# Retail Customer Reactions to Private Equity Acquisitions[*]

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## Abstract

Acquisition announcements by private equity funds are associated with significant reductions in customer visits to target firm outlets. These reductions occur in primary but not in secondary buyouts. The decrease is unlikely to be due to operational changes, as it takes place at announcement and reverses following deal completion. The decrease is larger for more salient deals and for outlets facing more competition, and smaller in areas with higher income, stock market participation, and self-employment rates. Customer and employee reviews do not become more negative. Survey results show that consumers view private equity ownership more negatively than other ownership types.

*JEL classification*: D12, G14, G24, G34

*Keywords*: private equity, buyout, customer reaction, ownership, reputation

# 1 Introduction

A large number of studies suggest that private equity (PE) ownership can have positive effects on firms' operations. Despite this, PE investors often spark negative public commentary and press coverage, as well as frequent attacks by politicians.[1] This negative public attention has been exacerbated by bankruptcies of several large PE-backed retail chains.[2] Such negative public image might both affect and reflect the general public opinion on private equity. Hence, an announcement that a PE fund is acquiring a business may be perceived negatively by the customers of the target firm – and affect their behavior as consumers.[3] However, studying customer reactions is difficult as there is usually very limited data available on private companies, and any existing data tend to be at annual frequency, making it hard to identify short-term changes.

In this study, we examine the reactions of retail customers to PE acquisitions of businesses using aggregated and anonymized mobile phone data covering approximately 10% of all mobile devices in the United States. This allows us to observe monthly customer visits to individual target outlets around the acquisition announcement and closing and compare those with matched control outlets in the same location. Our main finding is that there is a significant decrease in customer visits to target outlets in the months immediately following a PE acquisition announcement. However, after the completion of the deal, the customer losses tend to be reversed. Eventually, customer visits exceed the pre-announcement level for a typical buyout, possibly driven by changes introduced by the new owners. Such changes might include pricing, re-branding, advertising and other marketing, refurbishing of outlets, improvements in service or cleanliness, and others.

These findings suggest that some customers react negatively to the announcement of a PE

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[1]For example, in January 2019, the Democratic senator Elizabeth Warren introduced a piece of draft legislation titled "Stop Wall Street Looting Act" aimed at PE funds (Financial Times (2019)), and on March 2019, the Republican senator Marco Rubio released a report titled "American Investment in the 21st Century", attacking financial investors' control of the economy.

[2]See, for example, Business Insider (2017), Bloomberg (2017), Washington Post (2019).

[3]As a well-publicized example, Oatly, a producer of oat milk, faced a boycott backlash from consumers and activists after selling a stake to Blackstone, one of the largest PE firms.

buyout. The initial decrease in visits is unlikely to be explained by operational changes by the new PE owner, as it takes place before the deal completion, when the acquirer does not yet own the target business. Furthermore, this initial decrease in visits occurs only in primary buyouts. There is no decrease in secondary buyouts where the target business changes hands between two PE firms, nor in acquisitions by non-PE acquirers. This distinction also supports the interpretation that customers react negatively to PE ownership. It is also important to note that a negative customer reaction to PE acquisitions does not require financially sophisticated customers – only a negative perception that could result from media coverage, anecdotes or many other things.

Our mobile phone location data come from SafeGraph, which provides monthly customer visit numbers for millions of outlets across the U.S. The data set is available from 2018 onwards, and we end our customer visits sample in February 2020 to avoid the COVID-19 pandemic affecting our results. We construct a broad sample of PE acquisitions announced between March 1, 2018, and December 31, 2019. To capture as many deals as possible, we combine data on PE acquisitions from Preqin, SDC, and Capital IQ. This approach gives us a sample of 108 unique acquisitions by PE firms where we can track visits to target outlets. The 108 target firms have 20,598 unique outlets in the U.S.[4] We manually check and complement the announcement and completion dates in the data for completeness. For each target outlet, we include other outlets in the same zip code and same NAICS code as a control group. There are 260,567 control outlets in our final data set. These data allow us to observe changes in customer visits in target and control outlets at a monthly frequency around both the acquisition announcement as well as deal completion, which means we can separate the effect of announcement from the effect of change of operational control.[5]

We perform a regression analysis both around deal announcement and deal completion.

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[4]We use the sector-neutral term *outlet*, even though the majority (64%) of our full announcement sample and 87% of the completion sample are attributable to restaurants, making it by far the largest sector in our data.

[5]The high frequency also mitigates concerns about our results being driven by endogenous selection of target firms. For example, if PE funds targeted financially distressed firms that are losing customers, this would be visible already before the announcement. We do not see such differences before the announcement.

Relative to control outlets, target firms experience a significant reduction in customer visits following the announcement of a PE acquisition. Depending on the sample composition, customer visits bottom at approximately 5-9% below pre-announcement levels at three months after the announcement. The average level of visits in the four months following the announcement is 3.2% below the pre-announcement level. However, the decline in customer visits after deal announcement is temporary and reverses after deal completion, when the operational control of the business is transferred. After deal completion, target firms tend to experience an increase in customer visits and ultimately surpass the levels seen before the announcement. This finding is consistent with prior empirical evidence suggesting that PE funds are often good at improving operational performance.

If the decrease in customer visits was driven by an adverse customer reaction to the announcement of prospective PE ownership, we would expect this effect to disappear in cases where the former owner of the target business is another PE firm. These deals, referred to as "secondary" buyouts, are quite common and represent about one third of the outlets in our sample. Our empirical results support this prediction. There is no reduction in customer visits around the announcement of secondary buyouts. This means that the entire decrease we document comes from primary buyouts, where the target business is sold to a PE fund by a non-PE seller.

To shed light on whether the rebound in customer visits post closing is old customers returning or attributable to new customers, we study changes in customer composition, measuring visitors to each outlet by the census block group of their home location. We then estimate the maximum customer overlap for each month relative to the pre-announcement month customer base. We find that the composition of customer base changes in the period of regaining visits after the acquisition, suggesting that the rebound is attributable to new customers, not old customers returning.

An important assumption for the decline in customer visits to be explained by customers disliking private equity ownership is that customers must know about the acquisition. While

we cannot directly measure customer awareness or attention, we construct three possible proxies for customer attention: the size of the deal, measured by the number of outlets that the target firm has, the number of newspaper articles mentioning the deal, and the share of those articles that are published in a local newspaper. We find that with all these measures, deals that are likely to be more salient to customers are associated with larger decreases in customer visits.[6]

Another possibly important determinant of customers' ability to vote with their feet is the availability of alternatives, as suggested by the results of von Meyerinck et al. (2021). Hence, we perform an analysis of the role of competition that the outlet faces. We construct four proxies for competitive pressure: the market share of the target firm in the zip code (based on number of outlets), Herfindahl-Hirschman Index (HHI) of the local market concentration, as well as the number of competing outlets and competing firms in the same zip code. Across all these measures, target outlets facing more competition experience significantly larger decreases in customer visits. These results are consistent with competition being an important determinant of customer reactions.

We also study the cross-sectional differences in customer responses in different areas, focusing on local economic characteristics, religion and values, and political views. On economic characteristics, we find that higher income, stock market participation and self-employment rates are all associated with smaller decreases in customer visits following a buyout announcement. We also include the county-level economic connectedness measure introduced in Chetty et al. (2022a) and Chetty et al. (2022b), which captures the share of high-socioeconomic status (SES) friends among low-SES individuals based on Facebook data. We find that higher economic connectedness appears to have a similar effect as higher income, that is, more economically segregated areas exhibit more negative reactions to PE acquisitions.

Our results also suggest that different religious groups react differently to PE acquisi-

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[6]In Internet Appendix Section IA.3.2, we also show that the news coverage of target companies substantially increases at the time of the acquisition.

tions. A higher share of Protestants is associated with significantly more negative customer reactions, while the opposite is true for Catholics. We also find that the decrease in customer visits is significantly larger in more individualistic counties, using historical data from Bazzi et al. (2020) on infrequent names and frontier experience.[7] Finally, we find that higher rates of volunteering and activism, measured using the local percentage of Facebook users who are members of a group predicted to be about "volunteering" or "activism" (Chetty et al. (2022a,b)), is also associated with more negative reactions to PE acquisitions. This variable is likely to reflect the local customers' willingness to act based on their values and hence might predict customer tendency to adjust consumption behavior based on their views on ownership.

To measure political views, we identify counties as Republican if they voted Republican in the 2016 presidential election. As another indicator of not only political views, but perhaps partly also of views on private equity, we include a dummy indicating whether the county voted for Mitt Romney in the 2012 Republican primary. Mr. Romney was the co-founder of Bain Capital, one of the largest private equity firms in the world, a fact that was highly salient during his presidential campaign and attracted a lot of media attention. Hence, it seems plausible that negative views of private equity might be correlated with negative views on Mr. Romney. We find that customers in Republican-voting areas tend to reduce their visits to target firms more than customers in Democrat-voting areas. However, the opposite is true for areas that voted for Romney. Romney-supporting areas are associated with significantly smaller reductions in customer visits – and this is true among both Republican and Democrat counties.

Finally, if the decline in customer visits reflects customers disliking private equity ownership and the negative popular image of the industry, one might expect this effect to vary depending on how bad the reputation of the PE buyer is. As a proxy for negative reputa-

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[7]Bazzi et al. (2020) show that individualism is positively correlated with the support for Republicans. Bian et al. (2022) find that individualism is an important determinant of people's behavior during the COVID-19 pandemic.

tion, we count the lawsuits against the PE firm in past five and ten years. We find that PE firms targeted by more lawsuits in the past are also associated with more negative customer reactions to their acquisitions.

A potential alternative explanation for the decrease in customer visits is that service quality deteriorates after the buyout announcement. To directly test customer satisfaction around PE acquisition announcements, we use a broad sample of all PE acquisitions in the period 2005-2019 from Preqin. To this sample, we match all publicly available Yelp review data. We find that the average review following a PE acquisition announcement is actually slightly more positive than before it, although the difference is economically small. For the small subsample of customers rating the same outlet both before and after the acquisition, reviews become more negative – but due to the small sample size this difference is not statistically significant. We thus do not find any support for deteriorating quality after the buyout announcements.

If employees fear negative consequences of the upcoming private equity ownership (Lambert et al. (2021), Gornall et al. (2022)), they might reduce their effort and possibly start looking for a new job, which could also result in a worse customer experience. To test this, we obtain data on employee reviews from Glassdoor. We find no evidence of a decrease in employee satisfaction following a PE acquisition announcement. In fact, the estimated change in employee ratings is slightly positive, although economically very small.

To test whether the reductions in customer visits following an acquisition announcement are specific to private equity buyouts, we conduct a placebo test by constructing an alternative sample of acquisitions by non-PE acquirers and repeating our analysis of customer visits. There is no reduction in customer visits following the announcement of a non-PE acquisition. On the contrary, customer visits slightly increase following the announcement. Non-PE acquisition targets also do not exhibit increases in customer visits following deal completion, like PE buyout targets do. In fact, there is a slight reduction in visits following deal completion. These findings are consistent with customers reacting negatively to PE

buyers specifically, but also with PE buyers being better at increasing customer volumes immediately after obtaining control.

To obtain more direct evidence of consumers' perceptions about private equity and other ownership types, we conduct a large-scale survey of 1,093 respondents on Prolific. First, we show that boycotting firms is very common. Approximately a third of the respondents say they have boycotted a company, and another third say they have deliberately reduced dealing with a company. Of the ones that report never having boycotted a firm, 74% say they could imagine doing so in the future. Next, we explore consumer preferences for different ownership types. We find that family-owned firms are by far the most preferred alternative, while private-equity-owned firms are clearly the least preferred one. Private-equity-owned firms are the most likely to be boycotted, while family-owned firms are the least likely ones. Respondents believe private equity ownership is the worst alternative for customers, employees, as well as society as a whole, while family ownership is perceived as the best for all three. These findings suggest that people are quite likely to boycott firms they disapprove of. These findings suggest that people are quite likely to boycott firms they disapprove of, and private equity ownership is viewed substantially more negatively than other common ownership types.

Our study provides novel insights on customer reactions to PE acquisitions and their potential impact on target firms. Many existing studies suggest that buyouts and venture capital investments can lead to improvements in operational efficiency as measured by labor or total factor productivity (Davis et al. (2014), Chemmanur et al. (2011), Davis et al. (2019)), profitability and revenue growth (Acharya et al. (2013), Boucly et al. (2011)), as well as new products and geographic expansion (Fracassi et al. (2022)). Other studies focus on related improvements in innovative activity (Bertoni and Tykvová (2015), Lerner et al. (2011)), workplace safety (Cohn et al. (2021)), and health inspection records (Bernstein and Sheen (2016)). The evidence on pollution is mixed. Shive and Forster (2020) find no difference in pollution levels between public and PE-owned firms. Bellon (2020) shows

that the PE-effect on pollution depends on the level of environmental liability risks. A few studies focus on the consequences of buyouts on employees (Lambert et al. (2021), Gornall et al. (2022), Agrawal and Tambe (2016)). All of these studies focus on what the PE buyer does after it gains control of the target. In contrast, we study how customers react to PE acquisitions, regardless of any operational changes.

There are a few studies suggesting that buyouts can also have negative effects on customers in some industries, including higher education (Eaton et al. (2020)), hospitals (Liu (2022)), and nursing homes (Gupta et al. (2020)). Gandhi et al. (2020) find that the negative effect in nursing homes is concentrated in less competitive locations. Ewens et al. (2023) find that private equity acquisitions of local newspapers lead to declines in election participation, likely by shifting the focus away from local governance. Unlike us, these studies focusing more directly on the customers still study consequences of operational changes by the new owner, not customers' actions or ex-ante perceptions of PE ownership. Our results suggest that customers also actively react to the announcement of a change in ownership, even before that change actually takes place. Hence, we add a new perspective to this literature.

More broadly, our findings suggest that ownership matters. A large literature suggests that different forms of ownership can have important consequences. These are not limited to private equity, but might include government versus private ownership (e.g., Besley and Ghatak (2001)), institutional ownership (e.g., Aghion et al. (2013)), foreign ownership (e.g., Javorcik (2004)), and many other differences in the form of ownership. Our contribution is to show that ownership matters not only due to differences in governance, but also due to differences in perception. If customers and other stakeholders perceive different types of owners differently and actively change their behavior in response, they can have important economic consequences even absent any "real" differences in governance.

Our findings are also related to the role of reputation for companies (e.g., Knittel and Stango (2014), Chaney and Philipich (2002), Nelson et al. (2008)). There are a few studies of PE or VC reputation and its association with target firm performance (Chemmanur et al.

(2011)), financing terms (Demiroglu and James (2010), Huang et al. (2016)), exit types (Nahata (2008)), and new financing rounds (Tykvová (2017)). There is also experimental evidence suggesting that seller reputation matters for online sales (Resnick et al. (2006)). Our findings suggest that being associated with a private equity owner may have reputational effects on target firms.

Our results are also relevant for private equity practitioners. If the a typical LBO is associated with at least some customers reducing their business with the target firm, this could have important implications both for the assessment of prospective PE investments, as well as for designing marketing and communication strategies for such deals. More generally, it suggests that private equity as an industry might have an incentive to invest more in improving its public perception.

# 2 Data and methodology

## 2.1 Data on customer visits

To measure customer visits to retail outlets, we use aggregated mobile phone data from SafeGraph, a company producing anonymized mobile phone location statistics. The data include monthly number of visits by individual visitors at each outlet. SafeGraph observes 18.75 million devices, approximately 5.6% of the US population and about 10% of mobile devices. According to SafeGraph's analysis of user characteristics, SafeGraph posits that its sample is representative of the US population based on its own study of income characteristics, age, and demographics of its users. The data are widely used in studies of social distancing during the COVID-19 pandemic (see, e.g., Bizjak et al. (2022), Charoenwong et al. (2020)), and more recently also increasingly to measure consumer responses to firm actions (see, e.g., Painter (2021), Gurun et al. (2023)). SafeGraph data are available on a monthly basis from January 2018 onwards.

## 2.2 Buyout sample and control group

We construct a sample of private equity acquisitions of majority stakes (buyouts) in the U.S. by combining data from Preqin, SDC, and Capital IQ. To have enough data for comparison before and after the buyout, we limit our sample to deals announced between March 1, 2018, and December 31, 2019. The starting date is constrained because of the availability of SafeGraph data. The end date is constrained because of the COVID-19 pandemic, due to which we only study monthly customer visits until February 2020.

To combine buyout targets with SafeGraph outlet data, we perform a name-based matching. We include only target firms with at least 10 outlets in the data. This leaves us with a sample of 108 private equity acquisitions where we have the matching monthly customer visit data. The target firms in these deals have a total of 20,598 US outlets in the data, with the number of outlets per firm ranging from ten to 5,736. The deals included in the buyout sample are described in Appendix A.

To obtain a control group for each target outlet, we retain all outlets available in the SafeGraph data that are located in the same zip code and same 6-digit NAICS industry code as the target. This leaves us with a total sample of 281,165 outlets. Figure 1 shows the geographic distribution of the target outlets, while Table 1 provides summary statistics for our sample.

In order to be able to study changes around deal announcement separately, we extract both announcement and completion dates for the buyouts in our sample. To complement the data, we manually check these dates and search completion dates for the deals where the databases only include announcement dates. In our analysis, we use the full sample for studying visits around announcement dates. To examine visits around deal completion dates, we include only the deals where we have announcement and closing dates in different months, allowing us to separately observe announcement and closing effects.

## 2.3  Local characteristics

To study how the customer reaction to PE acquisitions varies by different demographics, we compile data on a range of local characteristics. On economic characteristics, these include county-level personal income per capita from the BEA, as well as Individual Income Tax Return (Form 1040) Statistics from the IRS. These data include zip code-level data of types of income and households, including average household income. We also estimate stock market participation as the proportion of households in a given zip code that reports dividend income during the year and self-employment rate based on the share of households including income from self-employment.

We also use two of the measures introduced in Chetty et al. (2022a) and Chetty et al. (2022b). The first is economic connectedness, which measures links among individuals with a different socioeconomic status (SES). More specifically, the variable is defined as two times the share of high-SES friends among low-SES individuals, averaged over all low-SES individuals in the county. Second, we include the local volunteering rate, defined as the percentage of Facebook users who are members of a group which is predicted to be about "volunteering" or "activism" based on group title and other group characteristics in the county. To obtain further measures of local values, we use two county-level proxies of individualism by Bazzi et al. (2020): the historical share of infrequent names in 1940, and frontier experience, measured as decades that the county was part of the frontier.

We obtain data on Protestant and Catholic shares from the U.S Religion Census by ARDA. In addition, we obtain county-level voting data on the 2016 presidential election, as well as in the Republican primaries of 2012 to obtain the local support for Mitt Romney, a former prominent private equity investor.

## 2.4  Private equity firms' involvement in lawsuits

As a possible proxy for the reputation of PE firms, we study their involvement in lawsuits. To obtain this data, we rely on the Westlaw database. As Atanasov et al. (2012) point out, this

database provides two main advantages over other databases. Compared to Lexis, which contains only judicially resolved cases, Westlaw covers unresolved cases too (for example cases that were voluntarily dismissed or settled). Compared to PACER, which focuses of federal cases, Westlaw contains cases from various court levels. We create two alternative variables to account for the involvement in lawsuits, counting the number of all lawsuits in which the PE firm was involved as a defendant in the 5- and 10-year periods prior to the deal announcement.

## 2.5 Prolific survey

To better understand consumer views on private equity ownership, we conduct a large-scale survey on Prolific. We obtain a sample of 1,093 respondents, representative of the U.S. population based on sex, age, and ethnicity. In this survey, we ask a number of questions of the respondents' boycotting behavior of companies and their views on different ownership types. We also obtain basic demographics of the respondents.

# 3 Main results

## 3.1 Description of the data

Table 1 shows summary statistics for our main customer visits sample, including a period of four months before to four months after the acquisition announcement. The average monthly number of customer visits in the sample outlets is 350 and the number of unique visitors 227. Approximately seven percent of the sample are target outlets, while the remainder are control outlets in the same NAICS and zip codes. 33% of the sample is attributable to secondary buyouts, where the target business is already owned by another PE fund. On average, each deal involves approximately 1,300 outlets and is mentioned in 28 news articles on Factiva. A target outlet has, on average, 37 competing outlets in the same zip code and a market share of 7%.

The average personal income per capital is approximately \$56,000 and the average household income \$89,000. On average, 20% of households participate in the stock market, while nearly 18% include self-employed individuals.

## 3.2 Customer visits around the PE acquisition announcement

To examine customer reactions around private equity deal announcements, we perform a regression analysis of the following form:

$$ln(Visits)_{i,t} = \beta Target_{i,j} \times Month\ from\ announcement_{i,t} + \gamma X_{i,j,t} + \epsilon_{i,t}, \qquad (1)$$

where $i$, $j$, $t$ index outlet, buyout, and calendar month, respectively. *Visits* is the monthly number of visits in outlet $i$. *Target* is a dummy taking the value of one if the outlet belongs to the buyout target firm and zero for the control outlets. *Month from announcement* is a set of dummies indicating the time relative to acquisition announcement. $X$ is a vector of controls that includes outlet fixed effects, controlling for cross-sectional differences between different outlets, and zip code $\times$ NAICS $\times$ (calendar) month fixed effects, controlling for any location-specific variation over time.

Figure 2 shows the results. There is a noticeable decrease in customer visits in the months immediately following the deal announcement, bottoming at approximately 5% reduction around month three from announcement. Importantly, the development of customer visits in the treated and control outlets is very similar prior to the deal announcement. This also mitigates potential concerns about endogenous selection of target firms. For example, if PE funds targeted financially distressed firms that are losing customers, this would be visible already before the announcement.

The decrease in visits gets reversed approximately six months after the deal announcement, on average. As not all of the deals in our sample have eight months of data after the announcement date, we include a separate line showing the same regression coefficients

only for the deals that have data for the full period. Finally, we also perform the same regression analysis for the sample we use in the analyses around completion dates, including only the deals where we have information about the completion and the announcement date and where the two dates differ.

The pattern is very similar across all these samples, although the economic magnitude is larger for the constant composition and the completion samples. In particular in the case of the completion sample, this may be due to these deals being larger and likely more salient. The completion sample that includes only deals with different announcement and completion dates also represents a cleaner test of the pure announcement effect than the full sample, because the full sample also includes deals that are announced and completed at the same time. The results for the constant composition sample mitigate any potential concerns that changes in sample composition across different months would drive our results.

Next, we replace the set of monthly dummies with a simple *Post* dummy taking the value of one following the buyout announcement and zero before it. We include a period from four months before to four months after the announcement. This regression is specified as follows:

$$ln(Visits)_{i,t} = \beta Post_{j,t} \times Target_{i,j} + \gamma X_{i,j,t} + \epsilon_{i,t}. \tag{2}$$

The results are shown in Panel A of Table 2. Across all specifications, the estimated coefficients for $Post \times Target$ are negative and statistically significant. The last specification, presented in column (4), suggests that there is a 3.2% reduction in customer visits in the four months following the announcement, relative to other outlets in the same NAICS industry and zip code. The magnitude of the effect is similar across all four specifications.

