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Are Applying for and Receiving Subsidy Worth for Small Enterprises? Evidence from the Government Support Program in Japan^{*}

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Abstract

This paper examines the effects of the Business Sustainable Subsidy (BSS) on small enterprises' productivity. The BSS aims productivity improvement and sustainable development of small enterprises by aiding a part of expenses for their business activities. We use rich firm data which contains the attributes and the accounting information of both applied and non-applied firms and examine the effects of receiving and applying for the subsidies. We employ sharp regression discontinuity design for the effects of receiving and difference in differences design for that of application. Our empirical results show that significant differences in small enterprises' performance improvement were not evident between receiving the subsidies and not. On the other hand, we found that applicant small enterprises perform higher productivity and sales growth than not-applicant firms. We also robustly obtain the positive results of application impacts by difference in differences model with propensity score matching, controlling for preintervention levels and trends in the outcome. Our findings imply that application in itself promotes firms' voluntarily activities to their own business issues through external support, and leads to improve their productivity.

Keywords: subsidy, industrial policy, SME, productivity JEL classification: D04, D24, H25, L50

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1. Introduction

Small- and medium-sized enterprises (SMEs) are essential facets of all economies¹. The capacity of SMEs to innovate in technology and create jobs drives future economic growth and attracts policy interests (Veugelers, 2008; Czarnitzki and Delanote, 2015; Neagu, 2016). In traditional economic theory, however, government intervention such as subsidies are said to distort competitive market. To justify such subsidies, the effect of market development must be higher than the effect of market distortion (Hallberg, 2000). Some empirical research does show a positive effect of subsidies on SMEs than large enterprises (e.g., Bronzini and Iachini (2014) in the Italy; Criscuolo et al. (2019) in the UK). To determine the validity and effectiveness of subsidies for SMEs, we also investigate the effects of a government subsidy program on SMEs.

In Japan, while large businesses have seen a gradual increase in labor productivity since 2008, SMEs remain stagnant². The 2019 White Paper on Small and Medium Enterprises claims that SMEs are marked by a slow growth in investments despite certain progress, such as in increasing profits. The productivity of SMEs needs urgent improvements, so it is the subject of much policy debate.

In 2013, the Ministry of Economy, Trade and Industry (METI) launched a unique program, the *Business Sustainable Subsidy* (BSS), to resolve the productivity issues of small enterprises. Its objectives included an increase in productivity and more sustainable development of small enterprises through partially supporting business expenses. To apply for this subsidy, enterprises are expected to submit their one-year business plan for improving sales and productivity. Applicants can also receive advisory support from institutions collaborating with the program in order to augment their plans. Enterprises apply for subsidies to the Japan Chamber of Commerce and Industry (JCCI) or the Central Federation of Societies of Commerce and Industry (CFSCIJ), depending on the region where they are located, and JCCI and CFSCIJ provide consultation services on business management and sales expansion to the applicants.

In this study, we examine the effects of applying for and receiving the subsidy program on firm performance and productivity. While the literature on the effect of subsidies for SMEs on firms is well established, little attention has been paid to comprehensively explore the effect of both receiving and applying for subsidies on firm productivity across industries. We thus use a large panel data combining the list of all the companies that applied for the BSS with the Tokyo Shoko Research (TSR) data, which contains business information of over 15 million firms in Japan.

We measure the effect of receiving the subsidy in order to investigate the degree to which financial support influences the productivity of small firms. We then analyze the benefits of application, that is, small enterprises can take the advice of external institutions to develop their business plan when applying for subsidy. Thus, the application process itself offers benefits irrespective of whether or not the firm is sanctioned the subsidy. Considering this factor, we test two types of treatment group—*reception* and *application*—in order to evaluate the comprehensive effects of the BSS program. Since the assessment score is the cutoff point to receive the subsidy, we employ a sharp

¹ According to the 2019 White Paper by The Small and Medium Enterprise Agency, the proportion of SMEs was 99.7%, of employees in SMEs was 68.1%, of sales in SMEs was 44.1%, and of value-added of SMEs was 52.9% in 2016 in Japan.

² The Small and Medium Enterprise Agency (2020)

regression discontinuity design to estimate reception. We also conduct a difference in differences (DID) analysis to examine the effect of receiving and applying for the subsidy.

As per our results, there is no significant evidence to show that the subsidy receipients benefitted firm productivity. Interestingly, applicants had higher performance and productivity than non-applicants. These results suggest that applying to small-scale subsidy projects such as the BSS itself has desirable effects for small enterprises than financial support does. We also conducted the same DID analysis for applicants using the subsample of each industry in order to check the heterogeneity of the subsidy effects. We found that applying to subsidies did, in fact, increase productivity, especially in service industries, other than manufacturing and construction.

There are two possible reasons for our results. *First*, the intent to strategize a business plan as well as the support offered by institutions related to the subsidy program during application benefit firm performance. More simply, applying to subsidies is effective per se for small businesses. *Second*, the heterogeneity between applicant and not-applicant small firms affects their respective performance. To examine which of the possibilities is more valid, we employ the sample that excludes firms that received the subsidy, and then analyzed subsidy applications for the same specification of DID. This method helps us estimate the effect of applying for subsidies on firm performance without the receiver effects. Our results are similar to those with the basic DID.

Note that the selection to apply for the BSS is still not well controlled. To address the bias caused by selection of applicant firms, we employ DID with propensity score matching (PSM–DID), thus satisfying the parallel trend through a robustness check. We first make the assumption stricter than the simple parallel trend. Then, we match the sample of the treatment and control groups wherein the levels and trends of the pretreatment outcomes is close. Our result confirms our initial finding that applying for the BSS benefits firm performance and productivity. This relationship is especially strong for the service industry, as we found with the basic DID.

These results imply that the planning and external support likely influence the effectiveness of applying for the program. SMEs often tend to demand support from third parties because they lack efficient resources. Advisory support helps firms break away from business troubles and promotes further growth through imparting knowledge (Bennett and Robson, 2000). Planning strategies, as well, can help SMEs systematically achieve tasks and, thus, gain a competitive edge (Hewlett, 1999; O'Regan and Ghobadian, 2002).

This paper will contribute to the literature in the two points. *First*, we consider the effects of a government subsidy program on the productivity of small-sized firms, an aspect poorly studied in the literature and with mixed results. Cin et al. (2016) found that receiving R&D subsidies benefits the value-added productivity of manufacturing SMEs in Korea. However, Bernini and Pellegrini (2011) clarified that the state aid policy *Law 488/1992* to manufacturing and service sectors harms labor productivity, although their data precludes small firms owing to lack of SME budgetary data. On the other hand, small firms have potential to achieve high growth through subsidies. To overcome the gap in the literature, we focus on the BSS and clarify the effect of a subsidy on the productivity of small enterprises.

