called "vertical restraints"—and how it has changed over time is the focus of this paper.

To assess the prevalence of vertical restraints in franchising relationships, we use text from Franchise Disclosure Documents (FDDs). FDDs exist due to the Franchise Rule, a regulation promulgated by the Federal Trade Commission (FTC) in 1978. The Franchise Rule mandates that, prior to agreeing to a contract, franchisors must provide would-be franchisees with an FDD containing disclosures about some of the costs, benefits, and stipulations related to owning the franchise. The idea behind the Franchise Rule is that prospective franchise buyers can make informed decisions, thereby disciplining abusive practices. In theory, this market mechanism may outperform costly ex-post litigation and ex-ante prohibitions or limitations, which may contain loopholes or have unintended consequences.

[1]The U.S. Census reported 498,234 franchise establishments in 2017 across 300 industries (Zamora-Appel and Jubran, 2021). More recent estimates from the trade press suggest establishment counts may now be nearly double that number (International Franchise Association, 2026).

FDDs follow a standard form with 23 Items, including a structured summary of the contractual provisions, a description of the chain and its business, a description of fees and obligations, voluntary disclosures related to the financial performance of franchised outlets, and mandatory copies of the franchisor's financial statements as well as the standard franchise contract itself as an appendix. States have varying franchise regulations, and some states further require that FDDs be registered as public records. We constructed the FDD corpus analyzed in this paper primarily from those state-level filings, supplemented with other sources.

Our corpus consists of just under 46,000 FDDs from 2009-2024. Each franchise chain issues its chain-specific FDD annually if it is seeking new franchisees. We use modern Natural Language Processing techniques and Large Language Models to extract chain names, dates, contractual provisions, chain-level characteristics, and key tables and items from those documents. We use these to construct an unbalanced franchise chain-level panel dataset. To the best of our knowledge, this dataset is the first of its kind, in terms of the depth and breadth of its coverage. The final dataset contains 4,500 unique franchise chains. Due to brands entering and exiting franchise offerings, this is more than the number of active chains in any given year.

Our main finding is that, over time, franchisees have become subject to an increasing number of restraints that diminish their business autonomy, shifting control in the franchising relationship up the supply chain to franchisors. We establish that this pattern holds not only in the full (unbalanced) panel but also in balanced sub-panels of chains observed consistently over time, confirming that the shift is driven at least in part by individual chains tightening their governance practices rather than by compositional change in the population of franchise chains.

Specifically, we code each FDD for the presence (or absence) of a suite of contractual provisions, including many vertical restraints. Vertical restraints are contracts or other arrangements between actors at different levels in a supply chain 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). That broad concept characterizes most of the provisions we code for in our FDD corpus. These include Resale Price Maintenance, Exclusive Territories, Exclusive Dealing, Exclusive Supply, Full-line Forcing, and Franchisee Noncompetes, which the IO literature typically consider to be vertical restraints (see, e.g., Mathewson and Winter (1984); Rey and Tirole (1986) for discussion of vertical restraints from the IO perspective). In addition we code contractual provisions relating to Dispute Resolution, Restrictions on Speech, Data Sharing, and Breaches of Limited Liability. The prevalence of all of the restraints that shift business autonomy from the franchisee to the franchisor has increased (or, in some cases, remained at a very high level) throughout our panel. Similarly, the prevalence of Exclusive Territories (which provide the franchisee with exclusive rights to use a franchisor's trademark in a given local area, thereby granting relatively greater power with respect to the franchisor than otherwise) has declined.

To validate and supplement our findings from the text analysis of FDDs, we conducted a survey that yielded over 300 responses from franchisees across 234 chains. The survey focused on franchisees' firsthand experience of franchisor control and perceived changes in control over time. We link these responses to each respondent's chain and find that many franchisees are subject to restrictions about which they are unaware. This mismatch suggests either a gap in franchisee understanding, grandfathered franchise contracts that confer greater autonomy than new contracts, or a gap between contractual control and its real-world enforcement.

This paper primarily explores the contractual balance of power between franchisors and franchisees. Changes in the balance of power, however, do not necessarily indicate welfare losses for any given party. It is possible that franchisees are compensated for the reduction in their business autonomy. For example, increased franchisor control and resulting chain uniformity could increase sales, benefiting both franchisors and franchisees. The implication of such an interpretation would be that franchisees optimally trade away their autonomy in exchange for greater profitability. Alternatively, franchisors may directly compensate franchisees for losses of autonomy by altering other terms of the relationship, such as franchise fees, royalty

rates, or qualitative aspects of the relationship unreported in FDDs.

We test this conjecture and conclude that it is not operative in what we observe: first, franchise fees tend to increase when vertical restraints shift towards giving franchisees less autonomy (and vice versa), indicating that this monetary lever is not used to compensate franchisees for lost autonomy. Royalty rates have remained relatively stable over time, indicating that decreased royalty rates are not being used to compensate franchisees.[2] Second, analysis of complaints filed by franchisees against franchisors with the Federal Trade Commission does not support the theory that franchisees are compensated for diminished autonomy. Third, our open-ended survey results likewise indicate franchisee dissatisfaction with the loss of autonomy, which is difficult to reconcile with the idea that its transfer is mutually beneficial.

Finally, we explore one potential explanation for the decrease in franchisee autonomy documented in this paper: that franchisors seek to make themselves attractive to prospective private equity investors both by promising rapid expansion and by appropriating bargaining surplus from incumbent franchisees while making it difficult for them to disaffiliate in response (similar to the interpretation of corporate takeovers put forward by Shleifer and Summers (1988)). We find that imposing restraints on franchisees (and stipulating the right to invade their territories in the future) prefigures private equity takeover. To do so, we track the ownership of chains by holding companies (sometimes called "platforms" in this industry), which are often publicly traded, but are increasingly held by private equity firms in our sample.

This paper contributes to a growing literature on contractual structure and changes therein. Argyres, Bercovitz and Mayer (2007) noted the lack of systematic study of the evolution of contracts in the strategic management literature (in which contract design was, at that time, not well-studied) or in the economics literature (in which analysis of contracts typically ignored their evolution), though the franchising sector is a notable exception (Lafontaine and Shaw, 1999). Since then, the strategic management literature has added to preexisting research to fill

[2]We emphasize one limitation of our analysis. While analysis of observable components of franchisee welfare do not support the theory that franchisees are compensated for losses of autonomy, we cannot observe the most direct measurement of financial success, i.e., outlet-level franchisee profits.

this gap (see, e.g., Bercovitz and Tyler (2014); Xing et al. (2021); Mayer and Argyres (2004); Vanneste and Puranam (2010)), including in the franchising context (Argyres, Bercovitz and Leenders, 2025). We contribute to this literature by providing a systematic overview of how franchise contracts have evolved over the past couple of decades, expanding on prior work both in depth (by examining many contractual terms, not just fees and royalties) and in breadth (by examining the near-universe of franchises over a long time horizon).

We also contribute indirectly to discussions regarding how contracts create or capture value within and across organizations (Schilke and Lumineau, 2018; Poppo and Zenger, 2002; Lumineau and Malhotra, 2011; Malhotra and Lumineau, 2011; Luo, 2002; Ryall and Sampson, 2009). This literature is highly related to a discussion in Law and Economics, as well as a body of antitrust jurisprudence, which asks whether vertical restraints in the franchising context are pro- or anti-competitive (Blair and Lafontaine, 2005; Easterbrook, 1984; Blair and Kaserman, 1983; Bernheim and Whinston, 1998; Asker and Bar-Isaac, 2014). Current antitrust jurisprudence is very permissive toward such control, generally interpreting it as pro-competitive because it realizes efficiency in distribution by aligning the incentives of franchisors and consumers. As a result, substantive regulation of the franchising relationship at the federal level has diminished considerably since the late 1970s (Callaci, 2021*a*). In this paper, we do not directly evaluate whether vertical restraints capture or create value, nor do we directly evaluate the competitive impact of vertical restraints; however, we document changes in prevalence over time, which inform overall competitive assessments of the franchising landscape given an assessment of the competitive impact of those restraints.

Finally, we contribute to a growing literature that uses FDDs as data to study franchising. This literature includes Norlander (2025), who use a smaller document corpus that forms the nucleus of the one used in this paper, Callaci (2021*b*) and Callaci et al. (2025), who focus on a cross-section of franchise chains for which the authors obtained 2015 FDDs. The aforementioned papers identify cross-sectional chain variation in the use of various provisions affecting franchising labor markets, like the requirement that franchisees impose non-competition agree-

ments on their workers, no-poaching or non-solicitation agreements between franchisees, and restrictions on the dissemination of trade secrets through the mechanism of workers switching jobs and/or chains (as do other papers in the literature, such as Lafontaine, Luisetto and Prescott (2025), Atz (2025), Murry and Newberry (2022), Schneider and Harknett (2025), and Krueger and Ashenfelter (2022)). Like the present paper, Lafontaine, Luisetto and Prescott (2025) has a time dimension since those authors obtained FDDs for 297 chains from both 2010 and 2020. Lafontaine, Saattvic and Slade (2023) and Callaci et al. (2024) investigate the effect on franchise workers of franchise chains ceasing use of no-poach clauses, albeit without using FDDs specifically as their data sources. This paper shifts the focus away from workers and labor markets to the bilateral relationship between franchisors and franchisees across a range of commercially relevant business decisions.

The paper proceeds as follows: Section 2 introduces the restraints we code for. Section 3 explains how we analyze the FDD corpus, including how we constructed the rules that determine whether a chain does or does not impose a given restraint or contractual provision in its FDD, and how we aggregate from FDDs to the chain-level panel. This section also provides a summary of the survey protocol and the FTC complaints data. Section 4 reports the prevalence of each restraint over time in the panel, as well as comparing that prevalence to the results of a survey of franchisees we conducted. Section 5 tests our interpretation of a shifting balance of power by investigating whether franchisees are compensated for the loss of their autonomy. Section 6 considers whether the corporate structure of franchise chains, and specifically the possibility of securing a private equity buyout, motivates the shift in power we document. Section 7 discusses the significance of our findings. Section 8 concludes.

2 Restraints

We began with the set of restraints covered by Callaci (2021*a*), which were initially hand-coded for a cross-section of 530 FDDs filed in Wisconsin for one year. Callaci et al. (2025) reports

the prevalence of that set of restraints in the cross-section of franchise chains, both in aggregate and by industry. In the course of constructing and validating the rules associated with each of those restraints for the present, much larger FDD corpus, we formulated additional variables and associated rules to capture the subtleties related to the initial set of restraints. We also investigated aspects of the franchise relationship that are unreported in any other prior work, to our knowledge, including the degree to which franchisees are bound by non-disclosure agreements and subject to other restrictions on commercial speech.

In general, the variables we create and the rules assembled to code for them are not treated as mutually exclusive, by design, even when the meaning of one provision would seem to rule out another. We adopt this approach in light of the high frequency with which we observe contradictory or near-contradictory language in the FDDs. Language that would seem to preserve franchisee autonomy is contradicted by accompanying language that grants the relevant authority to the franchisor or imposes a restriction on the franchisee's use of that autonomy. When such apparent contradictions arise, the FDD is categorized in both ways, with minimal researcher intervention to impose a given construction on the contract.

We organize the restraints and provisions we investigate into six categories, each corresponding to a distinct domain of business decision-making within the franchise relationship (Table 1).

Table 1. Contract Provisions in Franchise Disclosure Documents

Category	Provision	Description
Retail Pricing	Resale Price Maintenance	Franchisors set or substantially influence retail prices, restricting franchisees' ability to capture surplus or adapt pricing to local market conditions. Coded as active if the franchisor determines the price of *any* retail transaction, e.g. an "honor all discounts" or "accept all gift cards" policy.
	Minimum Resale Price Maintenance	Franchisors retain authority to set minimum retail prices, including prohibitions on under-pricing and competing for the retail customers of rival franchisees.
Product and Service Offerings	Full-Line Forcing	Franchisees must carry the franchisor's complete product or service portfolio, limiting their ability to specialize based on local demand.

Continued on next page

Table 1 continued from previous page

Category	Provision	Description
	Franchisor Can Prohibit Offerings	Franchisors retain veto rights over products or services franchisees wish to offer, even if locally profitable.
	Franchisor Can Change Product Mix	Franchisors can unilaterally alter the required product or service mix during the franchise term.
	Exclusive Supply / Approved Suppliers Only	Franchisees must source inventory, ingredients, or materials from franchisor-approved (or franchisor-owned) suppliers. Coded as active if the FDD indicates that *any* input must be sourced from the franchisor's chosen supplier.
	Propose New Suppliers	Franchisees may propose new suppliers, but the franchisor retains a veto. A weaker form of exclusive supply.
Territory and Competition	Exclusive Territory Granted	Franchisees receive a protected local market, preventing intra-brand competition. Absence allows franchisors to intensify outlet density.
	Franchisor Reserves Right to Compete in Territory	Franchisors reserve the right to open company-owned or additional franchised outlets within franchisees' territories. Often appears alongside a nominal exclusive territory grant, effectively countermanding that grant.
	Franchisee Confined to Territory	Franchisees are confined to a given territory and prohibited from offering products or services outside it.
	Franchisor Site Approval	Franchisors have the right to choose or reject the specific location or premises of the franchise.
	Exclusive Dealing	Franchisees must deal exclusively with the franchisor's brand and cannot carry competing brands or products.
	Franchisee Noncompete	Franchisees are prohibited from operating competing businesses *after* expiration of the franchise contract, limiting outside options and exit flexibility.
Governance and Dispute Resolution	Mandatory Arbitration	Disputes must be resolved through binding arbitration rather than litigation, potentially limiting legal recourse and reducing transparency.
	Non-disparagement Clause	Franchisees are prohibited from making negative statements about the brand to media, regulators, or prospective franchisees.
	Goodwill Clause	Franchisees are obligated to protect the goodwill of the brand (more general/less restrictive version of a Non-disparagement clause).
	Restrictions on Franchisee Speech	Franchisor discloses that it has extant non-disclosure agreements with franchisees in place, and hence existing franchisees are not at liberty to speak freely with prospective franchisees. (This does not refer to language protecting the franchisor's trade secrets.)

Continued on next page

Table 1 continued from previous page

Category	Provision	Description
	Independent Franchisee Organization	Whether an independent franchisee organization is recognized by the franchisor, enabling collective voice in governance.
	Franchisor Right to Purchase Assets/Right of First Refusal	Franchisors can acquire franchisee businesses or exercise a right of first refusal on proposed sales, potentially limiting exit options and secondary-market prices.
Information and Monitoring	Franchisor Access to Franchisee Data	Franchisors require access to operational and customer data, often through mandated point-of-sale systems. May mitigate information asymmetries but also increases franchisee operating costs.
Legal and Financial Obligations	Franchisee Personal Guarantee	Franchisees or their principals provide personal guarantees, piercing limited liability protections and exposing personal assets.
	Additional Guarantor	The franchisee's spouse, children, and/or business partners also guarantee obligations to the franchisor.

Each of these six domains represents an area in which the franchise contract allocates decision-making authority between the franchisor and the franchisee. Taken together, they describe much of the governance structure of the franchise relationship: who decides what products to sell, at what prices, from which suppliers, where, and subject to what oversight; dispute resolution mechanisms; and financial obligations. Provisions that shift authority to the franchisor reduce the scope of the franchisee's independent business judgment, while provisions like exclusive territories that grant the franchisee a protected local market do the reverse.

We note that franchise contracts also contain provisions that could plausibly benefit franchisees, such as franchisor obligations to provide training, chain-level advertising funded by the franchisor, and passive ownership clauses that allow franchisees to function as investors rather than owner-operators. We do not code these provisions in the present analysis. The omission is a limitation: our set of coded provisions is weighted toward those that restrict franchisee autonomy, and our principal franchisee-favoring provision is the exclusive territory. However, the provisions we do code correspond to the traditional categories of vertical restraints studied in both the industrial organization and strategic management literatures,

supplemented by franchising-specific governance provisions (such as speech restrictions, personal guarantees, and franchisee associations) that have received less systematic attention. Future work could extend the analysis to provisions that are more straightforwardly beneficial to franchisees.

3 Data and Methods

We built a comprehensive franchise-chain-level panel dataset based on information extracted from a corpus of FDDs representative of the franchise sector in the United States. We acquired FDDs used in Norlander (2025), Atz (2025), Schneider and Harknett (2025), Murry and Newberry (2022), and Arbel (2023). We acquired additional FDDs for the largest franchisors for the year 2009 to improve historical coverage, and requested FDDs from Minnesota, Wisconsin, Indiana, and Washington, where they are public records. The corpus of FDDs includes 45,892 documents from the following original sources each (Table 2).

In general, every franchise chain that operates in a given jurisdiction registers its FDD in that jurisdiction if registration is obligatory. In some states there are exemptions from filing requirements for small or inoperative chains.

We construct the panel dataset from this restraint-coded document-level output by means of document metadata we also extract, which includes the franchise chain that issued the FDD, the year it corresponds to, and other document-level characteristics. We then fuzzy match the document-level chain-identifying metadata to a master list of franchise chains we obtained from FRANdata.[3] Once a franchise chain identifier (as well as a year) has been assigned to each document, we construct the panel dataset by taking the modal value for each binary restraint variable across all the FDDs corresponding to that franchise chain and year. This implicitly allows the text of a chain's FDD for a given year to vary across our various data sources, since there are frequently multiple documents corresponding to each franchise chain-year cell. In

[3]FRANdata is a leading provider of data and market research in the franchising sector. See https://frandata.com/.

principle, the FDD is supposed to be invariant for each chain-year, though there are clauses that stipulate certain provisions do or do not apply in different jurisdictions given variations in state law related to franchising. However, in practice, the FDD for a given chain may not scan identically across sources and repositories, hence the need to aggregate within each chain-year cell.

Finally, given the general invariance of FDD provisions over time and the fact that chains that do not change their FDD are not necessarily obligated to re-file with state agencies in every year, we fill in missing chain-year observations by carrying forward the value of a given restraint-coding binary variable observed for the chain in a previous year, if any. If the FRANdata master list indicates that the chain is active in 2024, it is carried forward to that date. We do not do the same going backward in time. To give an example: if the chain's oldest FDD in the document corpus is dated 2013, then the chain appears again in 2017 and every year thereafter, that chain will have missing data for 2009–2012, the 2013 values for each restraint-coding binary variable will be carried forward to 2014–2016, and then the true values assigned based on each subsequent year's FDD. Almost all chains remain in the panel through 2024, the final year for which we have FDDs. The only reason a chain disappears prior to that are: (1) it has no FDD in that year, and (2) the FRANdata master list identifies it as "no longer franchising."

The full, unbalanced panel dataset covers 16 years of data for over 4,500 unique franchises. Data for 18,886 chain-year observations is traced to a specific FDD. By carrying forward FDD-derived observations from earlier years, our unbalanced panel data covers a total of 26,960 chain-years.

Figure 1(A) reports the count of distinct franchise chains and outlets in each year of the complete panel data, and Table 3 reports aggregated chain-level data at an annual frequency. The panel grows over time. Particularly in the early years, this is most likely because of the increasing availability of machine-readable state-registered FDDs since online repositories were created in the early 2010s. Franchising is also a growing business model, so the upward trend in the size of the panel may partly reflect the entry of new franchise chains and the growth of

existing ones (International Franchise Association, 2026).

3.1 Text Analysis and Data Construction Methods

We extract unstructured concepts and semi-structured data from FDDs. Based upon the literature and our understanding of the contractual provisions that shape franchisor control, we sought to identify the presence or absence of the restraints listed in Section 2 in franchise documents.

The methodology we employ for constructing novel concept classifiers leverages open-source software introduced in Meisenbacher and Norlander (2023) and deployed to study FDDs in Norlander (2025). We summarize it here for easy reference, but readers interested in a more detailed discussion of the methodology in contrast to alternatives are referred to those predecessors.

We first identify and locate 'keywords' in the text that plausibly correspond to a given meaning (a contractual provision in our case) (Luhn, 1960), excerpt the text around the specified keywords from the larger document to create a "context window," then subject the context window to a set of rules pre-determined to denote that the text in question has a given meaning—in our case, the presence or absence of a given restraint or contractual provision. The rules are given priority such that the presence of a higher-priority rule in a given context window overrides the way a lower-priority rule would otherwise classify the document with respect to one or more variables. The output is document-level data where each concept extracted is represented as a binary variable: 1 if it appears in any of the context windows, and 0 if it does not.

We construct the list of rules corresponding to a given binary variable (or set of related binary variables) by drawing a random sample of context windows corresponding to each keyword and rule from the corpus and classifying the random sample. Once we have a stable list of rules (i.e., further sampling yields no change to the list of rules or their prioritization), we run the completed rules on the entire document corpus to generate a binary classification of each document in the corpus for each variable. We then spot-check the coding of individual

FDDs to ensure that our rules generated the correct interpretation of that document's meaning.

The overall aim is to formulate a set of rules that can be applied to the entire FDD corpus consistently and comprehensively, in order to make reliable empirical claims about both the cross-sectional representation of each contractual provision in the franchise sector and its evolution over time.

The approach is qualitative: we examine a sample of text containing keywords, write rules that classify that text, and determine whether specific language conveys a given meaning, then automate the extrapolation of those rules to the larger document corpus. This method contrasts with unsupervised learning approaches to text analysis (Arold et al., 2024), but has the advantage of allowing high-precision identification of specific concepts at the scale of a corpus.

In addition to identifying concepts in unstructured text, we also extract structured information from the FDDs. Item 20 Table 1 of the FDD reports the number of outlets that are company-owned and managed, the number that are franchisee-owned and operated, and the total number of outlets for the prior three years. Item 20 Table 5 reports the projected openings for the following year, including the number of agreements signed with no outlet opened to date, the projected number of new franchisees, and the number of projected company-owned outlets.

Item 20's Table 1 contains five columns and nine rows. Item 20's Table 5 contains five columns and one or more rows (some franchisees report results for individual states). We extract this structured information by searching for Item 20 in the text of each PDF and identifying the page location of Table 1 and Table 5. We extract Table 1 and Table 5 with Camelot, a Python package that enables extraction from formatted tables in PDFs. As Camelot does not work on scanned images or documents without formatting, we also extract pages as an image and run the image of the page through a series of advanced open-source OCR models: GOT OCR 2.0 (Wei et al., 2023, 2024), a transformer-based image-to-text OCR model, Microsoft Phi Vision 3.5, a vision language model, and Surya OCR and Tabled. We discard outliers and indecipherable data that does not conform to the structure of Table 1 or Table 5.

We finally match structured information from FDDs to identifications at the level of their owners, such as a private equity firm. This data was manually acquired through press releases made public on industry media websites or directly from franchised chains and their owners. We then code the date of acquisition so that, for example, a brand acquired by an investor halfway through our panel is not tagged as owned by the investor throughout our entire panel.

3.2 Validation

In order to further validate our restraint codings and the rules that generate them, we employed a separate research assistant to manually classify a random sample of 39 FDDs with respect to each of the restraints, without having seen the list of rules that generate them, based on knowledge of franchising and the restraint definitions in Section 2. We then compared the results in the panel dataset whose construction was just described to those 39 hand-coded FDDs. The construction of the panel dataset relies not only on the automated rules ascribing meaning to the text of the FDD and the underlying contract, but also the correct assignment of franchise chain identity to a given document and the carry-forward procedure to "fill in" otherwise-missing cells of the panel. In 81% of the 1,053 cells of the comparison sample (39 chains $\times$ 27 binary variables), the two approaches agreed.

For the 19% of cases in which the panel disagreed with the hand-coded sample, the authors adjudicated. If the panel was deemed to have incorrectly coded a given chain-restraint cell, we edited the rules in order to accord with the hand-coded sample.

3.3 Survey Protocol

We conducted a survey of current and former franchisees using contact information listed in Item 20 of FDDs. This information, which is intended to enable prospective buyers to contact experienced franchisees, includes phone numbers and email addresses. The survey was administered in two waves (September 2024 and April 2025), following a pilot, using three

outreach modes: (1) mobile numbers received a text message with a link to an online Qualtrics survey, (2) landline numbers were contacted using interactive voice response (IVR), and (3) email addresses received an invitation with a follow-up reminder. The full survey protocol is described in Appendix B.

The combined sampling frame included over 393,000 phone numbers and 74,000 email addresses. Sampling was stratified by franchise size to control costs. However, up to half of the contact information appeared to be unmonitored or no longer active phone numbers or email addresses. The survey yielded 350 total responses (with 309 chain-identifiable responses). The blended response rate is estimated between 0.2% and 1.2%, consistent with other business-owner surveys relying on unsolicited contact, such as Minnis and Shroff (2017). Respondents disproportionately came from larger, more established chains, while chains with few outlets were underrepresented, as one might expect based on the sampling strategy. While the nonresponse bias remains unknown, our protocol likely reaches individual owner-operated outlets, which would improve the validity for questions related to autonomy and operational control.

3.4 Complaints to the FTC

As part of its mission to protect consumers, the Federal Trade Commission (FTC) administers a website to which individuals may "report fraud, scams, and bad business practices."[4] Using this website (and related offline portals for receipt of complaints), franchisees may submit complaints about franchisors. The FTC collects data from all submitted complaints, including substantial information on the party about which the complaint is filed, such as their name (and other identifying information) as reported by the complainer, product code descriptions (e.g., "Franchises & Distributorships"), violation code descriptions (e.g., "Deficient franchise disclosure," "Breach of contract," or "Unsubstantiated earnings claim"), and the text of the complaint itself.

We begin with a corpus of all complaints reported to the FTC from complainers based in

[4]See reportfraud.ftc.gov.

the United States from January 1, 2014 to September 30, 2023. The data includes the actual text of the complaint for all complaints created between January 26, 2019 and December 4, 2023.

Since all coding is input by users (who may be the complaining individual, in the case of an online complaint, or a hotline operator on behalf of a complaining individual, in the case of call center complaints), miscoding occurs. We take several steps to clean the data to guard against miscoding. Broadly, these steps are intended to standardize the data in order to determine which complaints are likely to be about the franchising relationship specifically. We summarize the most important steps here; for details, see Appendix D.1.

Many complaints are unlikely to be about the franchising relationship. Complainers may use the "Franchises & Distributorships" product code when complaining about the franchising relationship, but do not always do so. Conversely, that code is often used when the complaint is *not* about the franchising relationship. We flag complaints as likely to be about franchising if they meet combinations of the following criteria:

1. The violation code is commonly found associated with the product code "Franchises & Distributorships";

2. The complained-against party's name (fuzzy or exact) matches our list of known franchised businesses;

3. The complaint has the product code "Franchises & Distributorships"; and

4. The text of the complaint contains either of the words "franchisor" or "franchisee."

Our primary sample (which we refer to hereafter as the "full matched complaint set") is restricted to those complaints meeting criteria (1) and (2), comprising a total of 72,186 complaints from January, 2014 through September, 2023. We also consider samples that additionally separately meet criteria (3) (1,327 complaints) and (4) (461 complaints). Both of these latter two restrictions, especially (4), are likely overly restrictive and result in false negatives: that is, removal from the sample of complaints that are in fact about the franchising relationship.

However, they serve as analysis samples that likely have few false positives, which the full matched complaint set arguably contains. We reiterate that, due to data availability restrictions, the dataset containing text (and thus, the dataset that tags complaints containing the words "franchisee" or "franchisor") dates back only to January, 2019.

4 Results

4.1 Results in the Unbalanced Panel

Figure 2 reports the baseline results: the prevalence of each of the contractual provisions described in Section 2 in the unbalanced franchise chain panel. The main finding is that provisions shifting decision-making authority to the franchisor have increased in prevalence over time, while the principal provision granting the franchisee a protected stake in the relationship—the exclusive territory—has diminished. We discuss each category in turn.

Product and service offerings (Figure 2(B)). Exclusive supply and full-line forcing are arguably constitutive of the franchising business model, and both have high prevalence over the length of the panel. Exclusive supply is at nearly complete prevalence throughout.[5] Full-line forcing starts at over 90% prevalence and increases from there. Together, these provisions require that franchisees source their inputs from franchisor-approved suppliers and offer the franchisor's complete product or service portfolio, not only the profitable items. Altogether, it is perhaps unsurprising that most chains include some form of each. What is more notable is the trend in the franchisor's discretionary authority over the product mix: the prevalence of the franchisor's right to prohibit the franchisee from carrying specific products increases from around 80% to over 90%, and the prevalence of the franchisor's right to change the mix of products the franchisees are obligated to offer during the franchise term increases from 50%

[5] As stated previously, we code this restraint as in operation if it pertains to *any* input purchased by the franchisee.

to over 60%. These provisions go beyond the baseline uniformity that the franchise model requires; they grant the franchisor unilateral authority to reshape the franchisee's operations on an ongoing basis. The prevalence of the right to propose new suppliers also increases over the panel, but as we discuss in the survey results below, franchisees interpret this provision as a form of franchisor control rather than a grant of flexibility.

Territory and competition (Figure 2(C)). The most striking result concerns exclusive territories, which diminish considerably over the course of the panel, from a majority of chains at the beginning to around 20% by the end. Moreover, "Franchisor Reserves Right to Compete" is at almost complete prevalence by the end of the panel, suggesting that even the 20% of ostensible exclusive territory-granting chains that persist are nonetheless offering less than an ironclad guarantee of a protected local market.

This finding is significant for understanding the governance of the franchise relationship. The traditional account holds that the overall brand value is enhanced if franchisees conform to the franchisor's business model, including by not competing against one another. The exclusive territory is the quid pro quo in that arrangement: an exclusive license to share in the value of the brand in a local area. That exclusive territories are no longer being granted implies that franchisors can enforce the chain uniformity they need to operate without conceding protected markets to franchisees in return. We further test this interpretation in Section 5.

We note, however, that the decline in exclusive territories may interact with the growth of area development agreements and multi-unit franchising on the franchisee side. Some franchisees operate multiple outlets, and these operators may face a different trade-off: accepting weaker territorial protections in exchange for the flexibility to expand across locations. Our data do not permit us to distinguish between single- and multi-unit franchisees in this analysis, but the interaction between territorial restrictions and franchisee organizational structure is an important avenue for future research.

The restraints that prevent franchisees from offering products outside their territory, as well

as the franchisor's veto over the specific location of the franchisee's premises, have increased gradually over time. Many franchise chains apparently both confine their franchisees to operating in a specific designated geography and do not guarantee them an exclusive distributorship within that geography. The combination effectively constrains the franchisee's competitive options.

Exclusive dealing—the requirement that franchisees deal only with the franchisor's brand and not carry competing brands or products—is at nearly complete prevalence throughout the panel. This is arguably constitutive of the franchise model itself, but its interaction with the decline of exclusive territories is notable: franchisees are bound to a single brand but increasingly lack a protected market in which to sell it.

Post-term franchise noncompete clauses are also noteworthy in this context. The prevalence of noncompetes starts at 80% in the panel and increases to around 90% by the end. If the franchisee is bound by a post-term noncompete, the prospective franchisee faces a free choice of brand affiliation only once, at the outset, which is also when he or she would be least knowledgeable about the true commercial value of alternative franchise brands. Moreover, if the franchisor's right to purchase assets acts to inhibit the secondary market for franchise businesses, then the assumption that franchisees freely choose with which brand to affiliate is further undermined. In the language of organizational economics, these provisions raise the cost of exit from the relationship, shifting bargaining power to the franchisor over the life of the contract. Whether this power shift with respect to the option to exit is compensated with other franchisee-favoring changes in the terms of the relationship is what we investigate in section 5.

Retail pricing (Figure 2(A)). There are substantial increases in the prevalence of both retail price restraints: Resale Price Maintenance (which does not specify whether it is setting maximum or minimum prices, except in the cases where it is recording an "honor all discounts" policy, since that sets a maximum price for a specific transaction or set of transactions) as well as Minimum Resale Price Maintenance (which includes prohibitions on under-pricing and com-

peting for the retail customers of rival franchisees or the franchisor). We record any degree of franchisor involvement in retail price-setting as constituting Resale Price Maintenance because either promoting or prohibiting certain pricing conduct can rule out entire business models, or else impose them on the franchisee. For example, "honor all discounts" means the franchisee is obligated to implement the franchisor's policy of price discrimination, which may be against the franchisee's interest but not the franchisor's. It is also worth noting that the legal environment for retail price restraints shifted just prior to our panel period: the U.S. Supreme Court's 2007 decision in *Leegin Creative Leather Products, Inc. v. PSKS, Inc.* moved resale price maintenance from per se illegality to analysis under the rule of reason, potentially reducing the legal risk franchisors face from imposing pricing controls and contributing to their increased prevalence over the period we document.

Franchisor control over retail pricing also functions as a complement to other provisions. The franchisee may want to steer customers away from products on which it earns a loss; franchisor control over retail pricing prevents this, and is thereby necessary to enforce full-line forcing and exclusive supply. In this sense, the various facets of franchisor control are not independent but reinforce each other as a system. The simultaneous increase in pricing restraints and decline in exclusive territories is difficult to reconcile with models in which restraints serve primarily to share franchisor rents with franchisees in exchange for cooperation (cf. Asker and Bar-Isaac, 2014). Rather, our findings suggest that franchisors are able to secure franchisee compliance across multiple dimensions of business conduct without offering protected markets in return.

Governance and dispute resolution (Figure 2(D)). The findings with regard to non-disclosure and speech restrictions imposed on franchisees are interesting and, to our knowledge, novel. Around 40% of chains disclose that at least some franchisees are bound by NDAs (with a slight upward trend over time), while about the same number state explicitly that franchisees are not bound by NDAs. Almost 80% of chains include a requirement that franchisees not jeopardize

the franchisor's goodwill. The more extreme form of speech restriction, a non-disparagement clause imposed on the franchisee and/or its employees, applies to only a small minority of chains, but that too shows an increasing trend over time, reaching 20% of the panel by the end. About 60% of chains utilize a mandatory arbitration clause for franchisor-franchisee disputes.

Very few chains have an independent association of franchisees that is recognized by the franchisor, and the share that explicitly states they do not have one is rising, currently above 60%. From a governance perspective, these provisions collectively limit the mechanisms through which franchisees can voice dissatisfaction, coordinate with one another, or escalate disputes to public fora. They restrict not just what franchisees can do operationally but what they can say about the relationship, narrowing the channels through which the balance of the relationship might be contested.

Information and monitoring (Figure 2(E)). About 90% of chains require franchisees to share point-of-sale data, up from 70% at the start of the panel. This is often enforced by requiring franchisees to use a specific data system licensed by the franchisor. The rise in data-sharing requirements reflects a broader trend toward franchisor monitoring of franchisee operations, enabled by advances in information technology. This creates an information asymmetry in which the franchisor observes the franchisee's operations in real time while the franchisee has no reciprocal visibility into the franchisor's decision-making—an asymmetry that may be consequential when the franchisor is simultaneously deciding whether to open competing outlets in the franchisee's market, as they are increasingly at liberty to do.