Panel B of Table 2 repeats the same regression analysis but using the number of unique visitors as the dependent variable, instead of customer visits. The results are very similar to those using customer visits, suggesting that this distinction does not matter much.

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## 3.3 Deal announcement versus deal completion

A reduction in customer visits following a PE acquisition could be caused by either the customers changing their behavior or the target firm itself changing something. Most obviously, acquisitions might be followed by operational changes, refurbishments, re-branding or marketing changes, and other similar changes introduced by the new owner. Our setting allows us to effectively distinguish between these two possible channels, as we can differentiate between the time that the deal is announced publicly and the time that the deal is actually completed, i.e. when the ownership changes. By definition, any changes by the new owner (such as refurbishment or rebranding of outlets) can only take place after deal completion, when the ownership has been transferred. Hence, any operations-driven changes should take place after completion, not after announcement.

To study this, we repeat the monthly regression analysis of Figure 2, but focusing on the months around the deal completion instead on the deal announcement. The results, shown in Figure 3, suggest that there is no reduction in visits following deal completion. On the contrary, the decrease happens before the deal closing and actually gets reversed after deal completion.

We perform a regression analysis including separate dummies for the post-announcement and post-completion periods in the same regression. This analysis is specified as follows:

$$ln(Visits)_{i,t} = \beta_1 Target_{i,j} \times Post_{j,t} + \beta_2 Target_{i,j} \times Post\ close_{j,t} + \gamma X_{i,j,t} + \epsilon_{i,t}, \quad (3)$$

where *Post* is a dummy taking the value of one after the deal is announced, and *Post close* a dummy taking the value of one after deal completion. The sample only includes deals where the announcement and completion months are different. For each deal, we include a period of four months before announcement to four months after completion.

The results, shown in Table 3, are consistent with the monthly analyses discussed above. Customer visits decrease significantly following announcement, but increase following deal

completion. Taken together, these findings suggest that the reduction in customer visits is unlikely to be driven by operational changes introduced by the new owner. Instead, the reductions take place before the change in ownership, but following the public announcement of the transaction. This suggests that the changes are driven by customers reacting to the announcement of the deal, not the target firm making changes.

## 3.4 Primary versus secondary buyouts

If some consumers dislike PE owners and translate these perceptions into their behavior as customers, we should observe a decrease in customer visits in deals where the ownership changes from a non-PE to a PE investor. It should not happen in secondary buyouts, which are deals where a PE investor buys a target business from another PE firm. About one third of our sample outlets is attributable to secondary buyouts, which allows us to directly test this conjecture by comparing the customer reactions in primary versus secondary buyouts.

We repeat our regression analysis of monthly customer visits around the acquisition announcement and include a triple interaction term, which combines our double interaction term with an indicator for a secondary buyout. Alternatively, we split the sample into primary and secondary buyout subsamples. We report the results in Table 4. Consistent with our conjecture, there is no reduction in customer visits around the announcement of secondary buyouts. In fact, the estimated change for secondary buyouts is neither economically nor statistically different from zero. In contrast, the primary buyouts experience a 4.6% decrease in customer visits in the four months following the announcement, relative to other outlets in the same NAICS industry and zip code.

In Figure IA.6, we plot the monthly regression coefficient estimates separately for primary and secondary buyouts. For secondary buyouts, there are no observable meaningful changes in customer visits around the deal announcement. In contrast, primary buyouts exhibit a substantial decrease in visits in the months immediately following the announcement. These results suggest that the decrease we document comes from primary buyouts, where the target

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business is sold to a PE fund by a non-PE seller. This is consistent with a subset of customers actively avoiding patronizing PE-owned businesses.

# 4 Additional analysis

## 4.1 Customer composition changes

Our findings suggest that announcements of private equity acquisitions are followed by a decrease in customer visits, but the decrease is reversed after deal completion. An important question for the practical implications of our findings is whether the customer composition changes following deal announcement and deal completion. If the increase in customers post closing represents old customers returning, the customer loss is temporary. On the other hand, if the increase is achieved by acquiring new customers, the loss is permanent in the sense that the old customers never come back – and the business might be able to sustain higher business volumes in the long term if it did not incur the initial loss of customers.

To study changes in customer composition, we use Safegraph's visitor data broken down by visitor home census block group. This allows us to compare the geographic composition of the customer base over time at a granular level. For each outlet, we use the pre-announcement month as a benchmark and calculate for each other month the maximum possible overlap of customer base as a share of current month visitors. This could be interpreted as the maximum share of current-month customers that could have been customers also in the pre-announcement month. More loosely, it measures the similarity of the geographic distribution of customers in the current month relative to the pre-announcement month.

Internet Appendix Section IA.3.6 presents summary statistics of this sample. The average overlap is approximately 40%, meaning that on average a maximum of 40% of the customers each month could be the same as in the pre-announcement month. The average number of visitors per outlet is 264, residing in 47 different census block groups.

We then conduct a regression analysis of all target outlets around the time of acquisition

announcement. This analysis is presented in Figure 5. The omitted month is month zero (the announcement month), while month minus one is omitted by definition as it is the benchmark month for calculating the dependent variable, *Overlap*. Comparing this with the results on customer visits in Figure 2, we see that during months three to seven, when the average number of visits recovers to pre-announcement levels, there is a significant reduction in the geographic overlap of customer base with the pre-announcement composition. This suggests that the reversal in customer visits does not come from pre-deal customers returning, but from new customers acquired by the target business.

## 4.2   News coverage and salience

For customers to react to private equity acquisitions, they need to know about them. While we cannot directly observe customer attention, we can construct some proxies for likely deal salience. First, it seems likely that larger deals attract more media and other attention and are hence more salient to customers. To test this, we include an analysis using the number of outlets the target firm has as a proxy for deal size. Second, we collect all news articles in Factiva that mention both the target firm and the buyer and use the number of articles as a proxy for media attention to the deal. In the analysis, we calculate the number of articles in the period from 7 days before to 4 months after the deal announcement. Third, we classify some of the newspapers included in the Factiva data as "local", based on the name of the newspaper mentioning the name of a city or a county. For example, if The Boston Globe publishes an article mentioning the target and the buyer, we classify this as local news article for all outlets located in Boston. We then calculate the share of the total news coverage of the deal attributable to local newspapers for each outlet.

Table 5 shows the results of regression analyses including these various measures of salience. Larger deals, as measured by number of outlets, are associated with significantly larger reductions in customer visits, as are deals with more newspaper coverage. Similarly, the reduction in visits is larger if a larger share of the news coverage is attributable to lo-

cal newspapers. Taken together, these results are consistent with customers reacting more negatively to PE acquisitions that are more salient.

## 4.3   Local competition

As suggested by the results of von Meyerinck et al. (2021), customers' ability to reduce visits to PE-acquired outlets might be constrained by the lack of alternatives. Hence, we include an analysis using various measures of local competition. First, we calculate the target firm's market share in each zip code, based on the number of outlets. Second, to measure the local market concentration, we calculate the zip code-level Herfindahl-Hirschman Index (HHI) based on the number of outlets of firms that have a brand identifier in the SafeGraph data. Finally, we calculate the number of competing outlets in the same zip code, as well as the number of unique competing firms.

The results, shown in Table 6, are consistent with competition being an important determinant of customer reactions. Across all four measures, outlets more exposed to local competition experience significantly larger declines in customer visits following the PE acquisition announcement.

## 4.4   Location characteristics

### 4.4.1   Economic characteristics

In this section, we explore the cross-sectional determinants of customer reactions to private equity acquisitions. First, we focus on the economic characteristics of customers. We include analyses of local income, measured as either county-level per-capita income, or zip-code-level average household income, stock market participation, and self-employment. We also include analysis using the measure of economic connectedness developed in Chetty et al. (2022a) and Chetty et al. (2022b), which measures the share of high-SES friends among low-SES individuals in Facebook. It seems plausible that in less wealthy and more socio-economically

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segregated areas, people might have a more negative view on private equity.

The results are shown in Panel A of Table 7. Higher local income is associated with significantly less negative customer reactions to PE acquisitions. Similarly, higher stock market participation and self-employment rates are associated with smaller reductions in customer visits. Finally, higher economic connectedness between different socio-economic groups is also associated with less negative customer reactions. As these variables are correlated with each other, we include a specification with all five measures in the same regression. In this specification, local per-capita income is the only one that remains statistically significant.

### 4.4.2 Religion, individualism, volunteering, and activism

We then examine the link between customer reaction to buyout announcements and the county-level religious orientation and values. To measure religious orientation, we include the share of Protestants and Catholics, following a large literature studying the differences between these two religious groups. Prior studies have linked such differences to risk aversion (Barsky et al. (1997), Stulz and Williamson (2003), Renneboog and Spaenjers (2012), Baxamusa and Jalal (2016), Benjamin et al. (2016)), gambling (Kumar et al. (2011), Liu et al. (2020)), as well as investment and growth (Hilary and Hui (2009)).

To measure other local values, we use two county-level proxies of individualism by Bazzi et al. (2020): the historical share of infrequent names in 1940, and frontier experience, measured as decades that the county was part of the frontier. We also include the volunteering proxy from Chetty et al. (2022a) and Chetty et al. (2022b), measuring the local percentage of Facebook users who are members of a group predicted to be about "volunteering" or "activism". This variable is likely to reflect the local customers' willingness to act based on their values. Given a key reason for volunteering is altruism (Carpenter and Knowles Myers (2010)), this variable might also be correlated with altruism.

The results are shown in Panel B of Table 7. First, there is a striking difference between Protestant and Catholic areas. Protestants appear to react significantly more negatively

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than others to PE acquisitions, while the opposite is true for Catholics. Second, higher levels of individualism, measured by both infrequent names and frontier experience, are associated with significantly more negative customer reactions. This might be consistent with stronger views on individual responsibility of their consumption decisions. Finally, higher levels of volunteering and activism are associated with more negative customer reactions to PE acquisitions. Interestingly, when all of these variables are included in the same regression, individualism and volunteering/activism are the ones that remain statistically significant.

### 4.4.3 Political orientation

Finally, we study the role of political views. A large literature links political orientation to economic activity, such as managerial conservatism (Hutton et al. (2014)), entrepreneur risk aversion (Pástor and Veronesi (2020)), or customer reactions to political statements by firms (Painter (2021)). We classify counties as Republican if they voted Republican in the 2016 presidential election. As another indicator of not only political views, but perhaps partly also of views on private equity, we include a dummy indicating whether the county voted for Mitt Romney in the 2012 Republican primary. We expect that negative views of private equity might be correlated with negative views on Mr. Romney because he was the co-founder of Bain Capital, which is of the largest private equity firms in the world. This fact attracted a lot of media attention during his presidential campaign.

The results of this analysis are shown in Panel C of Table 7. Generally, customers in Republican-voting areas tend to reduce their visits to target firms more than customers in Democrat-voting areas. However, the opposite is true for areas that voted for Romney. Romney-supporting areas are associated with significantly smaller reductions in customer visits. This is true also when including the Republican interaction in the same regression. Finally, in columns (4) and (5), we also find that support for Romney is associated with less negative customer reactions to PE acquisitions in both Republican and Democrat counties.

## 4.5 PE firm involvement in lawsuits

If some of the reduction in customer visits following PE acquisitions is attributable to private equity having a bad reputation, one might expect this effect to be stronger for PE firms with worse reputations. We cannot directly measure reputation, but as a rough proxy, we calculate the number of lawsuits whose target the PE has been in the recent past. We calculate the number of lawsuits for two periods, five and ten years before the deal was announced.

The results are shown in Table 8. PE firms with more lawsuits in the past experience larger reductions in customer visits following the acquisition. To make sure that these effects are not simply driven by larger PE firms attracting more lawsuits, we include specifications where we control for the interaction with funds raised in the last 10 years, a proxy for the size of the PE firm.

## 4.6 Customer reviews following PE acquisition announcement

To examine whether the decrease in customer visits is due to a decrease in perceived quality, we study customer reviews on Yelp. For this analysis, we construct a new acquisitions sample, matching all reviews in the publicly available Yelp data set to all PE acquisitions in Preqin over the same period (from 2005 to 2019). For each target outlet in Yelp, we keep other outlets in the same zip code and same product category as control outlets. This methodology gives us a sample of 323 PE acquisitions with customer review data, involving 1,414 unique outlets and 9,395 individual reviews for the target businesses during the period from six months before the announcement to six months after it.

The Yelp reviews include a star rating, with five stars being the most positive one and one star the most negative one. In Figure 6, we show the distribution of reviews for the target outlets in the six months prior to PE acquisition announcement versus the six months after it. Panel A includes all customer reviews for this period and shows that the distributions look quite similar, although the reviews are slightly more positive following the announcement. Panel B includes only those customers who provide a review on the same target outlet

both in the six-month period before the acquisition and the six-month period after it. For these customers, the post-acquisition reviews appear clearly more negative than their reviews before the acquisition. However, as discussed below, this is based on a very small sample of customers, so it should be interpreted with caution.

Table 9 shows further analysis of customer reviews. Panel A shows summary statistics for the whole matched review sample, as well as specifically for the target outlets before and after the PE acquisition announcement. It also shows a t-test of the difference in target reviews post versus pre acquisition. This confirms first that the average reviews become more positive for target businesses, but the economic effect is small. Second, the reviews provided by customers that also rated the same outlet before the acquisition become more negative. The latter finding is not statistically significant, largely due to the very small sample size. There are only 34 pre-acquisition reviews and 36 post-acquisition reviews by these customers, reflecting the fact that most customers only provide one review per business in the Yelp data.

In Panel B, we present the results of a regression analysis of customer reviews. We include three alternative dependent variables. *Stars* is a continuous variable ranging from 1 (worst) to 5 (best), *5 stars* is a dummy taking the value of one if the customer gave a review of five stars, and *1 star* is a dummy taking the value of one if the customer gave a review of one star. These are consistent with the t-test in Panel A. On average, the estimated change in target reviews is positive, although not statistically significant. When including user-outlet pair fixed effects, the estimated change in reviews is in more negative direction, suggesting that those customers rating the target business both before and after the acquisition become more negative.

Taken together, these results suggest that the perceived quality of target businesses does not materially worsen following the announcement of PE acquisitions. If anything, there appears to be a slight positive change in customer reviews. However, some existing customers do appear to become more negative on the business. This suggests that the reduction in

customer visits that we document is not likely to be driven by a decrease in quality. It is, however, consistent with a subset of customers disliking the ownership change and reducing visits to the target business outlets.

## 4.7   Employee satisfaction following PE acquisition announcement

Another possible indicator of a worse customer experience could be an increase in employee dissatisfaction. If employees in target outlets fear that the upcoming PE ownership may lead to negative consequences for them, they could start looking for a new job and reduce their effort, which might result in worsening service quality. This would be consistent with the findings of Lambert et al. (2021) and Gornall et al. (2022).

To test this, we obtain data on employee reviews from Glassdoor. These data is at firm level and we only include the target firms in our main PE acquisition sample. We then perform an analysis of employee ratings before and after the acquisition announcement. The results are shown in Table 10. We find no evidence of a decrease in employee satisfaction following a PE acquisition announcement. In fact, the estimated change in employee ratings is slightly positive, although economically very small.

While Lambert et al. (2021) also use Glassdoor ratings in their analysis, we note the time horizon they study is substantially longer that in our analysis. Nevertheless, they also find no decrease in employee satisfaction in the sector including restaurants, which account for the majority of our outlets. Hence, our findings are consistent with their results.

## 4.8   Placebo test – non-PE acquisitions

To study whether our findings of decreasing customer visits following an acquisition announcement are unique to PE acquisitions, we perform a placebo analysis using non-PE acquisitions in the same period. We construct a separate sample of non-PE acquisitions, using data from Capital IQ and match those to SafeGraph data on customer visits. Similar to our main sample, we include deals where the target has at least 10 outlets in the data.

This results in a sample of 94 unique acquisitions, involving 5,207 unique outlets. As in our main sample of PE buyouts, we create a control group that includes all outlets in the same NAICS industries and zip codes as the target outlets, resulting in a total sample of 51,006 outlets. Panel A of Table 11 shows summary statistics for this non-PE sample.

We then repeat the regression analyses around deal announcement and deal completion for the non-PE sample. The results are shown in Panel B Table 11. Unlike for the PE buyout sample, there is no reduction in customer visits following the deal announcement. On the contrary, there is a slight increase of approximately 1.3% in customer visits in the months following the deal announcement. Also contrasting our PE sample results, there is a reduction of 1.3% in customer visits after the deal completion.

In Internet Appendix Section IA.3.5, we provide additional analyses of the non-PE acquisition sample. We first plot monthly regression results of customer visits around the acquisition announcement and completion, respectively. These are consistent with the results shown in Table 11. There is no reduction in customer visits following deal announcement, contrary to our PE buyouts sample. The non-PE targets also do not exhibit similar increase in visits post completion as the PE buyout sample does.

A possible concern is that the composition of the non-PE sample is different from the PE buyout sample. As discussed in more detail in Sections IA.2.1 and IA.3.4, the majority of the PE buyout sample is attributable to restaurants. This is not the case for the non-PE sample. To make sure that the differences in results are not driven by the sector composition of the samples, we repeat the regression analysis for restaurants only, similar to the analysis in Section IA.3.4. The results of the non-PE restaurant acquisitions look very similar to the results of the full non-PE sample, suggesting no reduction in customer visits following the acquisition announcement. They are very different from the restaurants subsample analysis for PE buyouts, where target firms experience significant reductions in customer visits. Taken together, these findings suggest that the reductions in customer visits in target companies after the acquisition announcement are specific to private equity buyers and not a general

feature of M&A transactions.

## 4.9 Survey of consumer views on PE and other ownership types

To obtain more direct evidence of consumers' perceptions about private equity and other ownership types, we analyze data from a large-scale survey of 1,093 respondents, conducted on Prolific. The sample is representative of the U.S. population based on sex, age, and ethnicity – while not necessarily representative on other dimensions.

First, we note that boycotting firms is very common. As shown in Panel A of Figure 7, 32% of the respondents say they have boycotted a company, and another 31% say they have deliberately reduced dealing with a company. Panel B further shows that of the ones that report never having boycotted a firm, 74% say they could imagine doing so in the future. These numbers appear consistent with other survey results. For example, a YouGov survey of 7,694 U.S. adults conducted in June 2023 finds that 52% of respondents report having a boycotted a business, against 37% that have not. The remaining 11% responded they are not sure, and only 7% of respondents say they would never consider boycotting a business.

Next, we explore consumer preferences for different ownership types. Panel A of Figure 8 shows the responses to the question: "As a customer, would you prefer the firm you are dealing with to be...:.". The scale is from 1 ("Do not prefer") to 5 ("Prefer a lot"). Family-owned firms are by far the most preferred alternative, while private-equity-owned firms are clearly the least preferred ones. In Panel B, we ask how likely the respondent would be to boycott a firm, depending on its ownership type. The results are the consistent with the stated preferences. Private-equity-owned firms are the most likely to be boycotted, while family-owned firms are the least likely ones.

In Figure 9, we further explore consumer perceptions about different ownership types. We ask how good the respondent thinks each of the listed ownership types is for various stakeholder groups and aspects, including customers (Panel A), employees (Panel B), financial performance of the firm (Panel C), and the society as a whole (Panel D). Interestingly, the

pattern is very similar across Panels A, B, and D. Respondents believe private equity owner-ship is the worst alternative for customers, employees, as well as the society as a whole, while family ownership is perceived as the best for all three. In contrast, private equity ownership is perceived as relatively good for the financial performance of the firm, although publicly listed firms are perceived as the most positive ownership type for financial performance.

In the Internet Appendix Section IA.1, we present additional analysis and summary statistics of the survey sample. In Figure IA.1, we study the reasons the respondents have boycotted firms. The most common reasons are political statements or actions by the com-pany, personal negative experiences, and product or service quality. Owner(s) or ownership structure of the company is selected as a reason for boycotting by 18% of respondents, just below "cover-ups (e.g. of scandals or mismanagement)" (selected by 19%) and above data breaches and lack of transparency (each selected by 15%).

In Table IA.1, we perform a regression analysis of preferences on ownership types de-pending on the respondent demographics. We find that PE ownership is relatively more favourably viewed by respondents with higher income and higher self-reported financial lit-eracy, as well as older respondents. Finance professionals also view PE ownership more positively. In comparison, family ownership, the most favourably-viewed form of ownership in general, is particularly preferred by women, and particularly negatively viewed by finance professionals.

Taken together, these findings suggest that i) people are quite likely to boycott firms they do not approve of, and ii) that private equity ownership is viewed substantially more negatively than other common ownership types.

## 4.10   Further results and robustness checks

In the Internet Appendix, we include a number of further results and robustness checks that complement our main analysis. These are briefly summarized in this section.

(i) *Additional survey analysis.* In Section , we present additional analysis and summary

statistics of the survey sample.

(ii) *Outlet closures.* In Section IA.3.1, we examine how the likelihood of outlet closure develops after the announcement and completion of PE acquisitions. The baseline likelihood of outlet closure is very low, which limits the interpretation of this analysis. The likelihood of outlet closure slightly decreases following the announcement of a PE acquisition. It seems that this difference comes primarily from the post-completion period. These results suggest that PE owners usually do not close outlets immediately after they acquire them.

(iii) *News coverage of the target firm.* In Section IA.3.2, we include a separate analysis of the overall news coverage of the target firm, using data from RavenPack, measuring both the number of unique news stories about the target firm as well as their tone. We find that there is a significant increase in news articles about the target firm during the acquisition month, and the coverage reverts to pre-buyout levels in 1-2 months. The average tone of news articles about the target following the buyout announcement also appears more negative, although this difference is not statistically significant.

(iv) *Additional analysis of customer reviews.* In Section IA.3.3, we include an additional analysis of customer reviews around the PE acquisition announcement, using a period of 12 months before 12 months after the acquisition instead of the six months in our main specification. The results remain qualitatively similar to our main results, with no substantial changes in overall reviews, but with existing customers becoming more negative.

(v) *Analysis of restaurants only.* In Section IA.3.4, we repeat our main analysis of customer visits for a subsample including only restaurants, which account for approximately 64% of the announcement sample and 87% of the completion sample. The sector composition of the sample is shown in detail in the Internet Appendix, Table IA.5. The results are qualitatively similar to our results using the full sample, but larger in magnitude. This analysis shows that our findings are to a large extent driven

by buyouts in the restaurant sector. This is not surprising, as this sector is highly competitive, with customers usually having many alternatives to choose from.

# 5    Conclusion

While the academic literature suggests that private equity buyouts are often associated with operational improvements for the target firm, the popular image of private equity is often negative. This has likely been exacerbated by some prominent retail chains bankruptcies following a PE buyout and politicians of all sides often vilifying PE firms.