Research in Japan on the relationship between subsidy and firm productivity is even more scarce. Most analysis is focused on R&D outcomes (Nishimura and Okamuro, 2011a, b; Okubo et al., 2016). For example, Nishimura and Okamuro (2011a) suggest that

the industrial cluster policy alone does not affect the firm's R&D activities, although they do not directly measure total firm productivity, because they use patents as outcome. Most other subsidy programs in Japan are also focused on R&D projects aimed incubating and expanding technical innovation made by SMEs³. Unlike these, the BSS is designed to improve the productivity of small enterprise and expand their sales, besides R&D. Therefore, we examine whether the effectivity of such a subsidy. Our results on how subsidy programs benefit firm productivity will contribute to policy-making and design.

Second, our measurement of the effect of "applying" to a subsidy is a novel approach. In the literature, Suzuki (2019) did study the effect of applying to the Support Industry Program introduced by METI in 2009. This compound government program incorporates multiple policy measures to support R&D of manufacturing SMEs. The program is similar to the BSS—for instance, applicants can receive advisory support to commercialize their R&D innovations. Suzuki terms this *soft support* and further showed its positive effect on firm sales and technological improvement. However, the effect of the subsidy itself was limited.

We extend Suzuki's (2019) study with a more rigorous setting. Following Ryan et al. (2019), we employed PSM–DID using similar preintervention levels and trends for each outcome in the matching stage. This way, we could rigorously show the effects by controlling any conceivable selection bias. We expanded our analysis by examining the subsidy effects in not only manufacturing, but also construction and service, allowing us to reveal the overall tendency of the subsidy effect and its heterogeneity by industry.

The remaining paper is organized as follows. Section 2 summarizes the BSS program and status of subsidy policies in Japan. Section 3 presents the data. Section 4 explains the regression discontinuity, DID, and empirical strategies. Section 5 presents the results. Section 6 discusses the results and presents the robustness check. Section 7 concludes.

2. Background

METI established the BSS in 2013 to support small-sized enterprises in improving their productivity and sustainable development by partially supporting expenses for business activities such as expanding sales channels. The amount of subsidy is within two-thirds of the expense, but \$500,000 at most. To qualify for the subsidy, firms must first submit a viable management plan.

Two organizations manage the subsidy and promote small businesses through activities such as advice, guidance, and loan placement: JCCI and CFSCIJ. They differ in their geographical jurisdiction⁴: The JCCI manages city-level enterprises, while the CFSCIJ manages town- and village-level ones, although there is a significant overlap roles and responsibilities toward enterprises. Overall, any enterprise seeking a subsidy should be small-sized and located in Japan. The definition of "small" varies by industry. In commerce and service, but excluding accommodation and entertainment businesses, a small enterprise is one with fewer than five permanent employees. In the accommodation

³ Motohashi (2002) and Inoue and Yamaguchi (2017) analyzed the effects of the Small Business Innovation Research project.

⁴ Other than jurisdiction, there are other differences between the two organizations: For example, JCCI's operation falls under The Small and Medium Enterprise Agency, whereas CFSCIJ operates under Economic and Industrial Policy Bureau, although both ultimately are part of METI.

and entertainment industry, this number is 20 and fewer, similar to other industries such as manufacturing.

Any enterprise needs to also satisfy following conditions for eligibility: *First*, the enterprise must have a concrete management plan for developing productivity and work efficiency that leads to an increase in sales within 1 year after completing the business plan. *Second*, there should be no overlap with other government assistant projects. *Finally*, an enterprise seeking a subsidy from JCCI (CFSCIJ) should be located and operated in the jurisdiction of JCCI (CFSCIJ).

SMEs are offered different opportunities in each fiscal year. For example, METI recruited applicants on February and May in FY2013 and March, May, and July in FY2014. Firms can apply multiple times under the program; if they fail in the first or second time in a year, they can reapply for a later plan. This opens numerous opportunities for SMEs to update and upgrade their business plans in order to receive the subsidy.

Despite the importance of the BSS, few studies have explored this program, although other subsidies for SMEs have been the subject of debate. Nishimura and Okamuro (2011b), for example, examined the effects of subsidies through the industrial cluster policy implemented by METI. This project started in 2001 to improve national competitiveness by way of an *industrial cluster* that included local SMEs, venture capitals, and research institutions. The project focuses on direct support for R&D through subsidies and indirect support through networking. Nishimura and Okamuro evaluated the project using original questionnaire data. Their estimation results confirm the project's ability to expand networks, but the effect of direct R&D support on firm performance was weak. The finding that the industrial cluster policy benefits networking was taken forward by Okubo et al. (2016), who focused on firm-level transaction networking (Nishimura and Okamuro [2011b] evaluated only inter-firm networking). They too confirm that firms part of the project expanded their transaction network faster than non-participants. However, Nishimura and Okamuro's (2011b) analysis was based on two-period original survey data, before and after the program. Their estimates may not capture detailed serial tendency. We especially take caution with their survey results because companies that receive grants tend to be more cooperative in surveys, which may lead to overestimates of the program's effectiveness (Criscuolo et al., 2019).

Let us now consider the Small Business Innovation Research (SBIR). The program was initiated by METI in 1999 to support SMEs. At the time of its inception, Japan was sinking under a long-time recession triggered by the bursting of the asset price bubble economy. The Japanese government, inspired by the U.S. SBIR policy, launched this program to stimulate its economy through high-tech small-sized firms. Using longitudinal data from the Manufacturing Census, Motohashi (2002) showed that the program helped increase sales growth. Inoue and Yamaguchi (2017) disagree, and find no statistical significance for a positive effect on firm performance.

3. Data

We use the BSS applicant lists of both JCCI and CFSCIJ in FY2013 and FY2014 to identify applicant firm name and information on whether they received a subsidy. These lists also contain basic attribute information on the firms, such as address, postcode, telephone number, and representative name. The JCCI list stores all such basic information, while the CFSCIJ lacks the postcode and telephone number data. This lack of data could restrict us from building merged data. We explain below.

To connect serial outcome information of firms to the lists for our analysis, we merged the firm data of 2007 to 2016, obtained from TSR. This database includes not only basic information (as above), but also serial accounting and attribute information, such as sales and the number of employees. It also includes the two-digit industry classification, as stipulated by the Japan Standard Industrial Classification. During the merging process, we need to match the two data sets by combining multiple information points on firm attributes, since there is no common identification number stored in both the lists and TSR data. This matching process is as follows: First, we merge each list dataset by the period of application in each fiscal year to the TSR data using firm name and postcode (see section 2 for yearly offerings under the BSS). Second, we merge the samples that have not been matched previously to the TSR data using the firm name and address (the first six letters). Third, using the same process, but with firm name and telephone number, we merged these samples. Finally, we merged the remaining unmatched samples using the telephone and postcode data. To make the fiscal year data set for FY2013 and FY2014, we accumulated the dataset of each application time in the same fiscal year. Firms that applied more than once in each fiscal year are counted as one application.