Legal and financial obligations (Figure 2(F)). Breaches of limited liability are common and increasingly prevalent. Over 90% of chains make the franchisee put up a personal guarantee of obligations to the franchisor, and over 80% extend that to the franchisee's family and/or business associates. If limited liability is a constituent of the corporate form, then ostensibly

independent franchise businesses are not fully able to avail themselves of it.[6] These provisions raise the personal stakes of the franchise relationship for the franchisee while doing nothing comparable for the franchisor. Combined with noncompete clauses and restrictions on the sale of the franchise business, they increase the cost of exit and thereby tilt the ongoing balance of bargaining power within the relationship.

Summary. Taken together, the trends documented in this subsection describe a coherent shift in the governance structure of franchise relationships. It is not the case that franchisors are gaining control in one domain while ceding it in another; rather, the movement is consistently in one direction across all six categories of contractual provisions. Franchisors are simultaneously tightening control over pricing, product mix, territory, information, speech, and financial exposure, while the principal concession to franchisees—the exclusive territory—is being withdrawn. This pattern of across-the-board tightening, rather than domain-specific adjustment, is what motivates the analysis in Section 5, where we test whether franchisees are compensated for the loss of autonomy we document here.

4.2 Results in the Balanced Component of the Panel

Given the starkly increasing number of chains represented in the unbalanced panel dataset over time, as shown in Figure 1(A), a natural question is whether declining franchisee autonomy is due to individual chains altering their governance practices over time, or due to the entry of new chains that grant less autonomy from the outset. Distinguishing between these two mechanisms is important: the former implies that franchisors are actively renegotiating the terms of existing chains mid-term, while the latter could simply reflect changing norms among newly formed chains.

[6] One of our (phone) survey responses raised a novel variant of this, at least to us: the franchisor treats the franchisee's business assets as its own collateral when obtaining bank loans—hence the franchisor's right to purchase assets may be required by any lender taking the franchisee's assets as collateral for a loan to the franchisor—which impairs the franchisee's ability to obtain business loans on its own account, and thus binds them to obtain financing *only* from the franchisor on unfavorable terms.

To answer this question, we created two balanced-panel subsets of the larger unbalanced panel. The first spans 2009–2024 and consists of 170 chains. The second spans 2013–2024 and contains 686 chains. For each, we recompute restraint prevalence by chain over time.

Results for the 2009–2024 balanced panel are reported in Figure A.1 and for the 2013–2024 balanced panel in Figure A.2. They show the same pattern as in the unbalanced panel results reported in Figure 2. If anything, the pattern in the balanced panel is more pronounced, indicating that long-standing chains changed their practices over the sample period in the direction of less franchisee autonomy. This rules out a pure composition effect: the shift in governance we document is occurring within ongoing franchise relationships, not merely at the point of entry.

An important clarification is that changes in FDD terms typically apply to new franchisees signing agreements and to incumbents at the point of renewal, rather than retroactively modifying existing contracts mid-term. Given that franchise terms typically span 10–20 years, some incumbent franchisees may operate under older, more favorable terms even as the chain's current FDD reflects tighter restrictions. We also note that within-chain changes may be driven by shifts in a subset of provisions rather than a uniform tightening across all dimensions; the factor analysis in Section 5.1 provides a summary measure that aggregates across provisions.

4.3 Industry-level Patterns

Given the wide prevalence of the franchising business model across a variety of consumer-facing goods and services sectors, we further break down the panel dataset by industry. Specifically, we compute the top 10 four-digit NAICS industries by franchise chain count in the panel and separately report restraint prevalence in those 10 industries. The count of chains from each industry is reported in Figure C.1, and we further report the pattern of restraint prevalence for each industry in the following figures.

The broad takeaway is that the overall pattern of reduced franchisee autonomy is not industry-specific—the patterns discussed in Subsection 4.1 above hold for all 10 industries, although

there is variation between them as to the level of prevalence of various restraints, mostly due to small chain counts in some industries in the early years of the panel. The generality of the pattern across industries ranging from restaurants to personal care services to residential construction suggests that the shift we document reflects sector-wide changes in how franchisors structure their relationships with franchisees, rather than idiosyncratic developments in any one industry.

4.4 Franchisee Survey Results

In order to supplement and validate our findings from text analysis of FDDs, we conducted a survey of franchisees. Specifically, we extracted telephone numbers and email addresses from Item 20 of the FDDs, which lists the contact information of incumbent franchisees for the purpose of inviting would-be franchisees to obtain information about the conduct of the franchisor from franchisees of longer standing. (This is the import of the related disclosure of past Non-Disclosure Agreements that would inhibit such information sharing, which we use to construct our Speech Restrictions and No Speech Restrictions binary variables.) Appendix B gives the protocol for this survey, including the text of the questions that were asked.

We asked several questions related to the franchisees' experience of franchisor control. Specifically, we asked the franchisees about the following:

1. Whether they are bound by a post-term noncompete clause.
2. Whether they have an exclusive territory.
3. Whether they or the franchisor sets retail prices.
4. Whether they choose their suppliers, or the franchisor does.
5. Whether they are restricted as to whom they could sell their franchise business.
6. Whether they are obligated to sell all the products or services mandated by the franchisor, or can pick and choose.

7. Whether they would receive a fair price if they sold their franchise business.

8. Whether the franchisor's overall level of control had gotten more or less onerous over time.

Altogether, we had 309 chain-identifiable survey responses to these questions, covering 234 distinct chains. (Duplicates are multiple franchisees reporting for the same chain.)

Table 4 reports the results for each of the questions about franchisor control, and Figure 3 gives the distribution of the size of the franchisee-respondents and their tenure in the business. Overall, the responses represent young, small franchisees who evince dissatisfaction with the level of franchisor control. The open-ended section of the survey reports a range of intense to moderate dissatisfaction, with only two respondents indicating they felt the franchisor benefited their business.[7] Figure 3(C) reports the share of respondents who say the franchisor's control has gotten more onerous as a function of franchisee tenure. Aside from the shortest-tenured franchisees, 60–70% of respondents report that the franchisor's control has gotten more onerous over the time they have been in the business.

We proceed to compare the survey responses to the text analysis of the relevant chain's FDDs previously reported. Specifically, since the survey was conducted over two waves in late 2024 and early 2025, we retain the most recent year observation for each chain in the panel dataset, which is usually 2024. We then compare variation between each possible answer to the survey question and the prevalence of relevant restraints reported in the panel. The results are visualized in Figure 4.

- **Franchisee Noncompete**: The survey question asked "Are you bound by a noncompete clause that would prevent you from affiliating with a different corporate headquarter after your current franchise agreement expires?" As written, this question refers specifically to post-term noncompetes, but we compare the prevalence of both that and Exclusive

[7] Table B.2 reports the full text of all the open-ended survey responses we received.

Dealing (which prohibits affiliation with a rival chain or entering the business line independently during the term of the franchise) across respondents who indicated that they either were or were not bound by a noncompete. 84.8% of respondents said they were bound by a noncompete, versus 15.2% who said they were not. Of those who said they were, we code 94% as having a noncompete in their FDD, versus 86% for the respondents who said they were not bound by a post-term noncompete.

- **Exclusive Territory**: The survey question asked "Do you have an exclusive franchise territory?" We compare the Yes/No answers to this question to two provisions: whether an exclusive territory is granted, and whether there is language reserving the franchisor's right to invade the territory or license other franchisees to do so. 24.7% of respondents said they did not have an exclusive territory, versus 75.3% who said they did—higher than the prevalence we find for exclusive territories in the FDDs by the end of the panel. On the other hand, many of the open-ended answers express extreme dissatisfaction with franchisors who invade territories the franchisee believes to be exclusive.

  The results from comparing survey and FDD data directly are similar: franchisees who indicated they have an exclusive territory are more likely to have one per the FDD data, but the difference is only 12 percentage points (19% versus 7%). There is almost complete prevalence of language reserving the franchisor's right to compete in both groups: 100% for the no-exclusive-territory survey responses, versus 98% for the survey respondents who answered that they do have an exclusive territory. This finding validates our interpretation of this language as countermanding the upfront promise of an exclusive territory and is confirmed by the franchisees' grievances about invasions of their territory.

- **Resale Price Maintenance**: The survey question was "Do you decide the prices you charge customers for your goods or services, or does the corporate headquarter decide that?" We compare the two retail price restraints we coded in the FDD data, Resale Price

Maintenance and Minimum Resale Price Maintenance, to respondents who answered "I decide," "The corporate headquarter decides," or "I decide, but the corporate headquarter can overrule if they want." The prevalence of the two restraints is higher among the respondents who said the franchisor sets retail prices, but lower among those who said the franchisor can overrule the retail prices franchisees set. Overall, 73.7% of respondents gave the first answer, that they choose retail prices, but in the second wave we asked a follow-up scaled question: How much control do franchisors exercise over retail prices? The responses are nearly uniformly distributed over the five scaled options, with slightly fewer (13%) giving the most extreme answer to the effect that the franchisor has complete control over retail prices. The other four answers received around 20% support.

- **Exclusive Supply**: The survey question asked "Do you decide which supplier(s) you buy from, does the franchisor decide, or is it a mix?" We compare answers to this question to two restraints coded from FDDs: Exclusive Supply and Franchisee Can Propose New Suppliers. The prevalence of Exclusive Supply is complete and uniform across all three survey responses, which may be partly due to the fact that we assign the binary for Exclusive Supply if language restricting franchisees to purchase or source *any* inventory or equipment appears in the FDD, whereas there is probably variation in most chains in terms of which inputs must be sourced exclusively from franchisor-negotiated contracts. 20.1% of respondents said they choose suppliers, 39.4% said the franchisor does, and 40.5% said it was a mix, confirming the interpretation that our coding for this restraint is more inclusive than franchisees perceive, in general.

  The finding with respect to Franchisee Can Propose New Suppliers is suggestive: 66% prevalence among respondents who said they can choose their own suppliers, 85% among respondents who said the franchisor chooses suppliers, and 79% among respondents who answered "A mix." We interpreted this provision as a weaker form of exclusive supply: franchisees can identify alternative sources but the franchisor retains a veto. The pattern

in the survey responses indicates that franchisees do not see it the same way: having to ask permission to source from a new supplier indicates franchisor control, not its absence. Having experience requesting approval may be what informs franchisees' understanding of whether they are bound by exclusive supply, as opposed to the text of the contract or the habit of obtaining supply through franchisor-negotiated channels. Note also from Figure 2(B) that Franchisee Can Propose New Suppliers increases in prevalence over the length of the panel.

- **Restrictions on Franchise Sales**: The survey question asked "If you wanted to sell your franchise business, can you sell to whomever you want, does the corporate headquarter restrict whom you can sell to, or are you obligated to sell only to the corporate headquarter?" We compare the three possible responses to this question to Franchisor Right to Purchase Assets and Franchisor Right of First Refusal to Purchase Assets. In this case there is not a lot of variation in restraint prevalence across survey answers, likely because there is not much variation in the FDD data on these two restraints (Figure 2(D)). The likely explanation is that franchisees answering the survey are still active for the most part, hence they may not have practical experience selling a franchise business.

  In order to elicit their beliefs about the sale value of their franchise, in the second wave we asked a scaled question "If you were to sell your franchise business, would you receive a fair price?" Most franchisees indicated they would not receive a fair price, which matches the 72.9% who said the franchisor restricts whom they can sell to.

- **Full-Line Forcing**: The survey question asks "Can you pick and choose which products or services to sell, or must you sell all of the products or services mandated by the corporate headquarter?" We compare the three possible responses—"I can choose," "I cannot choose," and "I can choose some products, but the franchisor requires others"—to three provisions: Full-Line Forcing, Franchisor Can Prohibit Products, and Franchisor Can Change Product Mix. In this case, there is virtually no difference in the FDD data

across the three survey responses, although a slightly higher share of those who gave the third answer are subject to franchisor discretion about the product mix.

- **Overall Franchisor Control**: On the question of whether the franchisor's overall control had gotten more or less onerous over time, 60.9% said more onerous, 31.1% said it had stayed the same, and only 8.1% reported it had gotten less onerous over time. As stated above, the share saying franchisor control has gotten more onerous is invariant at 60–70% as a function of tenure among franchisees with at least one year's tenure.

The gap between formal and perceived authority. A consistent theme across the survey-FDD comparisons is that franchisees who believe themselves not to be bound by various provisions are often bound by them according to our analysis of the applicable FDD. This gap between formal contractual authority and franchisees' perceptions of that authority admits three interpretations.

The first is that franchisees are less autonomous in reality than they think they are, and may be headed for a reckoning—as indicated by the open-ended responses expressing various grievances, some of them extreme. If that is the case, the Franchise Rule may not be doing an adequate job to inform prospective franchisees about the true terms of the franchise relationship, or alternatively, that the terms of the franchise relationship have changed and, perhaps due to the rising cost of exit we document, franchisees have no recourse for those changes to the terms of the business relationship they think they entered into.

The second interpretation is that the contractual authority we measure does not correspond to the practical exercise of control: the contract allocates decision rights to the franchisor that the franchisor does not currently invoke. In organizational terms, this is a distinction between formal authority and real authority (Aghion and Tirole, 1997). If that is the case, there may be untested costs to the exercise of franchisor power—legal, reputational, and operational costs that the franchisor would incur if it attempts to exert control over franchisee businesses that believe they retain autonomy. Under this interpretation, the contractual provisions we docu-

ment represent a reservoir of latent authority: decision rights that can be activated at the franchisor's discretion, even if they are not routinely exercised. The distinction matters because latent authority can be deployed selectively—for example, against franchisees who resist new initiatives or who become targets of acquisition—without being exercised against the entire system simultaneously.

The third possibility is simply that long-tenured franchisees are less constrained than new franchisees. Franchise contracts can last a decade or more, whereas the FDDs where we find rising franchisor control pertain to newly-offered contracts. In that case, the survey results could reflect the comparatively greater autonomy of longer-tenured franchisees. However, our survey responses indicate most respondents are new and small franchisees, suggesting that the gap between perceived autonomy and contractual restrictions is not due to the survey including long-tenured franchisees who are covered by older, less restrictive contracts.

5 Analysis of Franchisee Welfare

The results in Section 4 document an across-the-board shift in the allocation of decision-making authority from franchisees to franchisors. A natural question is whether this shift represents a transfer of surplus from franchisees to franchisors, or whether it instead reflects a jointly beneficial reorganization of the franchise relationship. The latter interpretation finds substantial theoretical support in the literature on vertical relationships: greater franchisor control may limit free-riding, eliminate double margins, incentivize franchisor investment in new products or services, or realize other efficiencies from chain uniformity. If such mechanisms are operative, the overall "pie" shared between the franchisor and franchisee may grow, and we would subsequently expect surplus to be shared with franchisees (so-called "*compensating differentials*"): reductions in franchisee autonomy would be offset by improvements in other terms of the bilateral relationship that benefit franchisees.

One scenario consistent with compensating differentials is a competitive market at the

franchisee-contracting stage. If the franchisor exerts greater control, that disincentive to affiliate must be offset by more generous terms in order to secure a flow of incoming franchisees. Alternatively, if prospective franchisees do not exert free choice at the contracting stage—because of information asymmetries, noncompete clauses binding them to the brand, or thin outside options—franchisors can make the terms more onerous without offering anything to compensate.

While we cannot measure an inclusive concept of welfare, we can estimate the relationship between the increased franchisor control documented in Section 4 and observable indicia of franchisee welfare. That is what we do in this section. We first reduce the dimensionality of the restraints to a single index of franchisor control, and then relate that measure—as well as the individual restraints—to three sets of outcomes: franchise fees, chain size and outlet dynamics, and complaints filed with the FTC. A positive correlation between franchisor control and franchise fees (or complaints) indicates *increasing differentials*: franchisee welfare is reduced in both qualitative and quantitative dimensions. The absence of a positive correlation between franchisor control and chain growth would indicate that the "growing the pie" rationale does not hold (or, at least, that franchisees do not receive a larger share of the pie in compensation for their lost autonomy). Conversely, a negative correlation between franchisor control and fees or complaints, combined with positive effects on chain size, would indicate compensating differentials.

While we employ two-way fixed effects regressions in this section, we emphasize that the goal is not to generate estimates of a causal relationship using a difference-in-differences framework. Causality may run in either or both directions in this case, and since the adoption or removal of restraints is not necessarily an exogenous event, our estimates cannot be interpreted causally. However, our estimates allow us the ability to rule out one possibility: that franchisees receive additional compensation (in some form) following franchisor adoption of new restraints.

5.1 Factor Analysis

We first compute an overall measure of franchisor control from the panel dataset based on the underlying restraint data. This dimensionality reduction allows us to arrive at a single interpretable estimate of the relationship between franchisor control and each index of franchisee welfare (as opposed to one for each restraint/index-of-welfare combination), though we explore the latter, as well.

To do so, we use a two-parameter logistic item-response model. The method assumes a latent, common trait θ to which individual items are responsive. In our application, θ is interpreted as a continuous measure of franchisor control, and each of the restraints is an item whose probability varies as a function of the underlying franchisor control parameter as well as a restraint-specific difficulty parameter β_k and discrimination parameter α_k. The difficulty parameter, in this context, can be interpreted as a shifter of the likelihood that a given restraint is present: high values of β_k indicate that restraint k is relatively uncommon in the population. The discrimination parameter, on the other hand, represents the responsiveness of the likelihood of observing a restraint to the underlying control parameter, θ: a low absolute value of α_k indicates that a low-θ and high-θ franchisor are nearly equally likely to use restraint k.

The probability that a given restraint k is present for franchise chain j in year t is given by

$$P(y_{jtk} = 1 \mid \theta_{jt}, \alpha_k, \beta_k) = \frac{1}{1 + \exp[-\alpha_k(\theta_{jt} - \beta_k)]} \tag{5.1}$$

where: θ_{jt} = latent trait score for franchise chain j in year t.

β_k = 'difficulty' of restraint k: location of the logistic function in θ-space.

α_k = 'discrimination' of restraint k: slope of the logistic function in θ-space.

We estimate this model via Maximum Likelihood on the set of restraints that reduce franchisee autonomy, plus the inverse of Exclusive Territory Granted (so that all items are coded in the direction of greater franchisor control) and the presence of an Independent Franchisee Associ-

ation.[8] The estimation produces $\{\hat{\theta}_{jt}\}$, which we use in subsequent analyses.

Figure 5 reports the results of this procedure. Figure 5(A) shows item characteristic curves: the predicted probability function, $\hat{y}_{jtk}(\theta)$, for each restraint k as a function of $\hat{\theta}$. Consistent with the results in Section 4, the logistic curves are increasing for all restraints except Exclusive Territory Granted, confirming that higher values of θ correspond to increased probability of all autonomy-reducing provisions and decreased probability of exclusive territories. Figure 5(B) is a histogram of the estimated $\hat{\theta}_{jt}$ for the panel as a whole, and Figure 5(C) shows how that distribution evolves over time. The rightward shift in the distribution of $\hat{\theta}$ over the panel illustrates the finding from Section 4—increased franchisor control—and establishes that the pattern is reducible to a single estimable factor.

5.2 Relating Franchisor Control to Observable Outcomes

We now relate the franchisor control factor (for interpretability), as well as the individual restraints (for completeness), to real-world outcomes indicative of franchisee welfare. For each outcome and each contractual provision (as well as $\hat{\theta}$), we separately estimate:

$$y_{jt} = \beta \cdot X_{jt} + \gamma_j + \lambda_t + \varepsilon_{jt} \tag{5.2}$$

where y_{jt} is the franchisee welfare outcome for chain j in year t; X_{jt} indicates the use of the contractual provision (or the value of $\hat{\theta}$); γ_j and λ_t are chain and year fixed effects, respectively; and ε_{jt} is the error term, clustered at the chain level. The inclusion of chain fixed effects means that β is identified from within-chain variation: it captures the effect of a chain *adopting* (or removing) a given provision on the outcome, not cross-sectional differences between chains that do and do not use the provision. We reiterate, however, that this does not induce a causal interpretation: our estimates simply allow us to determine whether franchisees receive com-

[8] We exclude from this analysis a handful of the restraints described in Section 2 that are the converse of restraints we do include, such as "No Exclusive Territory" and "No Independent Franchisee Association," to avoid redundancy in the item set.

pensation in some form following adoption of new restraints, not whether there is a causal relationship.

For count outcomes (outlet counts and FTC complaints), we estimate equation 5.2 via Poisson pseudo-maximum likelihood (PPML). For the initial franchise fee, which is a continuous dollar amount, we estimate via OLS with the log of the initial fee as the dependent variable. In both cases, we report percentage effects computed as $100 \times [\exp(\hat{\beta}) - 1]$. We report 95% confidence intervals as well as Bonferroni-corrected confidence intervals to account for multiple hypothesis testing across the set of restraints.[9]

5.2.1 Initial Franchise Fees

There are two broad categories of franchise fee payable by the franchisee to license the franchisor's brand, operating manual, and overall business model. Upfront or initial fees are specified as a dollar amount payable as a start-up cost. We extract initial fee data from the FDDs in our corpus. Royalties are assessed as a percentage of franchisee gross revenue. A further royalty payment to cover chain-level advertising is reported separately. Since the statements about royalties are highly variable in the FDDs themselves, we have not been able to use our large-scale text analysis tools to extract them in a unified and reliable way. Instead, we rely on *Entrepreneur* magazine's annual Franchise 500 ranking, which we link to our overall unbalanced panel data.[10] Hence, the royalty data is reported more sparsely than the initial fee data.

Figure 6 reports time trends in median and weighted average initial fees and royalty rates in the panel, where the weights are chain outlet counts taken from Item 20, Table 1 of the FDDs. All three types of fee are increasing over time, although the royalty rates cluster around a focal norm of 6% for the base royalty and 2% for the advertising royalty.

Figure 7(A) reports the results of estimating equation 5.2 with the log of the initial franchise

[9]The Bonferroni correction adjusts the significance level to α/k, where k is the number of restraints tested (including $\hat{\theta}$).

[10]This is also the source for the franchise fee panel dataset on which Lafontaine and Shaw (1999) is based.

fee as the dependent variable. The coefficient estimates are predominantly positive: chains that adopt autonomy-reducing provisions tend to increase their initial fees. The estimated effect of $\hat{\theta}$ is positive and statistically significant, indicating that the overall index of franchisor control is associated with higher fees even after absorbing chain and year fixed effects. This finding is inconsistent with the compensating differentials hypothesis, under which greater franchisor control would be offset by lower fees to attract franchisees. Instead, it indicates *increasing differentials*: qualitative and quantitative terms of the franchise relationship move together, with franchisees facing both less autonomy and higher costs of entry. One notable exception is the coefficient on Independent Franchisee Association, which is negative—albeit not quite statistically significant—suggesting that the presence of an organized franchisee body may be effective at limiting fee increases.

The results are less stark for royalty rates, likely because there is less within-chain variation in royalties. We omit these results for that reason. Royalty rates appear to be anchored around the focal norms of 6% and 2%, respectively. Since the royalty rate is the single most visible provision of the franchise contract, franchisors may be constrained from exploiting bilateral bargaining power through this particular margin.

5.2.2 Chain Size and Outlet Dynamics

We use the outlet count available from Item 20 of the FDD as an additional indicator. If greater franchisor control "grows the pie," we would expect it to be associated with larger chains, more new outlets, and fewer franchise terminations. Item 20 reports total outlet counts, counts of outlets terminated (i.e., closed at the discretion of the franchisor), and outlets signed-but-not-opened. Signed-but-unopened outlets may reflect a lag between signing and opening, but they may also represent franchisees who became daunted by the expense or disillusioned by the terms of the relationship before bringing their outlets online.

Figure 7 reports the results. Across the individual restraints and $\hat{\theta}$, we find no consistent evidence that greater franchisor control is associated with larger chain size or more favorable

outlet dynamics. The estimated effects on total outlet count are generally small and statistically insignificant (Figure 7(B)). The pattern for terminated outlets versus signed-but-unopened outlets is suggestive: terminations (which are at the franchisor's discretion) tend to be lower where franchisor control is greater (Figure 7(C)), while signed-but-unopened outlets (which represent the franchisee declining to proceed) tend to be higher (Figure 7(D)). This is consistent with franchisors exercising forbearance where they already hold contractual authority, while franchisees are more likely to be deterred from opening where that authority is extensive. However, these effects are imprecisely estimated and do not survive Bonferroni correction.

The absence of a positive relationship between franchisor control and chain growth undermines the "growing the pie" rationale for the shift in authority we document. If greater franchisor control realized efficiencies that benefited the overall system, we would expect to see that reflected in the expansion of the chain. We do not.

5.2.3 Complaints to the Federal Trade Commission

Finally, franchisees could be compensated for declining autonomy via difficult-to-quantify improvements in the quality of the franchising relationship—for example, if franchisors became more responsive to franchisees' operational needs. Although such improvements are difficult to measure directly, they may be reflected in a reduced likelihood of complaints to legal authorities. Conversely, declining autonomy could result in a greater volume of complaints if those complaints concern the contractual relationship itself.

Figure 8 presents the time series of the full matched complaint set (see Section 3.4 for a description of this dataset) against the set of *all* complaints lodged with the FTC, regardless of whether they pertained to franchising (the numbers are presented in raw counts as well as normalized counts for comparison).[11] The count of franchise complaints has clearly risen over

[11]Note that the counts of complaints reported here may differ from other publicly reported complaint counts. This is for several reasons: first, other complaint counts may also include complaints made to the Better Business Bureau, the Consumer Financial Protection Bureau, and others. Second, we limit the analysis to complainers located in the United States. Third, as noted in the Consumer Sentinel Network 2023 Data Book: "Numbers change over time. The Sentinel Data Book sorts consumer reports by year, based on the date of the consumer's

time, especially since 2019, though it appears to have leveled off somewhat since 2021. This pattern mostly mirrors the pattern for all complaints, though there appears to be a separation since 2021 whereby franchise complaints have held steady while overall complaint levels have fallen somewhat.

By matching the complained-against parties' names to a list of known franchisors, we identify the primary industrial sector of those parties. Figure 9 shows the relative percentage of complaints attributable to several sectors.[12] The shares of total complaints over time appear to remain roughly constant, with no discernible secular trend for any individual sector.

We then estimate equation 5.2 with the complaint count as the dependent variable, using PPML. The results are reported in Figure 10.[13] Most of the estimated effects are statistically indistinguishable from zero. Two provisions—exclusive dealing and franchisee personal guarantees—have positive associations with complaint volume that are meaningful and statistically significant at the 95% level, though these do not survive Bonferroni correction. The estimated effect of $\hat{\theta}$ on complaints is positive but statistically insignificant.

The key finding from this analysis is not a presence of large positive effects but the absence of negative ones. The estimate on $\hat{\theta}$ is precise enough to rule out large reductions in complaints associated with greater franchisor control: the lower end of the 95% confidence interval implies at most a 4.1% reduction in complaints given a one-within-chain-standard-deviation increase in $\hat{\theta}$.[14] In other words, the quality of the franchising relationship, as proxied by complaints to the FTC, does not improve to compensate for decreased autonomy.

report. Some data contributors transfer their complaints to Sentinel after the end of the calendar year, and new data providers often contribute reports from prior years. As a result, the total number of reports for 2023 will likely change during the next few months, and totals from previous years may differ from prior Consumer Sentinel Network Data Books. (Federal Trade Commission, 2024)

[12] For disclosure avoidance, only sectors with 1000 or more total complaints over the sample period are included in the figure.

[13] The depicted percentage effects are calculated as $B = 100 \times [\exp(\hat{\beta}) - 1]$.

[14] Calculated as $\exp(-0.0861 \times 0.4915) - 1$, where -0.0861 is the lower end of the 95% confidence interval for the coefficient on $\hat{\theta}$ and 0.4915 is the within-chain standard deviation of $\hat{\theta}$. Using the overall standard deviation of $\hat{\theta}$ (0.8565) generates an estimated 7.1% reduction.

5.3 Summary of Franchisee Welfare Tests

The three sets of results in this section point in the same direction. First, franchise fees are positively associated with franchisor control: chains that increase control also charge higher entry costs. This indicates increasing differentials rather than compensating ones—the monetary and qualitative terms of the relationship move together, to the detriment of franchisees. Second, there is no evidence that greater franchisor control is associated with chain growth or more favorable outlet dynamics, undermining the interpretation that the shift in authority we document serves to enlarge the joint surplus of the franchise relationship. Third, the volume of FTC complaints does not decline with greater franchisor control, ruling out the possibility that franchisees are compensated through non-monetary improvements in the quality of the relationship.

Taken together, these findings establish that the shift in decision-making authority documented in Section 4 corresponds to a broader reallocation of surplus within the franchise relationship: franchisees lose autonomy, pay more, and are not compensated through growth or improved relationship quality. This motivates the question we take up in Section 6: what drives this shift?

6 Corporate Structure and Ownership by Private Equity

Having established that the shift in franchisor control is not compensated by improvements in franchisee welfare, we now investigate what drives it. Many franchise chains are part of holding companies, consolidated either through mergers of pre-existing chains or originated by holding companies to enter new markets or launch new brands. We assign holding company ownership codes to the chains comprising the panel dataset and compute the Herfindahl-Hirschman Index (HHI) at the four-digit NAICS industry level for each of the top 10 industries in the panel, both at the individual chain level and at the holding company level. We find

no pronounced time trend in industry-level concentration despite increasing ownership by holding companies (Miller, 2024), most likely because entry by new franchise chains counterbalances the consolidation of incumbents (Figure E.1). We can therefore rule out increased franchisor consolidation as an explanation for the trend toward declining franchisee autonomy.

A more promising—though by no means exclusive—explanation emerges from the rising prevalence of private equity involvement in the ownership of franchise brands. Private equity firms acquire franchise chains either directly or through holding companies that are themselves private-equity-owned (Figure 1(B)). In Figure 11, we plot the prevalence of each restraint among chains that are and are not owned by private equity firms, over time. In general, each restraint is more prevalent among private-equity-owned chains, and the gap becomes increasingly clear as private equity ownership grows in the second half of the 2010s. Figure 12 makes this pattern visible in terms of the franchisor control factor: higher values of $\hat{\theta}$ are associated with a greater likelihood of private equity ownership.

This cross-sectional correlation could reflect either selection (private equity firms acquire chains that already exercise greater franchisor control) or treatment (private equity ownership causes chains to tighten control). To shed light on the direction, we estimate an event study testing whether private equity acquisition responds to the prior adoption of individual restraints:

$$\mathbb{I}\{\textit{Chain } j \textit{ is PE owned at time } t\}_{jt} = \sum_{\tau=-4}^{5} \beta_{k\tau} \cdot \textit{restraint } k_{j,(t-\hat{t}=\tau)} + \gamma_j + \lambda_t + \epsilon_{jt} \tag{6.1}$$

where the outcome is an indicator for whether chain j is owned by a private equity firm at time t, and the regressors are leads and lags relative to the year $\hat{t}$ in which chain j adopted (or, in the case of exclusive territories, removed) restraint k. Chain and year fixed effects are included, so identification comes from within-chain variation in the timing of restraint adoption. Standard errors are clustered at the chain level.

The results are reported in Figure 13. The post-adoption coefficients are generally positive, indicating that adopting autonomy-reducing provisions is associated with a 2–5 percentage

point increase in the probability of private equity ownership within five years. The restraints most strongly associated with subsequent private equity acquisition are the revocation of exclusive territories and the assertion of the franchisor's right to invade the franchisee's territory, franchisor control over site selection, resale price maintenance (both maximum and minimum), mandatory arbitration, and restrictions on franchisee speech.

Two caveats are important. First, in some cases the pre-treatment coefficients trend positively, indicating that chains that eventually adopt these restraints did so after they were acquired by private equity firms. This means the event study should not be interpreted as establishing that restraint adoption *causes* private equity buyout, since the causality may run in the opposite direction. We leave resolving that question to future research. Second, the confidence intervals are wide for several restraints, so we do not want to overstate the precision of the individual estimates. The more robust finding is the consistent direction of the pattern: adopting these restrictive restraints is positively correlated with private equity buyouts.

These results suggest a coherent strategic logic connecting the contractual changes we document to the ownership changes occurring in the franchise sector. From the perspective of a franchisor (or its current owners) seeking to attract private equity investment, stripping franchisees of exclusive territories signals capacity for rapid outlet expansion—a growth narrative that is attractive to prospective investors.[15] Resale price maintenance standardizes the brand and signals that price increases are an available profitability lever. Restrictions on what franchisees can say to prospective buyers, media, or regulators reduce the risk that incumbent franchisee dissatisfaction will complicate a transaction or dampen post-acquisition growth. Mandatory arbitration limits the legal exposure that a new owner would inherit. And the absence of exclusive territories means that new franchise licenses can be offered in existing markets without running afoul of incumbent franchisees' contractual protections.

From the acquirer's perspective, these features make the chain a more attractive target: the franchisor has already centralized the decision rights needed to implement the kinds of

[15] This interpretation is corroborated by Miller (2024).

operational changes—rapid expansion, cost rationalization, pricing adjustments—that private equity's value-creation playbook typically requires. The reduction in franchisee autonomy we document can thus be understood, at least in part, as franchisors positioning their brands for a capital market transaction by pre-emptively resolving the governance frictions that would otherwise constrain a new owner's ability to execute its strategy.

Whether this dynamic benefits or harms the parties involved depends on one's vantage point. For franchisors and their investors, the demonstrated ability to centralize control and expand the system is a source of value. For franchisees, the same changes represent a loss of autonomy, protected markets, and bargaining leverage that—as Section 5 established—is not offset by compensating improvements in other terms of the relationship. The coincidence of declining franchisee autonomy and rising private equity involvement in the franchise sector is a pattern that warrants further investigation as private equity's role in franchising continues to grow.

We also note that private equity involvement in franchising is not limited to the franchisor side: PE-backed multi-unit franchisees have become increasingly prominent and may possess different bargaining leverage than individual owner-operators. Whether the growth of sophisticated, well-capitalized franchisee-investors alters the dynamics we document, for example, by inducing franchisors to adjust contract terms to attract such investors, or by creating a class of franchisees better positioned to resist unfavorable provisions, is an important question we leave to future research.

There are other plausible explanations for the shifts documented in Section 4. First, the evolving legal framework may play a role: as noted in Section 4.1, the Supreme Court's 2007 *Leegin* decision reduced the legal risk of resale price maintenance, and more broadly, the permissive trajectory of antitrust jurisprudence toward vertical restraints since the late 1970s (Callaci, 2021*a*) may have emboldened franchisors to adopt provisions they previously avoided, albeit with a lag. Second, the professionalization and standardization of franchise law practice may contribute: franchise lawyers and consultants who advise multiple chains may propagate re-

strictive provisions across their client base, making it difficult to disentangle franchisor strategic intent from the influence of outside counsel. We do not test these mechanisms directly, but they are worth noting as factors that may operate alongside, or independently of, the ownership dynamics documented above.

7 Discussion

This paper documents and analyzes a shift in the balance of power within franchise relationships in the United States between 2009 and 2024. Using a comprehensive corpus of Franchise Disclosure Documents, survey evidence from franchisees, and administrative data on complaints, we establish three principal findings.