Our results suggest that announcements of PE acquisitions are followed by a short-term reduction in retail customer visits to the target firm's outlets – but not in cases where the target is already owned by a PE fund. This reduction is consistent with some customers voting with their feet amid the change in ownership. It is not driven by operational changes by the new owner, as the reduction takes place after announcement, not after deal completion. On the contrary, this decline is temporary, and the number of customer visits rebounds in the months after the acquisition announcement once the PE buyer obtains operational control of the business. Around the month six or seven, the typical target has returned to the pre-announcement level of customer visits.

However, our analysis suggests that the rebound in customer visits after deal completion is not driven by the old customers returning, but the target firm acquiring new customers to offset the initial losses. This distinction is consequential, as acquiring new customers is costly. And perhaps, if the new owner was able to avoid the initial losses and nevertheless obtain new customers at the same rate, this would result in permanently higher customer volumes, which might make a large difference for the value of the business, and consequently, the realised investment returns. It is also possible that some of the recovery in customer visits is achieved by lowering prices, in which case it may not be fully reflected in sales. Finally, the decrease in customer visits may adversely affect not only the PE buyer but

also the seller. Sales and purchase agreement of business typically include a purchase price adjustment mechanism that reflects the business development between the announcement and the completion (Choi, 2017; Tsao, 2016). The seller may thus have to pay for the decrease in revenues.

Even if the customer losses were purely temporary and did not result in lower pricing, they could still add up to large aggregate losses of business. According to EY estimates, the U.S. private equity sector (all PE-owned businesses and the funds themselves) generates approximately $1.4 trillion of GDP per year. A 3% reduction for six months every five years, close to a typical PE investment holding period, would correspond to $4.2 billion per year. Of course, the sales might be substituted somewhere else, or at a later point. But even a mere shift between firms of this magnitude is consequential. On the other hand, if all of the initial customer losses are permanent, i.e., the same customers never return, a 3% reduction could mean $42 billion per year. Either way, the economic magnitude is not trivial. As a consequence, if our findings hold more generally for PE deals, the PE industry may have a public relations problem that warrants further consideration.

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## Figure 1: Sample outlets

This map shows the target outlets included in our private equity acquisitions sample. In total, there are 20,598 target outlets in the data, attributable to 108 target firms.
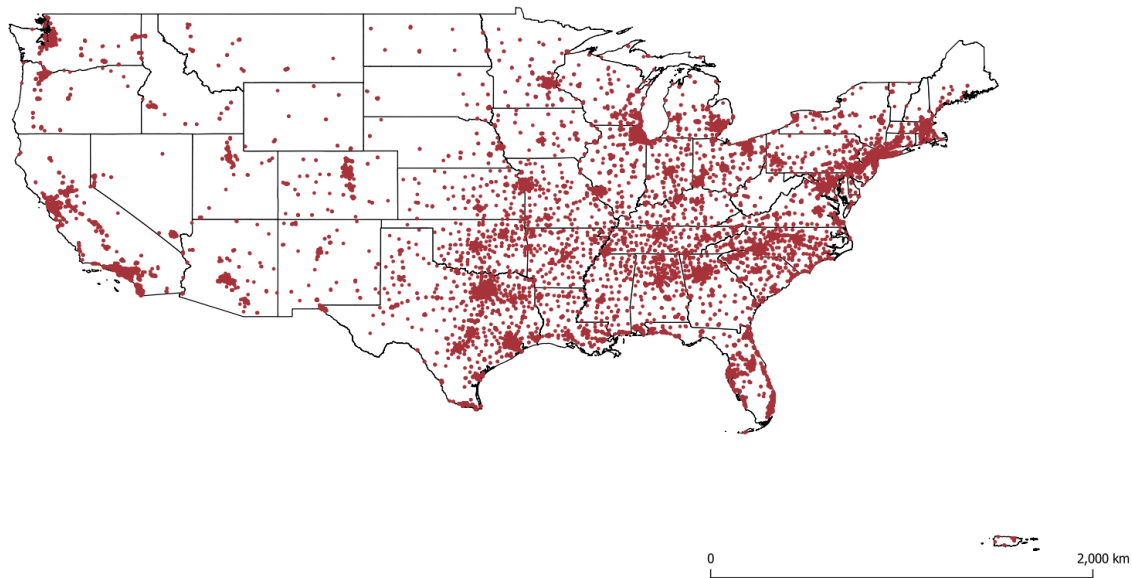
# Figure 2: Monthly visits (relative to acquisition announcement)

This chart presents monthly coefficients for *Target* relative to the time of acquisition announcement by a PE fund, from the following regression:

$$ln(Visits)_{i,t} = \beta Target_{i,j} \times Month\ from\ announcement_{i,t} + \gamma X_{i,j,t} + \epsilon_{i,t}$$

where $i$ denotes an outlet, $j$ denotes a buyout, and $t$ a calendar month. *Visits* is the monthly number of visits in outlet $i$. *Target* is a dummy taking the value one if the outlet belongs to the buyout target firm. *Month from announcement* is a set of dummies indicating the time relative to acquisition announcement. $X$ is a vector of controls that includes outlet fixed effects, controlling for cross-sectional differences between different outlets, and zip code x NAICS x month fixed effects, controlling for any location-specific variation over time. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by zip code.

## Figure 3: Monthly visits (relative to acquisition completion)

This chart presents monthly coefficients for *Target* relative to the time of acquisition completion by a PE fund, from the following regression:

$$ln(Visits)_{i,t} = \beta Target_{i,j} \times Month\ from\ completion_{i,t} + \gamma X_{i,j,t} + \epsilon_{i,t}$$

where $i$ denotes an outlet, $j$ denotes a buyout, and $t$ a calendar month. *Visits* is the monthly number of visits in outlet $i$. *Target* is a dummy taking the value one if the outlet belongs to the buyout target firm. *Month from completion* is a set of dummies indicating the time relative to acquisition completion. $X$ is a vector of controls that includes outlet fixed effects, controlling for cross-sectional differences between different outlets, and zip code x NAICS x month fixed effects, controlling for any location-specific variation over time. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by zip code.

## Figure 4: Primary versus secondary buyouts

This chart presents monthly coefficients for *Target* relative to the time of acquisition announcement by a PE fund, from the following regression:

$$ln(Visits)_{i,t} = \beta Target_{i,j} \times Month\ from\ announcement_{i,t} + \gamma X_{i,j,t} + \epsilon_{i,t}$$

where $i$ denotes an outlet, $j$ denotes a buyout, and $t$ a calendar month. *Visits* is the monthly number of visits in outlet $i$. *Target* is a dummy taking the value one if the outlet belongs to the buyout target firm. *Month from announcement* is a set of dummies indicating the time relative to acquisition announcement. $X$ is a vector of controls that includes outlet fixed effects, controlling for cross-sectional differences between different outlets, and zip code x NAICS x month fixed effects, controlling for any location-specific variation over time. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by zip code. *Primary* sample includes only primary buyouts where the seller is not another PE fund. *Secondary* sample includes only secondary buyouts where the seller is also a PE fund.
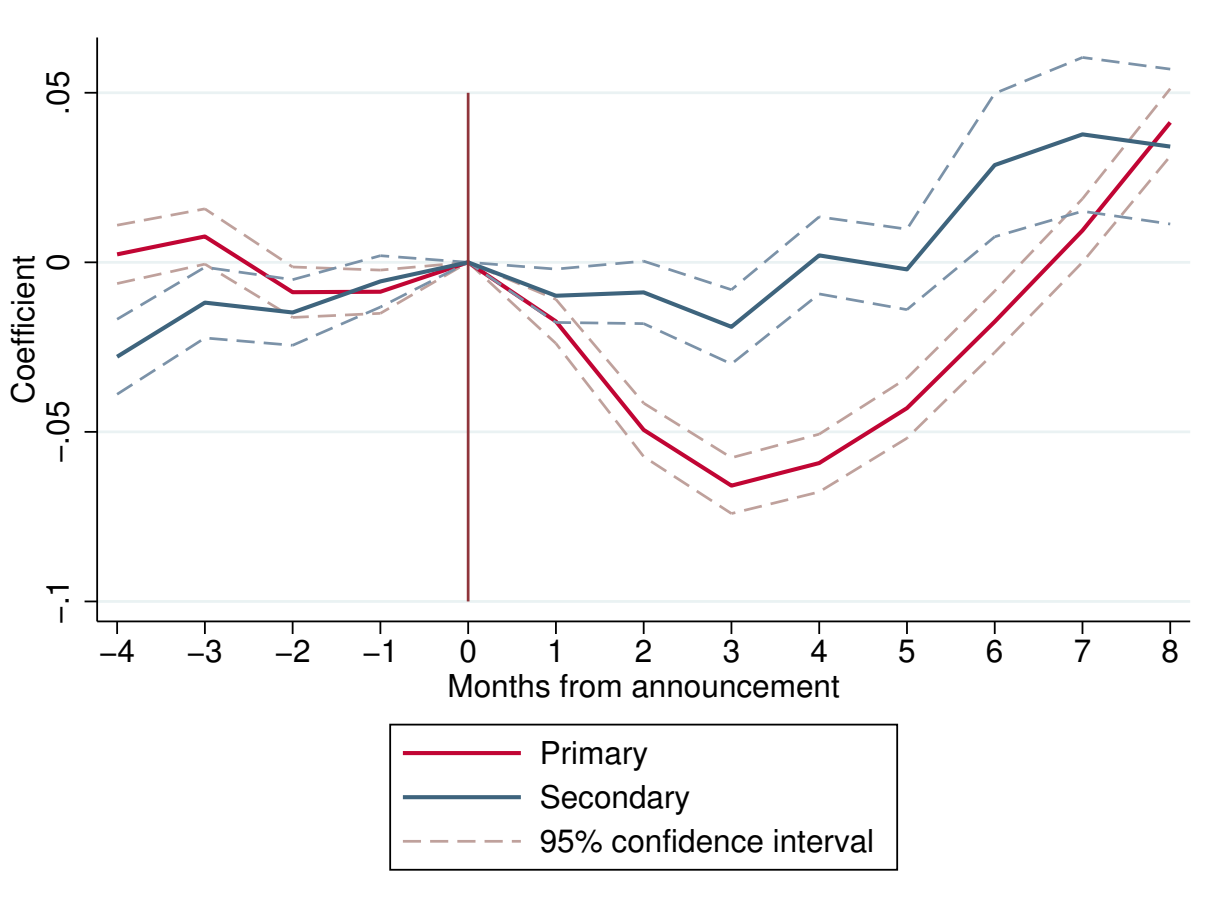
**Figure 5: Customer composition changes**

This chart presents coefficients for *Month from announcement* relative to the time of acquisition announcement by a PE fund, from the following regression:

$$Overlap_{i,t} = \beta Month\ from\ announcement_{i,t} + \gamma_i + \epsilon_{i,t}$$

where $i$ denotes an outlet and $t$ a calendar month. *Overlap* is the share of monthly visitors that overlaps the census block group distribution of the month minus one relative to acquisition announcement. *Month from announcement* is a set of dummies indicating the time relative to acquisition announcement. $\gamma$ denotes outlet fixed effects, controlling for cross-sectional differences between different outlets. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by outlet. The sample includes all target outlets. The omitted month is month zero, and month minus one is omitted by definition as the dependent variable measures overlap with month minus one.
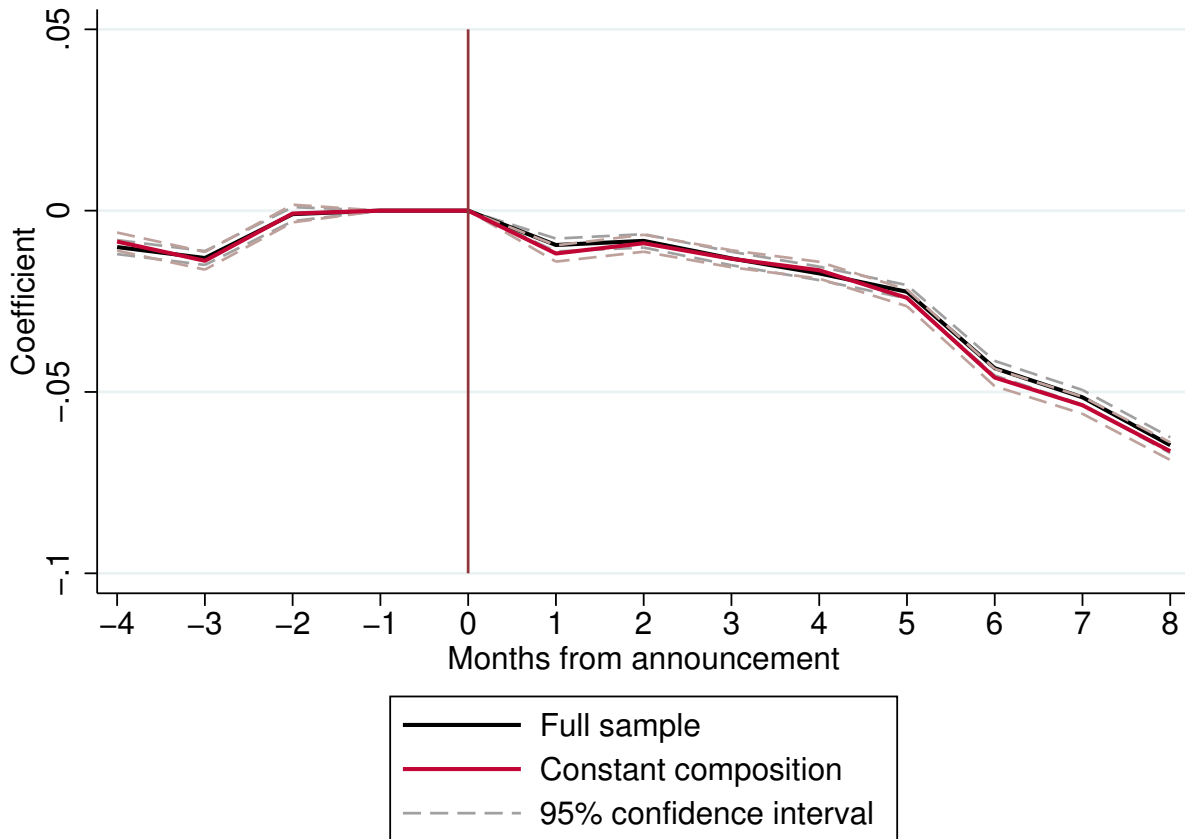
## Figure 6: Customer reviews around acquisition announcement

This figure shows the distribution of customer reviews of the target business before and after the announcement of a PE acquisition. For this analysis, we construct a separate sample of PE acquisitions from Preqin and match them to all available Yelp reviews taking place during the period 2005 - 2019. The pre-period is the six months prior to announcement and post-period the six months following the announcement. Panel A shows all customer reviews for the target business during the event window. Panel B shows only customers who provide reviews for the same target outlet both before and after the deal announcement.

**Panel A: All customers**
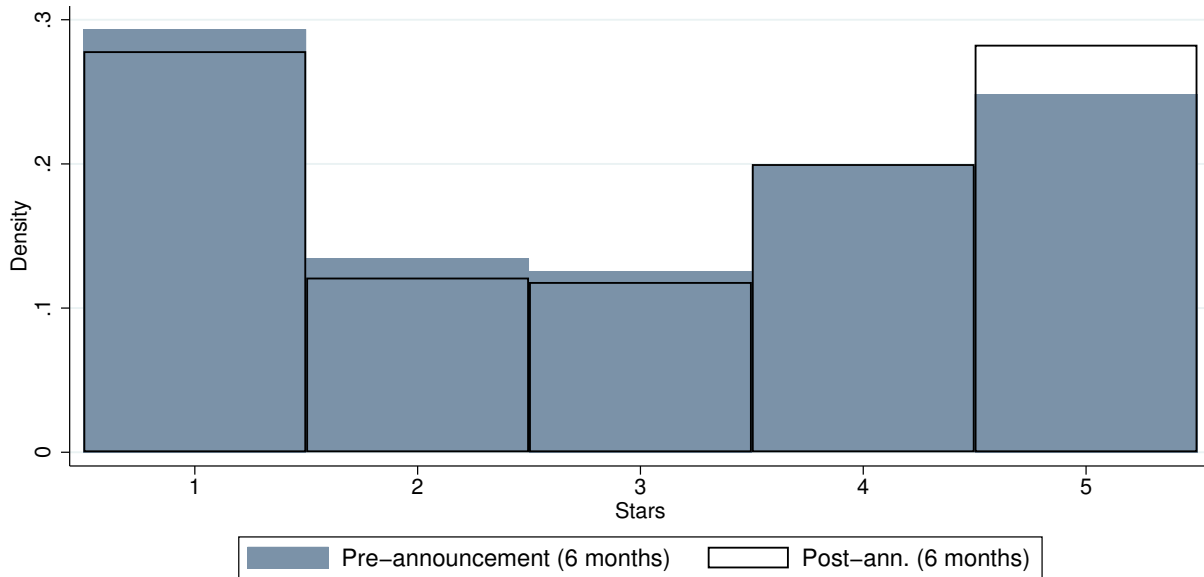


**Panel B: Same customers pre and post**
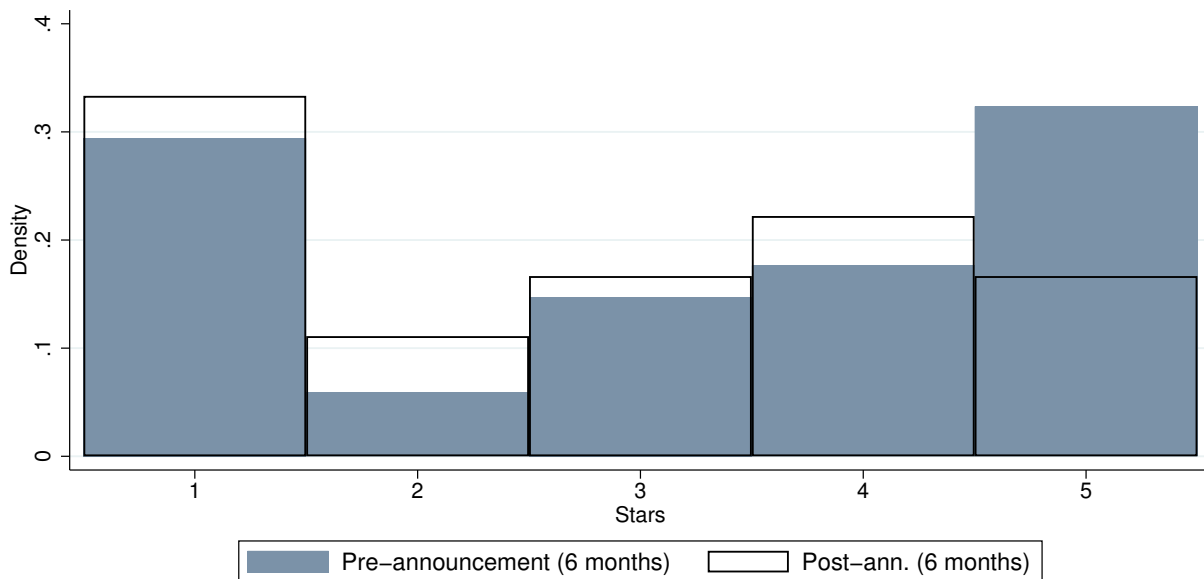
## Figure 7: Survey: Boycotting behavior

This figure presents results from a Prolific survey with a sample of 1,093 respondents. Panel A presents the responses to the question: "Have you ever boycotted a company?". For those who responded "No – I never boycotted a company", Panel B presents the responses to the question: "Could you imagine to boycott or deliberately reduce dealing with a company in the future?".