Since the TSR database records approximately 1.6 million companies in Japan, including large ones, we had to limit the sample to only small-sized enterprises that were eligible to apply for the BSS. We omitted enterprises with more than five permanent employees in commerce and service industries, but excluding accommodation and entertainment businesses. We also excluded companies in other industries with 20 or more permanent employees. The final matching rate is about 33%.

There are several reasons why a certain portion of firms were not matched. *First*, as mentioned above, there are no common identification numbers between the TSR data and the BSS applicant lists. We had to merge both using somewhat inconsistent firm information on name, address, phone number, and postcode. Some observations were not matched because of orthographic variants between the TSR data and the list. *Second*, we cannot use the data of firms not registered in the TSR database. This case was especially typical for sole proprietors, which are not registered as corporations. Thus, the matched firms tend to be larger in number of employees and capital than the non-matching firms. *Third*, data from CFSCIJ does not often include firm address and phone number, which limits merge operation.

As described earlier, METI offers subsidies several times a year. There were specifically two offering periods (February and May) in 2013 and three periods (March, May and July) in 2014. There is no limit to how many times a firm can apply in a year in order to qualify once. Firms apply to different institutions—JCCI or CFSCIJ—depending on their location. We analyze the data for each institution separately, and then aggregate these to two datasets.

Table 1 shows the descriptive statistics of the basic variables of all small firms. These data are merged from the JCCI and CFSCIJ; the datasets aggregate the information of all periods in order to understand the general tendency for all financial years. Comparing the data for application and receiving the subsidy in each financial year shows that both rates are larger in FY2014 than FY2013. The application rate in FY2013 is 0.5%, while 1.0% in FY2014. The rate of receiving the subsidy is 49.7% in FY2013, and it grows to 70.8% in FY2014. The number of firms that applied for the BSS in FY2014

grew to almost double the number in FY2013, and the number of firms that received the subsidy in FY2014 was about 2.78 times higher than the previous year⁵.

[Table 1]

Table 2 describes more detailed information: The dataset is divided into groups, "received-or-not" and "applied-or-not" for each fiscal year. Columns (1) and (2) compare the firms that received and did not receive the subsidy. We found few differences between them; on the contrary, the outcome variables, such as sales and productivity, for the firms that received the subsidy are unlikely to be larger than those for the firm that did not receive the subsidy. These trends can be seen in "applied-or-not" case in columns (3) and (4). This is a simple comparison between the treatment and the control group, and does not consider the post-treatment effects. Therefore, we empirically examine the effects of receiving and applying for the BSS with econometric inference.

[Table 2]

4. Empirical Analysis

4.1 Framework for Regression Discontinuity Analysis

In unveiling the effect of the BSS on firm performance, we encountered a methodological challenge: firms whose higher assessment score is high enough to qualify them for subsidy may differ systematically from firms with a score too low to obtain the subsidy. If the outcome is affected by different characteristics of the two firm types, then a simple comparison of "adoption" versus "rejection" would be misleading. In other words, a naïve comparison of treated and control firms, because of the systematic difference in their characteristics, may lead to incorrect inferences about the effect of obtaining subsidy.

The regression discontinuity design can be used in cases such as these to isolate a treatment effect of interest from all other systematic differences between the treated and control groups. Under appropriate assumptions, a comparison of firms where the subsidy is barely received versus firms where the subsidy is barely rejected will reveal the causal (local) effect of subsidization on firm performance. If a judgement cannot systematically manipulate the assessment score, observations just above and just below the cutoff will tend to be comparable in terms of all characteristics, with the exception of the firm that obtained the subsidy.

The framework of the BSS is satisfied with the canonical sharp regression discontinuity setup that has the three features: (i) the score is continuously distributed and has only one dimension, (ii) there is only one cutoff, and (iii) compliance with the treatment assignment is perfect. To be more specific, all applicant firms receive an assessment score, and a treatment is rigorously assigned to those firms whose score is above the cutoff. When the assessment score exceeds the cutoff score, the treatment firms receive the subsidy, or do not receive the subsidy otherwise.

As mentioned in section 2, there are two offerings in 2013 and three in 2014. The cutoff that determines the subsidization is different for each application time and implementing organization, namely, JCCI or CFSCIJ. We estimate 10 equations using the data of applicant firms in each offering (twice in 2013 and thrice in 2014) under each implementing organization.

Since subsidized firms are expected to improve productivity within a few years, the outcome variables (Y) are management indicators, particularly on the change of sales,

⁵ This number was derived as follows: (158,930 * 0.708)/(81,510 * 0.497) = 2.78

number of employees, and sales per employee one-three years after the year of subsidization. The running variable (X) is based on the assessment score. When the assessment score exceeds the cutoff score (c), such a firm is assigned to the treatment group (T) and receives the subsidy.

Our dataset also contains several predetermined covariates that we use to investigate the plausibility of the regression discontinuity design, and to illustrate the covariate-adjusted estimation methods. The covariates that we include are the TSR score, industry group indicator, and number of employees in the base year⁶.

Appendix Table A1 presents the descriptive statistics for the three regression discontinuity variables (Y, X, and T), and the firm-level predetermined covariates. While for the outcome of interests (Y) and predetermined covariates the variability of the mean value for each application is not too large, the subsidy received rate (T) varies greatly among the applicant organizations and application times. The subsidy received rate ranges from 0.950 (third offering in 2013 under CFSCIJ) to 0.235 (second offering in 2013 under JCCI). This explains why we analyze the effects of the subsidy separately for each organization and each time of application. The overall subsidy-received rate for 2013 and 2014 are 48.9% and 59.0%, respectively, calculated using the TSR matched sample. These sample subsidy-received rates are not very different from those of the population, implying that the sample used in the analysis correctly reflects the treatment decision of the population.

Before moving to the regression discontinuity results, we present two standard validity checks. *First*, we examine whether the density of the score variable—the assessment score—is continuous at the cutoff. The null hypothesis is that there is no manipulation of the density at the cutoff. Appendix Figure A1 illustrates a graphical representation of the continuity in the density test approach, exhibiting the actual density estimate with the shaded 95% confidence intervals. As the figure shows, all density estimates for the treated and control groups at the cutoff (the two intercepts in the figure) are quite close each to other, and the confidence intervals (shaded areas) overlap. This result implies that there is no statistical evidence of manipulation at the cutoff; it is evidence supporting the validity of the regression discontinuity design.