First, franchisee autonomy has declined systematically across multiple dimensions of business decision-making. Provisions that centralize control at the franchisor level—exclusive dealing, retail price control, product mix restrictions, and supplier mandates—have become substantially more prevalent, while exclusive territories (which grant franchisees protected local markets) have declined from a majority of chains at the start of the panel to around 20% by its end. This contractual evolution is neither marginal nor confined to a few chains: it affects the majority of franchise systems across diverse industries, as we demonstrate in industry-level breakdowns for the ten largest franchise sectors. Moreover, the balanced panel results confirm that the pattern is driven at least in part by individual chains altering their practices over time, not merely by entry of newer, less-autonomous chains.

Second, this decline in franchisee autonomy is not accompanied by compensating improvements in other aspects of the franchise relationship. Franchisees do not receive lower fees, stronger territorial protections, or enhanced support when they surrender decision rights. Instead, franchise fees rise in tandem with franchisor control, franchisee complaint rates to the FTC do not decline, and survey evidence indicates that franchisees perceive the changes as "more onerous" rather than beneficial. The item response analysis, which reduces the restraint

variables to a single latent factor $\hat{\theta}$ measuring franchisor control, reveals that higher values of $\hat{\theta}$ are associated with higher initial franchise fees but not increased chain size. The absence of compensating adjustments establishes that the autonomy decline represents a genuine power shift rather than mutually beneficial contractual evolution.

Third, private equity ownership predicts this contractual evolution. Chains that adopt franchisor-favoring provisions—particularly exclusive territory revocation, resale price maintenance, and speech restrictions—become significantly more likely to be acquired by private equity firms within the subsequent five years, with effect sizes in the range of 2–5 percentage points. This pattern is consistent with franchisors strategically adopting governance structures that signal growth potential and operational control to prospective investors.

7.1 Bargaining Power Shifts in Vertical Relationships

Our central contribution is documenting a systematic shift in bargaining power within an established vertical relationship. This finding engages with a foundational question in organizational economics: how is surplus allocated between parties in inter-firm relationships, and what determines changes in that allocation over time?

Theoretical work on bargaining power in vertical relationships (Brandenburger and Stuart, 1996) emphasizes that surplus division depends on outside options, switching costs, and the relative importance of each party's contribution to joint value creation. In franchising specifically, the literature has generally assumed that a competitive market for franchisees disciplines franchisor behavior: if franchisors offer unattractive terms, prospective franchisees will affiliate with competing brands or pursue alternative business opportunities (Blair and Lafontaine, 2005).

Our findings challenge this equilibrium view. We document that franchisors have extracted greater control and higher fees from franchisees without offering offsetting benefits, and that this pattern has persisted for over a decade across the near-universe of U.S. franchise chains. This suggests either that the market for franchisees is less competitive than previously as-

sumed, or that switching costs and information asymmetries prevent franchisees from disciplining franchisor behavior even when competition nominally exists.

Several mechanisms could explain persistent power asymmetry in franchise relationships. *Information asymmetries at the contracting stage*: our survey reveals a striking gap between franchisee perceptions and the contractual terms encoded in their FDDs. For instance, 75% of respondents report having an exclusive territory, yet our coding of their chains' FDDs shows that nearly all are subject to language reserving the franchisor's right to compete in that territory. If prospective franchisees systematically underestimate the constraints they will face, the "informed choice" mechanism underlying the Franchise Rule is impaired. *Relationship-specific investments and hold-up*: once a franchisee has committed capital to a specific location, brand identity, and operating system, disaffiliation becomes costly. The near-universal prevalence of post-term noncompete clauses (approaching 90% of chains by the end of our panel) further constrains exit options. *Collective action constraints*: very few chains have an independent franchisee association recognized by the franchisor, and the share explicitly stating they do not is rising. This limits the ability of franchisees to bargain collectively. *Network effects and brand value*: as a franchise brand grows, individual franchisees become more dependent on chain-level brand equity they cannot replicate independently.

These mechanisms are not mutually exclusive, and future research could investigate which factors most contribute to sustained power asymmetries in franchising. The broader implication is that vertical relationships governed by formal contracts are not immune to power shifts: even detailed, standardized agreements may fail to protect the weaker party when that party faces switching costs, information disadvantages, or collective action problems.

7.2 Value Creation vs. Value Capture in Contractual Evolution

A second contribution concerns how vertical restraints affect surplus creation and distribution. The industrial organization literature on franchising and vertical relationships has extensively debated whether restraints like resale price maintenance, exclusive dealing, and ter-

ritorial restrictions primarily serve efficiency—by solving coordination problems and aligning incentives—or rent extraction—by limiting franchisee autonomy to facilitate surplus appropriation (Blair and Lafontaine, 2005; Easterbrook, 1984; Asker, 2004; Asker and Bar-Isaac, 2014; Bernheim and Whinston, 1998).

Current antitrust doctrine generally presumes that vertical restraints are efficiency-enhancing unless proven otherwise. This presumption rests on theoretical work showing that restraints can mitigate free-riding, eliminate double marginalization, and incentivize franchisor investment in brand quality. If these efficiency mechanisms dominate, we would expect franchisors to offer compensating adjustments when adopting restraints: lower fees, stronger support, or enhanced territorial protection to offset the loss of franchisee autonomy.

We find no such compensation. Instead, the data reveal asymmetric contractual evolution: franchisors gain control while simultaneously increasing fees and diminishing franchisee protections. The survey's open-ended responses reinforce this interpretation, with the overwhelming majority of respondents expressing dissatisfaction with the level of franchisor control—and only a handful of the 65 open-ended responses indicating that the franchisor benefited their business. The FTC complaints analysis further corroborates this: shifts in the contractual balance of power toward franchisors are not associated with reductions in complaint rates, and our estimates allow us to rule out large negative effects on complaints (i.e., large improvements in the quality of the relationship).

Several caveats are important. First, we measure observable contract terms and franchisee outcomes, not total welfare or consumer surplus. It is theoretically possible that increased franchisor control benefits consumers through lower prices or higher quality, even if franchisees are worse off. We do not test the competitive effect of vertical restraints in output or labor markets; we document their prevalence and the absence of offsetting benefits for franchisees. Second, some efficiency gains may materialize only in the long run or may be difficult to specify contractually ex ante. However, the persistence of the pattern over 15 years makes this explanation less plausible. Third, the FTC complaints data is subject to measurement challenges—including

website redesigns and outreach initiatives that affected complaint categorization—though our primary sample definition mitigates these concerns.

The weight of evidence supports the interpretation that recent contractual evolution in franchising has primarily redistributed surplus from franchisees to franchisors rather than growing the pie for both parties. This does not imply that vertical restraints never serve efficiency; rather, it suggests that the balance between efficiency and rent extraction may shift over time as bargaining power evolves.

7.3 Private Equity and Governance Structure

Our third contribution is identifying private equity ownership as a predictor—and potential driver—of contractual changes that favor franchisors. This finding connects to an emerging literature on how private equity firms shape organizational practices and governance structures in portfolio companies.

The event study results are revealing: chains that revoke exclusive territories, implement resale price maintenance (both maximum and minimum), restrict franchisee speech, and require mandatory arbitration subsequently become more likely to be acquired by private equity. This pattern is consistent with franchisors strategically adopting governance provisions that signal to potential acquirers: growth potential through territorial intensification, operational control and pricing power, and limited franchisee resistance.

Importantly, we cannot definitively establish that restraint adoption causes PE acquisition. The positive pre-trends for some provisions suggest that chains already on a trajectory toward PE ownership adopt restraints in anticipation of—or in preparation for—that outcome. Nonetheless, even this interpretation is substantively important: it indicates that chains seeking PE investment adopt a recognizable portfolio of governance practices that centralize power with franchisors. Whether the restraints cause the buyout or the anticipated buyout motivates the restraints, the result for franchisees is the same: diminished autonomy associated with ownership transitions in which they have no say.

This finding has implications beyond franchising. Private equity involvement has grown substantially across many sectors, and our results suggest that PE ownership may systematically shift governance structures in portfolio companies toward arrangements that enhance investor returns through rent extraction from other stakeholders. The parallel to Shleifer and Summers (1988)—who interpreted corporate takeovers as mechanisms for breaching implicit contracts with stakeholders—is direct: franchisors may be appropriating bargaining surplus from incumbent franchisees while simultaneously making it difficult for them to disaffiliate or to publicly object.

7.4 Implications for Theory

Contract design and evolution. We demonstrate that contracts in franchise systems—typically viewed as highly standardized and stable (Lafontaine and Shaw, 1999)—have evolved substantially over time. Unlike bilateral contracts studied in prior work on contract evolution (Argyres, Bercovitz and Mayer, 2007; Mayer and Argyres, 2004; Xing et al., 2021; Vanneste and Puranam, 2010), franchise contracts are predominantly one-sided templates offered on a take-it-or-leave-it basis. This institutional feature may explain why contractual evolution is not accompanied by compensating adjustments: franchisees lack the bargaining power to demand better terms when contracts change. Our contribution to this literature is both broader in scope—covering the near-universe of U.S. franchises across 27 contractual dimensions over 16 years—and deeper in interpretation, linking contractual changes to ownership structure and franchisee welfare.

Organizational boundaries and vertical integration. Our documentation of increasing franchisor control suggests the boundary between franchisor and franchisee has become more porous over time. Franchisors increasingly exercise de facto control over franchisee operations while preserving the legal fiction of independent ownership. Over 90% of chains require personal guarantees that pierce limited liability, and breaches of the corporate form are increasingly prevalent. This creates a governance puzzle: franchisors obtain the control benefits of

vertical integration without bearing the capital costs or employment-related obligations. The arrangement challenges conventional theories of the firm that treat the integration decision as binary.

Value creation and value capture in inter-organizational relationships. The literature on inter-organizational relationships has debated whether formal contracts function primarily as safeguards against opportunism or as mechanisms for coordination and value creation (Poppo and Zenger, 2002; Schilke and Lumineau, 2018; Lumineau and Malhotra, 2011; Malhotra and Lumineau, 2011). Our evidence suggests a more complex picture: vertical restraints may serve value creation in some contexts and rent extraction in others, and the balance may shift over time as bargaining power evolves. For management scholars studying inter-organizational relationships more broadly, our findings suggest that who controls key decisions is not static but evolves in response to ownership changes, capital market pressures, and shifting bargaining power.

7.5 Implications for Practice

For franchisors. The contractual changes we document may enhance short-term profitability and make chains more attractive to private equity investors, but they risk creating hidden costs. Higher franchisee discouragement, elevated complaint rates, adversarial relationships, and the intense dissatisfaction reflected in our survey's open-ended responses may reduce system quality, slow expansion, or increase litigation risk over time. Franchisors face a trade-off between extracting rent from incumbents and maintaining an attractive value proposition for prospective franchisees.

For franchisees. Our findings suggest that disclosure-based regulation may be insufficient to protect franchisee interests when bargaining power is asymmetric. The gap between franchisee perceptions and their contractual reality—documented in our comparison of survey responses to FDD data—indicates that the Franchise Rule's assumption of informed decision-making may be unrealistic. If prospective franchisees systematically underestimate the con-

straints they will face, or if sunk investments prevent incumbents from disciplining franchisor behavior, market mechanisms alone may not prevent rent extraction.

For investors. Private equity firms and other investors in franchise systems should recognize that governance structures favoring franchisors may enhance near-term financial performance but potentially at the cost of long-term system stability. The open-ended survey responses—including accounts of franchisors using franchisee business assets as collateral for franchisor loans, mandating suppliers with inflated costs from which the franchisor takes a cut, and cutting off marketing leads without notice—suggest that the short-term gains from franchisor control may erode the cooperative foundation on which franchise systems depend.

7.6 Implications for Policy

Our findings also inform policy debates about franchise regulation. The FTC's Franchise Rule requires detailed disclosure but does not regulate substantive contract terms. The regulatory philosophy assumes that informed franchisees, armed with detailed disclosure documents, will make rational affiliation decisions that discipline franchisor behavior.

Our evidence suggests this approach may be insufficient on at least two grounds. First, the gap between franchisee perceptions and contractual reality indicates that disclosure does not reliably produce informed decision-making—even among incumbent franchisees who have lived under their contracts for years. Second, even if disclosure were perfectly effective at the contracting stage, relationship-specific investments and switching costs may prevent franchisees from disciplining franchisor behavior ex post. Some states have adopted "relationship laws" that provide substantive protections—such as restrictions on territorial encroachment or limitations on contract termination without cause. Our findings suggest such protections may be economically justified if they offset bargaining power asymmetries that disclosure alone cannot remedy.

Recent enforcement activity underscores the practical significance of these issues. In March 2026, the FTC secured a $17 million settlement against Xponential Fitness, which owns fit-

ness studio brands including Club Pilates, Pure Barre, YogaSix, StretchLab, and BFT. It was the largest consumer redress in the agency's history for a Franchise Rule violation, and it was levied for misrepresenting material information in its Franchise Disclosure Documents (such as the identities and contact information for terminated franchisees, as well as the CEO's previous legal troubles in the business). It also misrepresented the time required to open and operate studios, and did not provide timely FDDs to prospective franchisees (Federal Trade Commission, 2026). In his concurring statement, FTC Chairman Andrew N. Ferguson noted the "onerous noncompete clauses" that prohibited franchisees from opening competing fitness studios during the franchise term and for two years afterward, and the substantial transfer fees that further constrained exit (Ferguson, 2026).

The Xponential case illustrates the type of conduct our data highlight at scale: franchisors imposing restrictive provisions, including post-term noncompetes, exclusive dealing, restrictions on asset sales, while simultaneously undermining the disclosure regime that is supposed to inform prospective franchisees about the true terms of the relationship. That this enforcement action is the largest to date under the Franchise Rule, despite the Rule having been in effect since 1978, further illustrates the extent to which the regulatory framework has historically relied on disclosure rather than enforcement to protect franchisee interests.

7.7 Limitations and Future Research Directions

Contractual rights vs. actual control. We observe contractual allocations of decision rights but cannot measure whether and how franchisors exercise those rights in practice. Our survey provides some evidence on this point—for instance, some franchisees report autonomy even when their FDDs allocate control to the franchisor—but a systematic assessment would require combining contract data with operational data on franchisor decision-making. Future research could investigate the conditions under which franchisors exercise latent contractual rights and the costs they incur when doing so.

Entry and exit of franchise chains. Given the high turnover in the franchise sector, it would

be informative to investigate whether chains that exit the sample differ systematically in their contracting practices from those that enter or persist. For example, chains that exit may have relied on less favorable terms that hindered their ability to attract franchisees, or conversely, may have offered more generous terms that proved unsustainable. Our data do not permit a systematic analysis of exit, but the interaction between contractual practices and chain survival is a promising direction for future work.

Mechanisms and causality. While we identify private equity ownership as a predictor of contractual change, we cannot fully separate selection effects from treatment effects. The positive pre-trends in some event study specifications suggest that chains on a trajectory toward PE ownership adopt restraints in anticipation of acquisition, rather than restraint adoption being the decisive causal factor. Future research with longer post-acquisition time series could provide clearer causal identification. Relatedly, future work could also investigate the determinants of contractual change directly, for example, by using the franchisor control index $\hat{\theta}$ as a dependent variable and examining whether chain size, growth rates, or other characteristics predict which chains tighten governance over time.

Downstream effects on other stakeholders. Our focus on the franchisor-franchisee relationship leaves open questions about effects on franchise workers and consumers. Prior research using cross-sectional FDD data indicates that reductions in franchisee autonomy have negative consequences for workers in franchising labor markets (Callaci et al., 2025), and that removing franchise no-poach clauses has positive repercussions for franchise workers (Callaci et al., 2024). Whether the temporal shifts in contractual terms we document have corresponding labor market effects, or affect consumer prices or quality, are important questions for future research.

Survey representativeness. Our survey, while informative, has a low response rate (0.2–1.2%) and franchisee dissatisfaction may be overstated if disgruntled respondents are more likely to participate. However, the consistency between the survey evidence and the FDD-based contractual analysis provides reassurance that the broad pattern is robust.

8 Conclusion

Using a comprehensive corpus of Franchise Disclosure Documents spanning 2009–2024, we document a systematic shift in the balance of power within franchise relationships. Franchisee autonomy has declined across multiple dimensions—pricing, product offerings, territory, governance, information, and financial obligations—while franchisor control has increased. This autonomy decline is not compensated by improvements in fees, support, or relationship quality, establishing that bargaining power has shifted toward franchisors.

We identify private equity ownership as an explanation of this shift: chains that adopt franchisor-favoring provisions become substantially more likely to be acquired by private equity within five years. We interpret this pattern as reflecting franchisors' strategic efforts to signal growth potential and operational control to investors, even when doing so extracts surplus from franchisees.

These findings contribute to literatures on contract evolution, vertical relationships, and organizational boundaries by demonstrating that bargaining power in established inter-firm relationships can shift dramatically, that vertical restraints may serve rent extraction rather than efficiency, and that ownership structure influences governance in ways that affect surplus distribution. Our approach: treating the balance of power as a quantifiable, empirical phenomenon rather than an abstract concept, offers a template for studying power dynamics in other vertical relationships governed by standardized contracts.

The scale of the changes we document, affecting hundreds of thousands of franchise establishments across diverse industries, and their implications for how vertical relationships evolve merit continued attention from scholars, practitioners, and policymakers. The FTC's recent enforcement action against Xponential Fitness (Federal Trade Commission, 2026) demonstrates that the patterns we document have begun to attract regulatory scrutiny, though whether disclosure-based enforcement alone can remedy the systematic power imbalances we identify remains to be seen. Understanding the mechanisms that allow powerful parties to extract

rents from weaker trading partners, and identifying institutional arrangements that can mitigate such extraction, are central challenges for research on inter-organizational relationships. Whether similar shifts in the balance of power are occurring in other vertical relationships, and with what consequences for workers, suppliers, and consumers, are important questions for future research.

References

Aghion, Philippe, and Jean Tirole. 1997. "Formal and Real Authority in Organizations." *Journal of Political Economy*, 105(1): 1–29.

Arbel, Y. A. 2023. "The Readability of Contracts: Big Data Analysis."

Argyres, Nicholas, Janet Bercovitz, and Hugo Leenders. 2025. "Entitlement Constraints on Franchise Systems: Evidence from System Acquisitions." *Strategy Science*, 10(2): 166–184.

Argyres, Nicholas S, Janet Bercovitz, and Kyle J Mayer. 2007. "Complementarity and evolution of contractual provisions: An empirical study of IT services contracts." *Organization science*, 18(1): 3–19.

Arold, Benjamin, Elliott Ash, W. Bentley MacLeod, and Suresh Naidu. 2024. "Do Words Matter? The Value of Collective Bargaining Agreements."

Asker, John. 2004. "Measuring Cost Advantages from Exclusive Dealing An Empirical Study of Beer Distribution." Working Paper.

Asker, John, and Heski Bar-Isaac. 2014. "Raising Retailers' Profits: On Vertical Practices and the Exclusion of Rivals." *American Economic Review*, 104(2): 672–686.

Atz, Ulrich. 2025. "Voluntary Disclosures and Investor Naïveté: Evidence from Franchising." *Social Science Research Network, https://www.ssrn.com/abstract=5381656*.

Bercovitz, Janet EL, and Beverly B Tyler. 2014. "Who I am and how I contract: The effect of contractors' roles on the evolution of contract structure in university–industry research agreements." *Organization Science*, 25(6): 1840–1859.

Bernheim, B. Douglas, and Michael Whinston. 1998. "Exclusive Dealing." *Journal of Political Economy*, 106(1): 64–103.

Blair, Roger D., and David L. Kaserman. 1983. *Law and Economics of Vertical Integration and Control.* New York:Academic Press.

Blair, Roger D., and Francine Lafontaine. 2005. *The Economics of Franchising.* New York:Cambridge University Press.

Brandenburger, Adam M., and Harborne Stuart. 1996. "Value-based Business Strategy." *Journal of Economcs & Management Strategy*, 5(1): 5–24.

Callaci, Brian. 2021*a*. "Control without Responsibility: The Legal Creation of Franchising 1960-1980." *Enterprise & Society*, 22(1): 156–182.

Callaci, Brian. 2021*b*. "What Do Franchisees Do? Vertical Restraints as Workplace Fissuring and Labor Discipline Devices." *Journal of Law and Political Economy*, 1(3): 397–444.

Callaci, Brian, Matthew Gibson, Sérgio Pinto, Marshall Steinbaum, and Matt Walsh. 2024. "The Effect of Franchise No-poaching Restrictions on Worker Earnings." *Review of Economics and Statistics*. Accepted.

Callaci, Brian, Sérgio Pinto, Marshall Steinbaum, and Matt Walsh. 2025. "Vertical Restraints and Labor Markets in Franchised Industries." *Research in Labor Economics*, 52B: 255–305.

Easterbrook, Frank H. 1984. "Vertical Arrangements and the Rule of Reason." *Antitrust Law Journal*, 53(1): 135–173.

Federal Trade Commission. 2024. "Consumer Sentinel Network Data Book 2023."

Federal Trade Commission. 2026. "FTC Secures Settlement Against Xponential Fitness for Franchise Rule Violations." Press Release.

Ferguson, Andrew N. 2026. "Concurring Statement of Chairman Andrew N. Ferguson in Matter of Xponential."

Grosz, Michel, and Devesh Raval. 2025. "Amplifying Consumers' Voice: The Federal Trade Commission's Report Fraud Website Redesign." *Marketing Science*, 44(3): 525–545.

International Franchise Association. 2026. "Franchising Economic Outlook."

Krueger, Alan B, and Orley Ashenfelter. 2022. "Theory and Evidence on Employer Collusion in the Franchise Sector." *Journal of Human Resources*, 57.

Lafontaine, Francine, and Kathryn L. Shaw. 1999. "The Dynamics of Franchise Contracting: Evidence from Panel Data." *Journal of Political Economy*, 107(5): 1041–1080.

Lafontaine, Francine, Lorenzo Luisetto, and J.J. Prescott. 2025. "Mobility-Restricting Covenants in Business Contracts: the Case of Franchising." Working Paper.

Lafontaine, Francine, Saattvic, and Margaret Slade. 2023. "No-Poaching Clauses in Franchise Contracts: Anticompetitive or Efficiency Enhancing?"

Luhn, Hans Peter. 1960. "Key word-in-context index for technical literature (kwic index)." *American documentation*, 11(4): 288–295.

Lumineau, Fabrice, and Deepak Malhotra. 2011. "Shadow of the contract: How contract structure shapes interfirm dispute resolution." *Strategic management journal*, 32(5): 532–555.

Luo, Yadong. 2002. "Contract, cooperation, and performance in international joint ventures." *Strategic management journal*, 23(10): 903–919.

Malhotra, Deepak, and Fabrice Lumineau. 2011. "Trust and collaboration in the aftermath of conflict: The effects of contract structure." *Academy of management Journal*, 54(5): 981–998.

Mathewson, G Frank, and Ralph A Winter. 1984. "An economic theory of vertical restraints." *The RAND Journal of Economics*, 27–38.

Mayer, Kyle J, and Nicholas S Argyres. 2004. "Learning to contract: Evidence from the personal computer industry." *Organization science*, 15(4): 394–410.

Meisenbacher, Stephen, and Peter Norlander. 2023. "Transforming Unstructured Text into Data with Context Rule Assisted Machine Learning (CRAML)."

Miller, Alicia. 2024. *Big Money in Franchising: Scaling Your Enterprise in the Era of Private Equity.* Figure 1 Publishing.

Minnis, Michael, and Nemit Shroff. 2017. "Why regulate private firm disclosure and auditing?" *Accounting and Business Research*, 47(5): 473–502.

Murry, Charles, and Peter Newberry. 2022. "Franchise Contract Regulations and Local Market Structure." *The Journal of Law and Economics*, 65(1): 105–130. Publisher: The University of Chicago Press.

Norlander, Peter. 2025. "New Evidence on Employee Noncompete, No Poach, and No Hire Agreements in the Franchise Sector." *Research in Labor Economics*, 52B.

Paul, Sanjukta. 2023. "On Firms." *University of Chicago Law Review*, 90(2): 579–621.

Poppo, Laura, and Todd Zenger. 2002. "Do formal contracts and relational governance function as substitutes or complements?" *Strategic management journal*, 23(8): 707–725.

Rey, Patrick, and Jean Tirole. 1986. "The logic of vertical restraints." *The American economic review*, 921–939.

Ryall, Michael D, and Rachelle C Sampson. 2009. "Formal contracts in the presence of relational enforcement mechanisms: Evidence from technology development projects." *Management science*, 55(6): 906–925.

Schilke, Oliver, and Fabrice Lumineau. 2018. "The double-edged effect of contracts on alliance performance." *Journal of Management*, 44(7): 2827–2858.

Schneider, Daniel, and Kristen Harknett. 2025. "The Shift Project." *https://shift.hks.harvard.edu/about/team/*.

Shleifer, Andrei, and Lawrence H. Summers. 1988. "Breach of Trust in Hostile Takeovers." In *Corporate Takeovers: Causes and Consequences*. 33–68. Chicago:University of Chicago Press.

Stantcheva, Stefanie. 2023. "How to Run Surveys: A Guide to Creating Your Own Identifying Variation and Revealing the Invisible." *Annual Review of Economics*, 15(Volume 15, 2023): 205–234.

Vanneste, Bart S, and Phanish Puranam. 2010. "Repeated interactions and contractual detail: Identifying the learning effect." *Organization science*, 21(1): 186–201.

Wei, Haoran, Chenglong Liu, Jinyue Chen, Jia Wang, Lingyu Kong, Yanming Xu, Zheng Ge, Liang Zhao, Jianjian Sun, Yuang Peng, et al. 2024. "General OCR Theory: Towards OCR-2.0 via a Unified End-to-end Model." *arXiv preprint arXiv:2409.01704*.

Wei, Haoran, Lingyu Kong, Jinyue Chen, Liang Zhao, Zheng Ge, Jinrong Yang, Jianjian Sun, Chunrui Han, and Xiangyu Zhang. 2023. "Vary: Scaling up the Vision Vocabulary for Large Vision-Language Models." *arXiv preprint arXiv:2312.06109*.

Xing, Zhe, Kyle J Mayer, Xuanli Xie, Jeffrey J Reuer, and Elko Klijn. 2021. "The effects of contract detail and prior ties on contract change: A learning perspective." *Organization Science*, 32(2): 480–499.

Zamora-Appel, Barbara, and Nidaal Jubran. 2021. "Nearly 300 Industries Offer Franchise Opportunities."

Tables

Table 2. List of FDD sources

Source	Share (%)
California Department of Financial Protection and Innovation	43.0
Washington Department of Financial Institutions	17.5
Wisconsin Department of Financial Institutions	14.3
Minnesota Department of Commerce	8.1
Indiana Securities Division	3.4
North Dakota Securities Department	3.2
New York Office of the Attorney General	2.8
All other sources (each)	<2.0

Table 3. Summary Statistics for the Franchise Chain Panel. Outlet counts are reported on a retrospective basis. Outlet counts are unavailable for 2023 and 2024. The share of chain observations derived from an FDD for a given year means the share of franchise chains for which we have an FDD for that year and hence an original observation for our binary variables indicating each restraint, as opposed to carried forward from an observation for the same chain in a previous year.

Year	Number of Chains	Total Number of Outlets	Average Outlets per Chain	Median Initial Fee ($)	Median Royalty Rate (%)	Median Ad Royalty Rate (%)	Share of Chain Observations Derived from an FDD (%)
2009	186	292409	524	28925	5.75	2	100
2010	215	345154	515	25000	6	2	14.88
2011	693	360357	404	25000	5.5	2.25	85.57
2012	817	394867	321	29900	5.5	2	69.65
2013	1397	394380	293	30000	6	2	87.47
2014	1596	394662	268	30000	6	2	66.79
2015	1860	406161	264	32000	6	2	78.06
2016	1902	404521	260	32500	6	2	68.98
2017	1978	405578	253	34500	6	2	62.89
2018	2067	401007	245	35000	6	2	62.94
2019	2055	413387	238	35000	6	2	57.37
2020	2029	414928	236	35000	6	2	53.87
2021	2156	414410	241	35000	6	2	63.17
2022	2732	332099	277	36440	6	2	88.58
2023	2705			37500	6	2	85.58
2024	2572						73.13

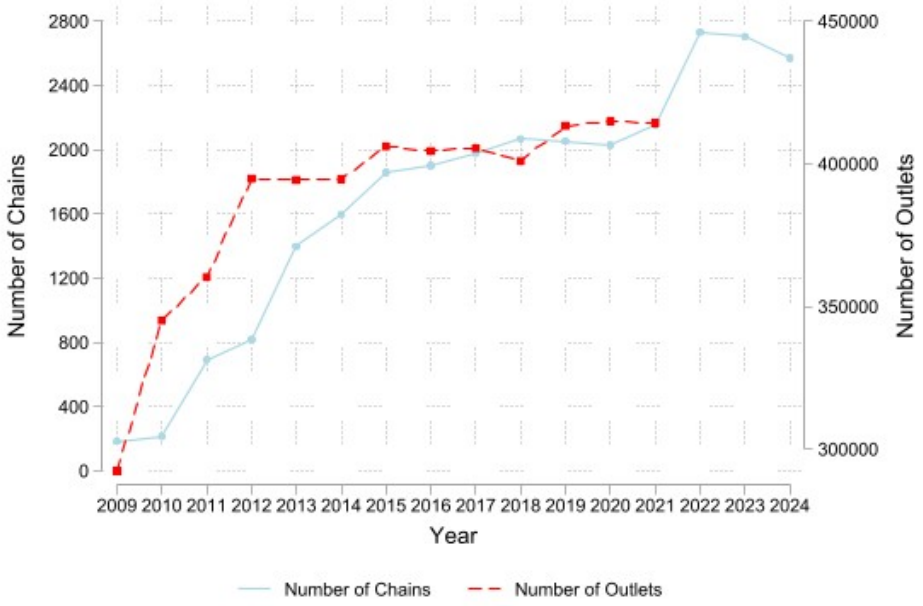
Table 4. Survey Responses

Question	Answer	Share	N
Is your franchise business still operating?	No	20.9%	325
	Yes	79.1%	
Do you decide retail prices?	I decide	73.7%	262
	The franchisor decides	19.8%	
	I decide, but the franchisor can overrule	6.5%	
Franchisor Control Over Retail Prices	Complete	13%	162
	A lot	24.1%	
	Medium	17.9%	
	Low	24.1%	
	None	21%	
Do you choose your suppliers?	I choose	20.1%	259
	The franchisor chooses	39.4%	
	A mix	40.5%	
Does the franchisor mandate the products/services you sell?	I can choose which products or services I sell	42.5%	259
	I cannot pick and choose which products or services I sell	40.9%	
	I must sell some products, but I am allowed to choose others	16.6%	
Do you have a post-term noncompete?	No Noncompete	15.2%	257
	Noncompete	84.8%	
Does the franchisor restrict franchise sales?	I can sell to whomever I want	25.6%	258
	The franchisor restricts whom I can sell to	72.9%	
	I can only sell to the franchisor	1.6%	
If you sold your franchise, would you receive a fair price?	Highly unlikely	28.7%	160
	Somewhat unlikely	23.1%	
	Uncertain	15%	
	Likely	26.3%	
	Certain	6.9%	
Do you have an exclusive franchise territory?	No	24.7%	263
	Yes	75.3%	
Has the franchisor's overall control gotten more onerous over time?	Franchisor's control gotten more onerous	60.9%	161
	Franchisor's control gotten less onerous	8.1%	
	Franchisor's control stayed the same	31.1%	

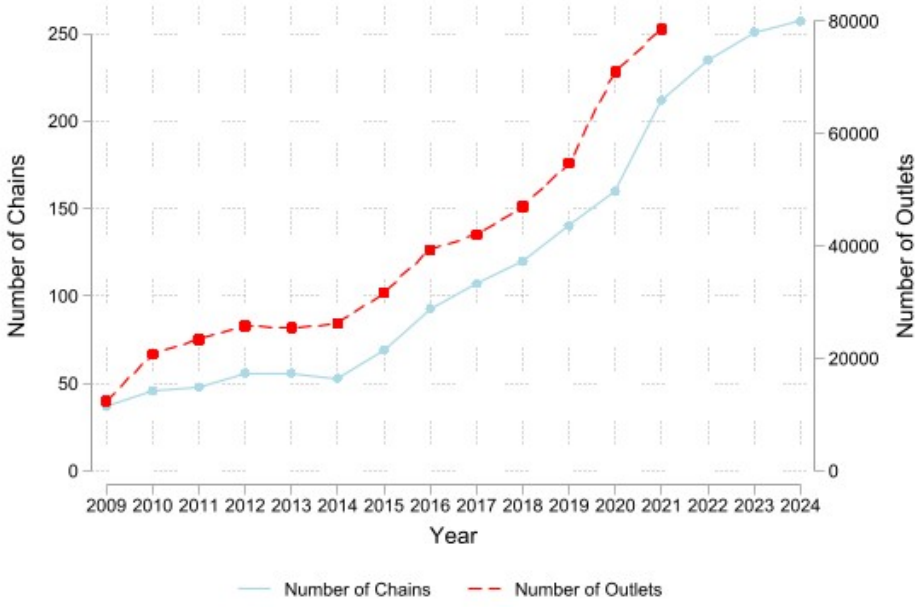
Note: The two scaled questions, *Franchisor Control Over Retail Prices* and *If You Sold Your Franchise Business, Would You Receive a Fair Price?* were asked on the second wave of the survey only, as was the final question assessing the overall trend in franchisor control.

Figures

Figure 1. Count of Franchise Chains and Outlets, 2009-2024. The number of chains per year refers to the width of the panel dataset, which is growing over time due to the increasing number of documents in the FDD corpus (as well as the growth of the franchising sector overall). The count of outlets derives from Item 20, Table 1 of the FDD, which reports the chain-level outlet count in the previous three years before the FDD was filed. This is shown at the level of private equity ownership as well.