**A. Have you ever boycotted a company?**
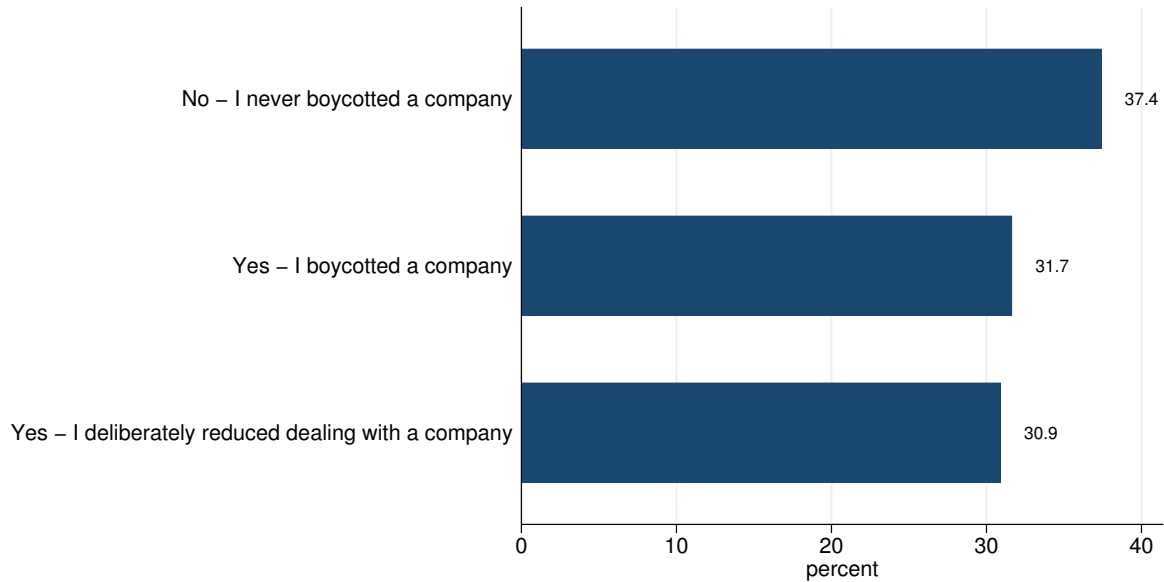


**B. Could you imagine to boycott or deliberately reduce dealing with a company in the future?**
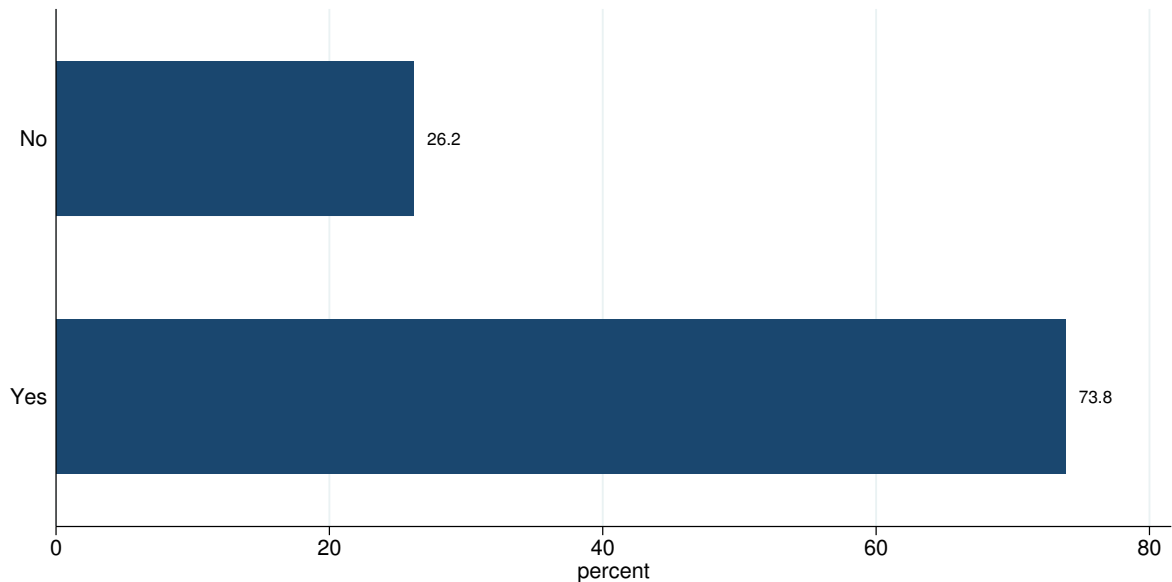
**Figure 8: Survey: Preferences for ownership types and likelihood to boycott**

This figure presents results from a Prolific survey with a sample of 1,093 respondents. Panel A shows the average responses to the question: "As a customer, would you prefer the firm you are dealing with to be...:". The scale is from 1 ("Do not prefer") to 5 ("Prefer a lot"). Panel B shows the average responses to the question: "How likely would you boycott a firm if it was...:". The scale is from 1 ("Not at all likely") to 5 ("Very likely").
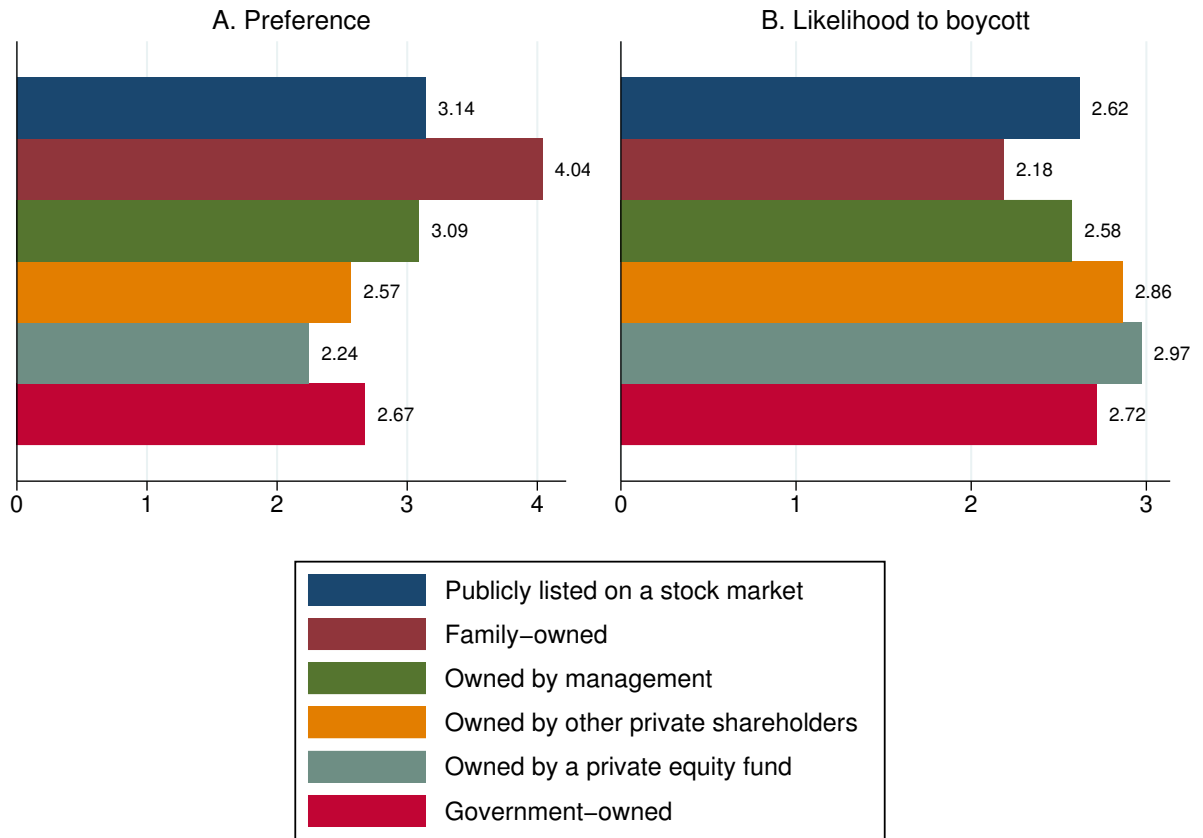
# Figure 9: Survey: Perceptions on different ownership types

This figure presents the responses to questions on how good each ownership type is for different stakeholders, based on a Prolific survey with a sample of 1,093 respondents. The exact questions are for each part are: A) "How good do you think each of the following ownership types is for the customers of the firm?"; B) "How good do you think each of the following ownership types is for the employees of the firm?"; C) "How good do you think each of the following ownership types is for the financial performance of the firm?"; and D) "How good do you think each of the following ownership types is for the society as a whole?". The scale is from 1 ("Extremely bad") to 5 ("Extremely good").
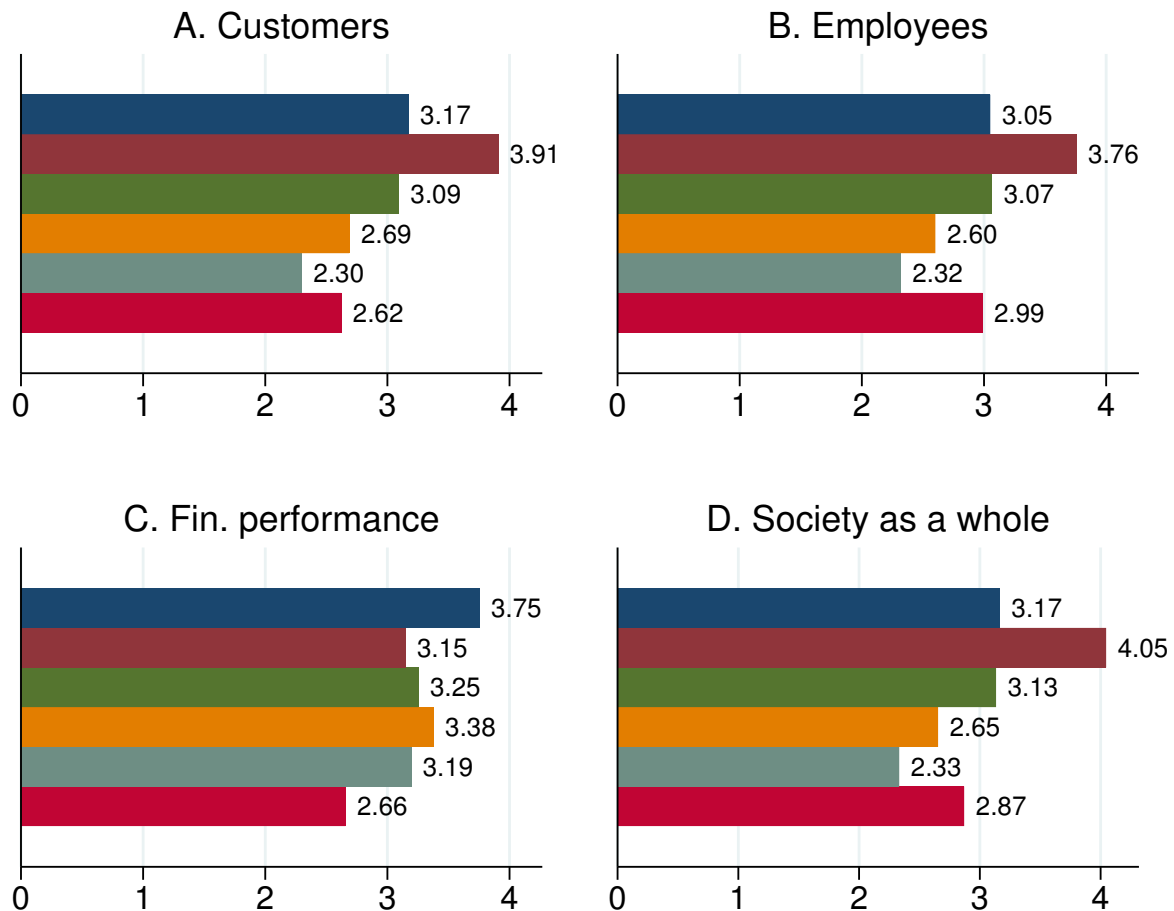
## Table 1
## Summary statistics

Summary statistics for the outlet-month observations in the sample. The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code. The time period is four months before to four months after the announcement month. *Visits* is the monthly number of visits and *Visitors* the number of unique visitors in the outlet. *Target* is a dummy identifying target firm outlets. *Secondary* is a dummy indicating if the seller is also a PE fund. *N outlets* is the number of outlets that the target firm has. *N articles* is the number of news articles that mention the target firm and the PE buyer. *Local news share* is the share of news articles attributable to local newspapers at the outlet location. *Market share* is the zip-code-level market share of the target firm, based on number of outlets. *HHI* measures market concentration at the zip code, based on number of outlets by firm. *N competing outlets* and *N competing firms* are the number of competitor outlets and competitor firms, respectively, in the same zip code.

|  | Mean | Std | p25 | p50 | p75 |
|---|---|---|---|---|---|
| **Outlet** | | | | | |
| Visits | 349.522 | 764.995 | 62.000 | 195.000 | 436.000 |
| Visitors | 226.823 | 378.825 | 35.000 | 122.000 | 296.000 |
| Target | 0.072 | 0.258 | 0.000 | 0.000 | 0.000 |
| **Deal** | | | | | |
| Secondary | 0.334 | 0.472 | 0.000 | 0.000 | 1.000 |
| N outlets ('000') | 1.309 | 1.455 | 0.250 | 0.749 | 2.768 |
| N articles | 28.354 | 22.415 | 11.000 | 18.000 | 50.000 |
| Local news share | 0.002 | 0.026 | 0.000 | 0.000 | 0.000 |
| **Competition** | | | | | |
| Market share | 0.072 | 0.108 | 0.019 | 0.043 | 0.083 |
| HHI | 0.267 | 0.299 | 0.067 | 0.125 | 0.333 |
| N competing outlets | 37.073 | 37.914 | 13.000 | 25.000 | 48.000 |
| N competing firms | 11.132 | 9.016 | 3.000 | 9.000 | 17.000 |
| **Location** | | | | | |
| PI per capita ('000) | 56.425 | 19.147 | 45.352 | 52.064 | 62.890 |
| Avg. HH income | 89.000 | 71.052 | 52.427 | 68.870 | 99.124 |
| Stock participation | 0.201 | 0.116 | 0.114 | 0.180 | 0.271 |
| Self empl. rate | 0.178 | 0.046 | 0.147 | 0.173 | 0.204 |
| Economic connectedness | 0.801 | 0.152 | 0.704 | 0.765 | 0.880 |
| % Protestant | 0.281 | 0.155 | 0.151 | 0.246 | 0.386 |
| % Catholic | 0.166 | 0.116 | 0.078 | 0.144 | 0.231 |
| Infrequent names | 0.712 | 0.048 | 0.681 | 0.711 | 0.745 |
| Frontier experience | 0.965 | 1.184 | 0.000 | 0.600 | 1.400 |
| Volunteering | 0.062 | 0.020 | 0.048 | 0.059 | 0.073 |
| Republican | 0.428 | 0.495 | 0.000 | 0.000 | 1.000 |
| Romney (2012) | 0.802 | 0.399 | 1.000 | 1.000 | 1.000 |
| **PE buyer** | | | | | |
| Lawsuits (5y) | 3.174 | 4.204 | 0.000 | 2.000 | 5.000 |
| Lawsuits (10y) | 7.120 | 11.004 | 2.000 | 6.000 | 8.000 |
| N | 2,370,237 | | | | |

**Table 2**

**Customer visits following PE acquisition announcement**

The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable in Panel A is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. The dependent variable in Panel B is *ln(Visitors)*, the natural logarithm of the total number of unique visitors in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

**Panel A: ln(Visits)**

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Post × Target | -0.0259*** | -0.0293*** | -0.0320*** | -0.0321*** |
|  | (0.0042) | (0.0026) | (0.0026) | (0.0026) |
| Post | 0.0311*** | -0.0041*** |  |  |
|  | (0.0022) | (0.0016) |  |  |
| Target | 0.1694*** |  |  |  |
|  | (0.0128) |  |  |  |
| Deal × Outlet FE | No | Yes | Yes | Yes |
| Month FE | No | Yes | No | No |
| Deal × NAICS × Month FE | No | No | Yes | No |
| Deal × Zip code × Month FE | No | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | No | Yes |
| N | 2,370,237 | 2,366,090 | 2,337,742 | 2,337,289 |
| $R^2$ | 0.001 | 0.968 | 0.973 | 0.973 |

**Panel B: ln(Visitors)**

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Post × Target | -0.0276*** | -0.0283*** | -0.0309*** | -0.0311*** |
|  | (0.0039) | (0.0023) | (0.0022) | (0.0022) |
| Post | 0.0233*** | -0.0066*** |  |  |
|  | (0.0022) | (0.0015) |  |  |
| Target | 0.1894*** |  |  |  |
|  | (0.0126) |  |  |  |
| Deal × Outlet FE | No | Yes | Yes | Yes |
| Month FE | No | Yes | No | No |
| Deal × NAICS × Month FE | No | No | Yes | No |
| Deal × Zip code × Month FE | No | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | No | Yes |
| N | 2,370,237 | 2,366,090 | 2,337,742 | 2,337,289 |
| $R^2$ | 0.001 | 0.977 | 0.980 | 0.980 |

**Table 3**
**PE acquisition announcement versus deal completion**

The dependent variable shown above each column. *ln(Visits)* is the natural logarithm of the total number of visits in the outlet during the month. *ln(Visitors)* is the natural logarithm of the total number of unique visitors in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. *Post close* is a dummy taking the value of one after the acquisition completion. The sample includes only deals where the completion month is later than the announcement month. The sample period is from four months before the announcement date to four months after the completion date for each deal. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

|  | ln(Visits) | | | ln(Visitors) | | |
|---|---|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Post close × Target | 0.0184*** | 0.0174*** | 0.0174*** | 0.0131*** | 0.0124*** | 0.0124*** |
|  | (0.0026) | (0.0027) | (0.0027) | (0.0022) | (0.0022) | (0.0022) |
| Post × Target | -0.0573*** | -0.0540*** | -0.0540*** | -0.0513*** | -0.0494*** | -0.0494*** |
|  | (0.0029) | (0.0031) | (0.0031) | (0.0026) | (0.0027) | (0.0027) |
| Post close | -0.0080*** |  |  | -0.0105*** |  |  |
|  | (0.0024) |  |  | (0.0023) |  |  |
| Post | -0.0221*** |  |  | -0.0275*** |  |  |
|  | (0.0020) |  |  | (0.0019) |  |  |
| Deal × Outlet FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Month FE | Yes | No | No | Yes | No | No |
| Deal × NAICS × Month FE | No | Yes | No | No | Yes | No |
| Deal × Zip code × Month FE | No | Yes | No | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | Yes | No | No | Yes |
| N | 1,465,394 | 1,458,659 | 1,458,659 | 1,465,394 | 1,458,659 | 1,458,659 |
| $R^2$ | 0.963 | 0.968 | 0.968 | 0.972 | 0.976 | 0.976 |

**Table 4**
**Primary versus secondary buyouts**

The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. *Secondary* is a dummy indicating buyouts where the seller is also a PE fund. *Primary* refers to buyouts where the seller is not a PE fund. Column (2) includes only primary buyouts. Column (3) includes only secondary buyouts. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

|  | (1) Full sample | (2) Primary | (3) Secondary |
|---|---|---|---|
| Post × Target | -0.0460*** | -0.0460*** | 0.0032 |
|  | (0.0032) | (0.0032) | (0.0041) |
| Post × Target × Secondary | 0.0492*** |  |  |
|  | (0.0052) |  |  |
| Deal × Outlet FE | Yes | Yes | Yes |
| Deal × Zip × NAICS × Month FE | Yes | Yes | Yes |
| N | 2,337,289 | 1,549,408 | 787,881 |
| $R^2$ | 0.973 | 0.972 | 0.968 |

**Table 5**
**News coverage and salience**

The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *N outlets* is the number of outlets that the target firm has. *N articles* is the number of news articles on Factiva that mention the target firm and the PE buyer. *Local news share* is the share of news articles attributable to local newspapers at the outlet location. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Post $\times$ Target | 0.1698*** | 0.0482*** | 0.0064** | 0.0485*** | 0.0675*** |
| | (0.0136) | (0.0090) | (0.0032) | (0.0091) | (0.0173) |
| Post $\times$ Target $\times$ ln(N outlets) | -0.0300*** | | | | -0.0037 |
| | (0.0020) | | | | (0.0029) |
| Post $\times$ Target $\times$ ln(N articles) | | -0.0143*** | | -0.0143*** | -0.0124*** |
| | | (0.0027) | | (0.0027) | (0.0031) |
| Post $\times$ Target $\times$ Local news share | | | -0.0629* | -0.0802** | -0.0919** |
| | | | (0.0366) | (0.0383) | (0.0390) |
| Deal $\times$ Outlet FE | Yes | Yes | Yes | Yes | Yes |
| Deal $\times$ Zip $\times$ NAICS $\times$ Month FE | Yes | Yes | Yes | Yes | Yes |
| N | 2,337,289 | 1,583,066 | 1,583,066 | 1,583,066 | 1,583,066 |
| $R^2$ | 0.973 | 0.973 | 0.973 | 0.973 | 0.973 |

**Table 6**
**Local competition**

The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *Market share* is the zip-code-level market share of the target firm, based on number of outlets. *HHI* is the Herfindahl-Hirschman Index measuring market concentration at the zip code, based on number of outlets by firm. *N competing outlets* and *N competing firms* are the number of competitor outlets and competitor firms, respectively, in the same zip code. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Post × Target | -0.0434*** | -0.0589*** | -0.0013 | 0.0165*** |
|  | (0.0038) | (0.0034) | (0.0075) | (0.0052) |
| Post × Target × Market share | 0.0823*** |  |  |  |
|  | (0.0211) |  |  |  |
| Post × Target × HHI |  | 0.0770*** |  |  |
|  |  | (0.0081) |  |  |
| Post × Target × ln(1+N competing outlets) |  |  | -0.0120*** |  |
|  |  |  | (0.0026) |  |
| Post × Target × ln(1+N competing firms) |  |  |  | -0.0292*** |
|  |  |  |  | (0.0024) |
| Deal × Outlet FE | Yes | Yes | Yes | Yes |
| Deal × Zip × NAICS × Month FE | Yes | Yes | Yes | Yes |
| N | 2,337,289 | 2,288,641 | 2,337,289 | 2,288,641 |
| $R^2$ | 0.973 | 0.972 | 0.973 | 0.972 |

## Table 7
## Location characteristics

The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. *PI per capita* is county-level personal income per capita. *HH income* is the zip-code level average household income. *Stock participation* is the share of households participating in the stock market. *Self employment* is the share of households including self-employed. *Economic connectedness* measures the share of high-SES friends among low-SES individuals in Facebook. *Protestant* and *Catholic* are the shares of individuals identifying as Protestant or Catholic, respectively, at the county level. *Infrequent names* is the share of infrequent names in 1940. *Frontier experience* is measured as decades that the county was part of the frontier. *Volunteering* is the local percentage of Facebook users who are members of a group predicted to be about "volunteering" or "activism". *Republican* is a dummy indicating whether the county voted Republican in the 2016 presidential election. *Romney (2012)* is a dummy indicating whether the county voted for Mitt Romney in the 2012 Republican primary. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

### Panel A: Economic characteristics

|  | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| Post × Target | -0.6276*** | -0.1255*** | -0.0508*** | -0.0603*** | -0.0557*** | -0.5653*** |
|  | (0.1036) | (0.0214) | (0.0050) | (0.0105) | (0.0138) | (0.1301) |
| Post × Target × ln(PI pc.) | 0.0547*** |  |  |  |  | 0.0528*** |
|  | (0.0095) |  |  |  |  | (0.0132) |
| Post × Target × ln(HH income) |  | 0.0219*** |  |  |  | -0.0126 |
|  |  | (0.0049) |  |  |  | (0.0133) |
| Post × Target × Stock p. |  |  | 0.0976*** |  |  | 0.0874 |
|  |  |  | (0.0216) |  |  | (0.0555) |
| Post × Target × Self emp. |  |  |  | 0.1629*** |  | 0.0853 |
|  |  |  |  | (0.0576) |  | (0.0648) |
| Post × Target × Econ. connectedness |  |  |  |  | 0.0292* | -0.0244 |
|  |  |  |  |  | (0.0170) | (0.0211) |
| Deal × Outlet FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal × Zip × NAICS × Month FE | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 2,300,635 | 2,331,476 | 2,331,476 | 2,331,476 | 2,328,860 | 2,298,789 |
| $R^2$ | 0.973 | 0.973 | 0.973 | 0.973 | 0.973 | 0.973 |

**Panel B: Religion and values**

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| Post × Target | -0.0127** | -0.0507*** | 0.1630*** | -0.0240*** | -0.0110 | 0.1558*** |
| | (0.0055) | (0.0045) | (0.0372) | (0.0034) | (0.0080) | (0.0456) |
| Post × Target × Protestant | -0.0670*** | | | | | -0.0209 |
| | (0.0161) | | | | | (0.0203) |
| Post × Target × Catholic | | 0.1110*** | | | | 0.0459 |
| | | (0.0224) | | | | (0.0291) |
| Post × Target × Infrequent names | | | -0.2738*** | | | -0.2294*** |
| | | | (0.0520) | | | (0.0577) |
| Post × Target × Frontier experience | | | | -0.0079*** | | -0.0032 |
| | | | | (0.0021) | | (0.0022) |
| Post × Target × Volunteering | | | | | -0.3294*** | -0.3558*** |
| | | | | | (0.1166) | (0.1237) |
| Deal × Outlet FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal × Zip × NAICS × Month FE | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 2,333,252 | 2,333,252 | 2,328,258 | 2,328,258 | 2,328,930 | 2,323,936 |
| $R^2$ | 0.973 | 0.973 | 0.973 | 0.973 | 0.973 | 0.973 |