Second, we inspect the control variables, used in later regressions, at the cutoff. Except for their treatment status, firms just above and just below the cutoff should be similar in all variables that could not have been affected by the treatment (Cattaneo et al. 2019). To implement this test, we use variables measured in the year prior to the base year, and test whether the predetermined covariates are continuous at the cutoff. To test the continuity at the cutoff, the statistical analysis must be conducted separately for each covariate by choosing a different optimal bandwidth for each covariate analyzed. Then, we estimate a local linear regression discontinuity effect with triangular kernel weights and common mean square error-optimal bandwidth. The results are presented in Appendix Table A2. The point estimate is not significant, except for some previous year's TSR score variables. We find no evidence that, at the cutoff, the treated and control firms differ systematically in predetermined covariates.

4.1.1 Results

⁶ The TSR score is a credit score for a company measured by the TSR; it is different from the assessment score of a subsidized project.

Table 3 presents the regression discontinuity results for three outcomes in JCCI: sales growth rate, change in the number of employees, and sales growth rate per capita. As mentioned above, the cutoff that determines the subsidization is different for each application time. We thus analyze the effect of the subsidy separately for each time of application (twice in 2013 and thrice in 2014). For each application, the change from the base year to the evaluation year is measured as the outcome: For FY2013 applications, for example, we report the change rate of sales for 2012–2013, 2012–2014, and 2012–2015, using 2012 as the base year. We estimate a local linear regression discontinuity effect with triangular kernel weights and common mean square error-optimal bandwidth. All estimations include controls for the TSR score, industry group indicator, and number of employees in the base year.

[Table 3]

All results in Table 3 are statistically insignificant. We cannot confirm the positive or negative significant effects for every outcome 1-3 years after the base year. Table 4, which estimates for CFSCIJ in the regression discontinuity specifications, shows almost the same results as the analysis of JCCI. Overall, the regression discontinuity results reveal that, even 1-3 years after the base year, the subsidy had not led to a significant improvement in firm outcomes.

[Table 4]

4.2 Framework for Difference in Differences Analysis

For exploiting the effect of the BSS, we also employ DID analysis using large panel data. In the DID estimation, we compare the extent of firm performance and productivity through the subsidy program before and after treatment and between the treatment and control groups. We specifically examine the following two points: *First*, we check the robustness of the results derived from the regression discontinuity analysis. We estimate the effects of receiving subsidies as treatment effects again, but with a different method. *Second*, we estimate the case wherein all applied small firms are part of the treatment group and not-applied ones are in the control group. This allows us to examine the effect of applying the program itself. The regression discontinuity analysis cannot be employed to the application analysis, since there exists no cutoff points when applying the program. Thus, we employ the DID method.

For specification, the estimation equation is as follows;

$$Y_{it} = \alpha + \delta(Treat_i \cdot d_t) + \gamma Treat_i + \theta d_t + \lambda_t + \tau_s + \mathbf{X}'_{it}\beta + \varepsilon_{it},$$

where *i* and *t* denote firm and year, respectively. $Treat_i$ is a dummy variable that equals one for the treatment group defined above, d_t is a dummy variable that equals one when time is the post period of treatment, λ_t is a year dummy variable, τ_s is an industry-fixed effect, X'_{it} represents transposed matrix of control variables, and ε_{it} is disturbance term. We induce the treatment effects by estimating the coefficient δ in this equation.

In terms of the post-period dummy variable, d_t , since the effects can be delayed further, we define a post period as one year after receiving or applying for the subsidy. This criteria is in accordance with the request of the BSS program that firms are expected to improve sales performance until the end of the following year, when the subsidy is received. Under the assumption that the treatment effects will continue for a while, we also regress the one-lagged post-period model:

$$Y_{it} = \alpha + \delta(Treat_i \cdot d_{t-1}) + \gamma Treat_i + \theta d_{t-1} + \lambda_t + \tau_s + X'_{it}\beta + \varepsilon_{it}.$$

The control variables we use in X'_{it} are as follows: a CEO male dummy variable, number of plants, number of establishments, and the TSR score. The TSR score is the reputation index that the TSR employs to comprehensively assess each enterprise based on four dimensions: managerial ability, potential growth, potential stability, and transparency of information. This score is represented as a real number ranging from 0 to 100.

We measure outcomes Y_{it} from the three viewpoints: sales, number of employees and sales per capita. Sales per capita is interpreted as the enterprise's labor productivity. All of them are logarithmic.

In terms of sample set, differing from the regression discontinuity analysis, we merge each stage in a particular year to constitute a sufficient sample size for accurate estimation. We use the datasets including data of all stages in each of the three years: JCCI data, CFSCIJ data, and merged data.

Similar to the regression discontinuity analysis, we validate the method. The DID analysis requires that we satisfy parallel trends, and show that values before the treated periods form the same tendency between the treatment and control groups. We thus estimate the following model for checking:

 $Y_{it} = \alpha + \delta(Treat_i \cdot d_t) + \gamma Treat_i + \theta d_t + \lambda_t * Treat_i + \lambda_t + \tau_s + X'_{it}\beta + \varepsilon_{it}$, where $\lambda_t * Treat_i$, the additional term in the basic DID model, refers to the interaction term of the treatment dummy with year dummy, where the standard is the year when firms applied for or received the BSS. We can assume parallel trends hold if the interaction dummies before the treatment year are not statistically significant in the comparison of the standard.

Appendix Table A3 and A4 provide the estimation results of the interaction model with respect to receiving and applying for the subsidy, respectively. The difference among the interaction terms before the treatment period does not appear when we control the other variables. Particularly, there are no significant interaction terms for the pretreatment for receiving the subsidy. In the estimation of the interaction term for application, some significant coefficients emerge as we move back in time from the intervention period. In the estimation of the combined sample, the coefficients from the two periods before the treatment at the earliest are significantly negative. These results imply partial satisfaction of the parallel trend; however, some pretreatment interaction terms are still significantly negative. We discuss these results further in section 6.

4.2.1 Results

Table 5 shows the estimates of the subsidy when the treatment group includes firms that received it. Columns (1) to (3) show the base estimates of each outcome of JCCI in 2013. [Table 5]

We find that the absolute values of all coefficients are close to zero and insignificant. Receiving the subsidy is unlikely to be correlated with the firm's outcomes in the period. The columns (4) to (6) refer to the case of the lagged interaction terms as the variable of interest from the same dataset. The results are similar to the earlier case; the coefficients are positive but insignificant. Columns (7) to (12) include the JCCI sample, but for 2014. All interest estimates are insignificant. We observe insignificance effects for the case of the lagged variable as well. That is, the effectiveness of receiving the subsidy is unclear even under the assumption that the effects appear after some time. The same tendency is found in the results of the CFSCIJ columns, (13) to (24), and the results of the combined

JCCI and CFSCIJ datasets in columns (25) to (36). In the other words, both base and lagged estimates show insignificant coefficients in almost all outcomes. One exception is the per capita sales in FY2014 from the JCCI dataset in column (9). This coefficient is positive and significant at the 10% level. One common tendency through all estimates is that the coefficient for sales per capita is positive but not significant.