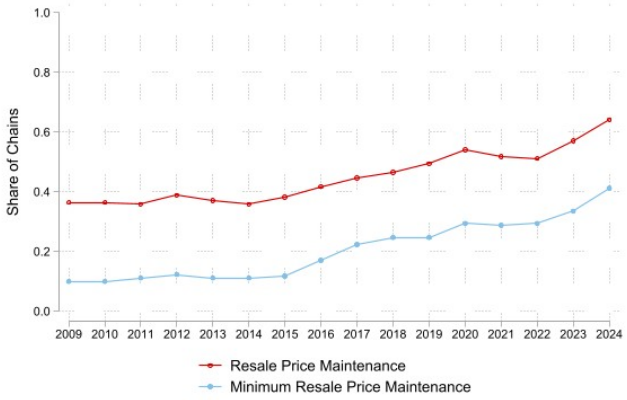


(A) All Chains

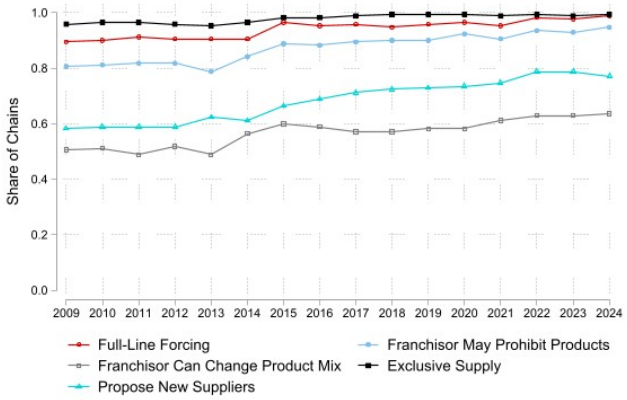


(B) Private Equity-Owned Chains

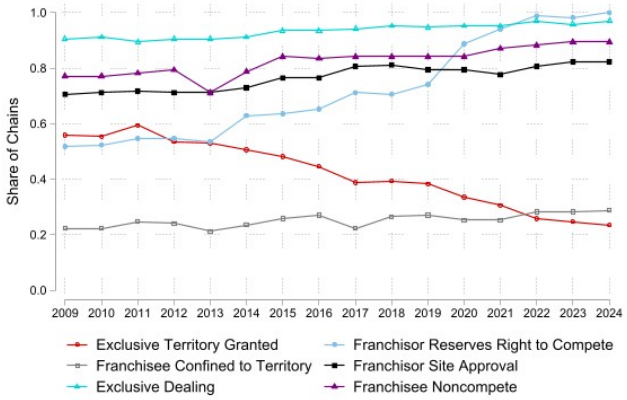
Figure 2. Time Series of the Prevalence of Each Franchise Restraint in the Panel Dataset. These figures report the prevalence of each of the six sets of franchise restraints and contractual provisions described in section 2 in the unbalanced franchise chain panel dataset, 2009-2024.



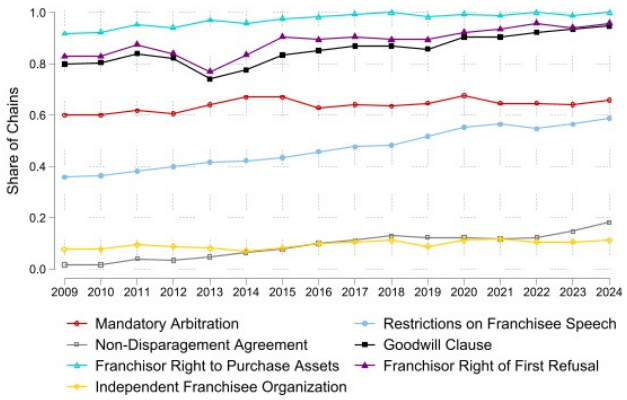
(A) Retail Pricing



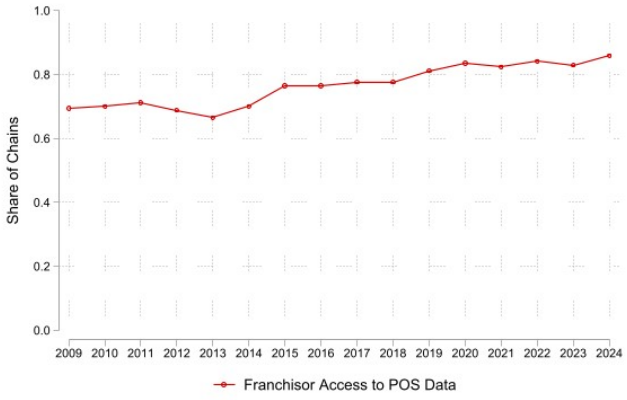
(B) Product & Service Offerings



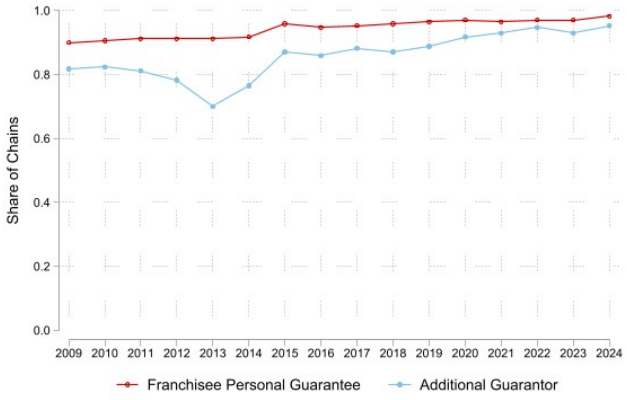
(C) Territory & Competition



(D) Governance & Dispute Resolution

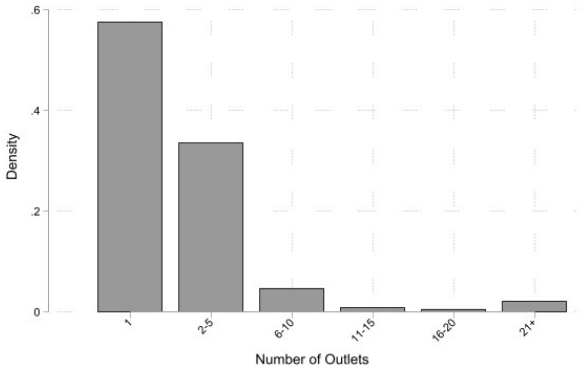


(E) Information & Monitoring

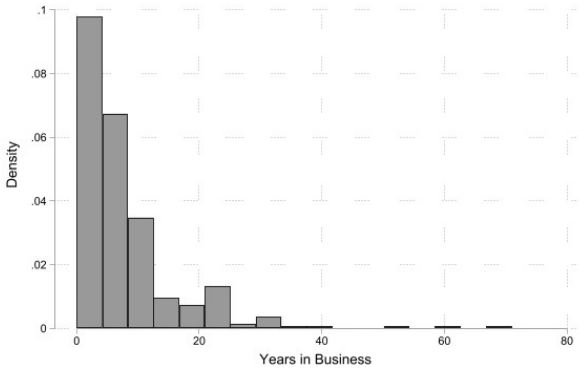


(F) Legal & Financial Obligations

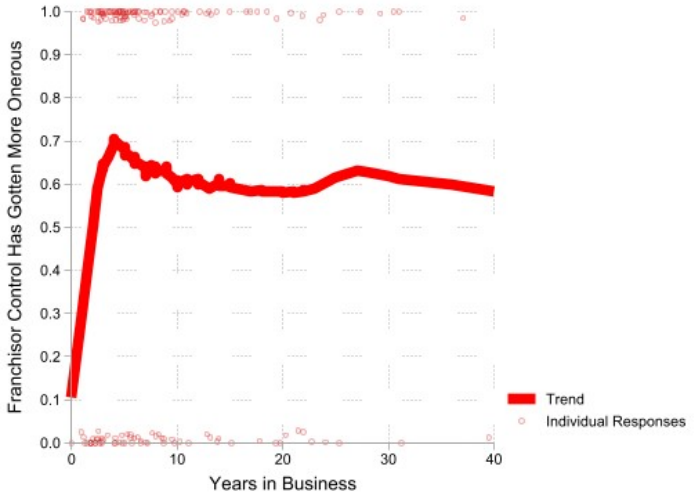
Figure 3. Summary Statistics from the Survey Responses. These figures display the distribution of franchise size (outlet count) and time in business reported by survey respondents described in section 4.4, as well as the share of respondents reporting the franchisor's control has gotten more onerous as a function of tenure in the business.



(A) Survey responses by number of franchised outlets owned by the respondent.

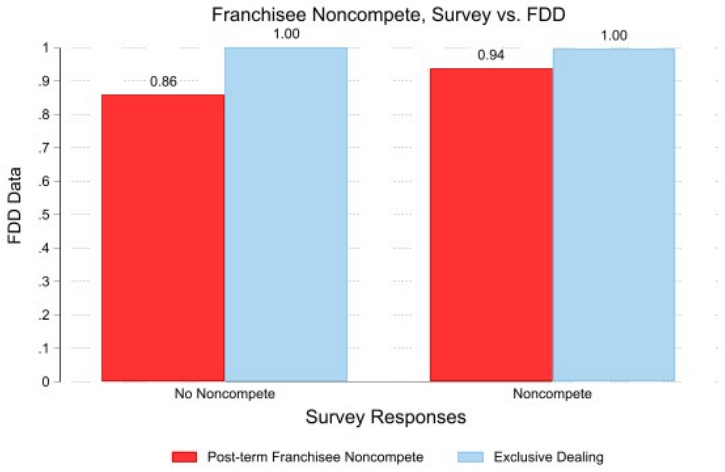


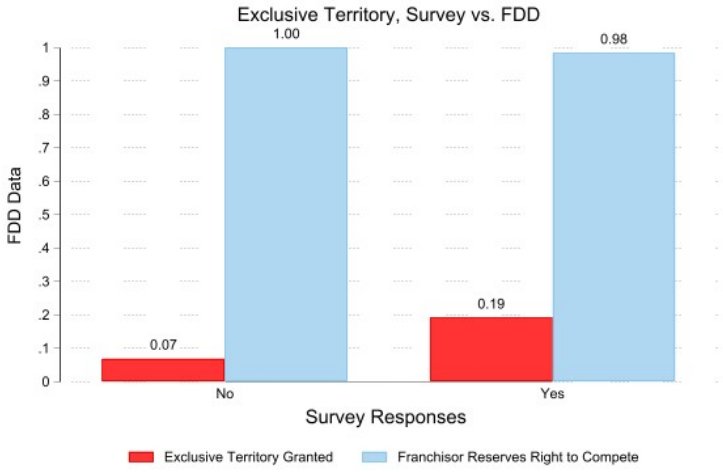
(B) Survey responses by franchisee tenure in the business.

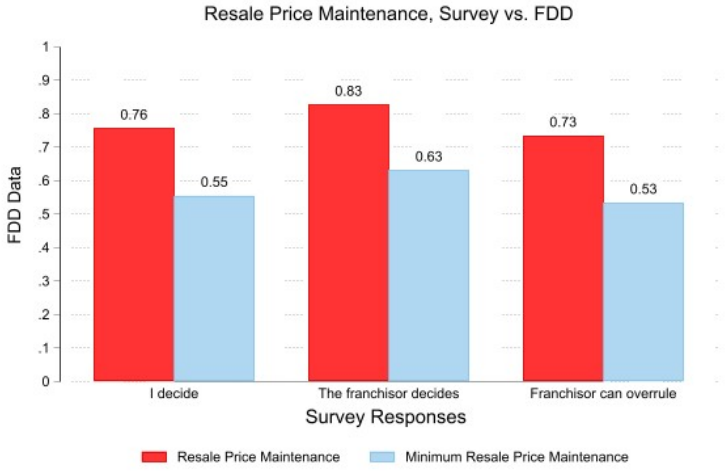


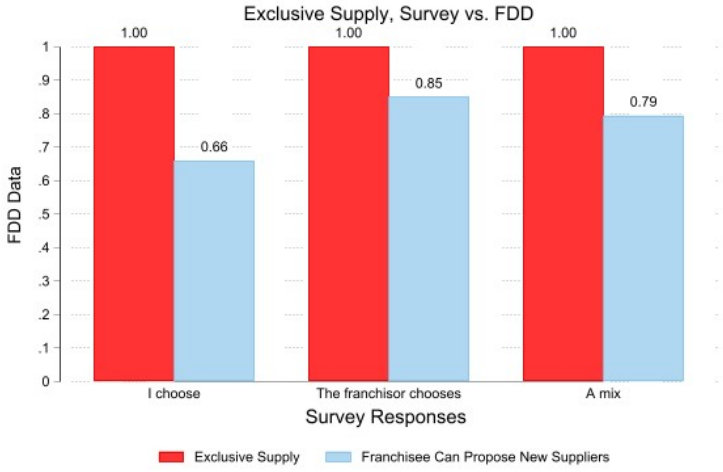
(C) Share answering "franchisor's control has gotten more onerous" by tenure in business.

Figure 4. Comparison Between Franchisee Survey Responses and Chain-level Data from FDDs. These figures compare the responses to the survey reported in section 4.4 to the franchise-chain-level data gathered from FDDs. For each survey response, the share of chains with a given restraint among the franchisees who gave that response is reported on the vertical axis. The relevant comparison is within restraint, across survey responses, i.e. comparing bars with the same color in each figure.











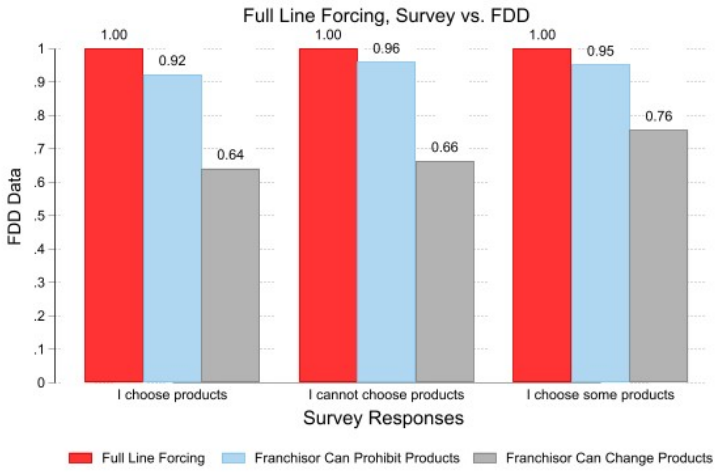
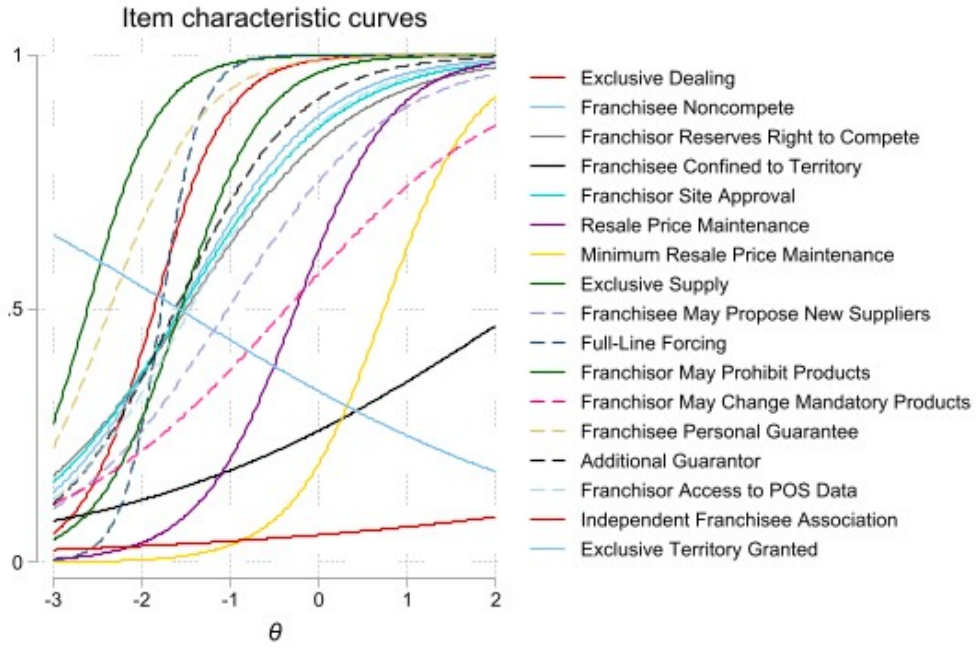
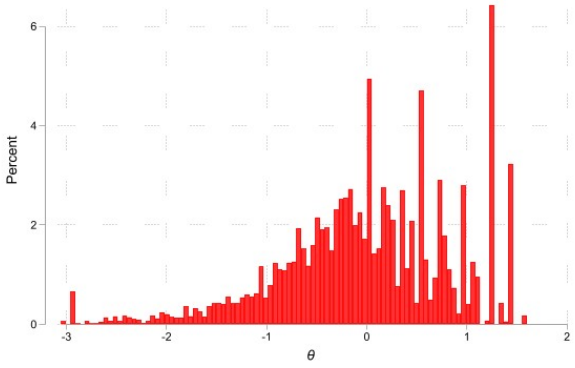


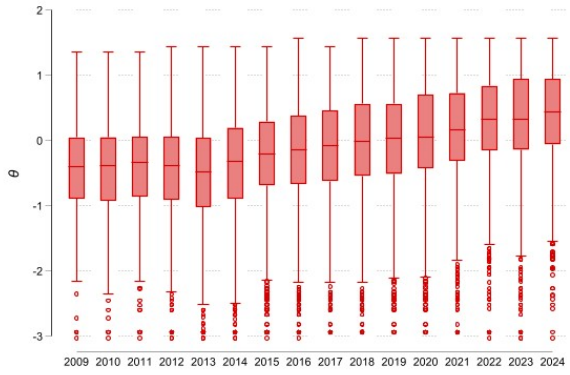
Figure 5. Item Response Analysis Results. (A) Item characteristic curves plotting predicted values for $\{y_{jtk}\}$ from equation 5.1. (B) Histogram of estimated $\hat{\theta}$ for the panel as a whole. (C) Time series of $\hat{\theta}$ distribution. In (C), the box marks the 25th, median, and 75th percentiles. 98% of observations lie between the whiskers, and outliers are represented by the points.



(A) Plot of predicted probability functions, $y_{jtk}(\theta)$, for each restraint k

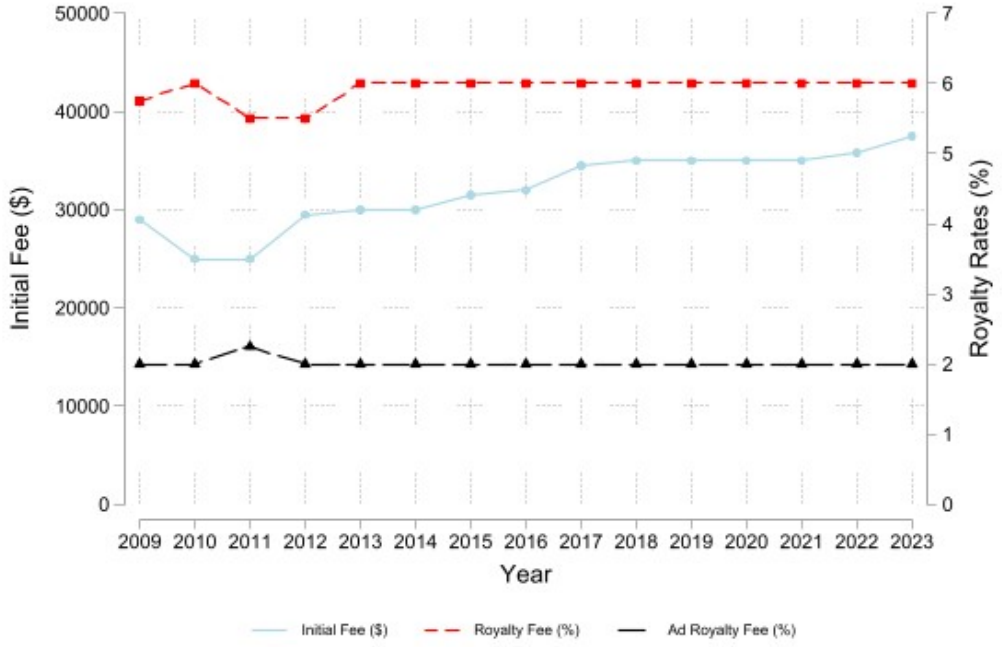


(B) Histogram of estimated $\hat{\theta}$

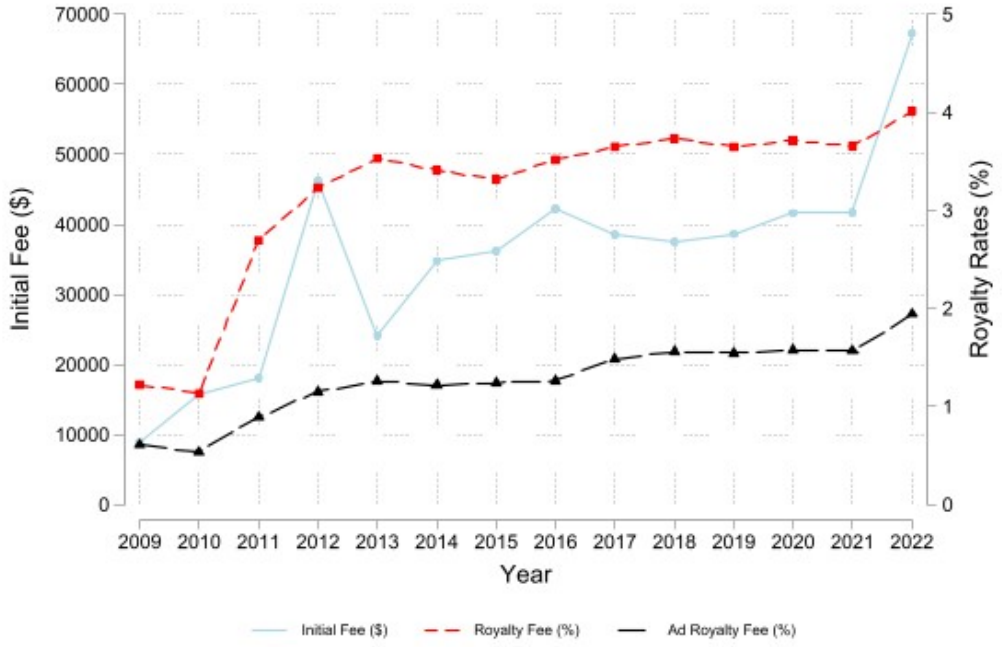


(C) Time series of $\hat{\theta}$ distribution.

Figure 6. Initial Fees and Royalties. These figures report chain-level upfront fees (left axis) and royalty rates (right axis), aggregated alternatively as annual medians and weighted averages in which the weight is the chain's outlet count in that year. The initial fee is a flat dollar amount paid to the franchisor to license the brand. Royalties are specified as a percentage of gross revenue. Ad royalty fees are additional royalties payable to the franchisor for chain-wide advertising. Initial fee data is sourced from FDDs. Royalty data is sourced from *Entrepreneur* magazine's annual Franchise 500 ranking and comparison data. Weighted average results in Panel B indicate royalty rates are skewed to the left as a function of chain size, while initial fees are skewed to the right.

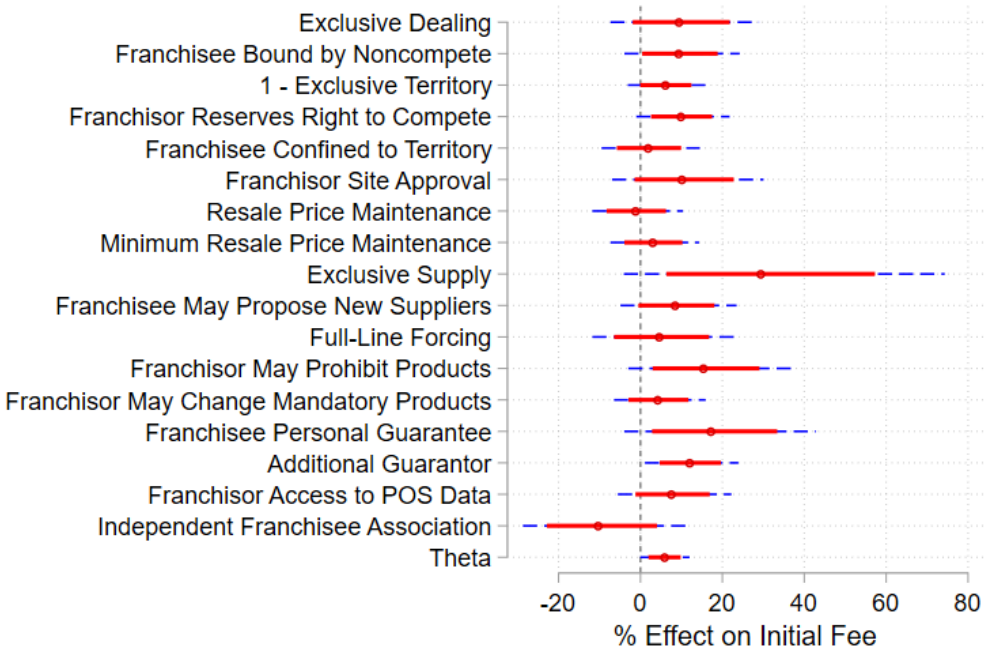


(A) Median Fees and Royalties

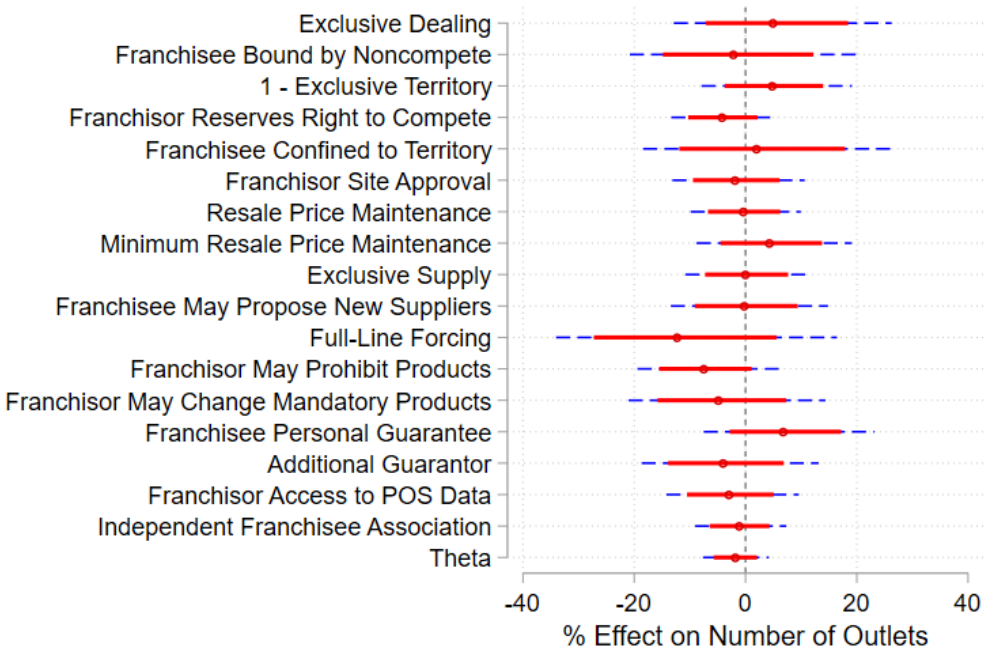


(B) Weighted Average Fees and Royalties

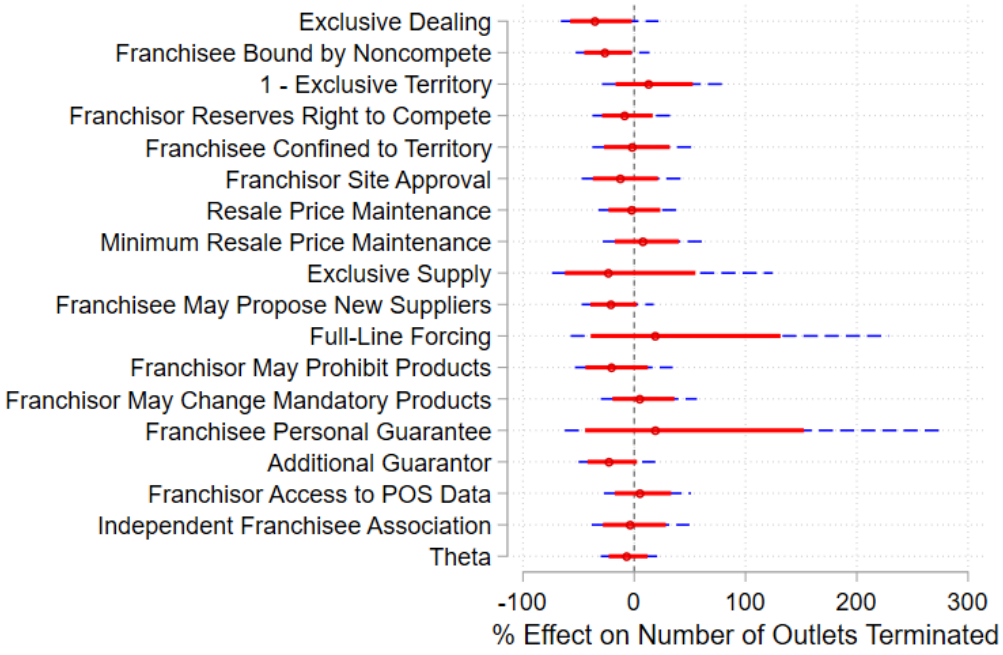
Figure 7. Correlation between franchisor control and indicia of franchisee welfare and chain growth. Each panel below shows the estimated relationship between a given continuous measure of franchisee welfare or chain growth and the given contractual restraint, as well as the estimated $\hat{\theta}$ from equation 5.1. Estimation is performed via Poisson pseudo-maximum likelihood for count outcomes and two-way fixed effects for continuous outcomes. Standard errors are clustered at the chain level. Coefficients and confidence interval are transformed into percentage effects. Blue confidence interval is corrected for multiple hypothesis testing using a Bonferroni correction.



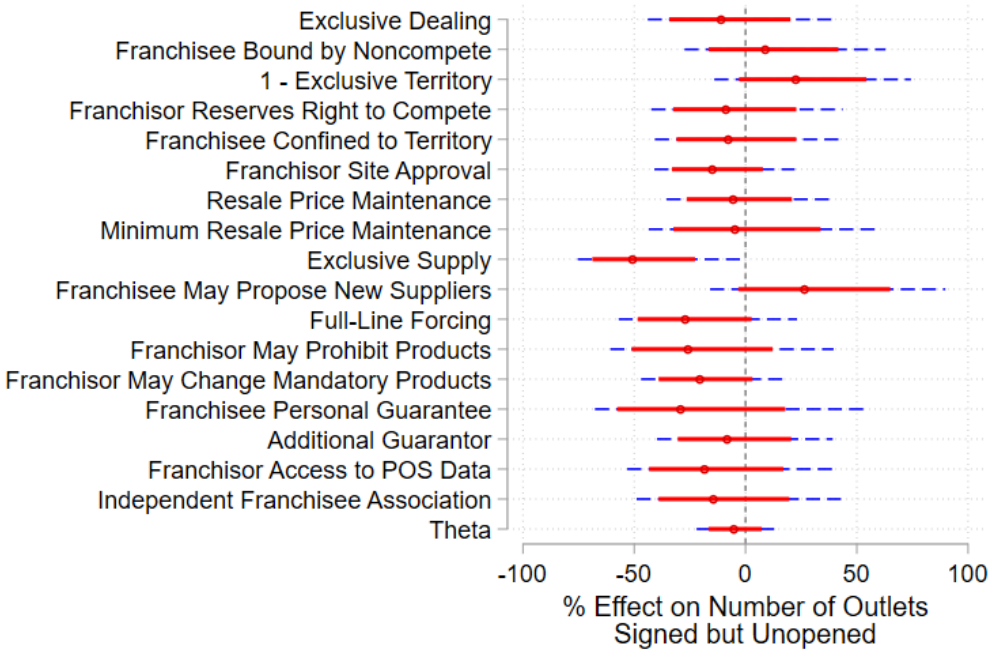
(A) Initial Franchise Fee



(B) Total Outlet Count

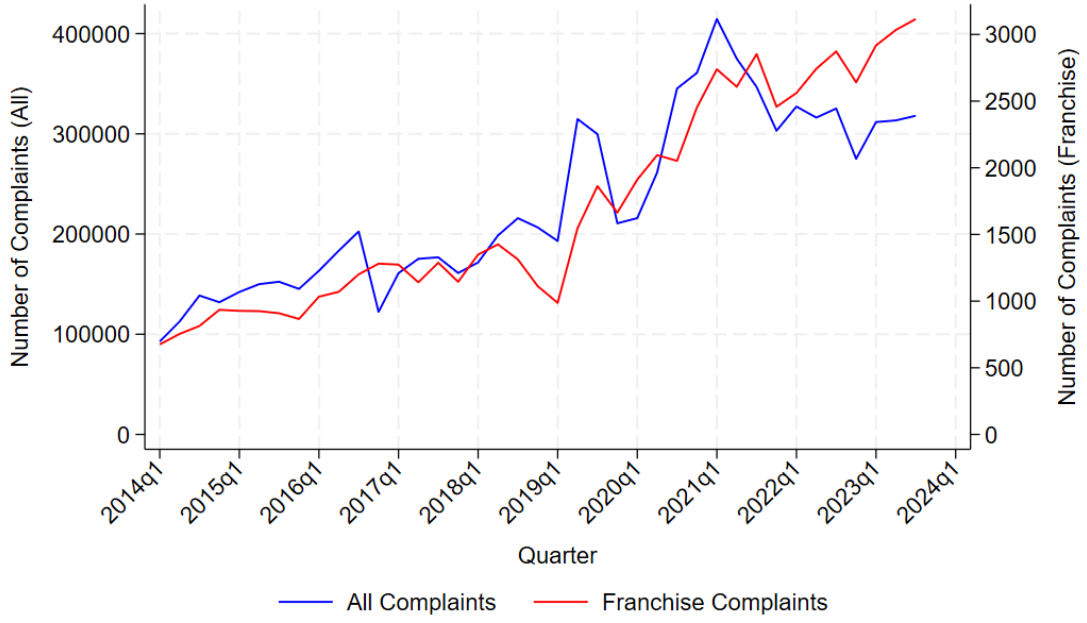


(C) Outlets Terminated

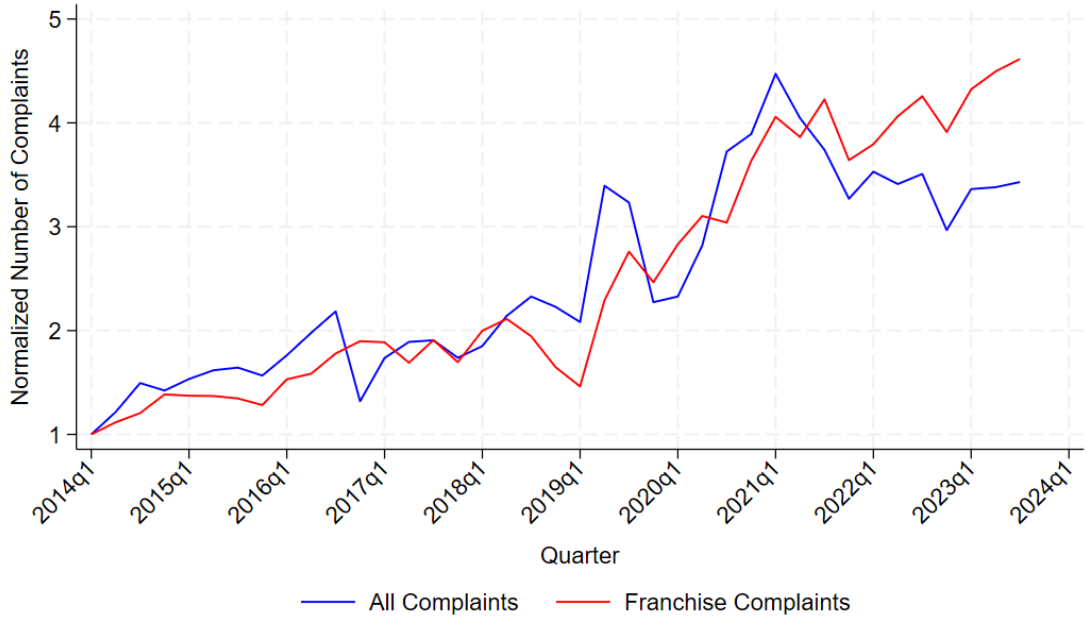


(D) Outlets Signed but Not Opened

Figure 8. Time Series of Complaints Filed with FTC (All Complaints vs. Franchise Complaints). Each figure contains two time series: first, a time series of all complaints filed with the FTC, and second, a time series of complaints related to franchising. Complaints are classified as relating to franchising if they are name-matched to a known franchisor and are lodged under a violation code likely to pertain to the franchising relationship. Complaint counts in panel (b) are normalized to 1 in the first quarter of 2014



(A) Raw Counts of Complaints



(B) Normalized Counts of Complaints

Figure 9. Time Series of Complaints Filed with FTC (by Industrial Sector). The figure contains time series of franchising complaints (the full matched complaint set), broken down by industry (denoted by 2-digit NAICS codes), on a relative basis. For disclosure avoidance, only sectors with 1000 or more total complaints over the sample period are included in the figure. The included NAICS codes correspond to: 44: Retail Trade; 53: Real Estate Rental and Leasing; 54: Professional, Scientific, and Technical Services; 56: Administrative and Support and Waste Management and Remediation Services; 61: Educational Services; 71: Arts, Entertainment, and Recreation; 72: Accommodation and Food Services; and 81: Other Services (except Public Administration).