**Panel C: Political orientation**

| | Full sample | | | Republican | Democrat |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Post x Target | -0.0178*** | -0.0531*** | -0.0342*** | -0.0593*** | -0.0345*** |
| | (0.0035) | (0.0059) | (0.0070) | (0.0070) | (0.0106) |
| Post x Target x Republican | -0.0301*** | | -0.0253*** | | |
| | (0.0052) | | (0.0055) | | |
| Post x Target x Romney (2012) | | 0.0275*** | 0.0185*** | 0.0183** | 0.0190* |
| | | (0.0066) | (0.0068) | (0.0085) | (0.0113) |
| Deal x Outlet FE | Yes | Yes | Yes | Yes | Yes |
| Deal x Zip x NAICS x Month FE | Yes | Yes | Yes | Yes | Yes |
| N | 2,337,289 | 2,260,675 | 2,260,675 | 957,398 | 1,303,277 |
| $R^2$ | 0.973 | 0.973 | 0.973 | 0.971 | 0.973 |

## Table 8
## PE firm involvement in lawsuits

The sample includes all outlets of firms acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. *Lawsuits 5y* and *Lawsuits 10y* are the numbers of lawsuits where the buyer PE firm has been a target in the previous five and 10 years, respectively. *Funds raised 10y* is the total amount of funds raised by teh PE firm in the previous 10 years, a proxy for PE firm size. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Post $\times$ Target | -0.0040 | -0.0131** | -0.0194 | -0.0132 |
|  | (0.0049) | (0.0059) | (0.0136) | (0.0136) |
| Post $\times$ Target $\times$ ln(Lawsuits 5y) | -0.0257*** |  | -0.0308*** |  |
|  | (0.0034) |  | (0.0041) |  |
| Post $\times$ Target $\times$ ln(Lawsuits 10y) |  | -0.0114*** |  | -0.0112*** |
|  |  | (0.0029) |  | (0.0036) |
| Post $\times$ Target $\times$ ln(Funds raised 10y) |  |  | 0.0021 | -0.0003 |
|  |  |  | (0.0017) | (0.0017) |
| Deal $\times$ Outlet FE | Yes | Yes | Yes | Yes |
| Deal $\times$ Zip $\times$ NAICS $\times$ Month FE | Yes | Yes | Yes | Yes |
| N | 2,337,289 | 2,337,289 | 2,140,199 | 2,140,199 |
| $R^2$ | 0.973 | 0.973 | 0.972 | 0.972 |

## Table 9
## Customer reviews following PE acquisition announcement

For this analysis, we construct a separate sample of PE acquisitions from Preqin and match them to all available Yelp reviews taking place during the period 2005 - 2019. This sample includes all Yelp reviews of outlets acquired by a PE fund, as well as all other firms operating in the same product category in the same zip code as any of the target outlets. Panel A shows summary statistics for all reviews in the sample, including both target outlets and matched control outlets, for a period of six months before to six months after announcement. For target outlets, we also show the period of 12 months before to 12 months after announcement. Panel B shows the results of a regression analysis, with the dependent variable shown above each column. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

### Panel A: Summary statistics

|  | All reviews | | Target (pre) | | Target (post) | | Post-Pre |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Mean | Std | Mean | N | Mean | N | $\Delta$ Mean |
| **All reviews** | | | | | | | |
| Stars | 3.777 | 1.414 | 2.974 | 4,492 | 3.088 | 4,903 | 0.114*** |
| 5 stars | 0.443 | 0.497 | 0.248 | 4,492 | 0.283 | 4,903 | 0.034*** |
| 1 star | 0.129 | 0.335 | 0.293 | 4,492 | 0.278 | 4,903 | -0.015 |
| Target | 0.040 | 0.195 | | | | | |
| **Same cust. only (6m)** | | | | | | | |
| Stars | | | 3.176 | 34 | 2.778 | 36 | -0.399 |
| 5 stars | | | 0.324 | 34 | 0.167 | 36 | -0.157 |
| 1 star | | | 0.294 | 34 | 0.333 | 36 | 0.039 |
| **Same cust. only (12m)** | | | | | | | |
| Stars | | | 2.942 | 86 | 2.798 | 84 | -0.144 |
| 5 stars | | | 0.198 | 86 | 0.190 | 84 | -0.007 |
| 1 star | | | 0.314 | 86 | 0.310 | 84 | -0.004 |
| N | 237,816 | | 4,526 | | 4,933 | | 9,459 |

### Panel B: Regression analysis – Six months pre to six months post announcement

|  | Stars | | 5 stars | | 1 star | |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Post × Target | 0.0428 | -1.5702 | 0.0248 | -0.4678* | 0.0047 | 0.2854 |
|  | (0.0810) | (1.0754) | (0.0243) | (0.2478) | (0.0269) | (0.2009) |
| Deal × Outlet FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Deal × Zip code × Month FE | Yes | Yes | Yes | Yes | Yes | Yes |
| User-Outlet FE | No | Yes | No | Yes | No | Yes |
| N | 231,560 | 9,614 | 231,560 | 9,614 | 231,560 | 9,614 |
| $R^2$ | 0.315 | 0.935 | 0.230 | 0.914 | 0.301 | 0.926 |

**Table 10**

**Glassdoor ratings following PE acquisition announcement**

This analysis includes Glassdoor employee ratings for the target firms in our main PE acquisition sample. We include two time windows around the announcement of the acquisition, 6 and 12 months before to 6 and 12 months after, respectively. Panel A shows summary statistics for the reviews in the sample. Panel B shows the results of a regression analysis, where the dependent variable is *Glassdoor rating*, ranging from 1 (lowest) to 5 (highest). Heteroscedasticity-consistent standard errors, clustered by firm, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

**Panel A: Summary statistics**

|  | Mean | Std | p25 | p50 | p75 | N |
|---|---|---|---|---|---|---|
| **± 6 months** |  |  |  |  |  |  |
| Glassdoor rating | 3.225 | 1.384 | 2.000 | 3.000 | 4.000 | 3,162 |
| **± 12 months** |  |  |  |  |  |  |
| Glassdoor rating | 3.276 | 1.388 | 2.000 | 3.000 | 5.000 | 6,624 |
| N | 6,624 |  |  |  |  |  |

**Panel B: Regression analysis**

|  | ± 6 months | | ± 12 months | |
|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) |
| Post | 0.0855 | 0.0853* | 0.1181** | 0.0972** |
|  | (0.0553) | (0.0508) | (0.0463) | (0.0427) |
| Firm FE | No | Yes | No | Yes |
| N | 3,162 | 3,156 | 6,624 | 6,620 |
| $R^2$ | 0.001 | 0.094 | 0.002 | 0.084 |

**Table 11**
**Placebo test – non-PE acquisitions**

The sample includes all outlets of firms acquired by non-PE acquirers in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. In the announcement sample, we include a time period of four months before to four months after the acquisition announcement month. In the completion sample, we include a time period of four months before acquisition announcement to four months after completion month. Panel A shows the summary statistics for the announcement sample. The dependent variable in Panel B is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. *Post close* is a dummy taking the value of one after the acquisition completion. The sample includes only deals where the completion month is later than the announcement month. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

**Panel A: Summary statistics**

|  | Mean | Std | p25 | p50 | p75 |
|---|---|---|---|---|---|
| Visits | 162.104 | 415.737 | 14.000 | 59.000 | 172.000 |
| Target | 0.102 | 0.303 | 0.000 | 0.000 | 0.000 |
| N | 393,239 | | | | |

**Panel B: Regression results**

|  | Announcement sample | | Completion sample | |
|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) |
| Post × Target | 0.0185*** | 0.0131** | 0.0155*** | 0.0124** |
|  | (0.0050) | (0.0053) | (0.0057) | (0.0062) |
| Post | 0.0079** | | 0.0155*** | |
|  | (0.0033) | | (0.0041) | |
| Post close × Target | | | -0.0014 | -0.0133* |
|  | | | (0.0067) | (0.0072) |
| Post close | | | 0.0127*** | |
|  | | | (0.0043) | |
| Deal × Outlet FE | Yes | Yes | Yes | Yes |
| Month FE | Yes | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | Yes | No | Yes |
| N | 391,766 | 383,609 | 450,241 | 440,811 |
| $R^2$ | 0.963 | 0.969 | 0.957 | 0.963 |

## Appendix A: PE acquisitions sample

This table lists the private equity acquisitions included in our sample.

| Announced | Completed | Target firm | Buyer | Outlets | Sector |
|---|---|---|---|---|---|
| 01-Mar-18 | 01-Mar-18 | Techna Glass Inc | CenterOak Partners LLC | 51 | Wholesale Trade |
| 01-Mar-18 | 01-Mar-18 | LaserShip Inc | Greenbriar Equity Group LP | 26 | Transportation and Warehousing |
| 02-Mar-18 | 02-Mar-18 | Susiecakes LLC | Sterling Partners GP LLC | 26 | Manufacturing |
| 09-Mar-18 | 09-Mar-18 | Northwest Medical Inc | Corbel Structured Equity Partners | 13 | Health Care and Social Assistance |
| 15-Mar-18 | 15-Mar-18 | Family Allergy & Asthma LLC | Prairie Capital | 31 | Health Care and Social Assistance |
| 31-Mar-18 | 31-Mar-18 | Eggs Up Grill | WJ Partners, LLC | 41 | Restaurants |
| 01-Apr-18 | 01-Apr-18 | Urban Air Adventure Parks | Mantucket Capital | 199 | Arts, Entertainment, and Recreation |
| 06-Apr-18 | 30-Mar-18 | Community Medical Services Holdings, LLC | Clearview Capital, L.P. | 16 | Health Care and Social Assistance |
| 13-Apr-18 | | Center For Autism and Related Disorders, LLC | Blackstone Group | 193 | Health Care and Social Assistance |
| 18-Apr-18 | 02-Apr-18 | Synergy Homecare | NexPhase Capital | 132 | Health Care and Social Assistance |
| 27-Apr-18 | 04-May-18 | SRS Distribution, Inc. | Leonard Green & Partners | 75 | Wholesale Trade |
| 30-Apr-18 | | Edelman Financial Engines, LLC | Edelman Financial Services, Hellman & Friedman, Financial Engines, Inc. | 39 | Finance and Insurance |
| 10-May-18 | 09-Jul-18 | Premier Healthcare Services, LLC | Aveanna Healthcare, LLC, J.H. Whitney & Co, Bain Capital | 17 | Health Care and Social Assistance |
| 22-May-18 | 15-Oct-18 | German American Bancorp, Inc. | First Security, Inc., Castle Creek Capital Partners | 15 | Finance and Insurance |
| 24-May-18 | 24-May-18 | PECAA — Professional Eye Care Associates of America | The Cambria Group | 12 | Retail Trade |
| 31-May-18 | 31-May-18 | Jackson Hewitt Tax Service Inc | Corsair Capital | 5736 | Professional, Scientific, and Technical Services |
| 01-Jun-18 | 01-Jun-18 | Tireworks Total Car Care | Greenbriar Equity Group, GB Auto Service Inc. | 17 | Retail Trade |
| 01-Jun-18 | 01-Jun-18 | Ramona Tire & Service Centers | GB Auto Service Inc., Greenbriar Equity Group | 17 | Retail Trade |
| 04-Jun-18 | 04-Jun-18 | Water's Edge Dermatology, Inc. | Gryphon Investors | 36 | Health Care and Social Assistance |
| 06-Jun-18 | 06-Jun-18 | PT Solutions Holdings LLC | Lindsay Goldberg | 165 | Health Care and Social Assistance |
| 06-Jun-18 | 06-Jun-18 | Paladina Health LLC | New Enterprise Associates | 10 | Health Care and Social Assistance |
| 20-Jun-18 | 20-Jun-18 | Native Foods Cafe | Millstone Capital Advisors | 13 | Restaurants |
| 01-Jul-18 | 01-Jul-18 | Rusty Taco Inc. | Roark Capital Group | 31 | Restaurants |
| 02-Jul-18 | 02-Jul-18 | The Learning Experience Corp. | Golden Gate Capital | 259 | Health Care and Social Assistance |
| 09-Jul-18 | 09-Jul-18 | Taco Del Mar | High Bluff Capital Partners | 63 | Restaurants |
| 20-Jul-18 | | Insomnia Cookies, LLC | BDT Capital Partners, Krispy Kreme Doughnut Corporation, JAB Holding Company | 180 | Manufacturing |
| 23-Jul-18 | 22-Aug-18 | Lifepoint Health, Inc | Apollo Global Management, RCCH Healthcare Partners | 84 | Health Care and Social Assistance |
| 26-Jul-18 | 26-Jul-18 | Smiles Dental | Granite Bridge Partners | 17 | Health Care and Social Assistance |
| 26-Jul-18 | | The Bay Clubs Company, LLC | KKR | 24 | Arts, Entertainment, and Recreation |
| 02-Aug-18 | 13-Sep-18 | Jamba, Inc. | Roark Capital Group, FOCU.S. Brands Inc. | 754 | Restaurants |

| | | | | | |
|---|---|---|---|---|---|
| 02-Aug-18 | 02-Aug-18 | MD Now Medical Centers, Inc. | Brentwood Associates | 49 | Health Care and Social Assistance |
| 09-Aug-18 | 30-Sep-18 | The Shade Store, LLC | Leonard Green & Partners | 26 | Retail Trade |
| 31-Aug-18 | 31-Aug-18 | Parry'S Pizzeria | Cannon Capital | 11 | Restaurants |
| 13-Sep-18 | 13-Sep-18 | Amazing Lash Studio Franchise LLC | WellBiz Brands, Inc., KSL Capital Partners | 250 | Other Services (except Public Administration) |
| 25-Sep-18 | 07-Dec-18 | Sonic Corp. | Roark Capital Group, Inspire Brands, Inc. | 3527 | Restaurants |
| 10-Oct-18 | | Waste Industries USA, Inc. | Ontario Teachers' Pension Plan, GFL Environmental Inc., BC Partners | 12 | Administrative and Support and Waste Management and Remediation Services |
| 10-Oct-18 | 05-Oct-18 | Eegee's, Inc. | Knott Partners, ORIX Mezzanine & Private Equity, 39 North Capital Partners | 61 | Restaurants |
| 15-Oct-18 | 15-Oct-18 | Sola Salon Studios LLC | MPK Equity Partners, AHR Growth Partners, PNC Riverarch Capital | 514 | Other Services (except Public Administration) |
| 18-Oct-18 | 15-Oct-18 | Gene Juarez Salons LLC | Transom Capital Group | 10 | Other Services (except Public Administration) |
| 23-Oct-18 | 23-Oct-18 | Dealer Tire LLC | Bain Capital | 12 | Retail Trade |
| 26-Oct-18 | 26-Oct-18 | Pure Barre, LLC. | Xponential Fitness, LLC., L Catterton, Snapdragon Capital Partners | 549 | Arts, Entertainment, and Recreation |
| 31-Oct-18 | 31-Oct-18 | Oilstop Inc | Silfra Capital LLC | 25 | Other Services (except Public Administration) |
| 06-Nov-18 | 06-Nov-18 | Splash Car Wash, Inc. | Palladin Consumer Retail Partners | 57 | Other Services (except Public Administration) |
| 06-Nov-18 | 28-Jan-19 | Bojangles', Inc. | Durational Capital Partners, The Jordan Company | 749 | Restaurants |
| 07-Nov-18 | 30-Nov-18 | Texas Digestive Disease Consultant, PLLC | Waud Capital Partners | 28 | Health Care and Social Assistance |
| 07-Nov-18 | 21-Dec-18 | Jostens, Inc. | Platinum Equity | 35 | Retail Trade |
| 12-Nov-18 | 21-Sep-18 | Numotion | LLR Partners, AEA Investors | 16 | Health Care and Social Assistance |
| 03-Dec-18 | 11-Feb-19 | Thorntons Inc | ArcLight Capital Partners, BP | 199 | Retail Trade |
| 05-Dec-18 | 05-Feb-19 | Caliber Collision Centers Inc | Hellman & Friedman LLC | 1150 | Other Services (except Public Administration) |
| 11-Dec-18 | 01-Dec-18 | Foot and Ankle Specialists of the Mid-Atlantic, LLC | New MainStream Capital | 18 | Health Care and Social Assistance |
| 12-Dec-18 | 12-Dec-18 | Health First | Capital Alignment Partners, Harbert Management Corporation, Urgent Care Group, LLC | 18 | Health Care and Social Assistance |
| 13-Dec-18 | | La Senza Corporation | Regent LP | 14 | Retail Trade |
| 13-Dec-18 | 13-Dec-18 | Pet Supplies Plus, L.L.C. | Sentinel Capital Partners | 417 | Retail Trade |
| 19-Dec-18 | 19-Dec-18 | FleetPride, Inc. | American Securities | 279 | Other Services (except Public Administration) |
| 08-Jan-19 | 08-Jan-19 | Firebirds International, LLC | J.H. Whitney & Co | 47 | Restaurants |
| 09-Jan-19 | 08-Jan-19 | ABBA Eye Care Inc. | Riata Capital Group, Acuity Eyecare Group, J.P. Morgan Asset Management - Private Equity Group | 10 | Retail Trade |
| 09-Jan-19 | 08-Jan-19 | Eyecare Specialties | Riata Capital Group, Acuity Eyecare Group, J.P. Morgan Asset Management - Private Equity Group | 11 | Retail Trade |
| 15-Jan-19 | 15-Jan-19 | Best Friends Pet Care, Inc. | Mosaic Capital Partners | 30 | Other Services (except Public Administration) |

| | | | | | |
|---|---|---|---|---|---|
| 04-Feb-19 | 04-Feb-19 | Fitness Connection Ltd. | Roark Capital Group | 45 | Arts, Entertainment, and Recreation |
| 05-Feb-19 | 05-Feb-19 | Club Champion LLC | Levine Leichtman Capital Partners | 53 | Retail Trade |
| 11-Feb-19 | | DEX Imaging, Inc. | Staples, Inc., Sycamore Partners | 35 | Retail Trade |
| 01-Mar-19 | 01-Mar-19 | DDS Dentures + Implant Solutions | Affordable Care, LLC, Berkshire Partners, Partners Group | 60 | Health Care and Social Assistance |
| 01-Mar-19 | 01-Mar-19 | Bay State Physical Therapy of Randolph PC | Calera Capital Management Inc | 30 | Health Care and Social Assistance |
| 01-Mar-19 | 01-Mar-19 | P.F. Chang's China Bistro, Inc. | Paulson & Co., TriArtisan Capital Partners | 218 | Restaurants |
| 12-Mar-19 | 12-Mar-19 | CorePower Yoga, LLC | TSG Consumer Partners | 224 | Other Services (except Public Administration) |
| 13-Mar-19 | 13-Mar-19 | FASTSIGNS International Inc. | Freeman Spogli & Co, LightBay Capital | 646 | Manufacturing |
| 18-Mar-19 | 18-Mar-19 | Gateway Dental | Smile Brands Inc., Gryphon Investors | 14 | Health Care and Social Assistance |
| 18-Mar-19 | 04-Mar-19 | Center for Diagnostic Imaging, Inc. | Wellspring Capital Management | 117 | Health Care and Social Assistance |
| 19-Mar-19 | 29-Apr-19 | Turkey Hill LLC | Peak Rock Capital | 31 | Retail Trade |
| 25-Mar-19 | | Maurices Incorporated | OpCapita | 886 | Retail Trade |
| 28-Mar-19 | | True Health | Kinderhook Industries, Evolent Health, GlobalHealth, Inc. | 11 | Health Care and Social Assistance |
| 31-Mar-19 | 31-Mar-19 | Savers Inc | Ares Management, Crescent Capital Group | 111 | Retail Trade |
| 01-Apr-19 | 01-Apr-19 | Exer Urgent Care | Orangewood Partners | 16 | Health Care and Social Assistance |
| 02-Apr-19 | 02-Apr-19 | Volcom, LLC | Authentic Brands Group, LLC, Lion Capital, General Atlantic | 38 | Retail Trade |
| 04-Apr-19 | 04-Apr-19 | Jenny Craig, Inc. | H.I.G. Capital | 569 | Other Services (except Public Administration) |
| 04-Apr-19 | 04-Apr-19 | Lucky Strike Entertainment, LLC | Wellspring Capital Management | 18 | Arts, Entertainment, and Recreation |
| 16-Apr-19 | 16-Apr-19 | Golden Bear Physical Therapy Sports Injury Center Inc. | Shore Capital Partners | 14 | Health Care and Social Assistance |
| 16-Apr-19 | 18-Jun-19 | Smart & Final Stores, Inc. | Apollo Global Management | 253 | Retail Trade |
| 01-May-19 | 01-May-19 | Driver's Edge | Greenbriar Equity Group, GB Auto Service Inc. | 21 | Other Services (except Public Administration) |
| 16-May-19 | 16-May-19 | AccentCare, Inc. | Advent International | 14 | Health Care and Social Assistance |
| 20-May-19 | 20-May-19 | Futures Academy, Inc. | iEducation Group, Leeds Equity Partners | 15 | Educational Services |
| 30-May-19 | 30-May-19 | Reddy Ice Corporation | Stone Canyon Industries | 104 | Manufacturing |
| 01-Jun-19 | 01-Jun-19 | Nystrom & Associates, Ltd. | Nautic Partners | 11 | Health Care and Social Assistance |
| 05-Jun-19 | 05-Jun-19 | Pei Wei Asian Diner, LLC | West Coast Capital | 144 | Restaurants |
| 07-Jun-19 | 06-Aug-19 | Barnes & Noble, Inc. | Elliott Management Corporation | 614 | Retail Trade |
| 14-Jun-19 | 30-Sep-19 | Whataburger Restaurants LP | BDT Capital Partners, LLC | 833 | Restaurants |
| 24-Jun-19 | | Lendmark Financial Services, LLC | Lightyear Capital, Ontario Teachers' Pension Plan | 229 | Finance and Insurance |
| 24-Jun-19 | 24-Jun-19 | Eye Care Specialists | Vision Innovation Partners, Centre Partners | 20 | Health Care and Social Assistance |
| 01-Jul-19 | 27-Jun-19 | Crunch LLC | TPG | 296 | Arts, Entertainment, and Recreation |
| 01-Jul-19 | 01-Jul-19 | Hooters of America, LLC | TriArtisan Capital Partners, Nord Bay Capital | 318 | Restaurants |
| 01-Jul-19 | 01-Jul-19 | Center For Sight, P.L. | Pamlico Capital Management, LP | 21 | Health Care and Social Assistance |
| 18-Jul-19 | 19-Aug-19 | Jack's Family Restaurants, Inc. | AEA Investors | 177 | Restaurants |
| 31-Jul-19 | 02-Oct-19 | Wealth Enhancement Group, LLC | TA Associates | 11 | Finance and Insurance |

| | | | | | |
|---|---|---|---|---|---|
| 08-Aug-19 | 16-Dec-19 | Vitamin Shoppe, LLC | Franchise Group, Inc., Vintage Capital Management | 739 | Retail Trade |
| 19-Aug-19 | 19-Aug-19 | Morphe LLC | General Atlantic, Summit Partners, Sofina | 19 | Retail Trade |
| 22-Aug-19 | | Joe Hudson's Collision Center | TSG Consumer Partners | 68 | Other Services (except Public Administration) |
| 23-Aug-19 | 23-Aug-19 | American Health Imaging, Inc. | Charlotte Radiology, P.A., Welsh, Carson, Anderson & Stowe | 23 | Health Care and Social Assistance |
| 27-Aug-19 | 23-Oct-19 | Sears Outlet Stores, LLC | Vintage Capital Management, Franchise Group, Inc. | 124 | Retail Trade |
| 05-Sep-19 | 05-Sep-19 | Associated Retinal Consultants, P.C. | FFL Partners, EyeCare Partners LLC | 10 | Health Care and Social Assistance |
| 12-Sep-19 | | Bar Method Media, Inc. | Anytime Fitness, LLC, Roark Capital Group, Partnership Capital Growth Investors, THL Credit Advisors | 121 | Arts, Entertainment, and Recreation |
| 25-Sep-19 | 18-Oct-19 | Jimmy John's Franchisor SPV, LLC | Inspire Brands, Inc., Roark Capital Group | 2768 | Restaurants |
| 04-Oct-19 | | National Seating & Mobility, Inc. | Cinven | 14 | Health Care and Social Assistance |
| 17-Oct-19 | 17-Oct-19 | ORS MEDCO | One Equity Partners | 10 | Wholesale Trade |
| 04-Dec-19 | 01-Nov-19 | Long's Drugs Incorporated/PharMedQuest Pharmacy Services, Inc. | Long's Drugs Incorporated, PharMedQuest Pharmacy Services, Inc., Kinderhook Industries | 18 | Retail Trade |
| 09-Dec-19 | 20-Dec-19 | Destination Maternity Corporation | Marquee Brands LLC, Neuberger Berman | 46 | Retail Trade |
| 12-Dec-19 | 12-Dec-19 | 21st Century Oncology, Inc. | Genesis Care Pty Ltd, KKR | 25 | Health Care and Social Assistance |
| 26-Dec-19 | 26-Dec-19 | Cartridge World North America, LLC | Blackford Capital | 207 | Retail Trade |
| 28-Dec-19 | | American Freight Inc. | Franchise Group, Inc., Vintage Capital Management | 177 | Retail Trade |

# Internet appendix

# IA.1   Survey on consumer preferences on ownership

## IA.1.1   Additional analysis of boycotting behavior

Figure IA.1 reports the reasons that respondents state for having boycotted firms.