To consistently compare the results with the regression discontinuity case, we estimate the same specification using the sample from the regression discontinuity analysis. The result, described in Table A5, reveals that all coefficients of the treatment effect are insignificant as well in the regression discontinuity analysis. There is still no proof that receiving the subsidy increases firm productivity.

In Table 6, the results for the case of subsidy application are different. *First*, in contrast to the reception cases in which we found no significant effects, the results show significance for key coefficients. In the case of JCCI in 2013 (columns [1–6]), employment growth has a significantly negative relationship with treatment, and sales per capita is positive and significant at the 1% level. For sales, significantly positive correlation appears in the lagged model. A similar tendency is seen in 2014 (columns [7–12]). For the CFSCIJ (columns [1–24], the results are slightly different from the JCCI case, but we still observe a positive effect on some outcomes. Specifically, the interaction variable is statistically significant and positive with respect to both sales and per-capita sales in both the base and lagged models. However, the treatment variable is insignificant for the number of employees.

For the merged datasets for 2013 (columns [25–36]), we derive the relationship of significance between the treatment variable and the outcomes; for almost all outcomes except sales in the lagged model for 2014, the coefficients are statistically significant. Sales growth and per-capita sales are positively associated with application, and employee growth is negatively associated with both the base and lagged models.

Specifically, the sales coefficient of the full data for 2013 is about 0.04; employee coefficient is -0.02 for both models. In reality, the coefficient of sales per capita, namely, labor productivity, is significantly positive, at 0.06. The same tendency is shown in the result of the 2014 full datasets, although the coefficients of sales per capita are slightly lower than the 2013 data.

We obtain consistent results for the estimates of the control variables in all models for both receiving and applying for subsidy. *First*, the dummy variable for CEO gender (male) is significantly and positively correlated at the 1% level for any outcome. The coefficients of plants and establishment were expected to have similar effects, but the sign of sales per capita was the opposite. The coefficient of plants is negative, while that of establishment is positive. The score variable shows positive effects on every outcome.

Finally, to examine the heterogeneity of the subsidy application effects by industry, we divide the sample into three industries: construction, manufacturing, and service⁷. Table 7 represents the results of the construction industry. For the JCCI case (columns [1–12]), the lagged estimation model in 2013 shows that the treatment is positively correlated with productivity at the 5% level. The results of the CFSCIJ case

⁷ Service industries comprising infrastructure, Telecommunications, logistics, wholesales, finance, real estate, academic, accommodation, entertainment, education, medical, compound services, other services, and public. The ratios of construction, manufacturing, and services are 35.0%, 11.4%, and 52.5% respectively. These cover 98.9% of all industries.

reveal the positive coefficient of treatment on productivity at the 5% level in the basic model of 2013. These positive tendencies are also seen in the full sample of models for 2013. However, there are no significant coefficients in any case of 2014. The manufacturing industry described in Table 8 also shows limited effects. The coefficient of treatment appears to be significantly positive in only the base model of the JCCI sample in 2014. Positively significant correlations are shown in the full sample, but the significance level is 10% and below.

[Table 7 and 8]

In contrast, applying for the BSS significantly affects firm productivity in service industries. Table 9 reveals that the treatment has significantly positive coefficients on labor productivity in all estimations. It also consistently affects sales growth positively and employee growth negatively in models for both fiscal years. These findings imply that the positive effects of the BSS application on productivity mainly stem from service industries and the effects are continuous.

[Table 9]

5. Robustness Checks

5.1 Effects of Application without Receivers

In the last section, we showed that applying for the BSS consistently affects firm labor productivity, while receiving the subsidy itself has no such effects on performance. We can interpret this to mean that SMEs can improve their business efficiency more through the very process of applying to the BSS than receiving direct financial support. Likely, SMEs apply to such programs to boost their productivity, because, *first*, all applicants are required to develop a viable business plan for eligibility. Such strategic planning can systematically measure and help achieve business targets (Hewlett, 1999; O'Regan and Ghobadian, 2002). Firms can then improve their decision-making processes and expand alternative strategies; this planning reflects in their better growth than non-planners (Lyles et al., 1993). *Second*, the external advisory support provided during the application process allows SMEs to obtain broad knowledge through the external market and reduce transaction costs (Uhlaner, et al., 2013). These advantages also improve performance. Thus, applying to the program may be more valuable than receiving the subsidy itself.

To confirm our supposition, we estimate the same model of application in the dataset wherein the samples are restricted by excluding firms that succeeded in receiving the subsidy. This allows us to analyze the effect of application on firm performance by excluding the receiver effects. In other words, if the same effects shown in the last section remain for firms that applied but failed to obtain financial support, we can confirm the positive effects of applying for the subsidy on productivity. Table 10 shows the results of analysis.

[Table 10]

While in some of columns the significant coefficients disappear, the results follow the original DID trends. The analysis of all datasets for 2013 yields a strongly significant coefficient and the same plus/minus sign as original calculation. Thus, applicants that did not receive the subsidy also benefited from the program. As discussed above, these positive effects may be attributed to the external advisory support and business planning provided during subsidy application.

5.2 DID with Propensity Score Matching

We now discuss causality. While applying for the subsidy program has positive effects on performance, it may be that firms with higher performance tend to apply more, suggesting heterogeneity between applicants and non-applicants. The application decision being endogenous for firms means that firms' key characteristics, such as business discipline, affects their productivities after the program. The literature also argues that, among manufacturing firms, firms with a large size, higher human capital, and past R&D experience apply more for national and regional R&D subsidy programs (Blanes and Busom, 2004). Thus, firm status generally affects the decision to apply for subsidy.

We thus check the existence of parallel trends based on the insignificance of the interaction terms between year and treatment prior to the treatment period in order to validify the DID estimation. However, not every interaction term is insignificant and we doubt that the parallel trend assumption is satisfied.

To respond to the selection problem for rigorous causality, we conduct PSM– DID, which controls for heterogeneity, as we choose a pair of samples with similar intervention possibilities. Ryan et al. (2019) compared the PSM–DID approach with other alternative methods for cases where the parallel trend assumption is violated. Employing Monte Carlo simulation experiment, their findings suggest that PSM–DID performs better than the two other estimators, single- and multi-group interrupted time-series analysis.

We follow Ryan et al. (2019) and Suzuki (2019) for the matching process. *First*, exactly match industries (two digits of the Japan Standard Industrial Classification) by separating the sample by each industry.