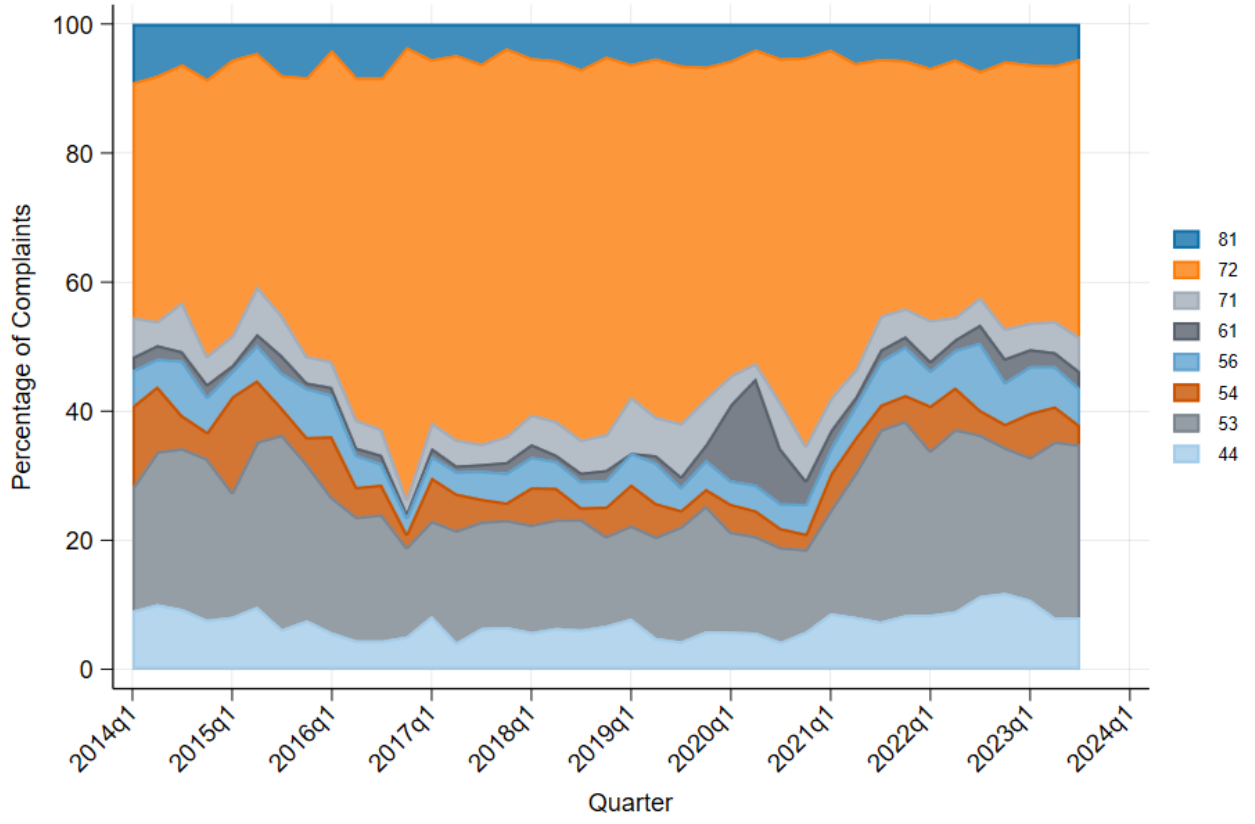


Figure 10. Regression Results: Association Between Complaint Counts and Use of Contractual Terms. The figure contains the estimated association between use of the listed contractual restraint and the number of complaints received by the FTC. Estimation is performed via Poisson pseudo-maximum likelihood and standard errors are clustered at the firm level. Coefficients and confidence intervals are transformed into percentage effects. Dashed blue confidence interval is corrected for multiple hypothesis testing using a Bonferroni correction.

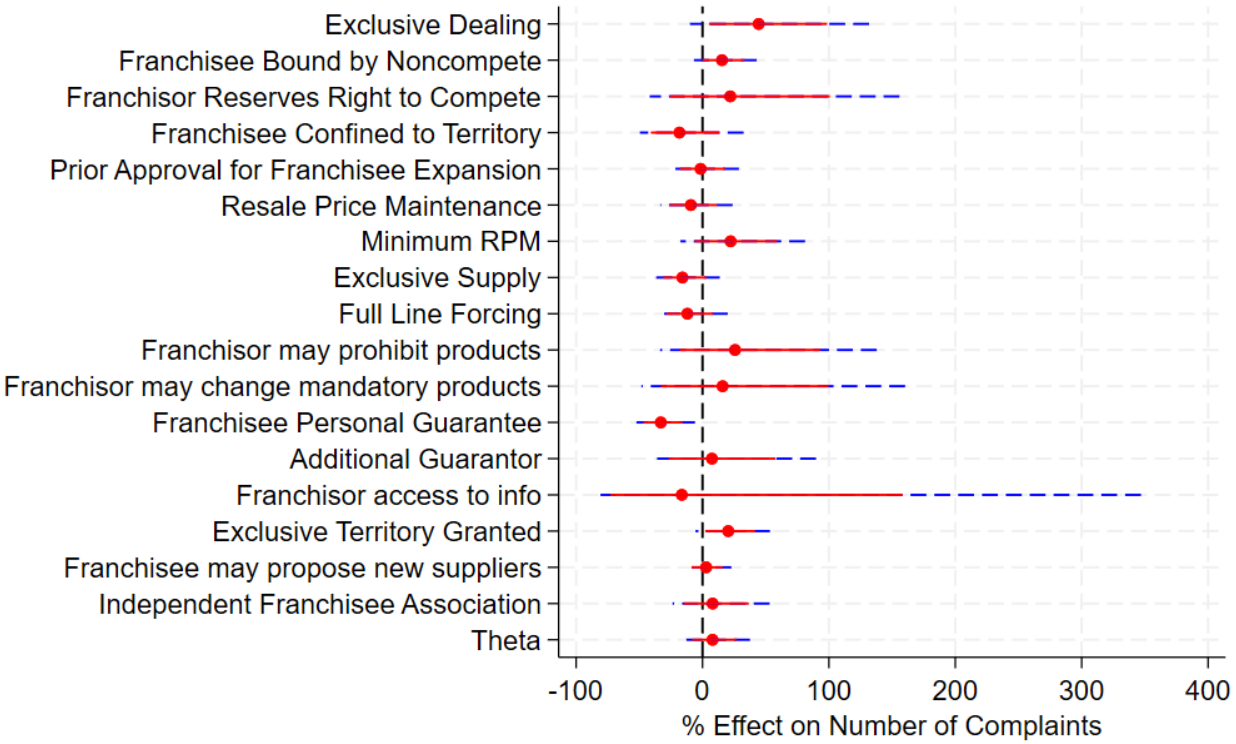
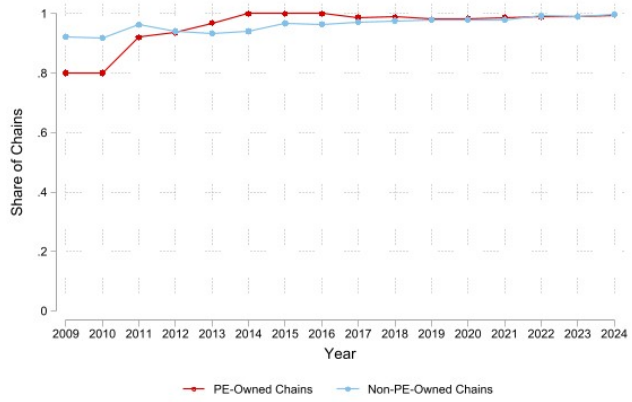
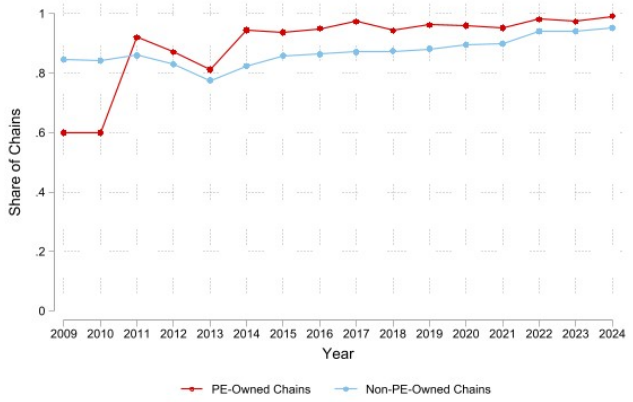


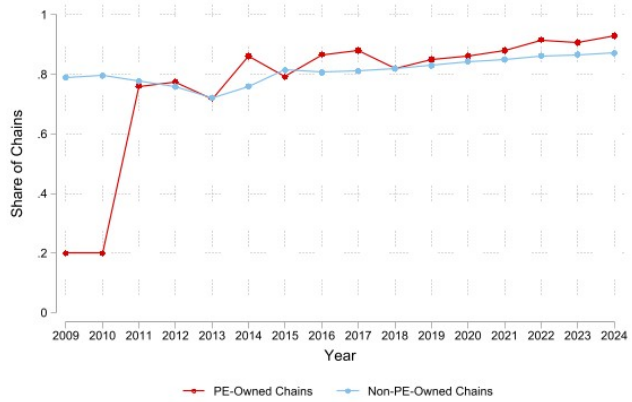
Figure 11. Vertical Restraints in Private-Equity-Owned and non-Private-Equity-Owned Chains. These figures display the differing frequencies of which private-equity-owned chains utilize a given vertical restraint compared to non-private-equity-owned chains.



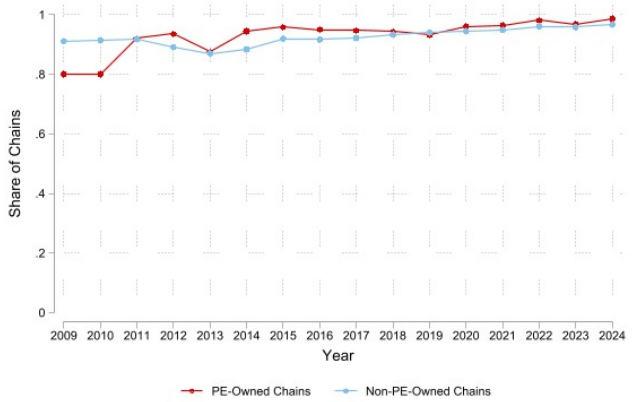
(A) Right to Purchase Assets



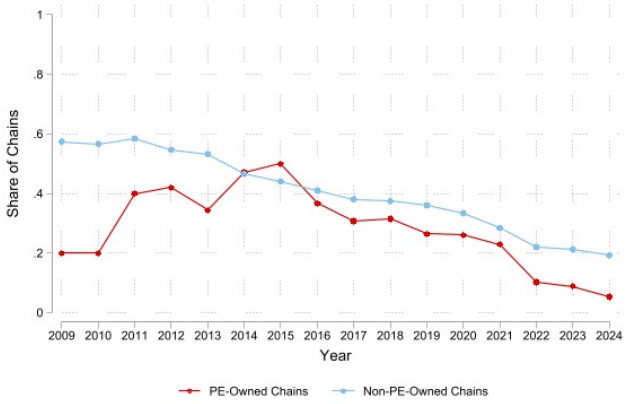
(B) Right of First Refusal



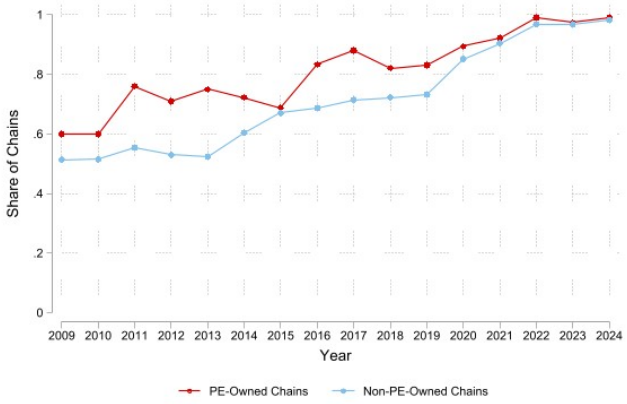
(C) Franchisee Noncompete



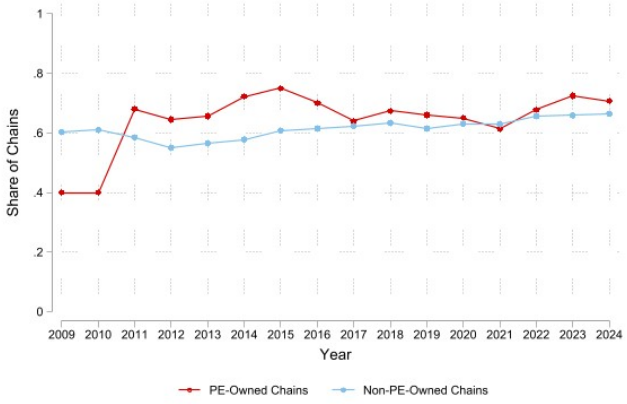
(D) Exclusive Dealing



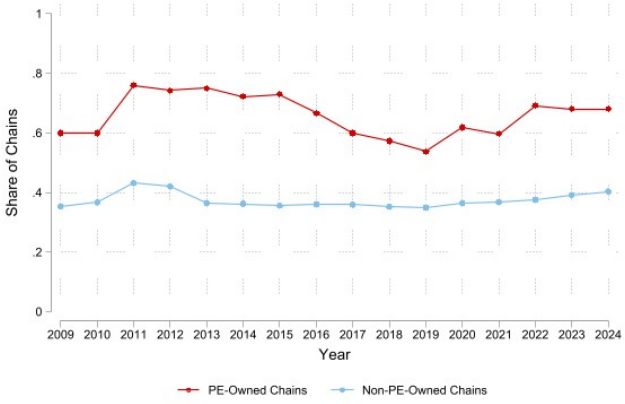
(E) Exclusive Territory Granted



(F) Franchisor Reserves Right to Compete



(G) Mandatory Arbitration



(H) Speech Restrictions

Figure 12. Probability of Private Equity Ownership as a Function of $\hat{\theta}$

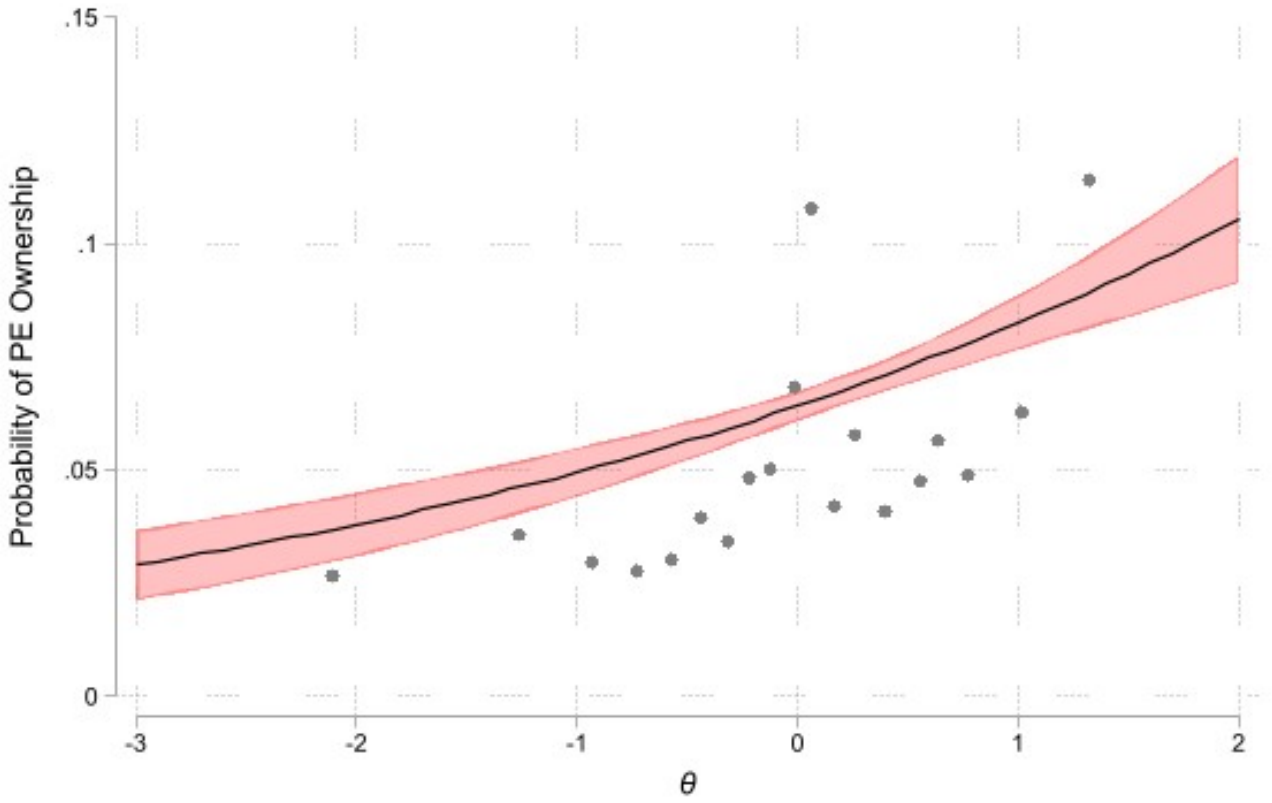
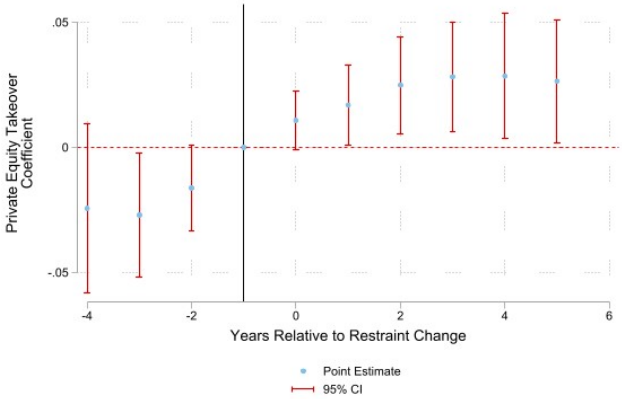
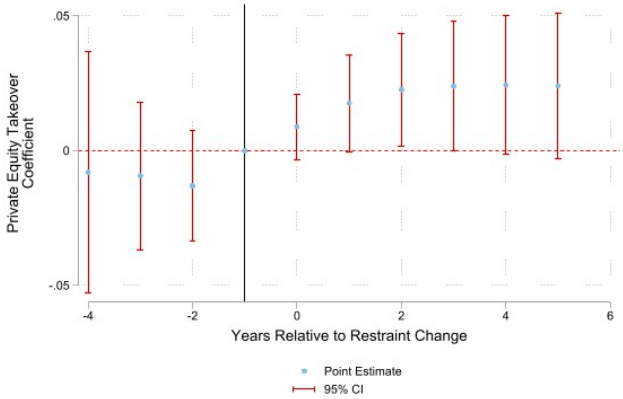


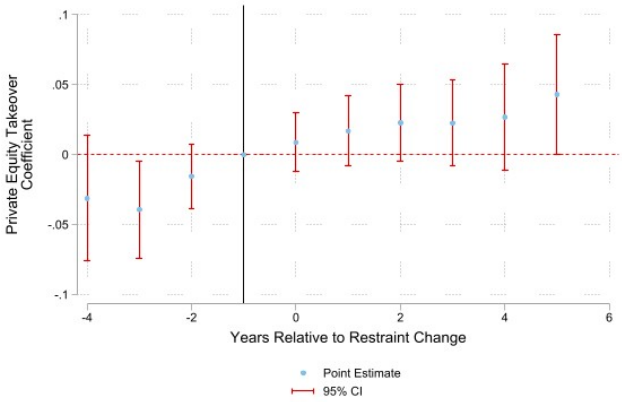
Figure 13. Event Study Plots showing the Acquisition by a Private Equity Firm as the Outcome of a Given Restraint Changing. These figures display the estimated coefficient $\hat{\beta}$ from year of restraint change from equation 6.1. Standard errors are clustered at the chain level.



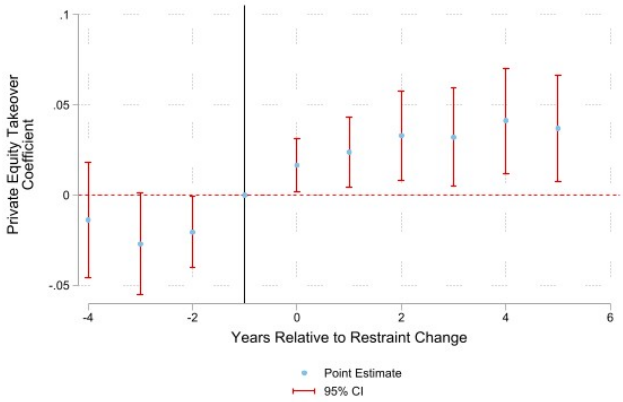
(A) Removal of Exclusive Territory Granted



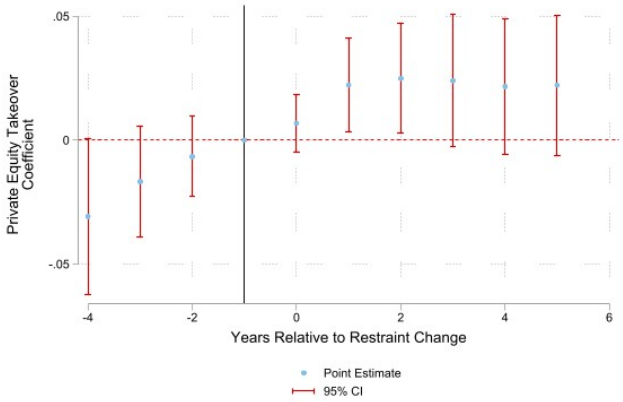
(B) Franchisor Reserves Right to Compete



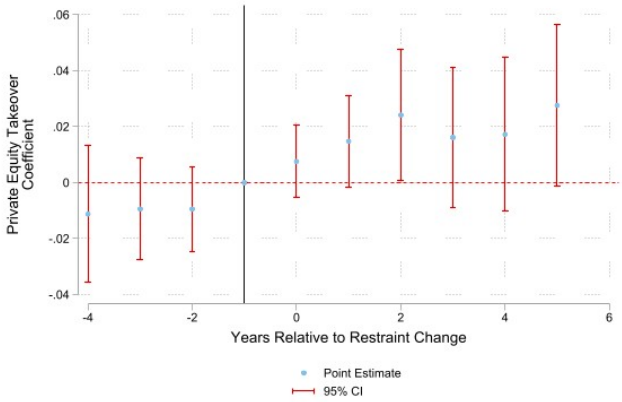
(C) Franchisor Site Approval



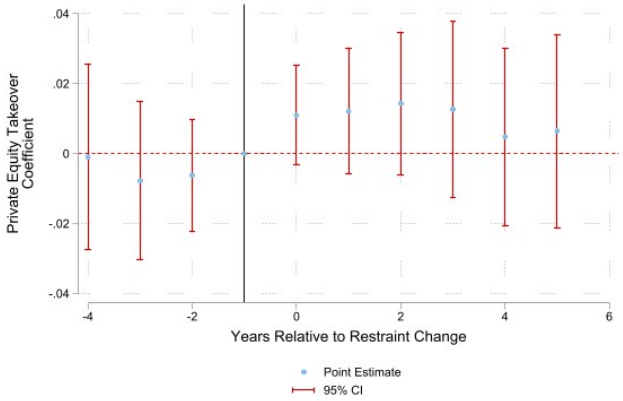
(D) No Franchisee Association



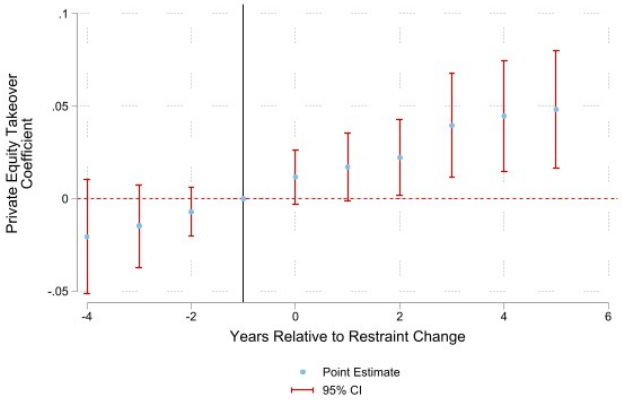
(E) Retail Price Maintenance



(F) Minimum RPM



(G) Mandatory Arbitration



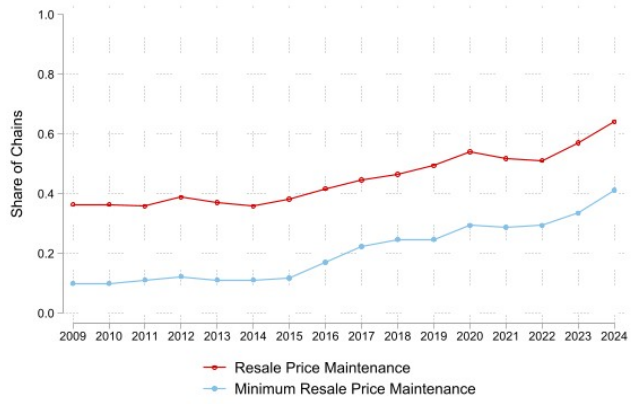
(H) Speech Restrictions

Appendix

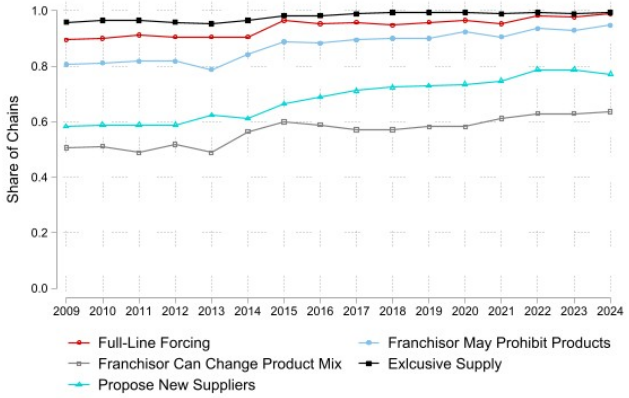
A Restraint Prevalence in the Balanced Panels

In this appendix we report figures equivalent to figure 2 for balanced sub-panels of the overall unbalanced panel dataset, spanning 2009-2024 (170 chains) and 2013-2024 (686 chains). This demonstrates that the overall reduction in franchisee autonomy is due at least in part to changes on the intensive margin, i.e. individual chains observed consistently reduce franchisee autonomy over time, rather than new, less-autonomous chains entering.

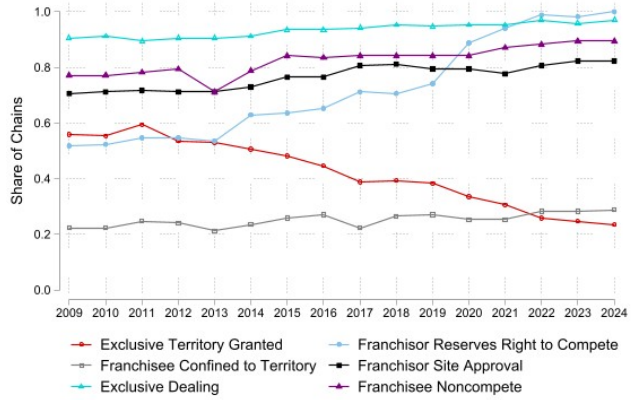
Figure A.1. Time Series of the Prevalence of Each Franchise Restraint in the Panel Dataset. These figures report the prevalence of each of the six sets of franchise restraints and contractual provisions described in section 2 in the balanced franchise chain panel dataset, 2009-2024. There are 170 chains represented in this balanced panel.



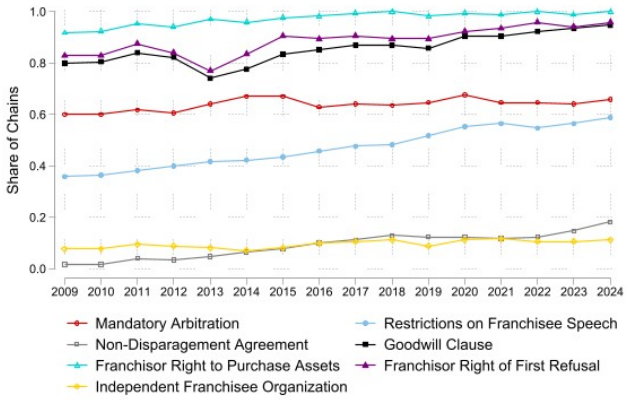
(A) Pricing



(B) Product and Service Offering



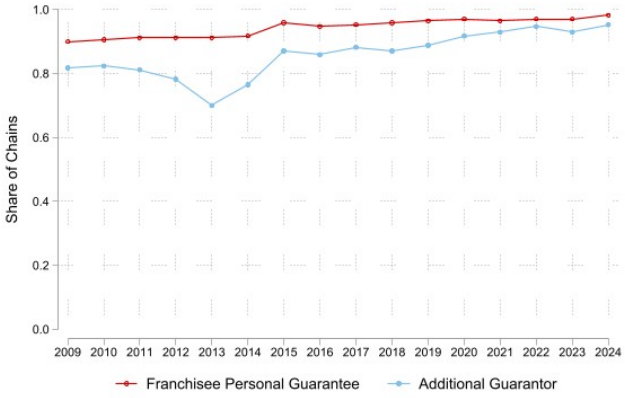
(C) Territory and Competition



(D) Governance and Dispute Resolution

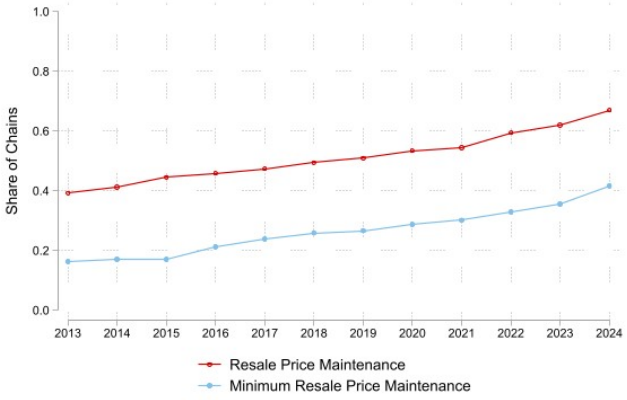


(E) Information and Monitoring

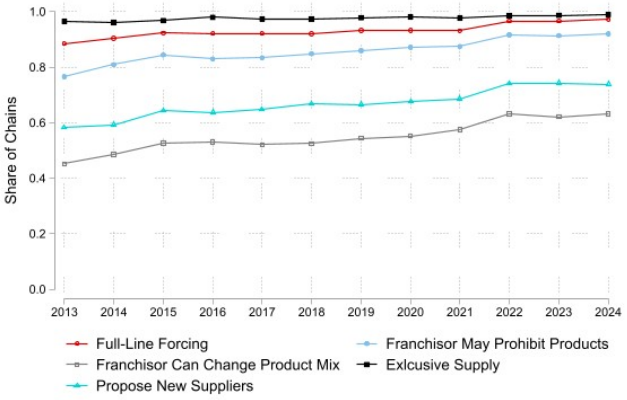


(F) Legal and Financial Obligations

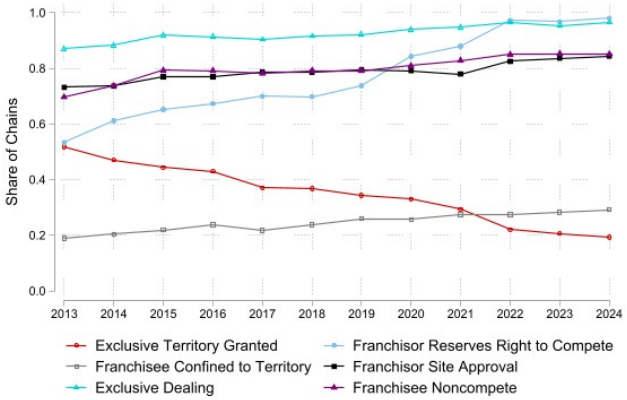
Figure A.2. Time Series of the Prevalence of Each Franchise Restraint in the Panel Dataset. These figures report the prevalence of each of the six sets of franchise restraints and contractual provisions described in section 2 in the balanced franchise chain panel dataset, 2013-2024. There are 686 chains represented in this balanced panel.