### Figure IA.1: Reasons for boycotting

This figure presents the reasons respondents boycotted or reduced dealing with a company. The question asked is: "Why did you choose to boycott or reduce dealing with a company? (you can choose more than one)". The sample includes all respondents who reported having boycotted a company or deliberately reduced dealing with a company.
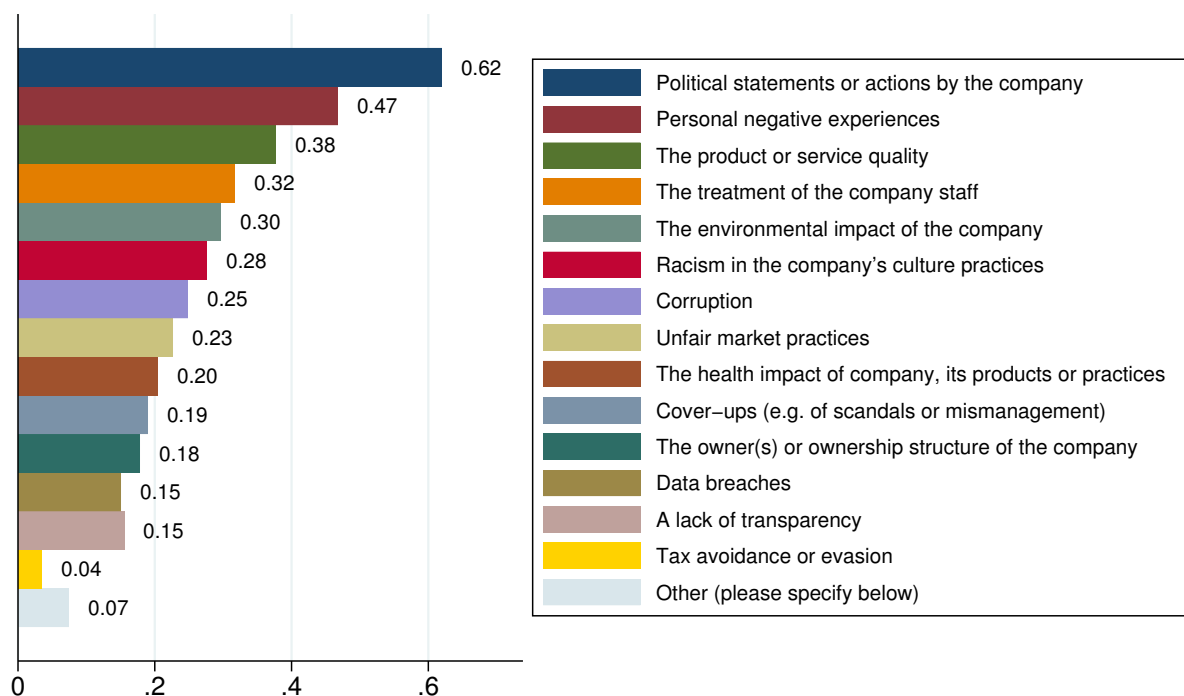
## IA.1.2   Preferences on different ownership types

This section presents a regression analysis of the survey respondents' preferences on different ownership types. Panel A of Table IA.1 shows summary statistics for the sample. In Panel B, we study the preferences for PE ownership. Respondents with high income and high self-reported financial literacy prefer PE ownership more, as do finance professionals and older respondents. In Panel C, we compare different types of ownership.

### Table IA.1
### Preferences on ownership types

This table presents a regression analysis of ownership preferences among our survey sample. Panel A shows summary statistics for the survey sample. Variables named *Preference X* are the responses to the question: "As a customer, would you prefer the firm you are dealing with to be...:", followed by options for each of the six ownership types we included in the survey. The scale is from 1 ("Do not prefer") to 5 ("Prefer a lot"). *Preference PE vs. other* is calculated as *Preference PE fund* less the average score by the same respondent for the other five types of ownership (*Avg. preference non-PE*). In Panel B, the dependent variable is shown above each column. In Panel C, the dependent variable is *Preference X*, with the *X* shown above each column.

### Panel A: Summary statistics

|                          | Mean    | Std    | p25     | p50     | p75     |
|--------------------------|---------|--------|---------|---------|---------|
| **Ownership preferences** |         |        |         |         |         |
| Preference PE fund       | 2.244   | 0.994  | 1.000   | 2.000   | 3.000   |
| Preference PE vs. other  | -0.855  | 0.849  | -1.400  | -0.800  | -0.200  |
| Preference public        | 3.142   | 1.066  | 2.000   | 3.000   | 4.000   |
| Preference family        | 4.039   | 1.012  | 3.000   | 4.000   | 5.000   |
| Preference mgmt          | 3.090   | 0.954  | 3.000   | 3.000   | 4.000   |
| Preference other private | 2.567   | 1.004  | 2.000   | 3.000   | 3.000   |
| Preference gov't         | 2.675   | 1.186  | 2.000   | 3.000   | 3.000   |
| Avg. preference non-PE   | 3.108   | 0.573  | 2.800   | 3.200   | 3.400   |
| **Characteristics**      |         |        |         |         |         |
| Income (mid) ('000)      | 58.939  | 41.287 | 25.000  | 55.000  | 85.000  |
| Finance professional     | 0.059   | 0.235  | 0.000   | 0.000   | 0.000   |
| Self-employed            | 0.114   | 0.318  | 0.000   | 0.000   | 0.000   |
| Stock investor           | 0.559   | 0.497  | 0.000   | 1.000   | 1.000   |
| Age                      | 45.765  | 15.679 | 32.000  | 46.000  | 59.000  |
| Female                   | 0.503   | 0.500  | 0.000   | 1.000   | 1.000   |
| Fin. literacy (self)     | 3.059   | 0.868  | 3.000   | 3.000   | 4.000   |
| Fin. literacy (advanced) | 1.593   | 0.608  | 1.000   | 2.000   | 2.000   |
| N                        | 1,093   |        |         |         |         |

**Panel B: Preference on PE ownership**

| | Preference PE fund | | | Pref. PE vs. other | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| ln(Income (mid)) | 0.1124*** | 0.0853** | | 0.0647** | 0.0447 | |
| | (0.0353) | (0.0361) | | (0.0312) | (0.0313) | |
| Finance professional | 0.4667*** | 0.3906** | | 0.2640** | 0.2119 | |
| | (0.1561) | (0.1563) | | (0.1319) | (0.1314) | |
| Self-employed | -0.0402 | -0.0594 | | -0.0600 | -0.0724 | |
| | (0.1043) | (0.1053) | | (0.0895) | (0.0891) | |
| Stock investor | 0.0189 | -0.0361 | -0.0402 | -0.0332 | -0.0674 | -0.0799 |
| | (0.0677) | (0.0696) | (0.0700) | (0.0569) | (0.0581) | (0.0590) |
| ln(Age) | 0.1844** | 0.1663* | 0.2013* | 0.0354 | 0.0410 | 0.0785 |
| | (0.0830) | (0.0853) | (0.1049) | (0.0718) | (0.0746) | (0.0909) |
| Female | -0.0398 | -0.0249 | 0.0020 | -0.0077 | -0.0074 | 0.0302 |
| | (0.0630) | (0.0632) | (0.0662) | (0.0543) | (0.0554) | (0.0595) |
| Fin. literacy (self) | | 0.1558*** | 0.1540*** | | 0.1157*** | 0.1124*** |
| | | (0.0415) | (0.0431) | | (0.0352) | (0.0363) |
| Fin. literacy (advanced) | | -0.0814 | -0.0471 | | -0.1165** | -0.0925** |
| | | (0.0539) | (0.0550) | | (0.0452) | (0.0451) |
| Income FE | No | No | Yes | No | No | Yes |
| Education FE | No | No | Yes | No | No | Yes |
| Profession FE | No | No | Yes | No | No | Yes |
| Employment FE | No | No | Yes | No | No | Yes |
| N | 1,016 | 1,016 | 1,013 | 1,016 | 1,016 | 1,013 |
| $R^2$ | 0.035 | 0.051 | 0.103 | 0.012 | 0.028 | 0.075 |

**Panel C: Preference on different ownership types**

| | (1)<br>Public | (2)<br>Family | (3)<br>Mgmt | (4)<br>Other priv. | (5)<br>PE fund | (6)<br>Gov't |
|---|---|---|---|---|---|---|
| ln(Income (mid)) | 0.0303 | 0.0299 | 0.0155 | 0.0662** | 0.0853** | 0.0530 |
| | (0.0395) | (0.0354) | (0.0343) | (0.0333) | (0.0361) | (0.0425) |
| Finance professional | 0.1793 | -0.2643* | 0.1907 | 0.5264*** | 0.3906** | 0.2341 |
| | (0.1362) | (0.1475) | (0.1182) | (0.1418) | (0.1563) | (0.1500) |
| Self-employed | -0.0107 | 0.0856 | -0.0331 | 0.0558 | -0.0594 | 0.0443 |
| | (0.1067) | (0.1001) | (0.0921) | (0.0982) | (0.1053) | (0.1147) |
| Stock investor | 0.1778** | -0.1027 | 0.0001 | 0.0096 | -0.0361 | 0.0639 |
| | (0.0732) | (0.0697) | (0.0688) | (0.0688) | (0.0696) | (0.0819) |
| ln(Age) | 0.2807*** | -0.1414 | 0.1492* | 0.4230*** | 0.1663* | -0.1011 |
| | (0.0929) | (0.0862) | (0.0810) | (0.0821) | (0.0853) | (0.1023) |
| Female | 0.0523 | 0.1455** | -0.0600 | -0.1200* | -0.0249 | -0.1066 |
| | (0.0675) | (0.0640) | (0.0620) | (0.0617) | (0.0632) | (0.0764) |
| Fin. literacy (self) | 0.1235*** | -0.0141 | 0.0627 | 0.1277*** | 0.1558*** | -0.0915* |
| | (0.0454) | (0.0415) | (0.0406) | (0.0419) | (0.0415) | (0.0507) |
| Fin. literacy (advanced) | 0.0955* | -0.0568 | 0.0152 | -0.0700 | -0.0814 | 0.1525** |
| | (0.0573) | (0.0537) | (0.0547) | (0.0544) | (0.0539) | (0.0632) |
| N | 1,046 | 1,079 | 1,068 | 1,057 | 1,016 | 1,069 |
| $R^2$ | 0.052 | 0.020 | 0.015 | 0.079 | 0.051 | 0.015 |

## IA.1.3 Trust in financial institutions

To compare our respondents' views on private equity against views on other financial (and other) institutions, in our survey we replicate the Financial Trust Index of Guiso et al. (2013), but add private equity funds and, for comparison, hedge funds into the survey. The results are summarized in Figure IA.2. Private equity is trusted clearly less than the stock market or banks, but roughly as much as the government. Hedge funds and large corporations are trusted even less than private equity.

**Figure IA.2: Trust in financial institutions**

This figure presents the reported level of trust in different institutions, following the format of the Financial Trust Index of Guiso et al. (2013). In Panel A, the scale is from 1 ("I do not trust at all") to 5 ("I trust completely"). Panel B presents the share of respondents that replied 4 or 5, i.e., who had some trust in the institution.

**A. Trust (1-5)**
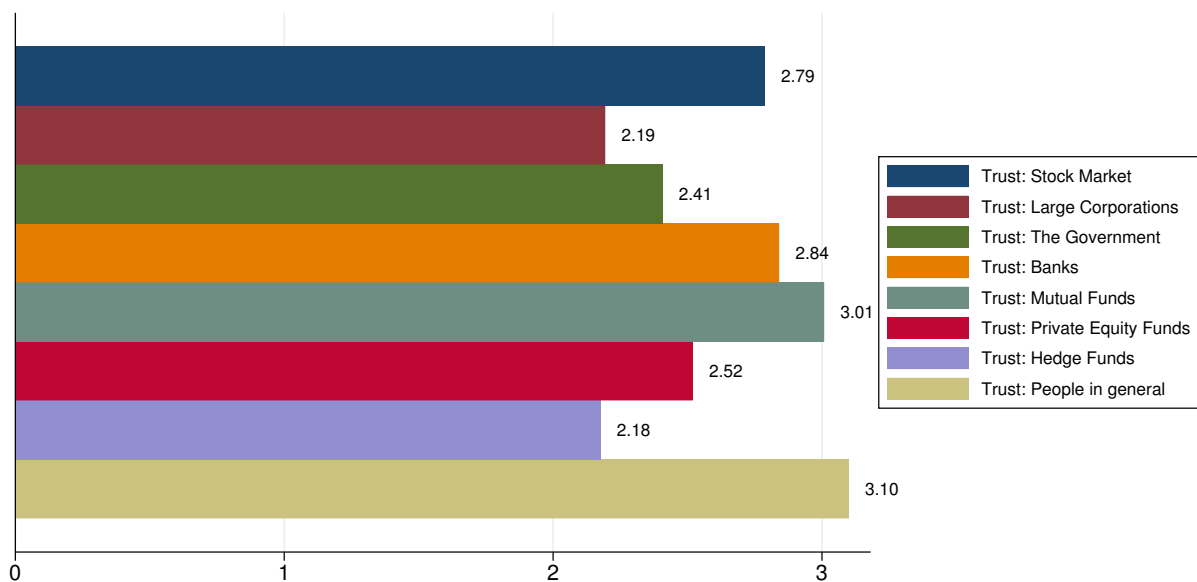


**B. Some trust (dummy)**
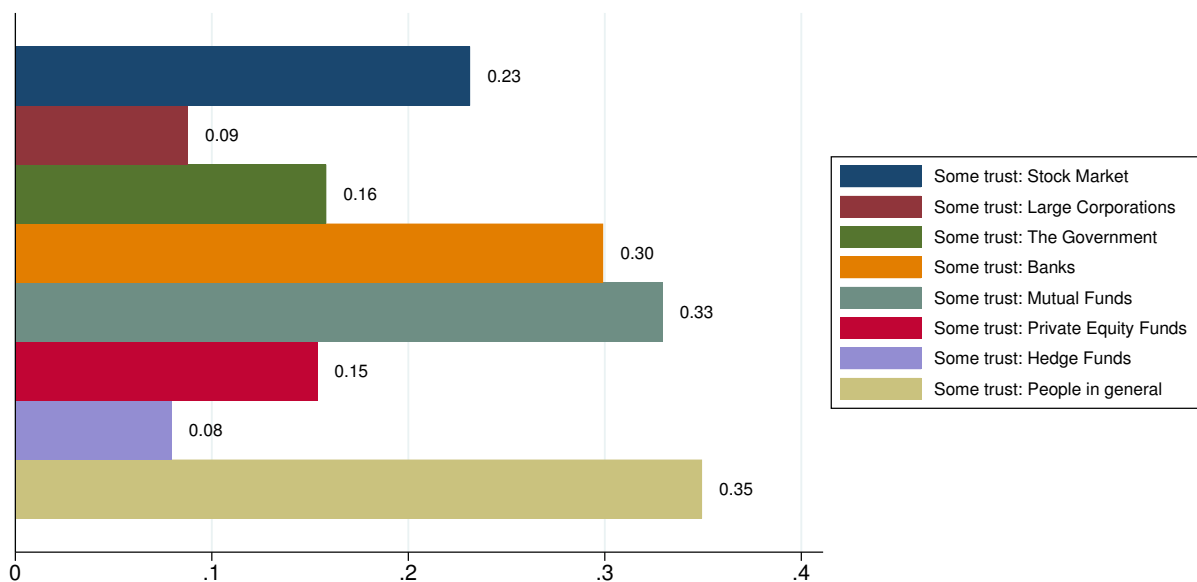
## IA.1.4 Additional summary information on the survey sample

This section presents further summary statistics of our Prolific survey sample. These include the distribution by education (Figure IA.3), profession (Figure IA.4), and income (Figure ??).
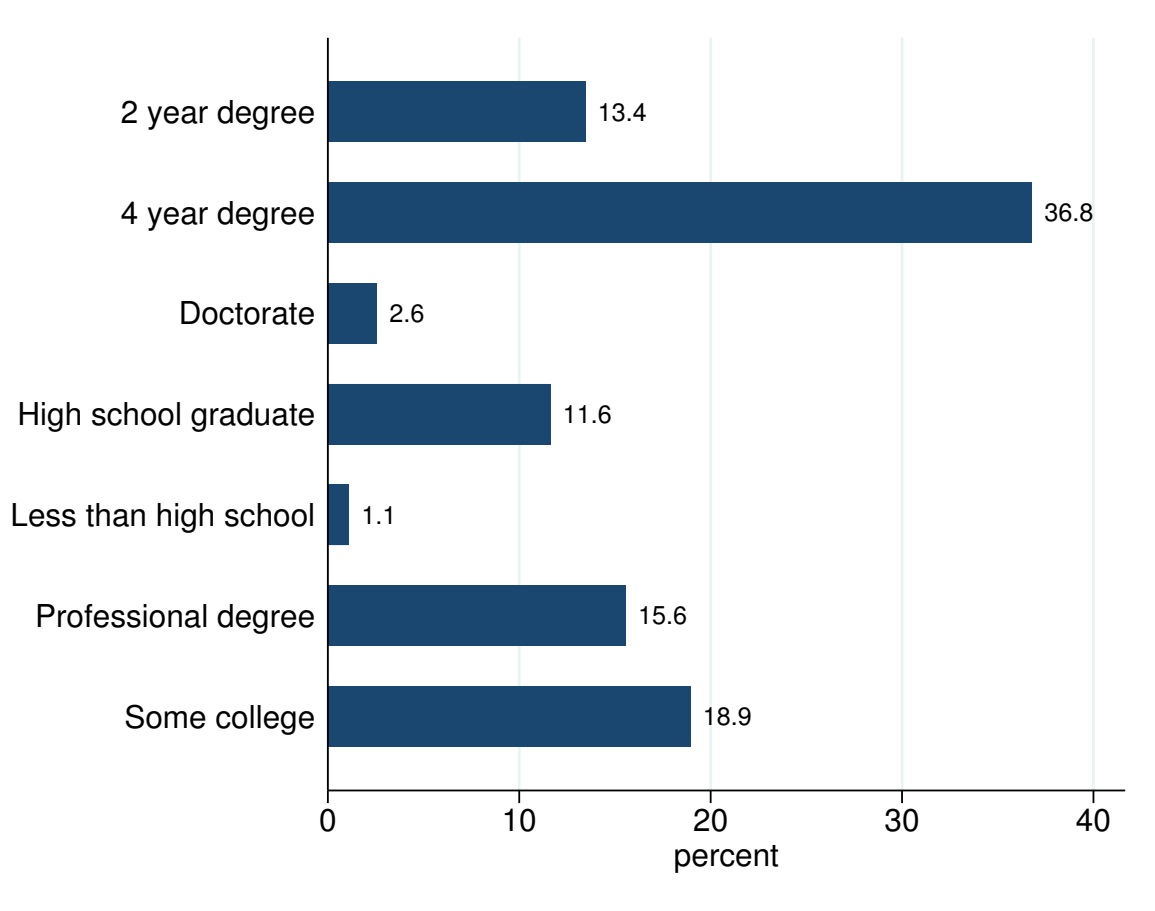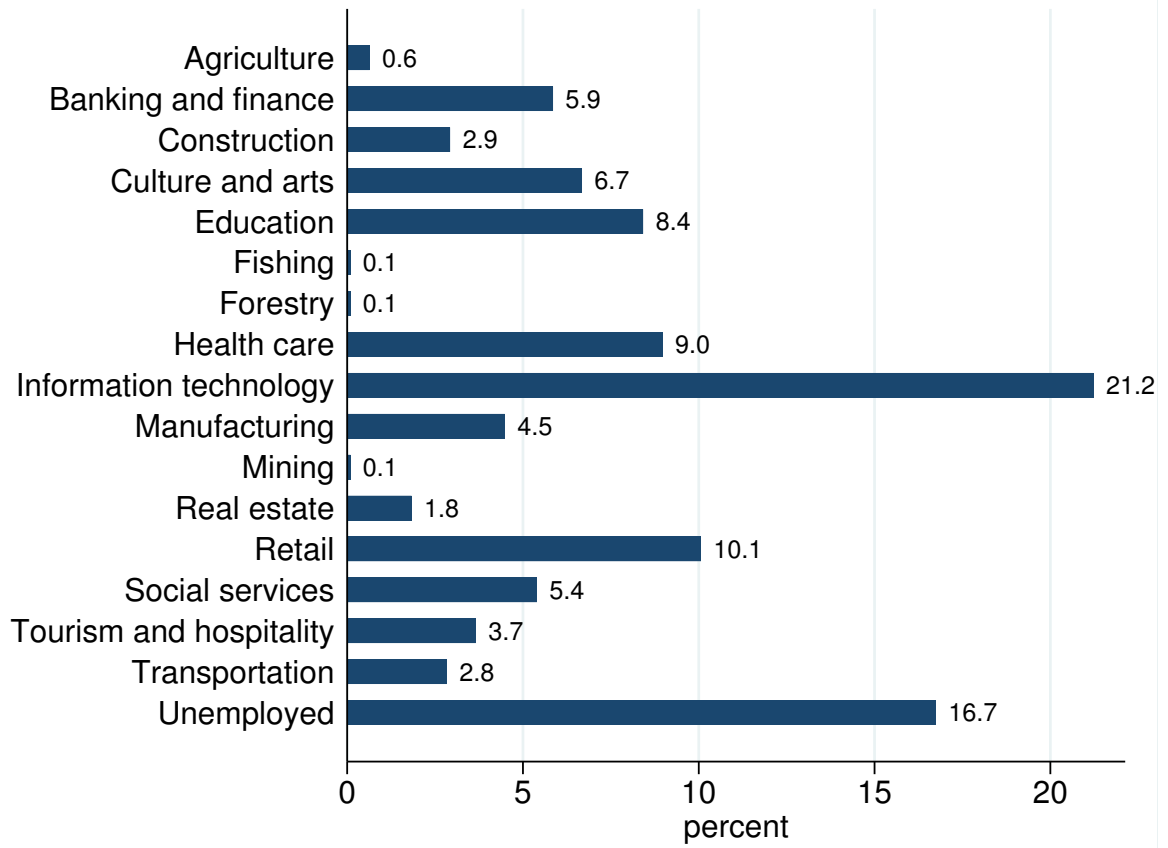
**Figure IA.3: Education**