Second, we calculate the propensity score by probit estimation in the sample of each industry. We assume that firms that have similar levels of outcomes in the preintervention periods in the same industries are more likely to have similar characteristics. Therefore, we match the levels of outcome in the pre-treatment periods (t-1,t-2,t-3 and t-4). This is a stronger assumption than the simple parallel trends because we control the outcome level for multiple periods. We match separately for each pre-treatment outcome levels according to dependent variable to be analyzed. For example, when we analyze sales growth, we match the sample using the pre-intervention level of only sales growth up to the fourth lag. This way, we create a sample with matched sales growth level. We repeat the same matching using employee growth and productivity, respectively, to create each matched sample. The propensity score matching method is a one-to-one matching with replacement, common support, and calipers of 0.01. Finally, we append the subsample of industries to one full sample and implement the semi-parametric DID estimation by using only the matched sample. The outcomes are the same as those in the section 4.2: sales growth, number of employees, and sales per capita as labor productivity. The control variables are also the same as in section 4.2.

Table 11 summarizes the results for all industries. First three columns, from (1) to (3), are estimations for 2013 without any control variables and industry- and year-fixed effects as base models. The second three columns, from (4) to (6), include the control variables and fixed effects⁸. The columns (7) to (12) are the same models for 2014. We use the sample of merged data in all cases. The estimations reveal significantly positive

⁸ As with the other DID analysis, the control variables are CEO male dummy, number of plants, number of establishments, and TSR score.

coefficients of labor productivity in every case. Thus, even after considering selection bias, applying to the BSS benefits firm productivity.

[Table 11]

Similar to the basic DID analysis, we check the heterogeneity by industry for the PSM–DID analysis. Tables 12–14 show the results. We find no significant treatment effects in any estimation models of the construction and manufacturing industries, but significantly positive coefficients on labor productivity in the model with the control variable for the service industry for both 2013 and 2014. These positive effects are the same as the basic DID results. With robustness, we ultimately show that the service industry accounts for large amount of the BSS application effects on productivity improvement.

[Tables 12–14]

5.3 Placebo Analysis of PSM–DID

To check the robustness of the PSM–DID results, we conduct a placebo analysis. We change the standard year of the post dummy variable to pre-treatment periods (t, t-1, t-2, t-3, t-4) and limit the sample up to the treatment year. For the analysis of applications in FY2013, we estimate the same PSM–DID specification but using the restricted panel data up to FY2013 and setting each year from 2009 to 2013 as the placebo standard year of post-treatment dummy variable. We assume no significant coefficients on the interaction term between the treatment and the placebo post dummy if there is no selection problem.

Table 15 provides the results of placebo analysis. We use the merged data as well as the PSM–DID with control variables and fixed-effects. Columns (1) to (15) refer to application year 2013. There are no significant coefficients on the *treatment* * *post* dummy variables in every standard year case. We thus confirm that applying for the BSS in FY2013 led to productivity improvement without selection. For FY2014 (columns [16] to [30]), we find significant coefficients on the *treatment* * *post* dummy variables, which indicates a selection problem. In other words, small firms that originally performed with high productivity tended to apply for the BSS, and these firms achieved higher outcomes than non-applicants.

[Table 15]

5.4 Implications

Let us consider the effect of external advisory support during subsidy application. Small firms, especially those unlikely to have efficient or even enough internal resources, might desperately need third-party guidance. Bennett and Robson (2000), for instance, also confirm the interrelationship between higher use of advice and firm growth. Both growing and declining SMEs require advice. Firms with high growth need it to grow further, while those in decline need more help to survive. Business advice is, indeed, one of the most important factors to grow SMEs performance in the market.

This "external advice" to boost performance is of diverse types, and has been extensively studied⁹ (Bennett and Robson, 2000; Berry et al., 2006; Uhlaner, et al., 2013). Bennett and Robson (2000) show the effects of using external advice on employment and turnover growths in business strategy, staff recruitment, taxation, and financial

⁹ Examples of external advice include source of external advisers (business friend/relative, customer, supplier, consultant, enterprise agency, etc.) and fields of external advice (business strategy, marketing, public relations, staff recruitment, etc.).

management. Similar effects have been shown in later research, such as Berry et al. (2006). Such external support is equally important for Japanese SMEs. Okamuro (2007) show that higher accessibility of external resources increases the probability of cooperative R&D success.

Strategic planning is also crucial for SMEs¹⁰. Strategic plans help firms accomplish tasks in a systematic way, allowing them better competitive edge (O'Regan and Ghobadian, 2002; Hewlett, 1999). Empirical evidence also suggests its positive relationship with firm performance, but the mechanism is slightly complicated. For instance, Gibson and Casser (2005) showed that a significant difference in employment growth between planners and non-planners, but improved performance foregoes planning. Similarly, AlQershi (2021) showed strategic planning improved business performance, but it is mediated by human capital accumulation. Taken together, the literature suggests that a firm that plans via subsidy application will achieve higher productivity than non-applicants; the same stands for external advisory support¹¹.

6. Conclusion

To summarize, we showed that receiving the subsidy does not have significant outcomes, but applying for one increases sales growth and labor productivity. Further, these positive effects are best seen in the service industry.

Our analysis suggests small-scale subsidy policies should create an application process that encourages enterprises to improve productivity by addressing their own problems and to receive external support, before using financial assistance. The BSS particularly offers applicants support from associated institutions. Our results are supported by prior research.

However, our work has certain limitations. *First*, because of the lack of a common identification number and basic information, the matching rate of the list with the TSR is as high as about 40%. This leads to the concerns that the treatment and control groups are not properly classified, because unmatched applicant firms may be included in the non-applicant group. Since we merge the list with the TSR, which contains over one million small firms, firms that applied for the BSS in 2013 would also be included in both the treatment and control groups of the 2014 datasets. The effects of this treatment would consequently be biased to be positive or negative.

Second, we do not identify the effects of advisory support and planning as a mechanism of productivity improvement in our estimations. We interpret the estimation results based on the characteristics of the BSS.

Third, we only focused on the outcomes of participants of the subsidy program, without accounting for spill-over effects on other non-participant firms. We admit that participation can affect not only business partners and local business areas positively, but

¹⁰ Strategic planning is formalized planning refined by strategies for decision-making for the organization's present and future prospects (Abbar and Echcharqy, 2016). Lyles et al. (1993) summarized the benefit of strategic planning as follows: improving the quality of strategic decision-making process, receiving more effective attention, and developing a more complete knowledge of the strategic management issues of the firm.

¹¹ The contents of planning are important as well, although it is omitted in this section because of our main focus. Abbar and Echcharqy (2016) decomposed the nature of strategic planning into formalized process, external environment analysis, decentralized decision process, and strategic control from external environment in order to

examine which of the natures affects sales growth. They found that decentralization and strategic control are different from control group with positive significance. The results imply that being the main actor of the decision process and monitoring are key factors of improving business performance in planning.

negatively affect non-participating competitors as well. Lack of business network data precluded this factor from the analysis.

Further analysis that rigorously solves these critical limitations in our study is needed to provide a more nuanced understanding of the effect of subsidy programs on small firms.