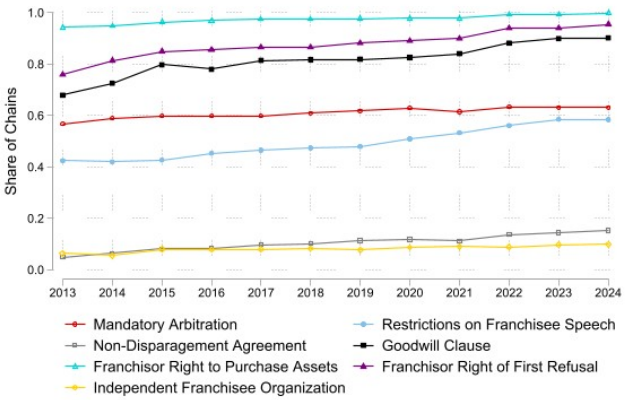
(A) Pricing



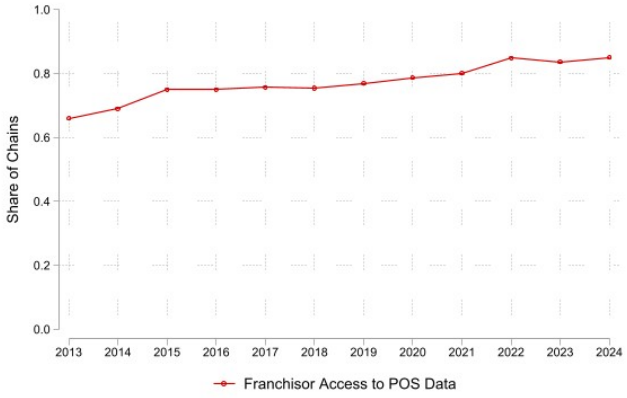
(B) Product and Service Offering



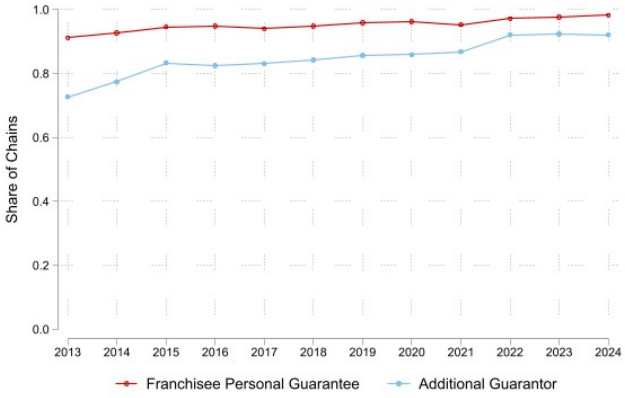
(C) Territory and Competition



(D) Governance and Dispute Resolution



(E) Information and Monitoring



(F) Legal and Financial Obligations

B Survey protocol

Note: The survey protocol was first described in Atz (2025) and is reproduced below.

B.1 Overall scope

The survey aimed to elicit responses from current or previous franchisees to questions about Item 19 and vertical restraints. Participants were identified through a self-constructed database of franchise businesses' contact information from publicly available Franchise Disclosure Documents. Contact information, i.e., phone numbers, emails, and business addresses, is publicized in the FDD with the expressed purpose of contacting franchise businesses. These documents are made available through various U.S. states' commerce websites. Item 20 contains a list of current and former franchise owners with their contact information. The FTC "Franchise Rule" governs the disclosure and use of this information (Federal Register/Vol. 72, No. 61/March 30, 2007/Rules and Regulations). The NYU Institutional Review Board determined the protocol to be exempt from the federal policy following a limited IRB review under reference number IRB-FY2024-9116.

The study contacted franchisees via three modes:

1. For mobile phone numbers, a text (SMS) recruited participants for an online survey via a link. The questionnaire was administered via Qualtrics.

2. For landline phone numbers, the study used interactive voice response (IVR) technology, which allowed participants to choose whether they wanted to access the online survey or answer the questions on the phone via the keypad. The latter used an abridged version of the survey to avoid survey fatigue.

3. For email addresses, the study sent a link by email, with a follow-up message after one week if there was no response. The questionnaire was administered via Qualtrics.

The survey included two waves and a pilot phase. The pilot phase ran from 2024-09-13 to 2024-09-18, and the responses were included in the final sample. The first wave was conducted between 2024-09-24 and 2024-09-30. The second wave was conducted between 2025-03-31 and 2025-04-21. The questionnaire for wave 2 was changed slightly and included an expanded section on vertical restraints. Distributions were sent at varying times during local U.S. business hours including one Saturday. Email addresses and mobile numbers were contacted up to two times; landlines were contacted up to three times if they were busy or reached an answering machine.

B.2 Sampling

The sampling frame was based on 393,453 phone numbers and 74,335 email addresses from the latest FDD of each franchise.

The regular expression to extract phone numbers was:

```
\b\(?[0-9]{3}\)?[\.\-\s]?[0-9]{3}[\.\-\s]?[0-9]{4}
```

Note that there is no word boundary at the end because of possible phone number extensions. Additionally, phone numbers were validated in terms of length and their location in the FDD (i.e., Item 20). Phone numbers starting with 800 or 866 were excluded due to the high likelihood of encountering an answering machine.

The regular expression to extract email addresses was:

```
\b[A-Za-z0-9\.\_\%+-]+@[A-Za-z0-9\.-]+\.[A-Za-z]{2,}\b
```

Additionally, email addresses were validated in terms of OCR errors and screened for government and non-U.S. top level domains. Franchisor or corporate emails were filtered out where possible.

Cost constraints determined the planned sample size. Stantcheva (2023) recommends "sampling for range", which in this case meant stratifying the sample based on franchise size. Wave

1 included 96,995 phone numbers from all available franchises, with a maximum number of 60 phone numbers per chain. The type of phone line was split into mobile with 30,178 (31%) phone numbers, landline with 55,060 (57%) numbers, VoIP with 8752 (9%), and other types for the rest. Mobile numbers were used for the SMS distribution and landline numbers for the IVR. Wave 2 included 43,937 phone numbers, of which roughly half were numbers not previously contacted, and used all available email addresses.

B.3 Response rate and potential response biases

The total number of valid responses was 350. The number of chain-identifiable responses for the analyses in this study is 309. The three modes—phone, SMS, and email—achieved different response rates, where the highest success rates was from text messages.

Most of the landline phone numbers reached an answering machine (45%) or were otherwise busy, unavailable, or yielded a carrier error (together 39%). Live answers accounted for 16% of all calls. The response rate was low, with 0.2% of live answers resulting in participation. An additional 12 participants chose to enroll in the survey via text. For the SMS distribution, it was less clear which messages were delivered to the intended target. The overall response rate was 2%, which, however, includes a large number of incomplete surveys. Moreover, it was likely that a substantial number of SMS did not reach a live phone numbers (as with landlines). Email outreach also resulted in a large number of undelivered surveys, where over 50% of survey invites bounced at the server. The email response rate for completed surveys was 0.4%. Thus, the blended response rate is estimated somewhere between 0.2% and 1.2%, which is in line with other studies that reached out via an unsolicited email or call (e.g., Minnis and Shroff (2017)).

The main concern for this survey protocol is a potential nonresponse error. There is a substantial challenge in reaching the target population, the franchisees, by using business phone numbers or email addresses, even though the contact information in Item 20 was meant to facilitate reaching current or past outlet owners. At least three reasons make a large share of the

phone numbers unsuitable: first, the phone number may not be monitored or may no longer be in use. Second, calling the number may only reach an answering machine or automated system. Third, even in the case of a live answer, depending on the franchise, it may be a front-line employee who receives the call or text instead of the franchisee. The latter is mitigated by a screening question. Email addresses are not required by the franchise regulation and are, therefore, included voluntarily. This mode of contact also suffers from a large share of inactive or unreachable email addresses.

There are several additional caveats. First, attrition is a serious concern, and the questionnaire was optimized to be as short as possible in the pre-pilot phase. Second, behavioral biases related to content and formatting ought to be reduced by modern survey design. Third, given the response rate, we should expect some form of selection in addition to coverage error. For example, it might be that disgruntled franchisees are more likely to participate in a survey about pre-sale earnings information. In general, franchisees who complete the survey could be systematically different from those who did not, which would undermine any generalizations to all franchisees. It seems plausible that small and unsophisticated franchisees are easier to reach with this survey protocol (e.g., they are more likely to put down a "personal" phone number) and more likely to be available (e.g., as the active manager) than sophisticated franchisees, which should work in favor of making inferences from the survey responses. Table B.1 compares the franchise chains in the survey with those that did not participate. The survey includes on average franchises that are larger in outlet size and more often part of the Entrepreneur 500 ranking. Franchises with few or no outlets are harder to reach and are, therefore, underrepresented.

Table B.1. Comparison of Franchises In Survey vs. Not In Survey. This table compares the franchises that participated in the survey with those that did not participate, based on the last available FDD. The variables *Size* (number of outlets) and *Initial fee* (in USD) are log-transformed. E500 stands for the Entrepreneur 500 ranking. Significance thresholds: * p<0.05.

	In Survey		Not In Survey		Diff. in Means	Std. Error
	Mean	Std. Dev.	Mean	Std. Dev.		
Size (log)	2.1	0.67	1.1	0.91	-1*	0.047
Initial fee (log)	4.6	0.41	4.5	0.43	-0.1*	0.028
Royalty fee (%)	7.3	3.6	6.3	3.4	-1*	0.39
Ad Royalty fee (%)	2.9	2.1	2.5	1.8	-0.41	0.25
Top 100 by E500	0.091	0.29	0.022	0.15	-0.069*	0.019
Unranked by E500	0.51	0.50	0.88	0.32	0.37*	0.033

Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
1	Franchisor's control stayed the same	No support, no new products, everything offered is a way they can make money from the franchisees since our sales don't provide the increased in royalties
2	Franchisor's control stayed the same	Their job is to support. They do a good job supporting
3	Franchisor's control gotten less onerous	HQ control is minimal- I'm not sure if they are even around. It's horrible
4	Franchisor's control gotten more onerous	If I knew now what I didn't know when I joined I would have not expanded due to the. Control
5	Franchisor's control gotten more onerous	In my experience the franchisor has had little success bringing traffic into the individual stores. They rely on price increases brought on by minimum wage increases as a way to market their success to new investors.
6	Franchisor's control gotten more onerous	They are totally out of touch and do not consider how regions operate differently. My state of Florida is drastically different than the rest of the country.
7	Franchisor's control gotten more onerous	They love to micromanage the franchisees
8	Franchisor's control gotten more onerous	They stink
9	Franchisor's control gotten less onerous	"Franchise" was a great franchise 10 years ago but now they don't care about one owner shops they only want to cater owners that have 6 or more stores.
10	Franchisor's control stayed the same	Good corporate structure
11	Franchisor's control gotten more onerous	They are very involved when it comes to getting their %. They are disinterested in helping the Indvidual franchisees.
12	Franchisor's control stayed the same	I've had a great experience w/ my franchise.

Continued on next page...

Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
13	Franchisor's control gotten more onerous	Headquarters forces agreements on us where they receive a kickback. They also force agreements with businesses that are owned by HQ employees.
14	Franchisor's control gotten more onerous	Communication is poor at best. No clear standards, training was a joke, no help offered from headquarters
15	Franchisor's control stayed the same	Corporate headquarters has proven that they have no clue what they're doing
16	Franchisor's control gotten less onerous	Essentially none. They only exert control over future buyers due to the fact that the future buyer would need to enter into a new franchise agreement. Otherwise, HQ merely fulfills an advisory role, so we stay in business and continue paying the monthly fee.
17	Franchisor's control gotten more onerous	It seems inconsistent depending upon when you came into the system.
18	Franchisor's control gotten more onerous	Our primary service offering relies on supplies that are sole sourced from one vendor. The franchise organization and this vendor have become increasingly tied at the hip to the point where the supplies were are mandated to purchase have increased in cost by nearly 200% in the past 3 years. Over that period of time an additional service was bundle into the supplies's cost, however, the addition of that service should have increased the cost of those supplies by about 20-25% and that's being generous.
19	Franchisor's control gotten more onerous	Headquarter is run by a family. Restrictive on comments on franconnect. Not open to new ideas. Nickel and diming franchisees.
20	Franchisor's control gotten more onerous	I original signed up for territory development but became in possible with economics (location, rent, labor (doubled in 10 years), product, services, etc.) cost to develop in the time frame allotted.
21	Franchisor's control gotten more onerous	Corporate do not listen to there franchise owners.
22	Franchisor's control gotten more onerous	They are thief's

Continued on next page...

Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
23	Franchisor's control stayed the same	Very little interaction with them
24	Franchisor's control gotten more onerous	I feel like corporate control is like similar with communism or Dictatorship
25	Franchisor's control gotten more onerous	jsut that their rules are crappy and it sucks to own but not own a business.
26	Franchisor's control gotten less onerous	They are the reason my business failed. The advertising was outrageously priced and ineffective.
27	Franchisor's control stayed the same	I wanted to sell my franchise business, But, my corporate headquarter restrict to sell. whom i can sell to, or are i obligated to sell only to the my territory. headquarter can not helping me to sell. So, I am frustrated and lost more than $70,000
28	Franchisor's control gotten more onerous	"Franchise" is the perfect example of what people dread as a franchisee - they are WAY TOO involved in the "independently owned" franchisee operations
29	Franchisor's control gotten more onerous	They suck at running the business. They keep making changes that are not helpful or worse, hurtful.
30	Franchisor's control gotten more onerous	It sucks. My franchisor makes horrible decisions that benefit them while hurting us.
31	Franchisor's control stayed the same	there is a law in place regarding who owns the employees that places a check on franchisors' desire to increase control. Also there have been law suites against franchisors dictating vendor mandates that have also kept a check on franchisor greed and control.
32	Franchisor's control gotten more onerous	When they sell to private equity it's a crap shoot...
33	Franchisor's control stayed the same	They do a great job for me
34	Franchisor's control gotten more onerous	They make more money off their mandatory vendors and mandatory marketing spend through them than they do from royalties.

Continued on next page...

Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
35	Franchisor's control gotten more onerous	Required marketing spends are putting franchisees out of business
36	Franchisor's control gotten more onerous	They were horrible and made horrible decisions
37	Franchisor's control gotten more onerous	Corporate headquarters also committed fraud against me by price fixing my services, which is illegal in California- where I operated my location. They also instructed me to break labor laws and not pay my employees full wages to "reduce payroll" which I refused and chose not to follow to said instructions. The best way to describe this franchise is predatory.
38	Franchisor's control gotten more onerous	The control is able to get more onerous because the FDD allows the headquarters to change the manual. If the manual is static than headquarters would not be able to as much. This is referring to an external document that can change in the FDD should be disallowed.
39	Franchisor's control gotten more onerous	Yes, the franchise has been implementing changes in the operation manual which supposedly supersedes, existing franchise agreement and franchise disclosure documents.
40	Franchisor's control gotten more onerous	They don't care about individual territories; what works for one area doesn't always work for another
41	Franchisor's control stayed the same	Our Corporate headquarters do not do a lot for the franchisees. They are disengaged and not very helpful.
42	Franchisor's control stayed the same	They give us great latitude to run our business
43	Franchisor's control gotten more onerous	The more corporate discovers that franchisees are not in compliance, the more onerous their control becomes.
44	Franchisor's control gotten more onerous	They do not allow you to sell to private equity groups or companies. That could be restrict the pool of available buyers.
45	Franchisor's control gotten more onerous	Rise takes but gives little

Continued on next page...

Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
46	Franchisor's control gotten more onerous	We are measured (KPIs) and go out of favor at the individual franchisor's will (he is founder, owner and CEO). The KPIs are not mentioned in the FDD or FA. Over the past year or two the franchisor has executed new FAs that require 20% of sale price go to franchisor. This is up from $5K when we first joined, and in a $2M biz is $400K. Also the franchisor has escalated the franchise fee to $1.50/pop (is saying will be $2.50 soon, and was $0.37 when we purchased), making a new franchise purchase of one lot cost $\tilde{\$}$375K in franchise fee alone. The franchisor recruits new franchisees by loaning them the $375K and often the franchisee cannot make enough in profit to stay in business. So the CEO resells the lot.
47	Franchisor's control gotten more onerous	Once the Franchisor bought out his partners, the Franchise has turned into a dictatorship, ruled by threats and lack of HQ help. HQ only helps a few top performers. Their new software is a POS. Nothing works and we all fear we will lose clients and employees.
48	Franchisor's control gotten more onerous	"Franchise" was acquired by "Franchise" which has been a net negative for my business results, relationships, and operations.
49	Franchisor's control stayed the same	The Franchisor micromanages and does not understand differences in geography (hot weather vs snowy areas), local cultures et.
50	Franchisor's control gotten more onerous	While I can set prices, they run the advertising, often offering large discounts.
51	Franchisor's control gotten less onerous	No support and bo profitability education for new comers
52	Franchisor's control gotten less onerous	Covid changed things - online zoom calls and service delivery. control lightened up
53	Franchisor's control stayed the same	HQ's approach has been to work with minimal controls and to maintain a very high level of involvement with the Franchisees.
54	Franchisor's control gotten more onerous	See following links to comments submitted to the FTC

Continued on next page...

Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
55	Franchisor's control gotten more onerous	We were purchased by an umbrella company, "Franchise". They have a few franchises related to children. They have put all the businesses on the same software. This is an example of control that makes it much harder to do business since they took over.
56	Franchisor's control gotten more onerous	The parent company "Franchise" doesn't understand our business model at all, which makes it difficult for new owners to be successful.
57	Franchisor's control gotten more onerous	Purchasing equipment above fair market value has caused extreme distress
58	Franchisor's control gotten more onerous	It is a balance and really depends on the type of franchise, the market, the maturity of the brand and the company, and a number of other factors.
59	Franchisor's control gotten more onerous	My franchise was acquired in part by work In 2019. Things have significantly changed for the worst since then.
60	Franchisor's control gotten more onerous	Economically I cannot afford to market for myself. And the franchisee holds total control over marketing and can and has cut off my sales leads at a moments notice without notice or cause.
61	Franchisor's control gotten more onerous	Some of these questions I'm unable to answer because I've never explored selling for instance.
62	Franchisor's control stayed the same	Some items are "restricted" not by corporate requirements but by general lack of options or by corporate recommendations. We are not strictly required to order from certain vendors or to carry certain products but we are expected to carry branded items of which there are only certain vendors that offer them and limited selection of them so we end up being somewhat restricted in who we can order and what we can carry. This is not necessarily a bad thing as it helps maintain our brand across the board but it does come at some risk that something would happen with those vendors and our business would be harmed by that even though we technically can carry products from outside companies that compete with our own branded items.

Continued on next page...

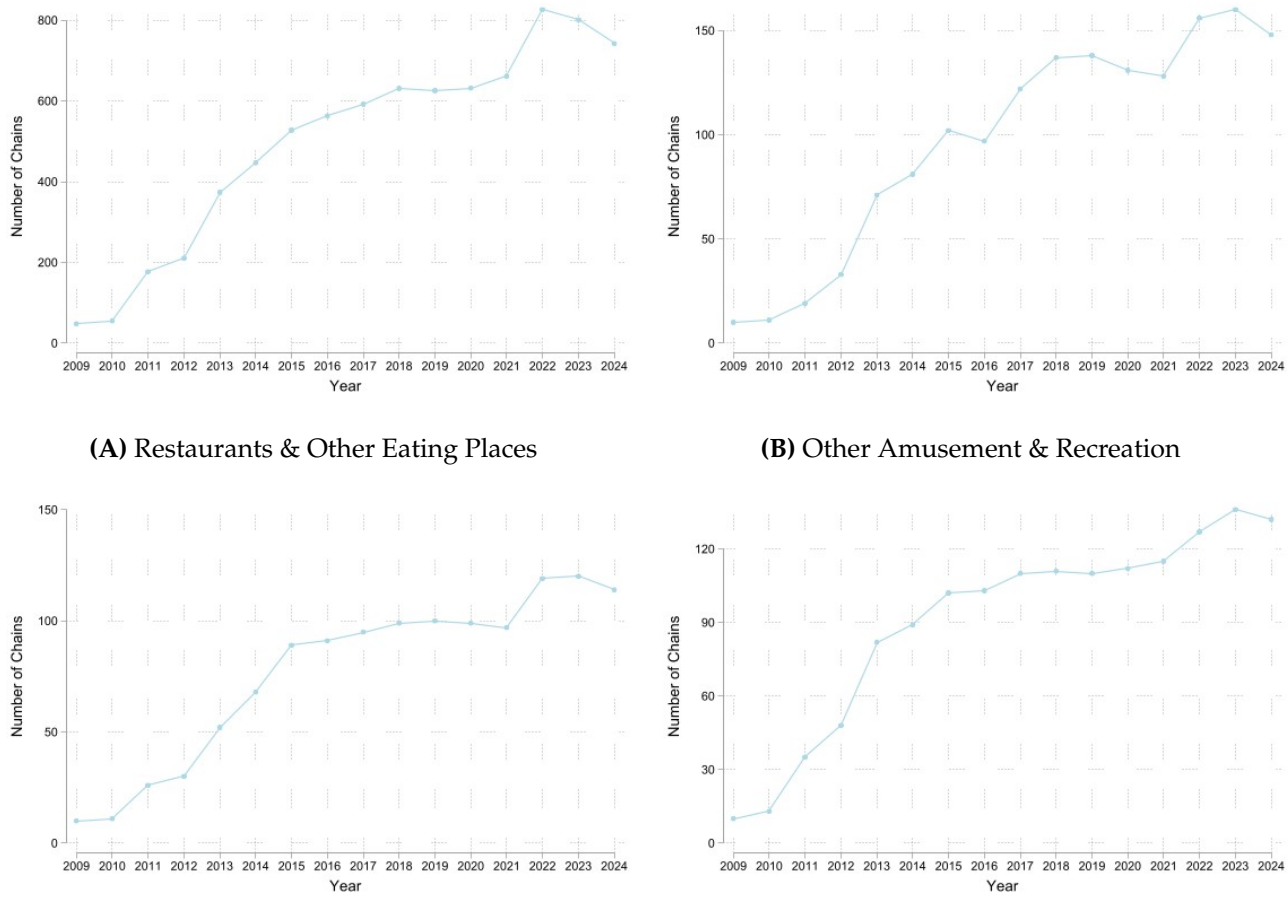
Table B.2. Open-ended Survey Responses. This table reports all of the open-ended survey responses we received, as well as their answer to the final structured question about time trends in franchisor control. Named franchise brands were anonymized by replacing them with "franchise".

#	Franchisor Control	Other Comments
63	Franchisor's control gotten more onerous	To me, corporate oversteps their boundaries
64	Franchisor's control stayed the same	Corporate has almost total control build costs including negotiating unfavorable contracts with suppliers/vendors that corporate benefits from by taking a cut of the inflated prices. In all their corporate contracts, Corporate uses their bargaining power to enrich themselves (by inflating costs to take a cut) instead of to benefit franchisees.
65	Franchisor's control gotten more onerous	ineffective

C Restraint Prevalence by Industry

Section 4.3 addresses variation in restraint prevalence by industry, which we report in this appendix, in addition to the count of chains for each of the top 10 industries in the panel over time.

Figure C.1. Count of Chains in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.

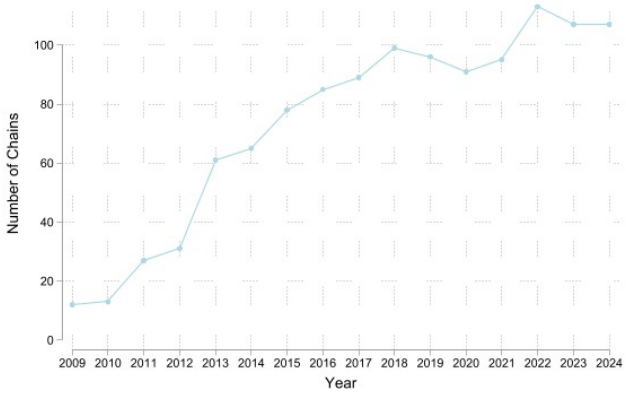


(A) Restaurants & Other Eating Places

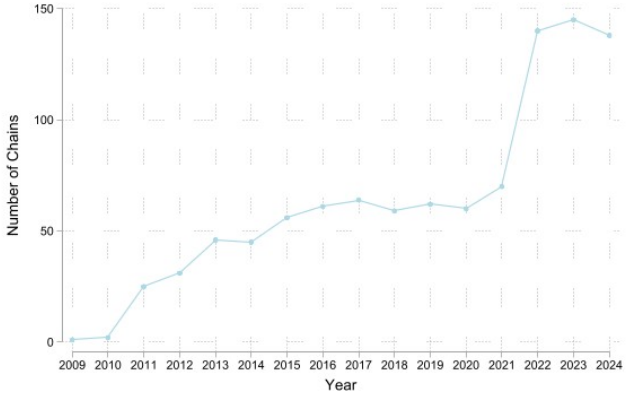
(B) Other Amusement & Recreation

(C) Personal Care Services

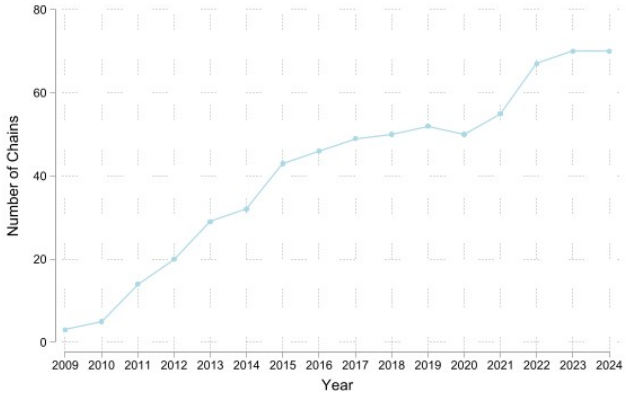
(D) Services to Buildings & Dwellings



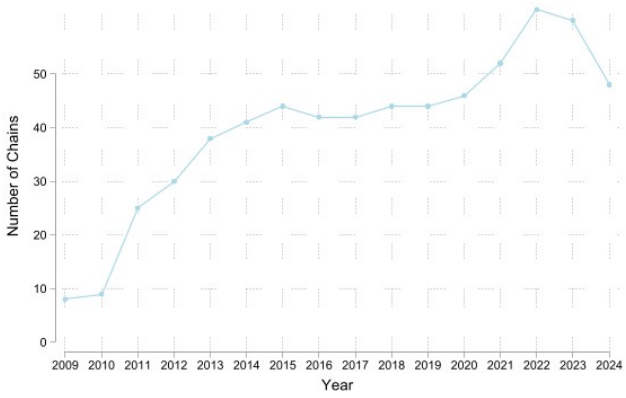
(E) Other Schools & Instruction



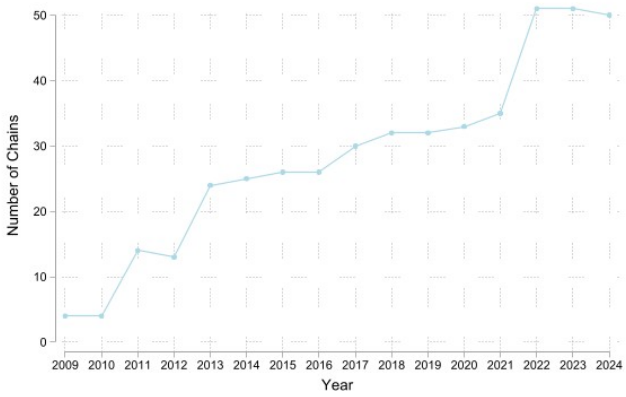
(F) Traveler Accommodation



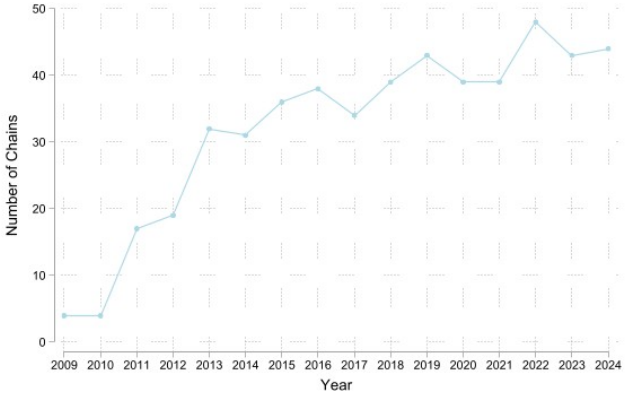
(G) Residential Building Construction



(H) Automotive Repair & Maintenance

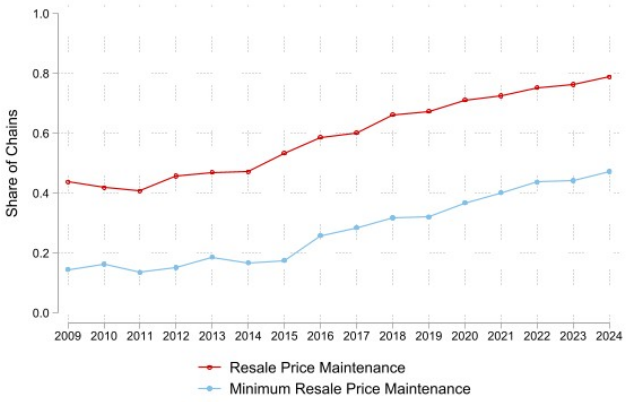


(I) Other Personal Services

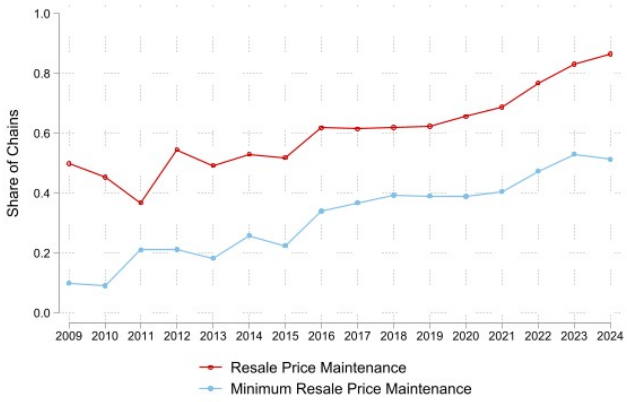


(J) Real Estate Agents

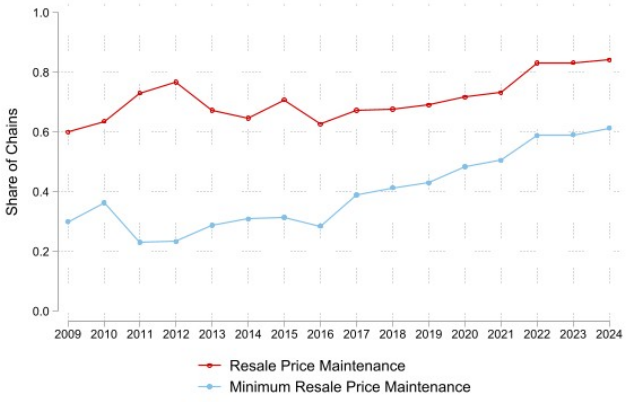
Figure C.2. Pricing Restraint Prevalence in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.



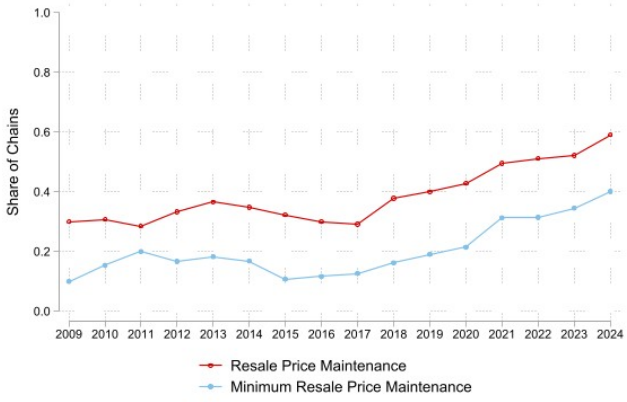
(A) Restaurants & Other Eating Places



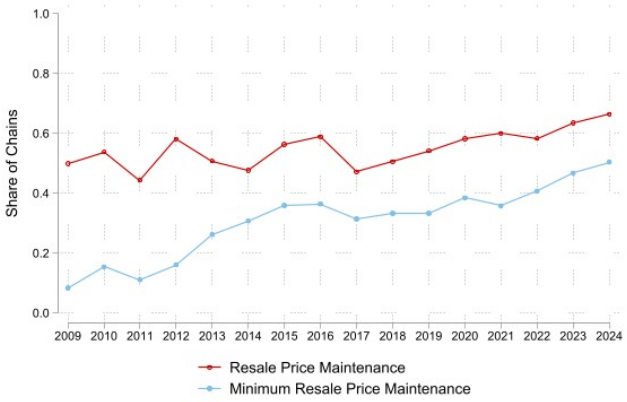
(B) Other Amusement & Recreation Industries



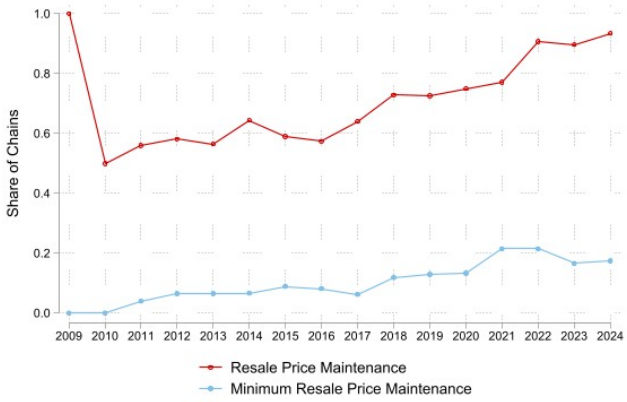
(C) Personal Care Services



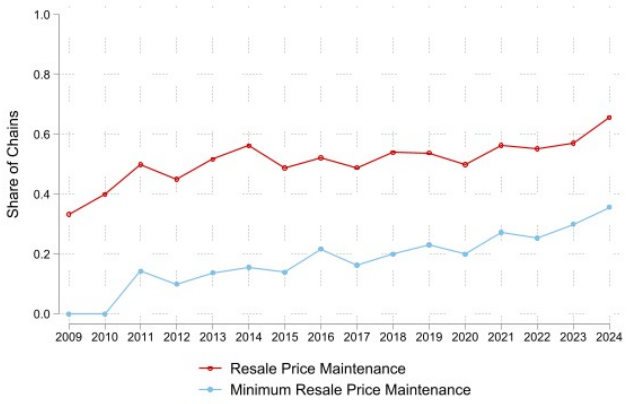
(D) Services to Buildings and Dwellings



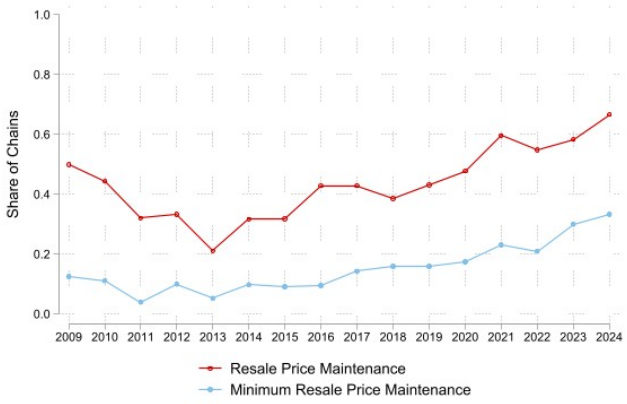
(E) Other Schools and Instruction



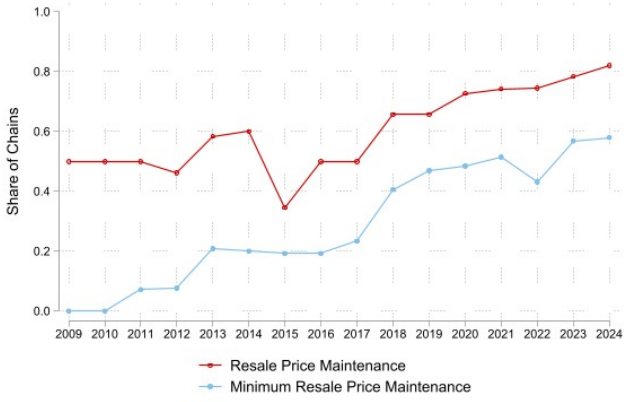
(F) Traveler Accommodation



(G) Residential Building Construction



(H) Automotive Repair and Maintenance

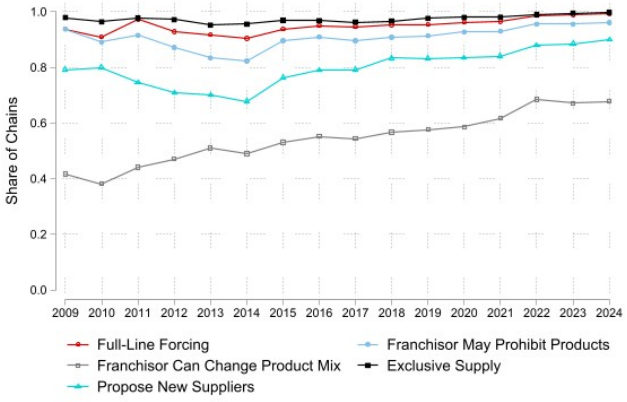


(I) Other Personal Services

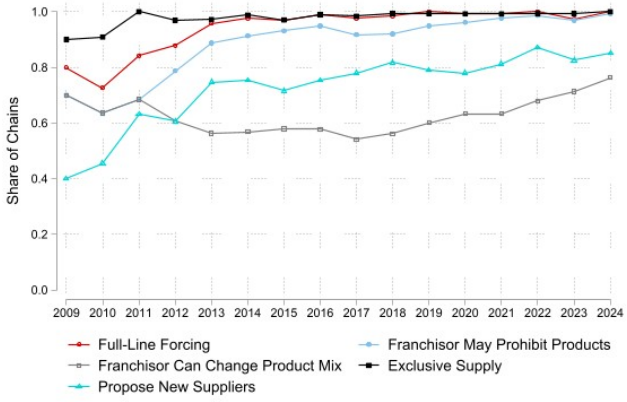


(J) Offices of Real Estate Agents and Brokers

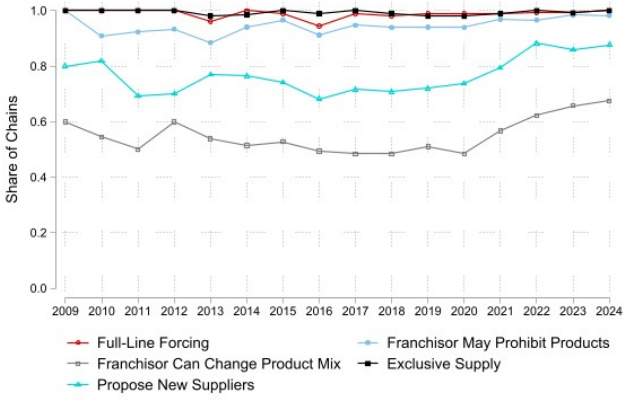
Figure C.3. Product and Service Offering Restraint Prevalence in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.