**Figure IA.4: Profession**

Agriculture — 0.6
Banking and finance — 5.9
Construction — 2.9
Culture and arts — 6.7
Education — 8.4
Fishing — 0.1
Forestry — 0.1
Health care — 9.0
Information technology — 21.2
Manufacturing — 4.5
Mining — 0.1
Real estate — 1.8
Retail — 10.1
Social services — 5.4
Tourism and hospitality — 3.7
Transportation — 2.8
Unemployed — 16.7

percent

**Figure IA.5: Employment**

**Figure IA.6: Income**



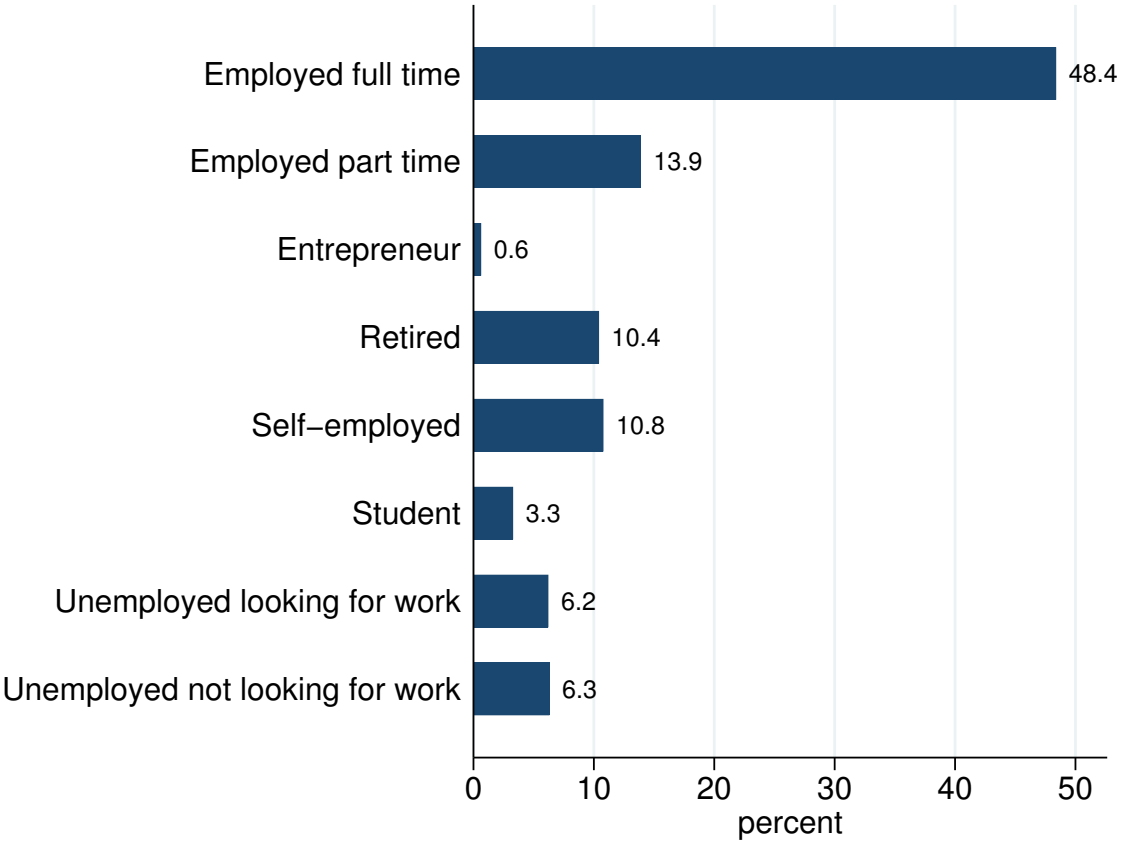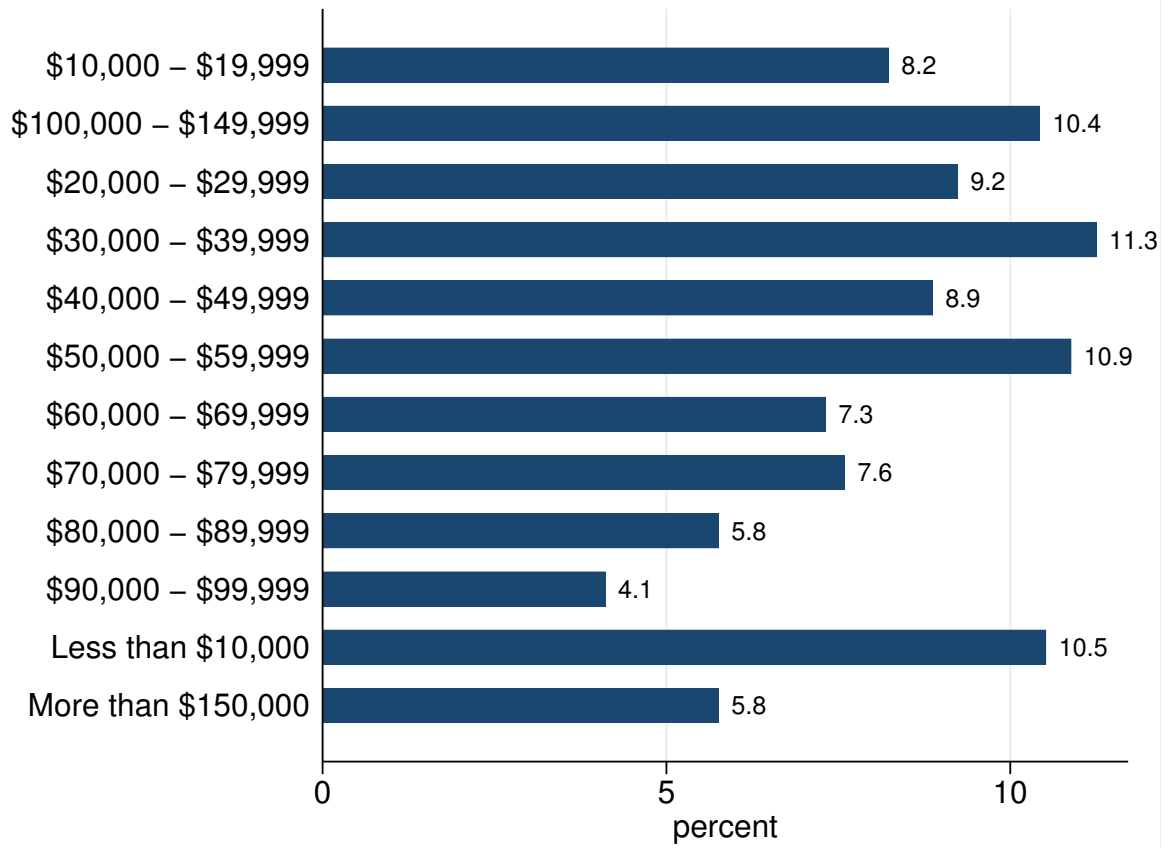| Income | percent |
|---|---|
| $10,000 – $19,999 | 8.2 |
| $100,000 – $149,999 | 10.4 |
| $20,000 – $29,999 | 9.2 |
| $30,000 – $39,999 | 11.3 |
| $40,000 – $49,999 | 8.9 |
| $50,000 – $59,999 | 10.9 |
| $60,000 – $69,999 | 7.3 |
| $70,000 – $79,999 | 7.6 |
| $80,000 – $89,999 | 5.8 |
| $90,000 – $99,999 | 4.1 |
| Less than $10,000 | 10.5 |
| More than $150,000 | 5.8 |

# IA.2 Additional summary statistics

## IA.2.1 Observations by sector

### Table IA.4
### Number of observations by sector

This table shows the number of monthly observations by sector. Panel A includes the full sample used for analyses around deal announcement, where the sample period is from four months before to four months after the announcement date for each deal. Panel B includes the sample used for analyses of announcement versus completion effects. This sample includes only deals where the completion month is after the announcement month, and the sample period is from four months before the announcement date to four months after the completion date for each deal.

**Panel A: Announcement sample**

|  | N | % of sample |
|---|---|---|
| Restaurants | 1,508,383 | 63.6 |
| Arts, Entertainment, and Recreation | 224,990 | 9.5 |
| Retail Trade | 186,740 | 7.9 |
| Other Services | 175,352 | 7.4 |
| Health Care and Social Assistance | 156,991 | 6.6 |
| Professional, Scientific, and Technical Services | 84,520 | 3.6 |
| Manufacturing | 16,722 | 0.7 |
| Other | 16,539 | 0.7 |
| Total | 2,370,237 | 100.0 |

**Panel B: Completion sample**

|  | N | % of sample |
|---|---|---|
| Restaurants | 1,277,667 | 87.2 |
| Retail Trade | 105,028 | 7.2 |
| Other Services | 76,476 | 5.2 |
| Other | 3,568 | 0.2 |
| Health Care and Social Assistance | 3,101 | 0.2 |
| Total | 1,465,840 | 100.0 |

## Table IA.5
## Number of observations by sector – target outlets only

This table shows the number of monthly observations by sector. Panel A includes the full sample used for analyses around deal announcement, where the sample period is from four months before to four months after the announcement date for each deal. Panel B includes the sample used for analyses of announcement versus completion effects. This sample includes only deals where the completion month is after the announcement month, and the sample period is from four months before the announcement date to four months after the completion date for each deal.

**Panel A: Announcement sample**

|  | N | % of sample |
|---|---|---|
| Restaurants | 85,283 | 50.0 |
| Retail Trade | 31,521 | 18.5 |
| Other Services | 15,423 | 9.0 |
| Arts, Entertainment, and Recreation | 10,816 | 6.3 |
| Health Care and Social Assistance | 10,197 | 6.0 |
| Professional, Scientific, and Technical Services | 8,804 | 5.2 |
| Manufacturing | 6,545 | 3.8 |
| Other | 1,921 | 1.1 |
| Total | 170,510 | 100.0 |

**Panel B: Completion sample**

|  | N | % of sample |
|---|---|---|
| Restaurants | 95,629 | 74.2 |
| Retail Trade | 20,678 | 16.0 |
| Other Services | 10,736 | 8.3 |
| Health Care and Social Assistance | 966 | 0.7 |
| Other | 841 | 0.7 |
| Total | 128,850 | 100.0 |

# IA.3    Additional analysis

## IA.3.1    Outlet closures

In this section, we examine how the likelihood of outlet closure develops after the announcement and completion of PE acquisitions. The baseline likelihood of outlet closure is very low, which limits the interpretation of this analysis. Table IA.6 shows the results. The likelihood of outlet closure slightly decreases following the announcement of a PE acquisition. From columns (4)-(6), it seems that this difference comes primarily from the post-completion period. These results suggest that PE owners usually do not close outlets immediately after they acquire them.

## Table IA.6
## Likelihood of outlet closure

The dependent variable is *Closure × 100*, where *Closure* is a dummy taking the value of one if the outlet is closed during the month. In columns 1-3, the sample includes all deals, and the sample period is from four months before to four months after the announcement date for each deal. In columns 4-6, the sample includes only deals where the completion month is after the announcement month, and the sample period is from four months before the announcement date to four months after the completion date for each deal. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

| | Announcement (full) sample | | | Completion sample | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Post × Target | -0.0090 | -0.0155* | -0.0155* | -0.0050 | -0.0093 | -0.0093 |
| | (0.0094) | (0.0093) | (0.0093) | (0.0088) | (0.0102) | (0.0102) |
| Post | 0.0020 | | | -0.0073 | | |
| | (0.0049) | | | (0.0058) | | |
| Post close × Target | | | | -0.0071 | -0.0353** | -0.0353** |
| | | | | (0.0130) | (0.0153) | (0.0153) |
| Post close | | | | 0.0037 | | |
| | | | | (0.0070) | | |
| Deal × Outlet FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Month FE | Yes | No | No | Yes | No | No |
| Deal × NAICS × Month FE | No | Yes | No | No | Yes | No |
| Deal × Zip code × Month FE | No | Yes | No | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | Yes | No | No | Yes |
| N | 2,366,090 | 2,337,742 | 2,337,289 | 1,465,394 | 1,458,659 | 1,458,659 |
| $R^2$ | 0.383 | 0.445 | 0.445 | 0.300 | 0.373 | 0.373 |

## IA.3.2 News coverage around acquisition announcement

When we explain the decline in customer visits by their aversion against private equity, we assume that customers know about the acquisition. However, we cannot observe customer knowledge. We argue that if target firm coverage in the media increases around the acquitision announcement, it is more likely that customers obtain this information. We therefore look at the number of novel and relevant news stories about the target firm around the acquisition announcement. In addition to the number of stories, we also consider their tone. We can only perform this analysis for the subsample of target firms covered by RavenPack data.

To see whether news coverage increases around the acquisition announcement, we measure news coverage of target firms and the sentiment of these news. We use data from RavenPack News Analytics, which include details of each news article mentioning the firm from a large number of sources, including Dow Jones Newswires, Barrons, the Wall Street Journal, and over 22,000 other traditional and social media sites. The data also include measures of structured sentiment, relevance, and novelty. Relevance is reflected in a score between 0 and 100 that indicates how strongly the company relates to the underlying news story, with higher values indicating greater relevance. Novelty is proxied using the ENS similarity gap, which measures the number of days since a similar event was detected for a company. We include only highly relevant (relevance of 100) and novel (ENS similarity gap of at least 90) news articles. We exclude news of the content groups "technical-analysis", "stock-prices", and "order-imbalances", because these types of news are directly reporting the stock market performance of the firm. For each target firm, we then calculate the monthly number of articles and their average composite sentiment score (CSS). We call this sentiment index *News sentiment.*

We show the results in Figure IA.7. From Panel A, we can observe a significant increase in news articles about the target firm during the acquisition month, and the coverage reverts to pre-buyout levels in 1-2 months. Panel B shows that the average tone of news articles

about the target following the buyout announcement appears more negative, although this difference is not statistically significant.

**Figure IA.7: News articles and sentiment (relative to acquisition announcement)**

This figure presents regression analysis of news articles and their sentiment for each target firm around the acquisition by a PE fund. The sample consists of firm-month observations of all target firms in our SafeGraph sample that are also included in RavenPack data. Panel A presents monthly coefficients for *Post* relative to the time of acquisition announcement by a PE fund, from the following regression:

$$ln(News\ articles)_{i,t} = \beta Month\ from\ announcement_{i,t} + \gamma X_{i,t} + \epsilon_{i,t}$$

where $i$ denotes a firm and $t$ a calendar month. *News articles* is the monthly number of distinct news articles in outlet $i$. *Month from announcement* is a set of dummies indicating the time relative to acquisition announcement. $X$ is a vector of controls that includes firms fixed effects, controlling for cross-sectional differences between different firms, and calendar month fixed effects. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by firm. The excluded coefficient is for month -1, so the estimated coefficients are relative to that month. Panel B replaces the outcome variable with *News sentiment*, the monthly average sentiment score based on RavenPack composite sentiment score (CSS).

**Panel A. News articles**



17
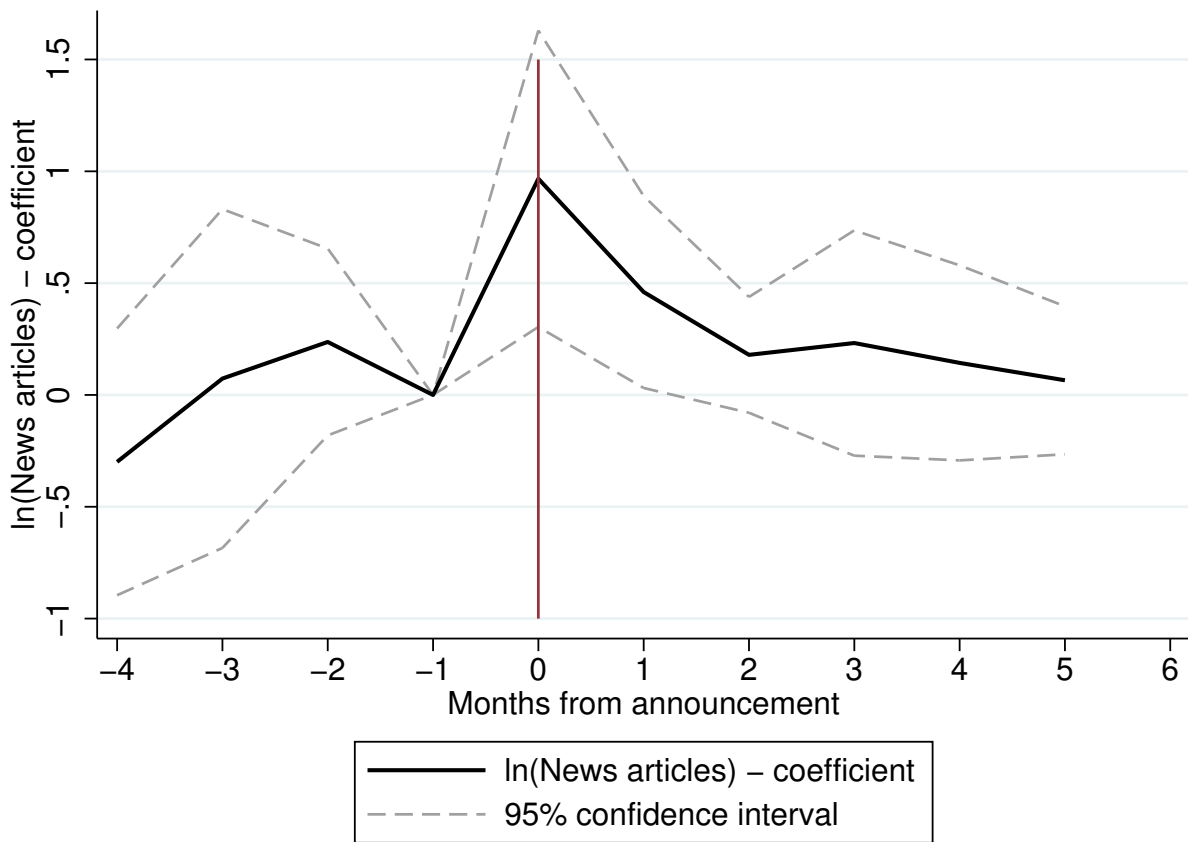
**Panel B. News sentiment**
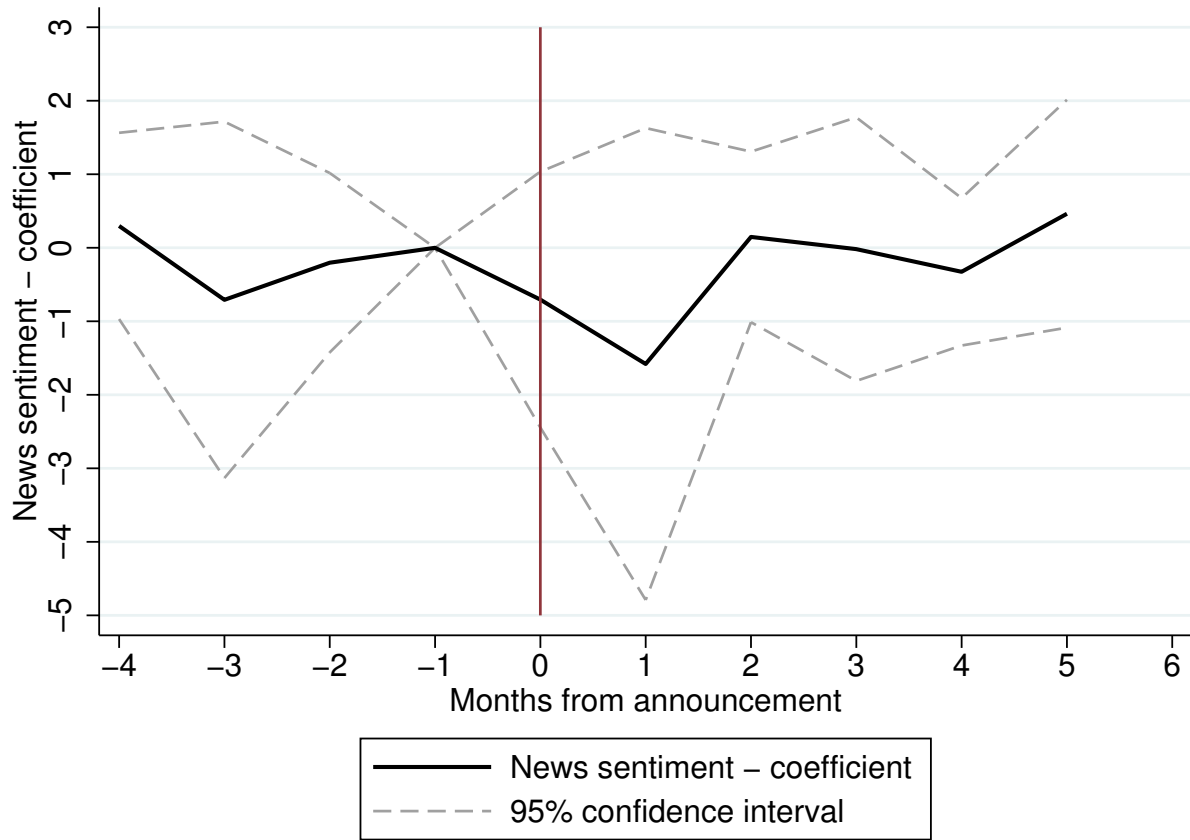
## IA.3.3 Customer reviews – additional analysis

**Figure IA.9: Customer reviews around acquisition announcement (12 months)**

This figure shows the distribution of customer reviews of the target business before and after the announcement of a PE acquisition. For this analysis, we construct a separate sample of PE acquisitions from Preqin and match them to all available Yelp reviews taking place during the period 2005 - 2019. The pre-period is the 12 months prior to announcement and post-period the 12 months following the announcement. Panel A shows all customer reviews for the target business during the event window. Panel B shows only customers who provide reviews for the same target outlet both before and after the deal announcement.