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Variable	Obs	Mean	Std. Dev.	Min	Max
TSR score	11,040,789	45.481	5.081	0	89
# of employees	10,906,442	5.399	4.697	1	180
# of plant	7,723,274	0.233	0.487	0	89
# of establishment	7,888,501	0.484	2.111	0	680
ceo_sex	11,055,806	0.928	0.258	0	1
sales (MM yen)	8,978,532	163	1,462	0	890,000
sales_per (MM yen)	8,841,619	30	400	0	444,000
industry_Agriculture	11,062,347	0.009	0.097	0	1
industry_Fishery	11,062,347	0.001	0.032	0	1
industry_Mining	11,062,347	0.001	0.033	0	1
industry_Construction	11,062,347	0.350	0.477	0	1
industry_Manufacturing	11,062,347	0.114	0.318	0	1
industry_Infrastructure	11,062,347	0.001	0.023	0	1
industry_Telecommunications	11,062,347	0.019	0.138	0	1
industry_Logistics	11,062,347	0.019	0.137	0	1
industry_Wholesales	11,062,347	0.240	0.427	0	1
industry_Finance	11,062,347	0.006	0.080	0	1
industry_Real Estate	11,062,347	0.076	0.265	0	1
industry_Academic	11,062,347	0.040	0.195	0	1
industry_Accomodation	11,062,347	0.011	0.104	0	1
industry_Entertainment	11,062,347	0.018	0.135	0	1
industry_Education	11,062,347	0.004	0.064	0	1
industry Medical	11,062,347	0.023	0.149	0	1
industry_Compound Services	11,062,347	0.008	0.089	0	1
industry_Other Services	11,062,347	0.060	0.237	0	1
Industry_Public	11,062,347	0.000	0.002	0	1

Table 1: Descriptive Statistics on All Firms (aggregated 2006-2017)

	Offering	g year: F	FY2013	Offering	year: F	Y2014
Variable	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
receive in applicants	6,715	0.508	0.500	13,664	0.716	0.451
application	1,190,367	0.006	0.075	1,208,552	0.011	0.106

Offering Year: 2013	(1) Receive						(2)	Not Receive	;	Max 65 48 10 75		
Variables	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max		
TSR score	30,296	45.933	4.318	24	68	28,770	45.554	4.389	13	65		
# of employees	30,124	5.993	4.476	1	40	28,527	5.623	4.362	1	48		
# of plant	22,606	0.436	0.598	0	10	21,110	0.289	0.523	0	10		
# of establishment	22,860	0.572	0.973	0	21	21,456	0.619	1.227	0	75		
ceo_sex	30,291	0.928	0.258	0	1	28,787	0.911	0.285	0	1		
sales (MM yen)	26,893	119	142	0	4,695	25,325	125	303	0	34,700		
sales per employee (MM yen)	26,719	23	24	0	1,105	25,103	25	54	0	3,466		

Table 2: Descriptive Statistics by Reception/Application (Aggregated 2006-2017)

Offering Year: 2014	(1) Receive						(2)	Not Receive		
Variables	Obs	Mean	Std.	Min	Max	Obs	Mean	Std.	Min	Max
TSR score	82,160	45.944	4.406	10	68	31,699	45.504	4.669	22	74
# of employees	81,622	5.865	4.423	1	70	31,430	5.585	4.392	1	70
# of plant	60,198	0.370	0.568	0	13	23,011	0.298	0.502	0	11
# of establishment	61,316	0.564	1.023	0	42	23,685	0.538	0.961	0	18
ceo_sex	82,165	0.924	0.265	0	1	31,705	0.921	0.270	0	1
sales (MM yen)	73,395	124	165	0	7,500	27,655	128	163	0	4,019
sales per employee (MM yen)	72,865	24	33	0	2,034	27,401	25	27	0	772

Offering Year: 2013 (3) Apply							(4) Not Appl	у	
Variables	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
TSR score	59,066	45.748	4.357	13	68	10,981,723	45.479	5.084	0	89
# of employees	58,651	5.813	4.424	1	48	10,847,791	5.397	4.698	1	180
# of plant	43,716	0.365	0.568	0	10	7,679,558	0.232	0.486	0	89
# of establishment	44,316	0.595	1.103	0	75	7,844,185	0.484	2.116	0	680
ceo_sex	59,078	0.92	0.272	0	1	10,996,728	0.928	0.258	0	1
sales (MM yen)	52,218	122	234	0	34,700	8,926,314	164	1,466	0	890,000
profit (MM yen)	35,954	1	9	-323	199	6,508,779	3	259	-179,000	461,000
sales per employee (MM yen)	51,822	24	42	0	3,466	8,789,797	30	401	0	444,000

Offering Year: 2014 (3) Apply							(4) Not Apply	Min Max 0 89 1 180 0 89 0 89 0 680 0 1				
Variables	Obs	Mean	Std.	Min	Max	Obs	Mean	Std.	Min	Max			
TSR score	113,859	45.821	4.485	10	74	10,926,930	45.477	5.087	0	89			
# of employees	113,052	5.787	4.416	1	70	10,793,390	5.395	4.699	1	180			
# of plant	83,209	0.35	0.552	0	13	7,640,065	0.231	0.486	0	89			
# of establishment	85,001	0.556	1.006	0	42	7,803,500	0.483	2.12	0	680			
ceo_sex	113,870	0.923	0.267	0	1	10,941,936	0.928	0.258	0	1			
sales (MM yen)	101,050	125	165	0	7,500	8,877,482	164	1,470	0	890,000			
profit (MM yen)	69,817	1	10	-428	727	6,474,916	3	260	-179,000	461,000			
sales per employee (MM yen)	100,266	24	31	0	2,034	8,741,353	30	402	0	444,000			

Table 3: RDD Estimation in JCCI

Outcome: Change Rate of Sales												
	First	offering in	2013	Second	d offering i	n 2013						
	2013	2014	2015	2013	2014	2015						
RD_Estimate	-0.0865	-0.0660	-0.0567	0.00274	0.0223	0.0399						
Std. Err.	(0.0746)	(0.116)	(0.144)	(0.0217)	(0.0375)	(0.0450)						
Observations	491	480	448	2,584	2,490	2,400						
	First	offering in	2014	Second	d offering i	n 2014	Third	l offering in	2014			
	2014	2015	2016	2014	2015	2016	2014	2015	2016			
RD_Estimate	-0.00709	0.0295	0.0273	0.00853	0.0246	0.0875	0.00874	-0.0316	-0.0800			
Std. Err.	(0.0295)	(0.0414)	(0.0778)	(0.0240)	(0.0354)	(0.0635)	(0.0361)	(0.0633)	(0.0952)			
Observations	1,591	1,505	1,039	2,996	2,858	2,012	1,348	1,269	903			