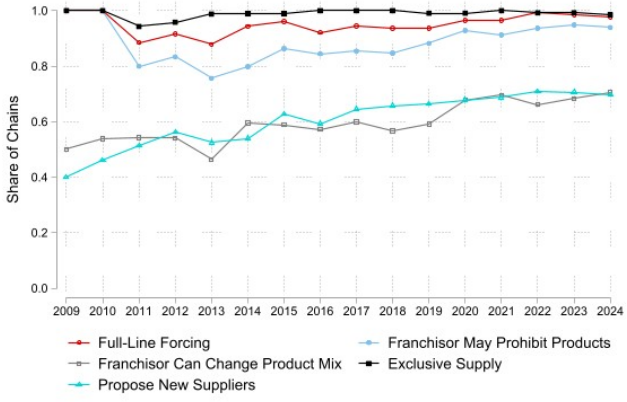
(A) Restaurants & Other Eating Places



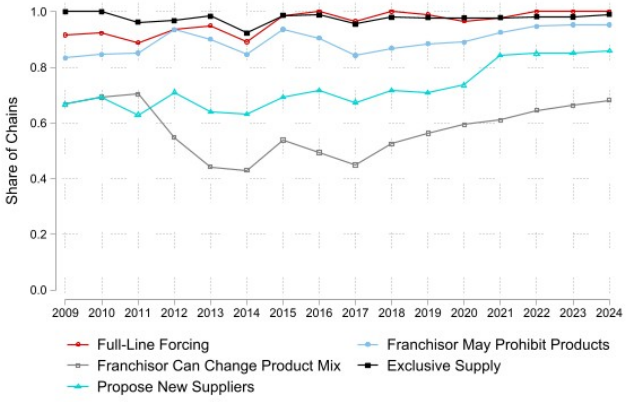
(B) Other Amusement & Recreation Industries



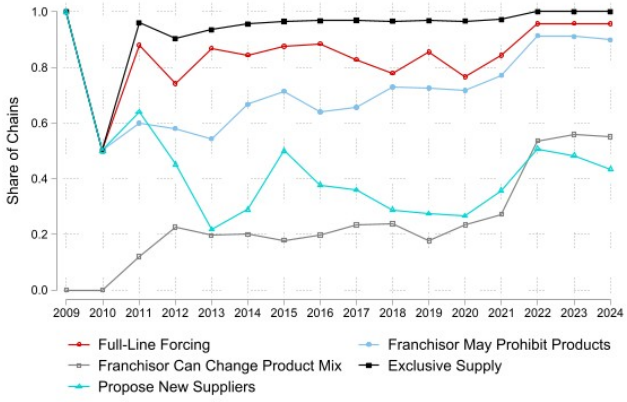
(C) Personal Care Services



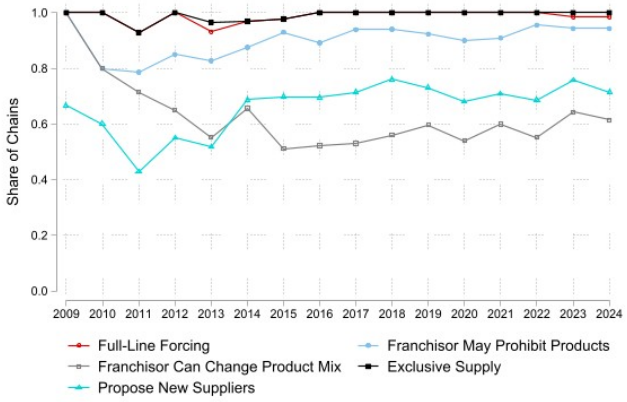
(D) Services to Buildings and Dwellings



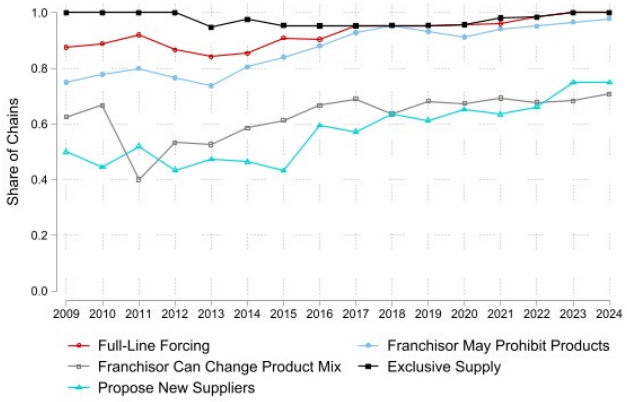
(E) Other Schools and Instruction



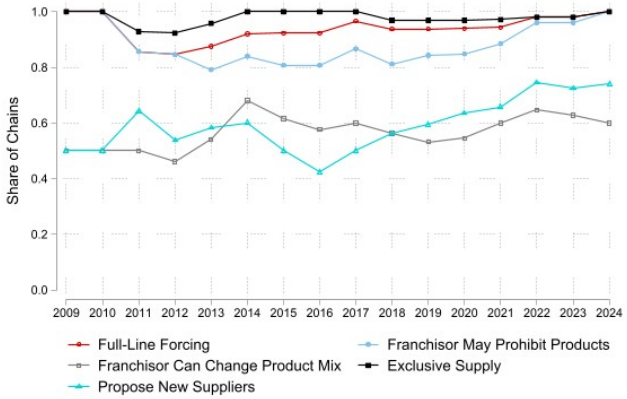
(F) Traveler Accommodation



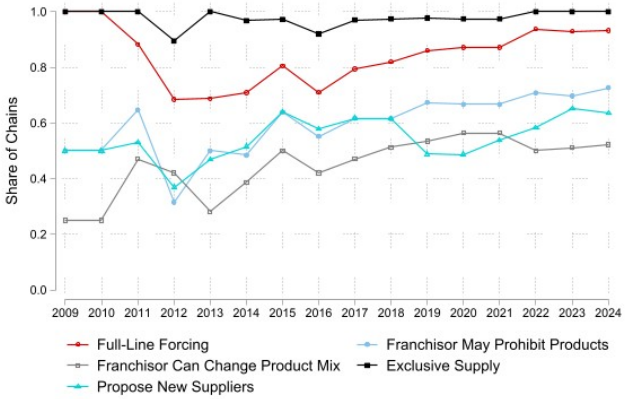
(G) Residential Building Construction



(H) Automotive Repair and Maintenance

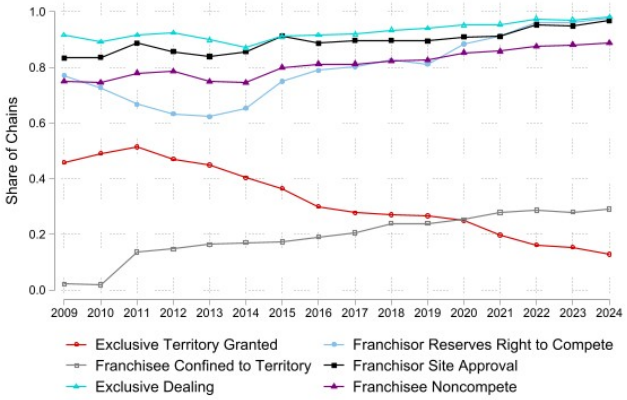


(I) Other Personal Services

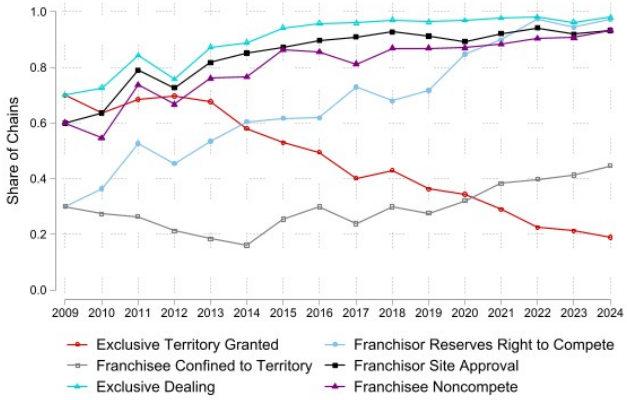


(J) Offices of Real Estate Agents and Brokers

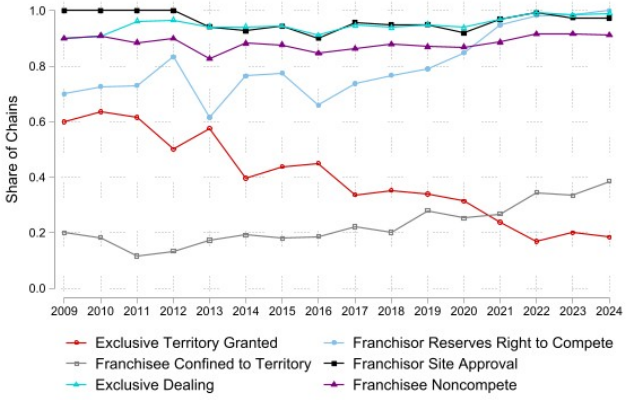
Figure C.4. Territory and Price Restraint Prevalence in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.



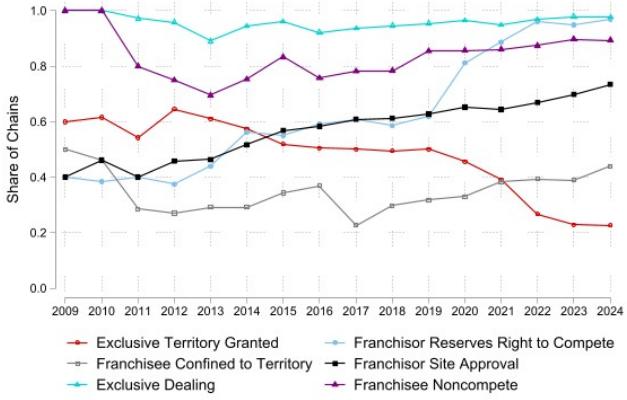
(A) Restaurants & Other Eating Places



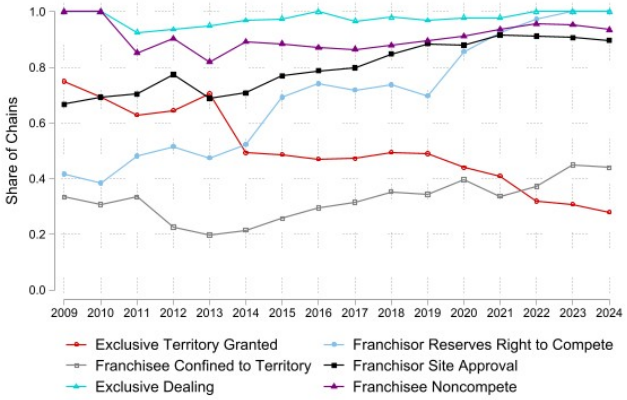
(B) Other Amusement & Recreation Industries



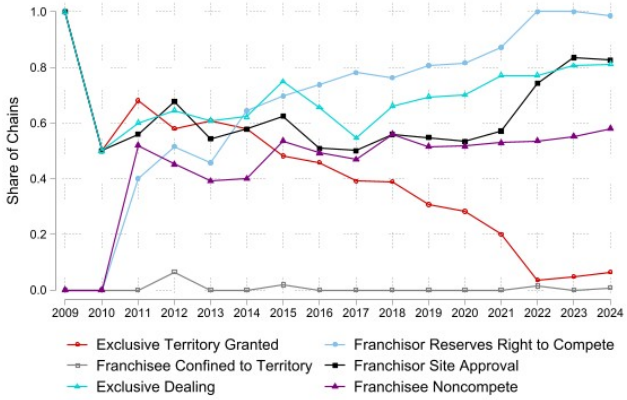
(C) Personal Care Services



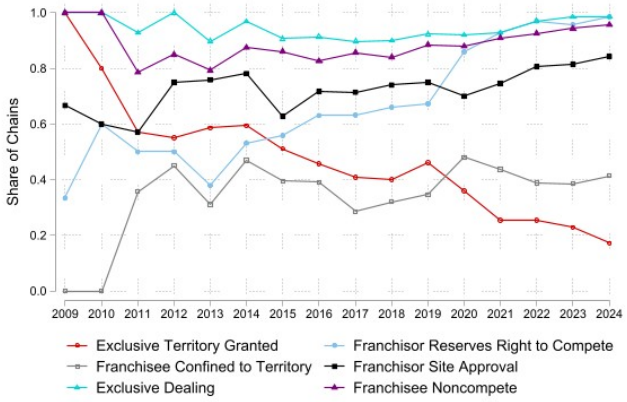
(D) Services to Buildings and Dwellings



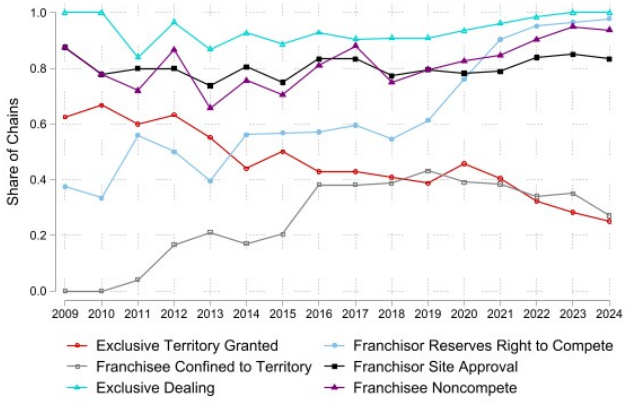
(E) Other Schools and Instruction



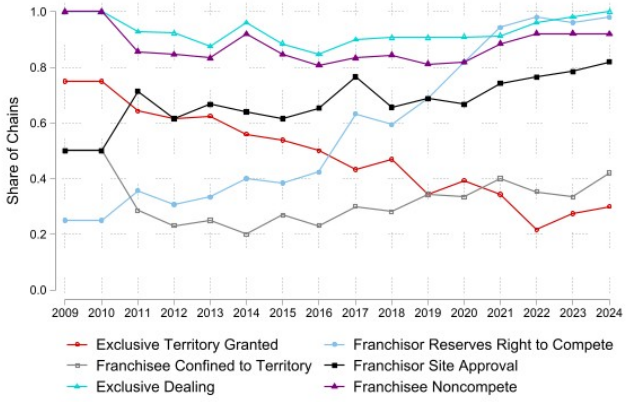
(F) Traveler Accommodation



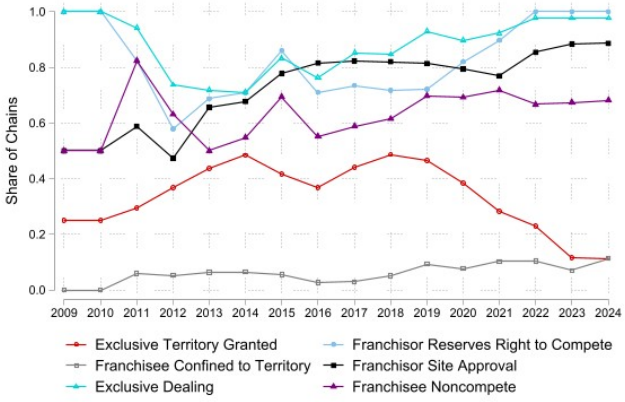
(G) Residential Building Construction



(H) Automotive Repair and Maintenance

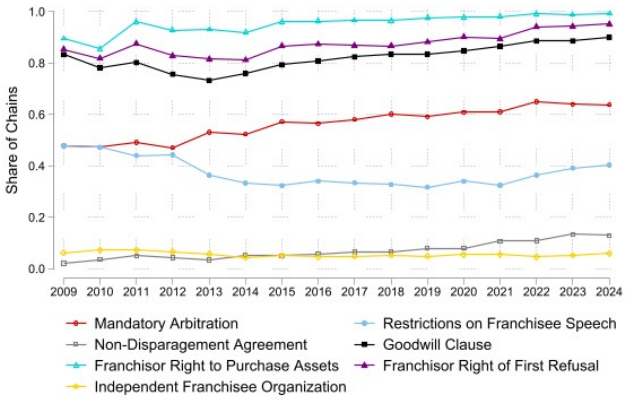


(I) Other Personal Services

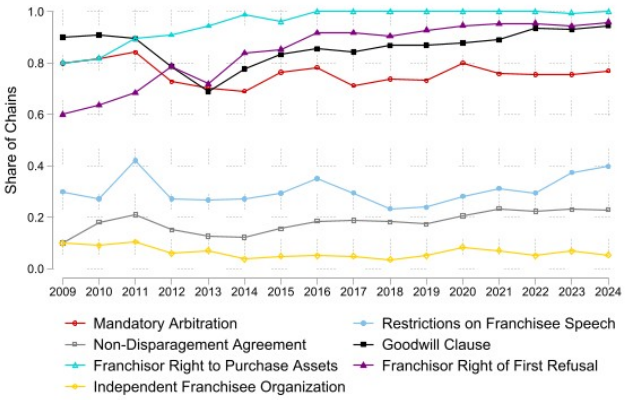


(J) Offices of Real Estate Agents and Brokers

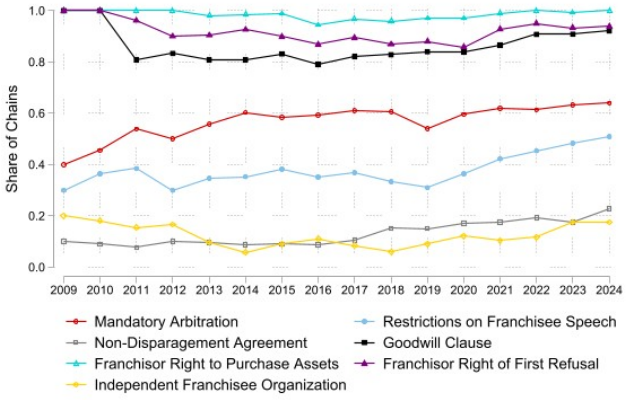
Figure C.5. Governance and Dispute Resolution Restraint Prevalence in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.



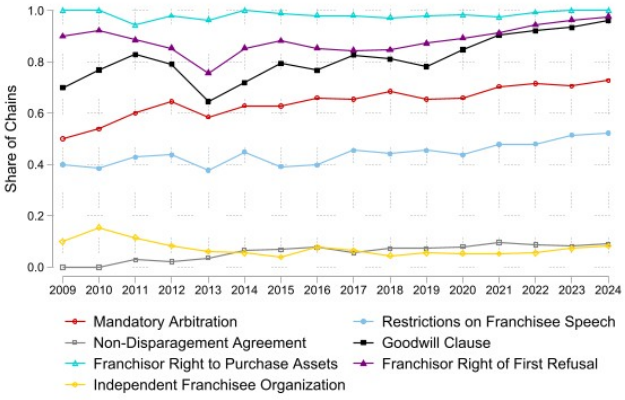
(A) Restaurants & Other Eating Places



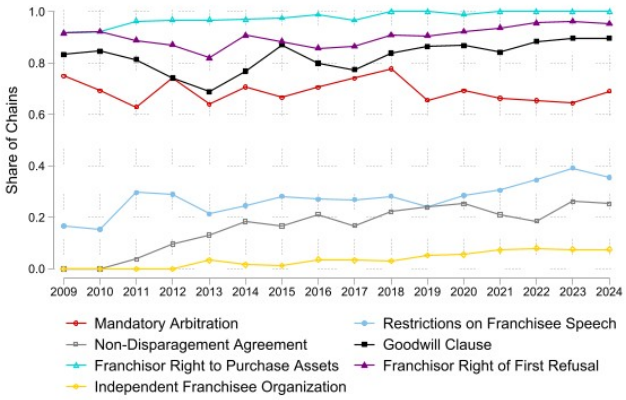
(B) Other Amusement & Recreation Industries



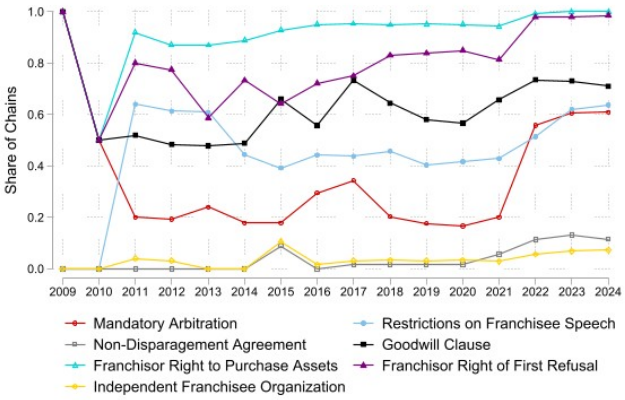
(C) Personal Care Services



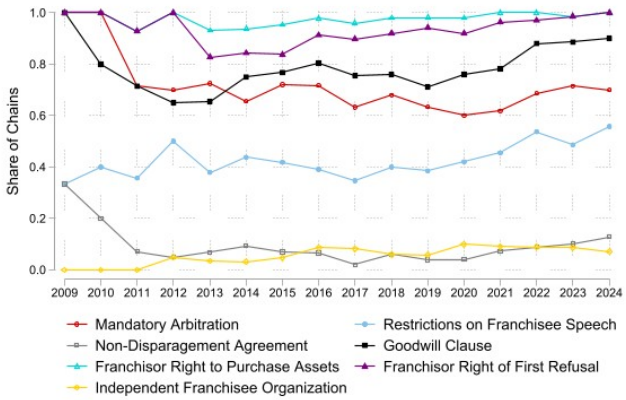
(D) Services to Buildings and Dwellings



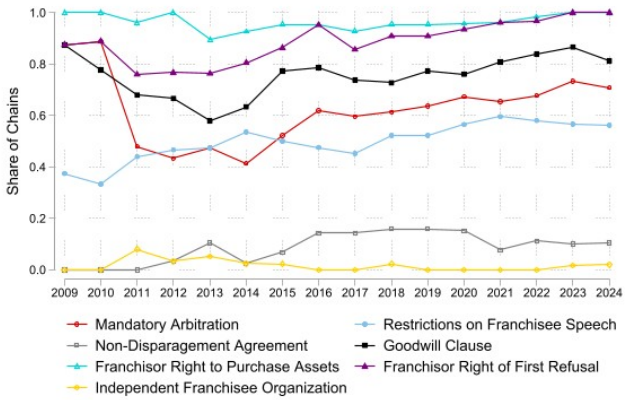
(E) Other Schools and Instruction



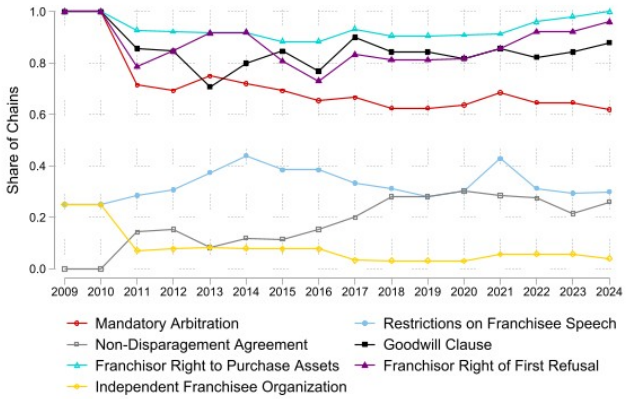
(F) Traveler Accommodation



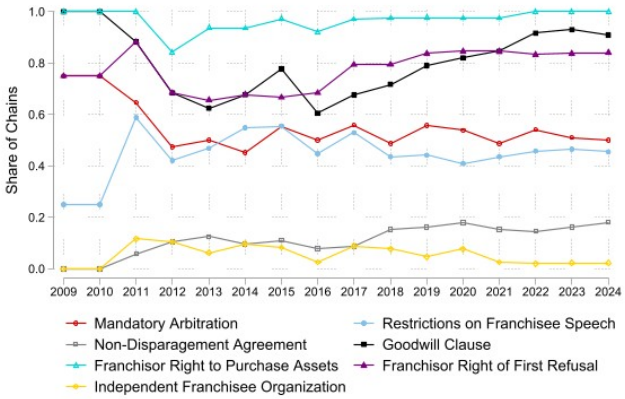
(G) Residential Building Construction



(H) Automotive Repair and Maintenance

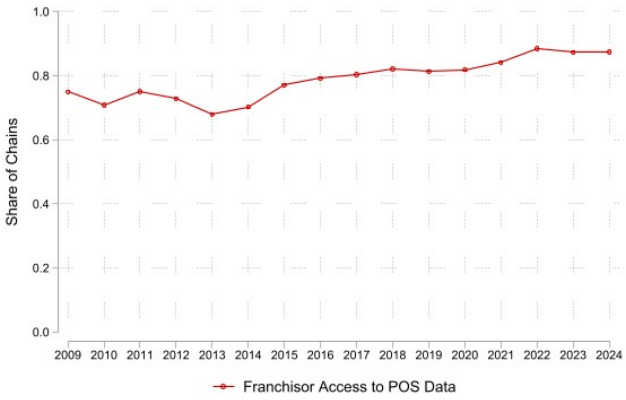


(I) Other Personal Services

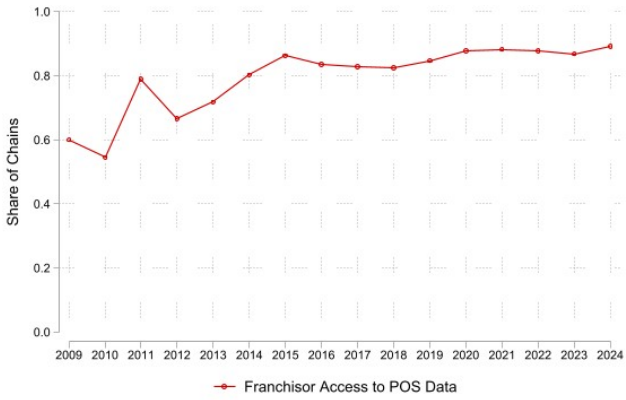


(J) Offices of Real Estate Agents and Brokers

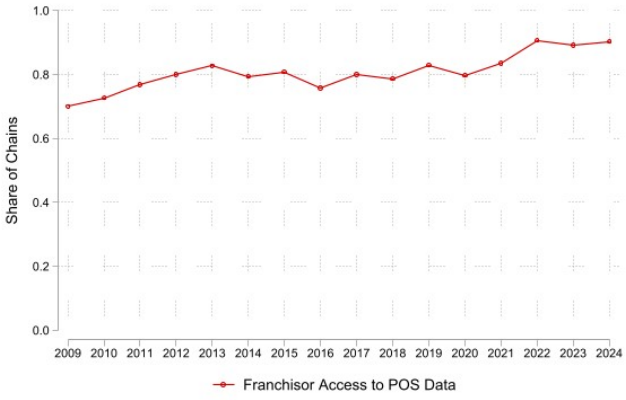
Figure C.6. Information and Monitoring Provision Prevalence in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.



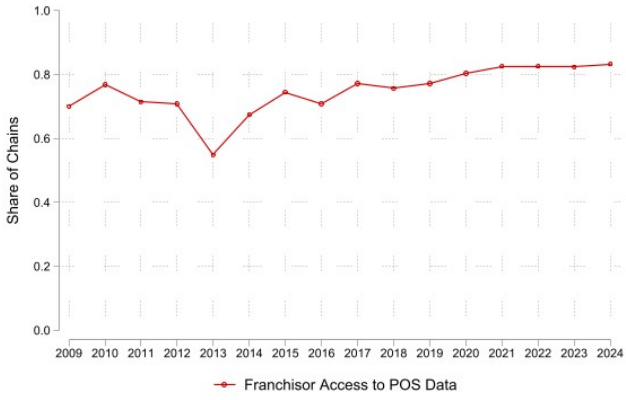
(A) Restaurants & Other Eating Places



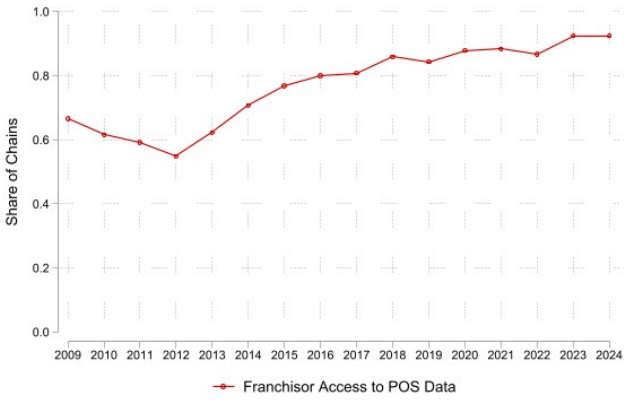
(B) Other Amusement & Recreation Industries



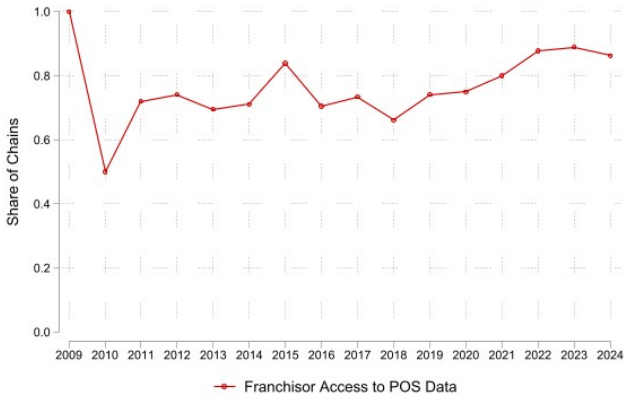
(C) Personal Care Services



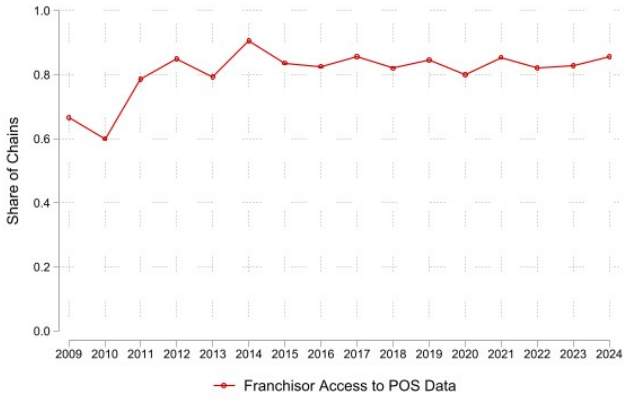
(D) Services to Buildings and Dwellings



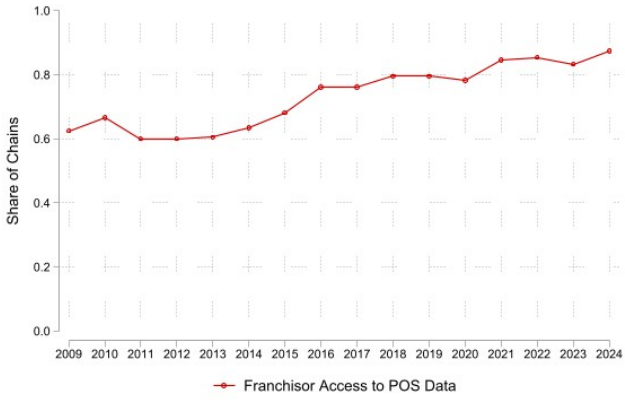
(E) Other Schools and Instruction



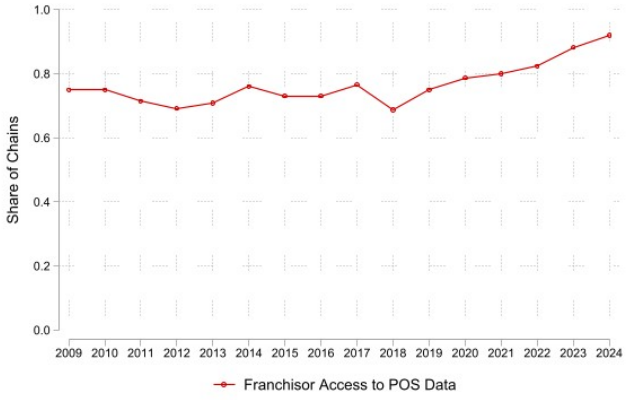
(F) Traveler Accommodation



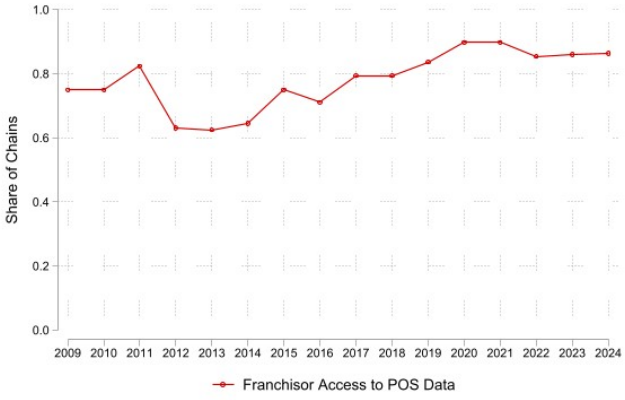
(G) Residential Building Construction



(H) Automotive Repair and Maintenance

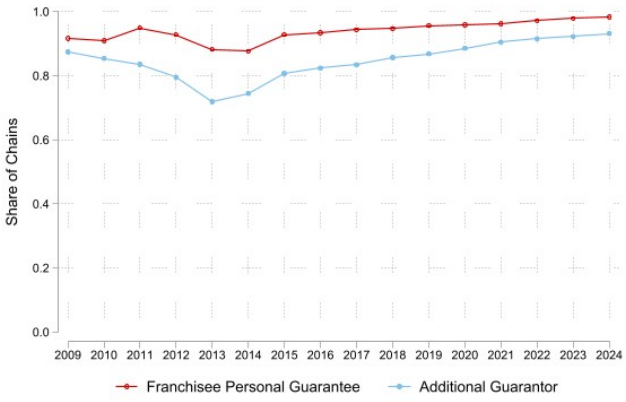


(I) Other Personal Services

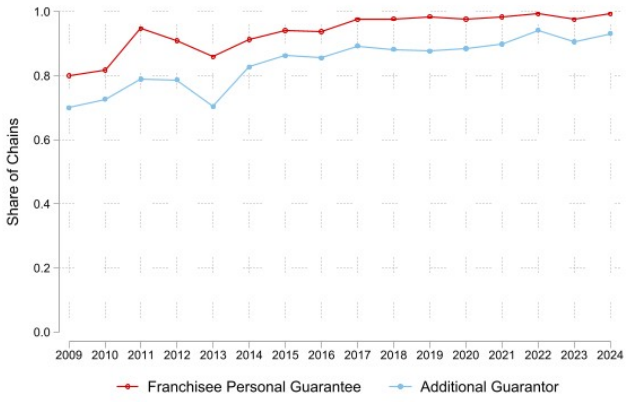


(J) Offices of Real Estate Agents and Brokers

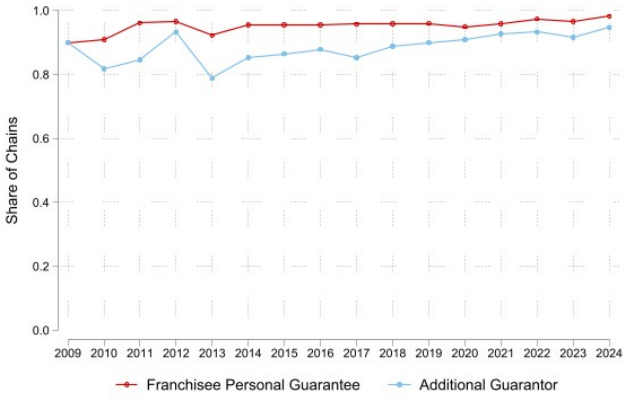
Figure C.7. Legal and Financial Obligation Provisions Prevalence in Each of the Top 10 Industries in the Franchise Chain Panel Dataset, 2009-2024.