**Panel A: All customers**
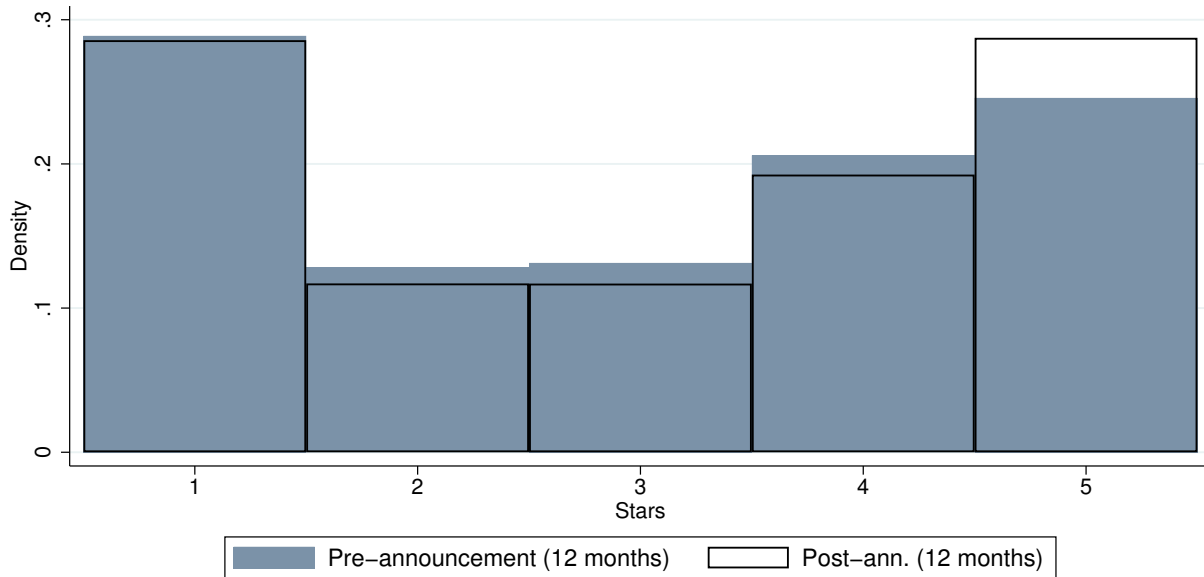


**Panel B: Same customers pre and post**
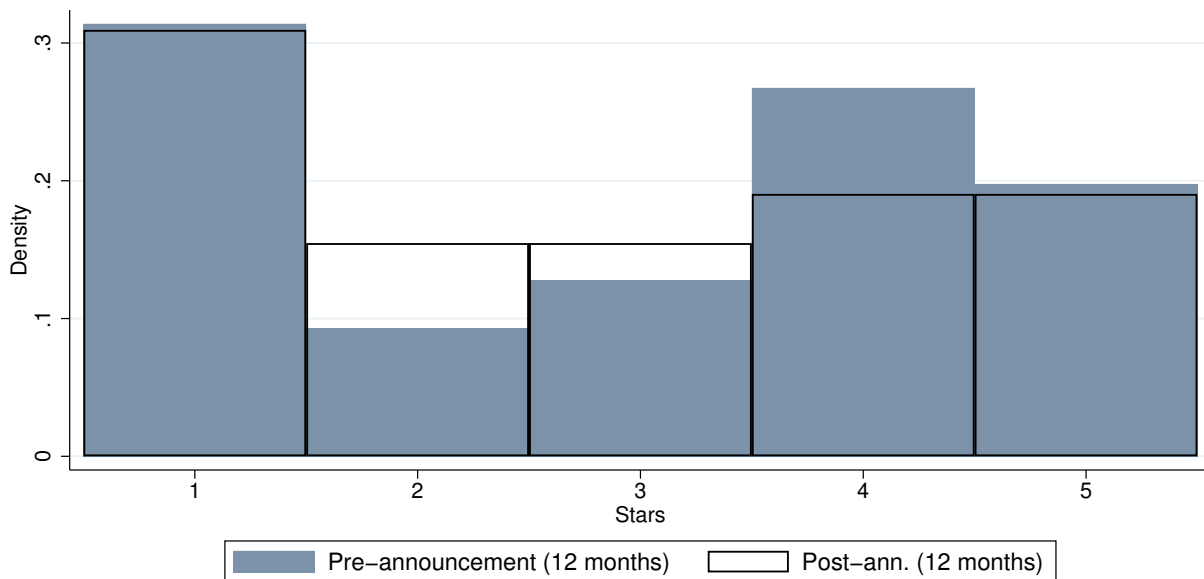
## IA.3.4    Restaurants only

Approximately 64% of the announcement sample and 87% of the completion sample are attributable to restaurants, making it by far the largest sector in our data. The sector composition of the sample is shown in detail in the Internet Appendix, Table IA.5. Hence, in this section, we repeat the baseline analyses around deal announcement and completion, excluding all other sectors from the sample.

The results, shown in Table IA.7, are qualitatively similar to our results using the full sample, but substantially larger in magnitude. This analysis suggests that our findings are to a substantial degree driven by buyouts in the restaurant sector. This is not surprising, as this sector is highly competitive, with customers usually having many alternatives to choose from.

## Table IA.7
## Restaurants only

The sample includes only restaurants acquired by PE funds in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. Panel A shows customer visits around the announcement of the PE acquisition, with sample period from four months before to four months after the announcement date for each deal. Panel B includes only deals where the completion month is after the announcement month, with sample period from four months before the announcement date to four months after the completion date for each deal. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

### Panel A: Customer visits following PE acquisition announcement

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Post × Target | -0.0698*** | -0.0661*** | -0.0651*** | -0.0651*** |
|  | (0.0037) | (0.0030) | (0.0031) | (0.0031) |
| Post | 0.0255*** | -0.0141*** |  |  |
|  | (0.0025) | (0.0022) |  |  |
| Target | 0.5274*** |  |  |  |
|  | (0.0125) |  |  |  |
| Deal × Outlet FE | No | Yes | Yes | Yes |
| Month FE | No | Yes | No | No |
| Deal × NAICS × Month FE | No | No | Yes | No |
| Deal × Zip code × Month FE | No | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | No | Yes |
| N | 1,508,383 | 1,508,070 | 1,506,947 | 1,506,938 |
| $R^2$ | 0.008 | 0.962 | 0.967 | 0.967 |

**Panel B: PE acquisition announcement vs. deal completion**

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Post close × Target | -0.2311*** | 0.0252*** | 0.0230*** | 0.0230*** |
|  | (0.0061) | (0.0027) | (0.0027) | (0.0027) |
| Post × Target | 0.1868*** | -0.0827*** | -0.0767*** | -0.0767*** |
|  | (0.0063) | (0.0032) | (0.0033) | (0.0033) |
| Post close | 0.0693*** | -0.0241*** |  |  |
|  | (0.0036) | (0.0031) |  |  |
| Post | 0.0092*** | -0.0161*** |  |  |
|  | (0.0035) | (0.0026) |  |  |
| Target | 0.5075*** |  |  |  |
|  | (0.0132) |  |  |  |
| Deal × Outlet FE | No | Yes | Yes | Yes |
| Month FE | No | Yes | No | No |
| Deal × NAICS × Month FE | No | No | Yes | No |
| Deal × Zip code × Month FE | No | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | No | Yes |
| N | 1,277,667 | 1,277,502 | 1,276,219 | 1,276,219 |
| $R^2$ | 0.014 | 0.959 | 0.964 | 0.964 |

## IA.3.5 Non-PE acquisitions

In Section 4.8, we present results of a regression analysis for an alternative sample of acquisitions by non-PE acquirers. In this section, we provide additional analysis of the non-PE sample.

Figures IA.10 and IA.11 present plots of monthly regression results of customer visits around the acquisition announcement and completion, respectively. These are consistent with the results shown in Table 11. There is no reduction in customer visits following deal announcement, as seen in our PE buyouts sample. The non-PE targets also do not exhibit similar increase in visits post pompletion as the PE buyout sample does.

A possible concern is that the composition of the non-PE sample is different from the PE buyout sample. As discussed in Sections IA.2.1 and IA.3.4, the majority of the PE buyout sample is attributable to restaurants. This is not the case for the non-PE sample, as shown in IA.8. To make sure that the differences in results are not driven by the sector composition of the samples, we repeat the regression analysis for restaurants only, similar to the analysis in Section IA.3.4.

The results of the non-PE restaurant acquisitions analysis are presented in IA.9. These look very similar to the results of the full non-PE sample, suggesting no reduction in customer visits following the acquisition announcement. They are very different from the restaurants subsample analysis for PE buyouts, where target firms experience significant reductions in customer visits.
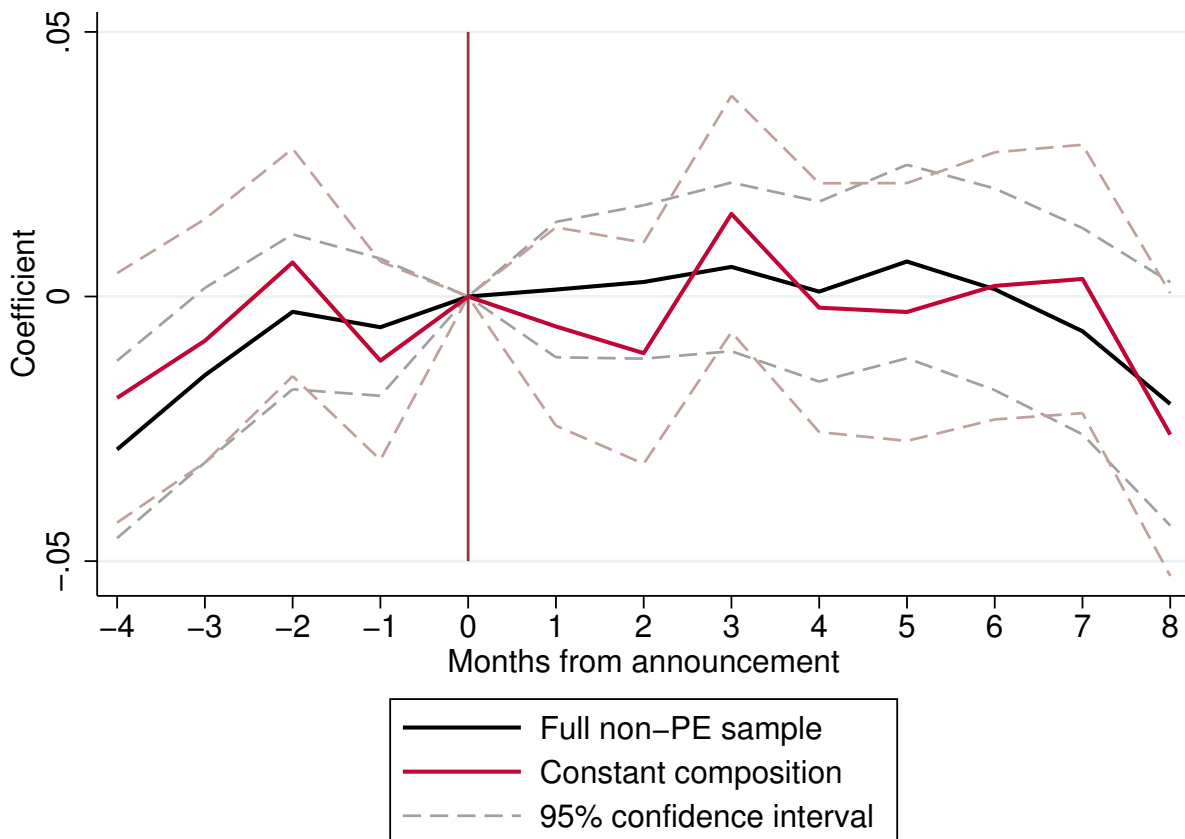
Taken together, these findings suggest that the reductions in customer visits in target companies after the acquisition announcement are specific to private equity buyers and not a general feature of M&A transactions.

**Figure IA.10: Placebo test – non-PE acquisitions (relative to acquisition announcement)**

This chart presents monthly coefficients for *Target* relative to the time of acquisition announcement by a non-PE acquirer, from the following regression:

$$ln(Visits)_{i,t} = \beta Target_{i,j} \times Month\ from\ announcement_{i,t} + \gamma X_{i,j,t} + \epsilon_{i,t}$$

where $i$ denotes an outlet, $j$ denotes an acquisition, and $t$ a calendar month. *Visits* is the monthly number of visits in outlet $i$. *Target* is a dummy taking the value one if the outlet belongs to the target firm. *Month from announcement* is a set of dummies indicating the time relative to acquisition announcement. $X$ is a vector of controls that includes outlet fixed effects, controlling for cross-sectional differences between different outlets, and zip code x NAICS x month fixed effects, controlling for any location-specific variation over time. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by zip code.

## Figure IA.11: Placebo test – non-PE acquisitions (relative to acquisition completion)

This chart presents monthly coefficients for *Target* relative to the time of acquisition completion by a non-PE acquirer, from the following regression:

$$ln(Visits)_{i,t} = \beta Target_{i,j} \times Month\ from\ completion_{i,t} + \gamma X_{i,j,t} + \epsilon_{i,t}$$

where $i$ denotes an outlet, $j$ denotes an acquisition, and $t$ a calendar month. *Visits* is the monthly number of visits in outlet $i$. *Target* is a dummy taking the value one if the outlet belongs to the target firm. *Month from completion* is a set of dummies indicating the time relative to acquisition completion. $X$ is a vector of controls that includes outlet fixed effects, controlling for cross-sectional differences between different outlets, and zip code x NAICS x month fixed effects, controlling for any location-specific variation over time. The ranges indicate 95-% confidence intervals, using heteroscedasticity-consistent standard errors clustered by zip code.
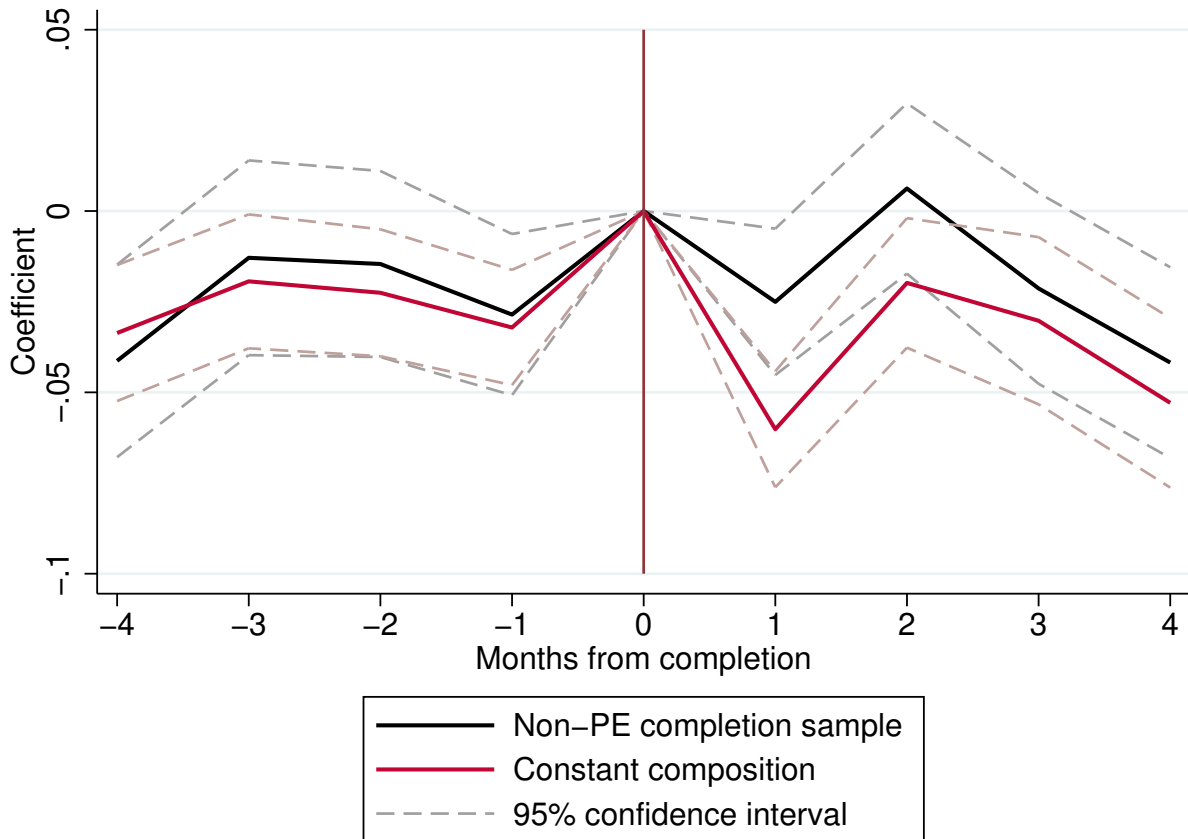
## Table IA.8
### Number of observations by sector – non-PE acquisitions

This table shows the number of monthly observations by sector. Panel A includes the full sample used for analyses around deal announcement, where the sample period is from four months before to four months after the announcement date for each deal. Panel B includes the sample used for analyses of announcement versus completion effects. This sample includes only deals where the completion month is after the announcement month, and the sample period is from four months before the announcement date to four months after the completion date for each deal.

**Panel A: Announcement sample**

|  | N | % of sample |
|---|---|---|
| Finance and Insurance | 179,072 | 45.5 |
| Retail Trade | 118,297 | 30.1 |
| Health Care and Social Assistance | 47,919 | 12.2 |
| Restaurants | 29,006 | 7.4 |
| Arts, Entertainment, and Recreation | 7,698 | 2.0 |
| Other | 5,012 | 1.3 |
| Other Services (except Public Administration) | 4,141 | 1.1 |
| Educational Services | 2,094 | 0.5 |
| Total | 393,239 | 100.0 |

**Panel B: Completion sample**

|  | N | % of sample |
|---|---|---|
| Finance and Insurance | 269,624 | 59.7 |
| Retail Trade | 113,767 | 25.2 |
| Health Care and Social Assistance | 39,290 | 8.7 |
| Restaurants | 22,308 | 4.9 |
| Other | 5,020 | 1.1 |
| Educational Services | 1,275 | 0.3 |
| Total | 451,284 | 100.0 |

**Table IA.9**
**Placebo test – non-PE acquisitions – restaurants only**

The sample includes all outlets of restaurants acquired by non-PE acquirers in the sample period, i.e. deals announced between March 2018 and December 2019, as well as all other firms operating in the same NAICS industry in the same zip code as any of the target outlets. We include a time period of four months before to four months after the acquisition announcement month. The dependent variable is *ln(Visits)*, the natural logarithm of the total number of visits in the outlet during the month. *Post* is a dummy taking the value of one after the acquisition announcement. The sample includes only deals where the completion month is later than the announcement month. Heteroscedasticity-consistent standard errors, clustered by zip code, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

|  | (1) | (2) | (3) |
|---|---|---|---|
| Post × Target | 0.0434 | 0.0155 | 0.0155 |
|  | (0.0285) | (0.0296) | (0.0296) |
| Post | 0.0589*** |  |  |
|  | (0.0188) |  |  |
| Deal × Outlet FE | Yes | Yes | Yes |
| Month FE | Yes | No | No |
| Deal × NAICS × Month FE | No | Yes | No |
| Deal × Zip code × Month FE | No | Yes | No |
| Deal × Zip × NAICS × Month FE | No | No | Yes |
| N | 28,995 | 28,976 | 28,976 |
| $R^2$ | 0.964 | 0.967 | 0.967 |

## IA.3.6 Customer composition

This section presents additional analysis on customer composition around PE acquisitions to complement the analysis shown in Figure 5. Panel A of Table IA.10 presents summary statistics for the sample. Panel B presents regression analysis around deal announcement, and Panel C around announcement versus completion.

### Table IA.10
### Customer composition

The dependent variable Panels B and C is *Overlap*, the share of monthly visitors that overlaps the census block group distribution of the month minus one relative to acquisition announcement. *Post* is a dummy taking the value of one after the acquisition announcement. *Post close* is a dummy taking the value of one after the acquisition completion. In Panel B, we include a time period of four months before to four months after the acquisition announcement month. The sample includes all target outlets. In Panel C, we include a time period of four months before announcement month to four months after the acquisition completion month. The sample includes only deals where the completion month is later than the announcement month. Heteroscedasticity-consistent standard errors, clustered by outlet, are shown in parentheses. Significance levels: * 0.1, ** 0.05, *** 0.01.

**Panel A: Summary statistics**

|           | Mean    | Std     | p25    | p50     | p75     |
|-----------|---------|---------|--------|---------|---------|
| Overlap   | 0.395   | 0.309   | 0.142  | 0.356   | 0.589   |
| N visitors| 263.999 | 301.716 | 48.000 | 176.000 | 375.000 |
| N CBGS    | 46.565  | 47.053  | 11.000 | 36.000  | 65.000  |
| Post      | 0.444   | 0.497   | 0.000  | 0.000   | 1.000   |
| N         | 159,624 |         |        |         |         |

**Panel B: Regression results**

|                   | (1)          | (2)          | (3)          |
|-------------------|--------------|--------------|--------------|
| Post              | -0.0073***   | -0.0060***   | -0.0137***   |
|                   | (0.0006)     | (0.0005)     | (0.0011)     |
| Deal × Outlet FE  | No           | Yes          | Yes          |
| Month FE          | No           | No           | Yes          |
| N                 | 141,697      | 141,091      | 141,091      |
| $R^2$             | 0.000        | 0.879        | 0.880        |

**Panel C: Announcement vs. completion**

|  | (1) | (2) | (3) |
|---|---|---|---|
| Post close | -0.0459*** | -0.0247*** | -0.0656*** |
|  | (0.0013) | (0.0006) | (0.0018) |
| Post | -0.0928*** | -0.1176*** | -0.2907*** |
|  | (0.0012) | (0.0007) | (0.0016) |
| Deal × Outlet FE | No | Yes | Yes |
| Month FE | No | No | Yes |
| N | 125,812 | 125,730 | 125,730 |
| $R^2$ | 0.051 | 0.542 | 0.660 |