(A) Restaurants & Other Eating Places



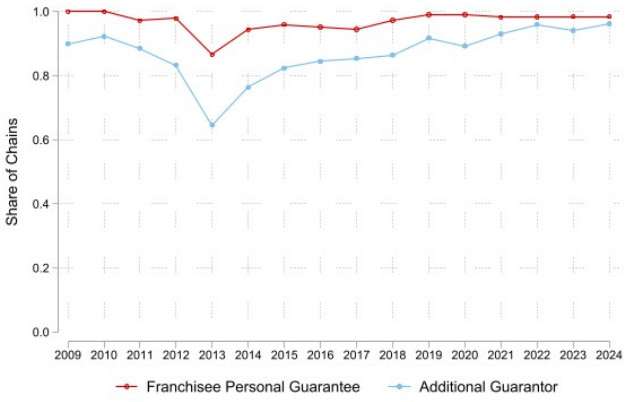
(B) Other Amusement & Recreation Industries



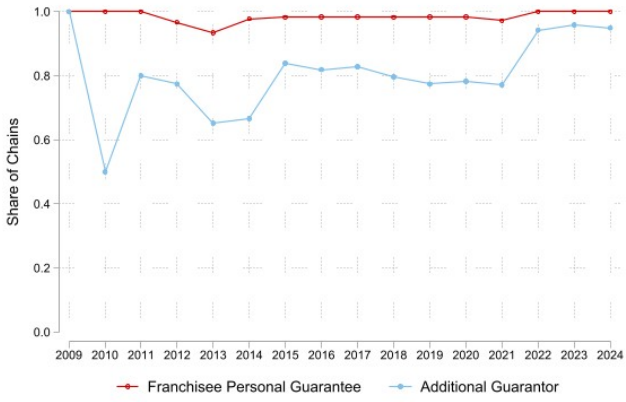
(C) Personal Care Services



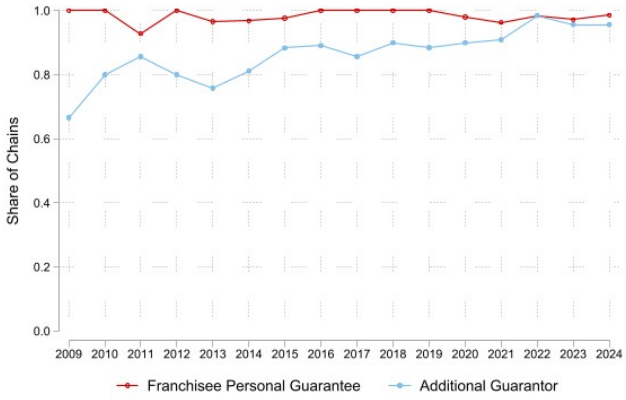
(D) Services to Buildings and Dwellings



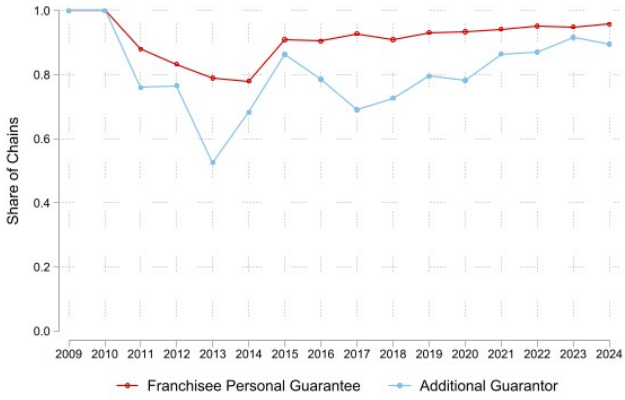
(E) Other Schools and Instruction



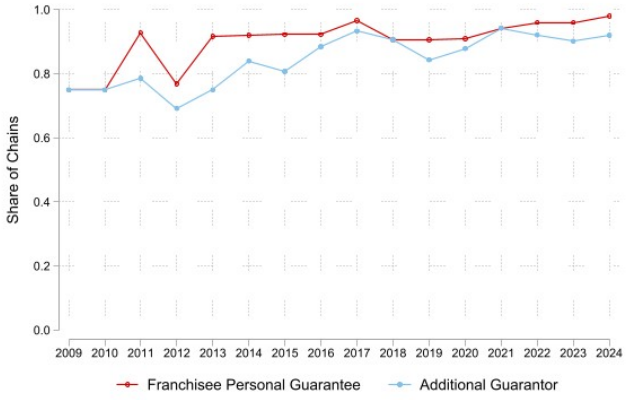
(F) Traveler Accommodation



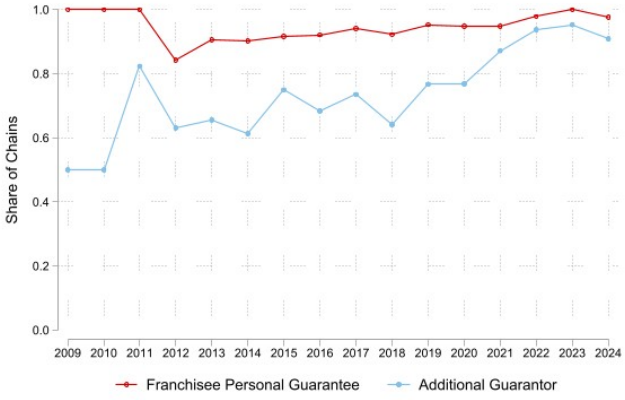
(G) Residential Building Construction



(H) Automotive Repair and Maintenance



(I) Other Personal Services



(J) Offices of Real Estate Agents and Brokers

D Methodology and Robustness for FTC Complaints Analysis

This appendix contains a detailed methodology for the FTC complaints analysis presented in Section 5.2.3, as well as additional results related to idiosyncrasies in the complaints data.

D.1 Detailed Complaints Methodology

First, we removed leading, trailing, and internal duplicated blanks; converted all characters to lower-case; converted Unicode character codes to their corresponding characters; kept only Name 1 in the case of names input as “Name 1 fka/aka/dba Name 2;" removed common endings not present in the matching data (for example, “llc," “inc," “of California," or “franchise systems"); and other minor housekeeping procedures to standardize business names. These cleaning steps result in more uniform names which are more easily matched to known business names in subsequent steps.

Next, we took steps to remove complaints which are unlikely to be about the franchising relationship. While complainers should use the “Franchises & Distributorships" product code when complaining about the franchising relationship, this is not always done in practice. For example, a franchisee of a fast food restaurant may code the product as “Food" when their complaint is in fact about the franchising relationship. Miscoding may occur in the other direction, as well: for example, a consumer at a franchised fast food establishment may code the product as “Franchises & Distributorships" when the complaint is in fact about the food itself. In the first step, we therefore kept only complaints that had a **violation code** contained in the following list: Deficient Franchise Disclosure, Breach of Contract, Fail to Provide Franchise Disclosure, Deception/Misrepresentation, Unsubstantiated Earnings Claim, and Other (Note the Violation in the Comment Field). This list was generated by first identifying violation codes that are associated with at least one complaint with the **product code** “Franchises & Distributorships"[16] (hereafter, FD), and then manually curating the list to identify violation

[16]This product code is used synonymously with “Franchises\Distributorships," which is reported in some years

codes highly likely to pertain to the franchising relationship. In other words, we first removed from the data any complaints that both: (a) did not have the **product code** FD; and (b) had a **violation code** never associated with an FD complaint. This step eliminated several categories of complaints irrelevant to this analysis, such as "Calls any person repeatedly or continuously." Second, we removed observations with violation codes unlikely to pertain to the franchising relationship.[17]

In addition to increasing the likelihood that the alleged violations may be present in franchising relationships, we matched the names of the complained against parties to an extensive list of known franchisors. This matching procedure has two benefits: first, it greatly increases the likelihood that complaints are about franchised businesses. Second, it allows connection of the complaints data to the data on use of terms in franchise contracts. We matched complaints to the list of known franchisors by first performing an exact match against an expansive manually-generated list of known misspellings or alternate spellings, and subsequently performing fuzzy matches against databases of franchisor and chain names. For the primary sample, we keep observations for which the complained-about party's name is found as an exact match, or for which fuzzy match quality was high (defined as a Jaro-Winkler similarity score of at least 0.95). We note that we manually removed from the data common false matches (e.g., complainers who indicated that the complaint was about "me," which erroneously matched to a sandwich franchise called "Melty").

To summarize, the primary sample (which we hereafter refer to as the "full matched complaint set") consists of observations with violation codes likely to pertain to the franchising relationship and with names that exact- or fuzzy-match names of known franchises.

In additional analyses, we separately implement two other restrictions: first, that the complaint is lodged using product code descriptions "Franchises & Distributorships" or "Fran-

of the data.

[17] Examples of the removed violation codes were: Company does not have adequate security; Company fails to honor request to opt-out/opt-out mechanism does not work; I was told it was a free trial; Uses obscene, profane or otherwise abusive language; and several violation codes related to spam and the Telemarketing Sales Rule.

chises\Distributorships," and second, that the complaint's text contains either of the words "franchisee" or "franchisor." Both of these restrictions, especially the latter, are likely overly restrictive and result in false negatives: that is, removal from the sample of complaints that are in fact about the franchising relationship. However, they serve as analysis samples that likely have few false positives, which the full matched complaint set arguably contains. We reiterate that, due to data availability restrictions, the dataset containing text (and thus, the dataset that tags complaints containing the words "franchisee" or "franchisor") dates back only to January, 2019.

Lower Bounds and Effects of Website Redesigns & FTC Outreach

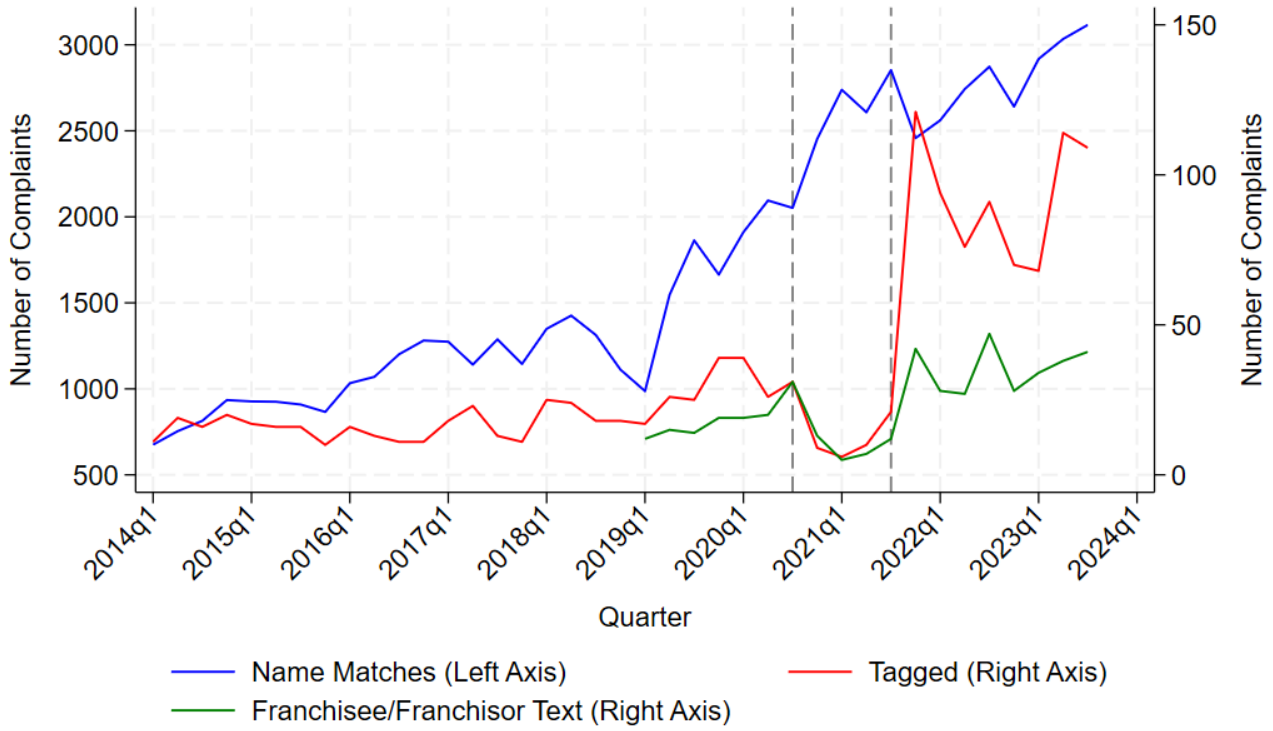
The full matched complaint sample utilized for the results in Section 5.2.3 may include complaints which are not, in fact, about the franchising relationship. Any complaint whose subject matches to the list of known franchisors and whose flagged violation is on the list discussed in Section D.1 will appear in our sample. In this section, we discuss more restrictive assumptions which likely generate lower bounds on the count of complaints that are truly about the franchising relationship. In doing so, we highlight and discuss two FTC actions which starkly affect complaint categorization.

The first additional restriction we implement is to require that complaints are tagged as "Franchises & Distributorships" (hereafter, FD). The second additional restriction is that the text of complaints contain either of the words "franchisee" or "franchisor." The first restriction identifies complaints that are more likely to be about the franchising relationship, since the complainer must select "Franchise" as the topic of their complaint. The second restriction similarly identifies complaints about the franchising relationship, since complaining franchisees are likely the only ones who would use the terms "franchisee" or "franchisor."

The time series of complaints (including the full matched complaint set, as well as the tagged set—those tagged FD—and the Franchisee/Franchisor Text set) are depicted in Figure D.1.

There are multiple notable features of Figure D.1. First, the number of complaints that are

Figure D.1. Time Series of Complaints Filed with FTC: Full Matched Complaint Set vs. Additionally Restricted Sets



The figure contains time series of franchising complaints. In addition to the full matched complaint set, the figure depicts series that are additionally restricted to be tagged with the "Franchises & Distributorships" tag or contain either of the words "franchisee" or "franchisor". The two dashed vertical lines indicate the two actions taken by the FTC: first, a 2020 website redesign, and second, a 2021 button addition and outreach to franchisee groups.

tagged FD or have franchisee/franchisor text (as well as satisfying the other sample inclusion restrictions) is one to two orders of magnitude less than those that satisfy our baseline restrictions. Therefore, the true number of complaints about the franchising relationship is bounded, but not tightly so. However, the trends in each series are similar: broadly increasing over time.

Other notable features of Figure D.1 are the drop in complaints in Fall 2020, and the rise in complaints in Summer 2021, for the two additionally restricted sets. In Fall 2020, the FTC redesigned the complaint reporting website in order to make it easier for consumers to file complaints. The timing of this redesign is indicated by the leftmost dashed line. Its effects were analyzed in Grosz and Raval (2025), who found that the redesign substantially increased the quantity and readability of complaints. It is surprising, therefore, that complaints tagged FD appear to have dropped following the redesign. However, this may be due to specific components of the redesign. As shown in Figure D.2(A), the old website clearly indicated the ability to select a subcategory (which included FD). On the other hand, the redesigned website (shown in Figure D.2(B)) asked complainers to select "Something else" in case they did not find a suitable category, without inviting complainers to look through subcategories. Therefore, while the redesign broadly increased complaint rates, it may have decreased those specifically categorized as FD.

In late summer 2021, the FTC undertook two additional actions that had the potential to affect the count of complaints tagged as FD. First, the FTC added a specific "franchise" button to the online portal (see Figure D.2(C)). Second, the FTC engaged in outreach to franchisee groups to encourage franchisees to report illegal behavior by franchisors, including referencing the complaint website in legal filings and on its website.[18] The timing of these two actions is indicated by the rightmost dashed line in Figure D.1.

Notably, there is a clear increase in complaints satisfying each of the two additional restrictions following the Summer 2021 button addition and outreach. However, there does not

[18]For more details on the redesign and outreach, see the Government Accountability Office's report entitled "Actions Needed to Improve Education Efforts and Awareness of Complaint Process for Franchise Owners," available at https://www.gao.gov/assets/d23105338.pdf.

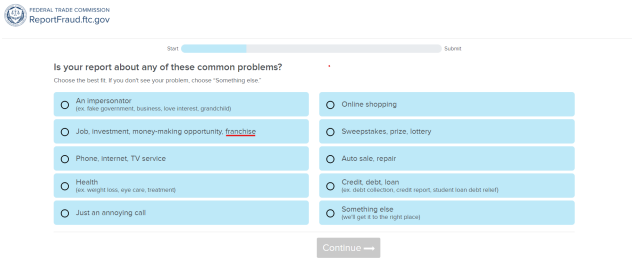
Figure D.2. FTC Complaint Website Over Time



(A) FTC Complaint Website, Pre-Redesign (before Fall 2020)



(B) FTC Complaint Website, Post-Button Addition (after Fall 2020, before Summer 2021)



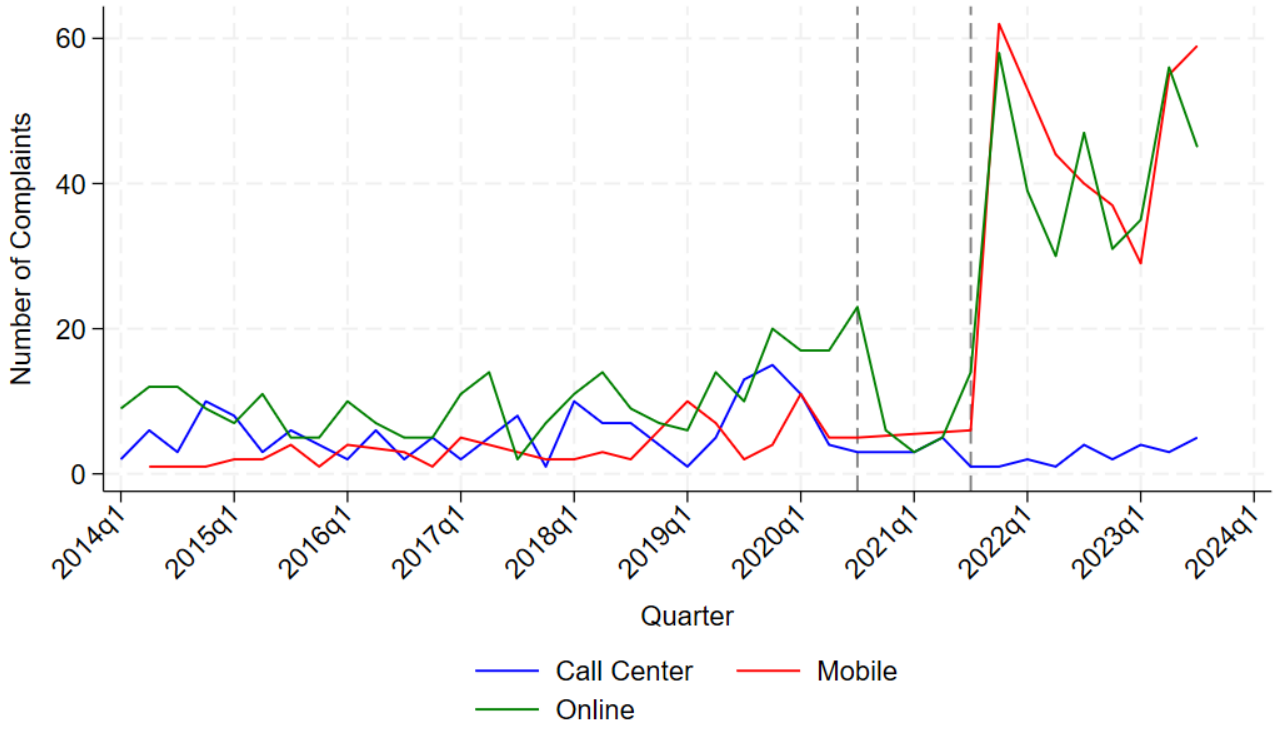
(C) FTC Complaint Website, Post-Button Addition (after Summer 2021)

Screenshots of FTC Complaint Website entry page over time.

appear to be an increase in franchise complaints in the full matched complaints set. This difference raises the question of whether the full matched complaints set is accurately capturing complaints about the franchising relationship: on the one hand, the button addition should *not* affect the full matched complaint set (since that set is not restricted only to include those complaints tagged FD). However, if the outreach was effective, it should have had a positive effect on the full matched complaint set. Lack of an effect could indicate that that set is overly inclusive, and any positive effect is swamped by noise.

One piece of evidence suggests that the positive effect for the tagged and franchisee/franchisor text match groups was due to the button addition. In Figure D.3, we show (for the set restricted to complaints tagged FD) the breakdown of the full matched complaint set into the mode of complaint: online, mobile, or via the call center. This breakdown shows that the sharp rise in complaints occurred for the online and mobile channels (where the button addition mattered), but not for the call center channel. Indeed, there appears to be no spike for the call center chan-

Figure D.3. Time Series of Complaints Filed with FTC (by Mode of Complaint)



The figure contains time series of franchising complaints, by mode of complaint (online, mobile, or via the call center). The sample is restricted to complaints tagged with the "Franchises & Distributorships" tag. The two dashed vertical lines indicate the two actions taken by the FTC: first, a 2020 website redesign, and second, a 2021 button addition and outreach to franchisee groups.

nel at all. Treating the call center data as a mode affected by the outreach but not the button addition, this Figure appears to demonstrate that the outreach was not effective at increasing the rate of complaints, relative to the button addition. However, if outreach encouraged online (rather than call center) reporting specifically, then this comparison may not be valid. In that case, it may simply be that the effect of outreach was not enough to make a huge difference in the full matched complaint set, though the divergence of that series versus all complaints (depicted in Figure 8) may be at least partially reflective of outreach.

Taken together, this evidence suggests that, while the full matched complaint set may overestimate the total number of complaints, it is likely unimportant to take into account the effect

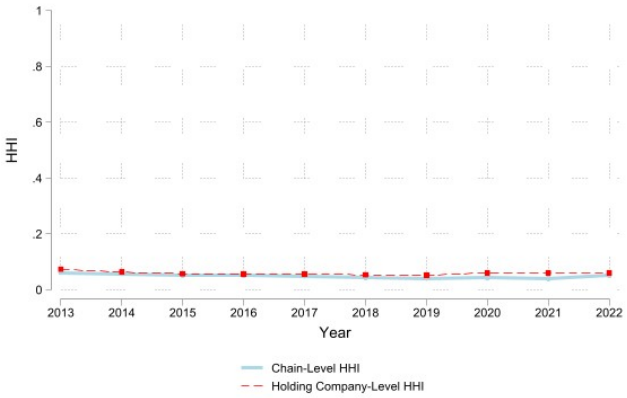
of either the Fall 2020 or Summer 2021 events in assessing the time series of that set. This is because the events appeared to simply change the composition of complaints (tagged FD or with franchisee/franchisor text, versus not) as opposed to changing the overall number.

E Time Series of Industry-level Holding Company HHI

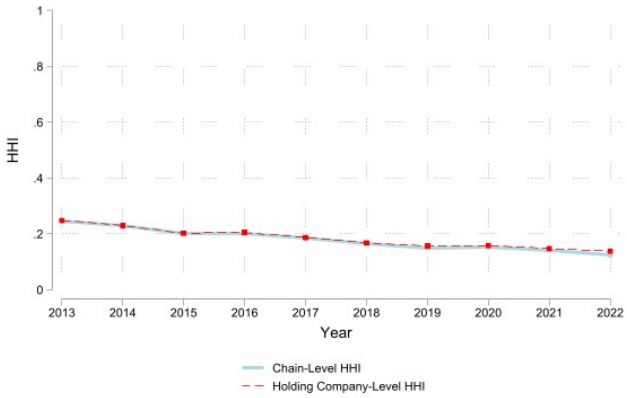
In Section 6 we address the ownership of franchise chains by what we call holding companies, which are corporate entities that control multiple franchise chains. If the market is defined by 4-digit NAICS industry and the entire country, and market shares are computed from outlets as reported in Item 20 of the FDDs, holding-company-level ownership concentration has not meaningfully increased (and in some cases, slightly decreased) over our sample period. That is shown below in figure E.1 for the top 10 most-frequently-appearing 4-digit NAICS industries in our panel dataset.

We interpret this finding as reflecting the offsetting effects of increased chain ownership by holding companies and new chain entry.

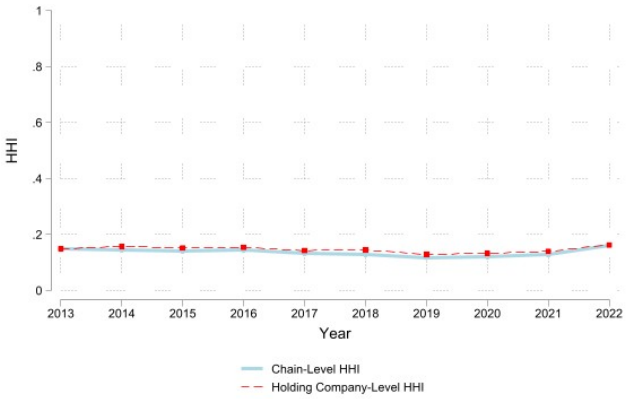
Figure E.1. Industry-level Concentration for the top 10 NAICS 4-digit industries in the panel dataset. We compute the Herfindahl-Hirschman Index at the industry-by-year level for each of the top 10 most frequently-appearing industries in the franchise chain panel dataset. We compute HHI separately at the individual chain level and at the holding company level, i.e. attributing all the chains owned by a given holding company to that locus of control (and treating the non-holding-company-owned chains as independent). Market shares are computed from chain-level outlet counts, reported in Item 20, Table 1 of the FDD.



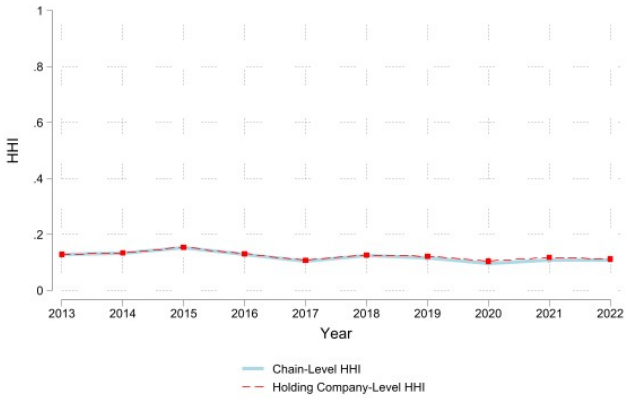
(A) Restaurants & Other Eating Places



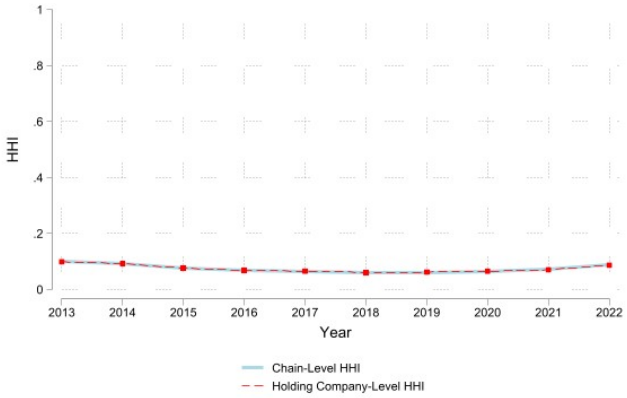
(B) Other Amusement & Recreation



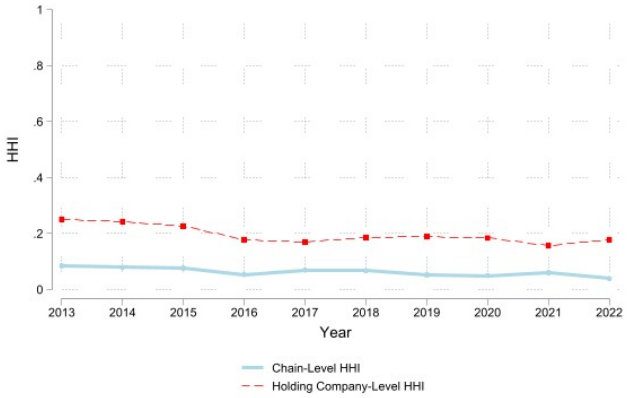
(C) Personal Care Services



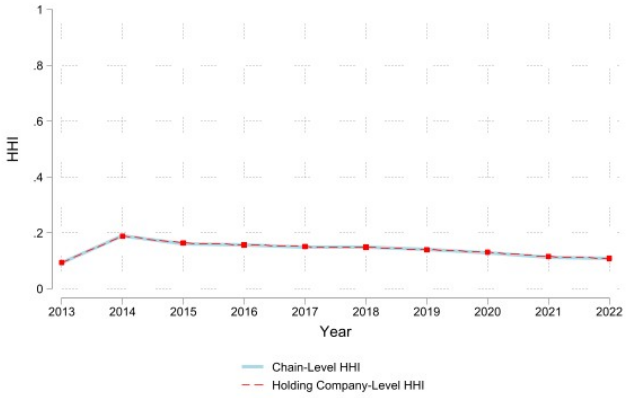
(D) Services to Buildings & Dwellings



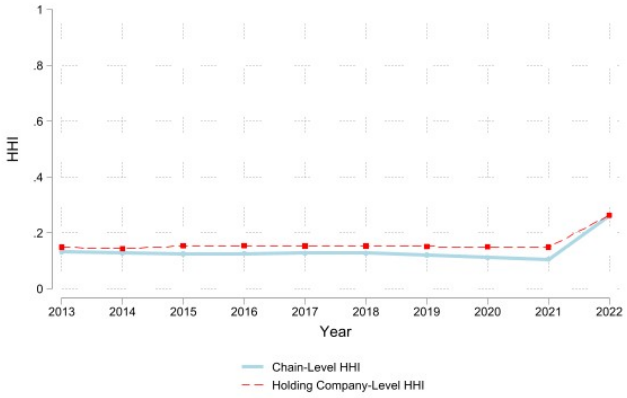
(E) Other Schools & Instruction



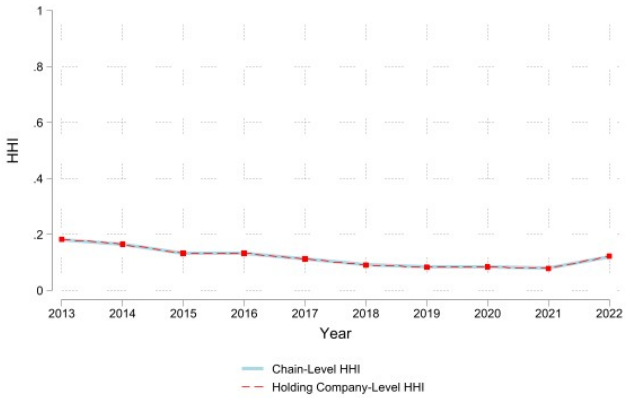
(F) Traveler Accommodation



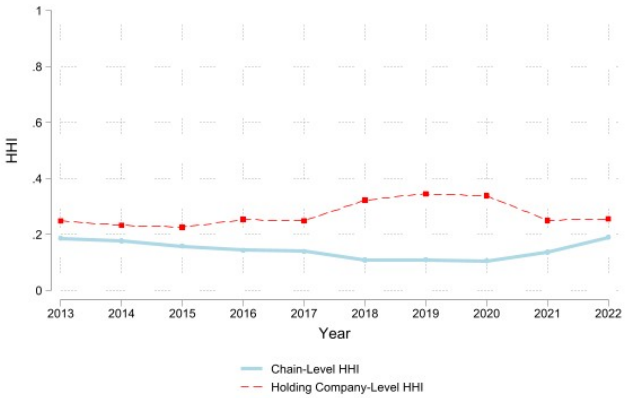
(G) Residential Building Construction



(H) Automotive Repair & Maintenance



(I) Other Personal Services



(J) Real Estate Agents