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Outcome: Cha	Outcome: Change in the Number of employees													
	First c	offering in 2	2013	Secon	d offering i	n 2013								
	2013	2014	2015	2013	2014	2015								
RD_Estimate	-0.313	0.519	-0.766	-0.179	0.287	0.164								
Std. Err.	(0.357)	(0.681)	(0.945)	(0.223)	(0.300)	(0.335)								
Observations	554	548	534	2,888	2,851	2,825								
	First c	offering in 2	2014	Secon	d offering i	n 2014		Third	offering in	2014				
	2014	2015	2016	2014	2015	2016		2014	2015	2016				

Table 3 (Continued): RDD Estimation in JCCI

RD_Estimate 0.117 -0.229 -0.151 -0.00508 0.0158 0.189 -0.212 0.250 0.402 Std. Err. (0.206)(0.243)(0.300)(0.158)(0.196)(0.224)(0.199)(0.316) (0.354)Observations 1,805 1,778 1,746 3,283 1,473 3,387 3,344 1,524 1,499

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Outcome: Gro	Outcome: Growth Rate per capita												
	First	offering in	2013	Second	offering in	n 2013							
	2013	2014	2015	2013	2014	2015							
RD_Estimate	-0.0407	-0.518	0.154	-0.0758	-0.124	-0.0954							
Std. Err.	(0.135)	(0.631)	(0.568)	(0.115)	(0.148)	(0.186)							
Observations	491	480	448	2,582	2,486	2,398							
	First	offering in	2014	Second	offering in	n 2014	Thi	d offering ir	n 2014				
	2014	2015	2016	2014	2015	2016	2014	2015	2016				
RD_Estimate	-0.0352	-0.221	-0.215	-0.0558	-0.117	-0.142	-0.0555	-0.0663	0.118				
Std. Err.	(0.147)	(0.258)	(0.300)	(0.0913)	(0.126)	(0.174)	(0.169)	(0.282)	(0.368)				
Observations	1,589	1,503	1,037	2,994	2,856	2,011	1,348	1,269	903				

Table 3 (Continued): RDD Estimation in JCCI

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 4: RDD Estimation in CFSCIJ

Outcome: Change Rate of Sales											
	First offering in 2013			Secon	d offering i	n 2013					
	2013	2014	2015	2013	2014	2015					
RD_Estimate	-0.00948	-0.0703	-0.0981	0.0276	-0.0319	-0.0406					
Std. Err.	(0.0320)	(0.0515)	(0.0657)	(0.0294)	(0.0376)	(0.0403)					
Observations	506	492	476	1,981	1,936	1,868					

d. Err.	(0.0320)	(0.0515)	(0.0657)	(0.0294)	(0.0376)	(0.0403)	
ervations	506	492	476	1,981	1,936	1,868	
	First	offering in	2014	Secon	d offering in	n 2014	Third

	First	offering in	2014	Secon	d offering i	n 2014	Thir	d offering in	2014
	2014	2015	2016	2014	2015	2016	2014	2015	2016
RD_Estimate	- 0.0527**	-0.0492	0.000758	-0.0214	-0.0575	-0.0470	-0.0971	-0.226	-0.507*
Std. Err.	(0.0246)	(0.0375)	(0.0517)	(0.0288)	(0.0405)	(0.0544)	(0.143)	(0.185)	(0.261)
Observations	2,500	2,396	1,707	3,653	3,515	2,550	1,560	1,501	1,091

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 The standard year of 2013 is FY2012 and the standard year of 2014 is FY2013.

Table 4 (Continued): RDD Estimation in CFSCIJ

Succome: Shange in the reamber of employees												
	First	offering in	2013	Secor	nd offering i	n 2013						
	2013	2014	2015	2013	2014	2015						
RD_Estimate	-0.662	-0.212	-0.180	0.0301	-0.254	-0.248						
Std. Err.	(0.415)	(0.308)	(0.396)	(0.147)	(0.224)	(0.275)						
Observations	564	560	555	2,204	2,183	2,165						

Outcome: Change in the Number of employees

	First	offering in	2014	Secon	d offering i	n 2014	Thir	d offering in	2014
	2014	2015	2016	2014	2015	2016	2014	2015	2016
RD_Estimate	-0.114	0.142	0.153	0.233	0.232	0.440	-0.220	-0.373	-0.675
Std. Err.	(0.117)	(0.174)	(0.212)	(0.229)	(0.277)	(0.326)	(0.222)	(0.304)	(0.447)
Observations	2,814	2,791	2,744	4,058	4,017	3,972	1,732	1,721	1,696

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 The standard year of 2013 is FY2012 and the standard year of 2014 is FY2013.

Outcome: Growth Rate per capita First offering in 2013 Second offering in 2013 2013 2014 2015 2013 2014 2015 **RD** Estimate -0.0708 0.107 0.295 -0.118 -0.0881 0.00821 Std. Err. (0.0843)(0.164)(0.201)(0.178)(0.209)(0.216)Observations 1,981 1,935 1,867 506 492 476

Table 4 (Continued): RDD Estimation in CFSCIJ

	First	offering in	2014	Second	l offering in	2014	Thir	d offering ir	2014
	2014	2015	2016	2014	2015	2016	2014	2015	2016
RD_Estimate	0.178	0.158	0.617**	-0.0966	-0.270	0.109	0.465	-0.0833	-0.0604
Std. Err.	(0.143)	(0.178)	(0.299)	(0.118)	(0.169)	(0.200)	(0.441)	(0.623)	(0.825)
Observations	2,500	2,396	1,707	3,653	3,515	2,550	1,560	1,501	1,091

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Received or Not			FY	2013			FY 2014					
JCCI		Base			Lagged			Base			Lagged	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	-0.011	-0.010	-0.000				0.021	-0.014	0.043*			
	(0.028)	(0.019)	(0.025)				(0.025)	(0.016)	(0.022)			
Lagged treatment*post dummy				0.019	0.001	0.009				0.024	-0.003	0.032
				(0.033)	(0.022)	(0.029)				(0.038)	(0.021)	(0.032)
Treatment dummy	0.005	0.024**	-0.012	-0.008	0.020*	-0.019	0.001	0.042***	-0.051***	0.007	0.038***	-0.040***
	(0.016)	(0.012)	(0.014)	(0.016)	(0.012)	(0.014)	(0.011)	(0.008)	(0.010)	(0.012)	(0.008)	(0.010)
Post dummy	-0.112***	-0.095***	-0.008				-0.166***	-0.099***	-0.067***			
	(0.032)	(0.021)	(0.027)				(0.029)	(0.019)	(0.025)			
Lagged post dummy				-0.083***	-0.116***	0.045*				-0.157***	-0.123***	-0.029
				(0.032)	(0.021)	(0.027)				(0.033)	(0.020)	(0.029)
CEO male dummy	0.327***	0.087***	0.243***	0.333***	0.087***	0.249***	0.326***	0.065***	0.236***	0.326***	0.067***	0.229***
	(0.025)	(0.016)	(0.023)	(0.027)	(0.017)	(0.025)	(0.023)	(0.013)	(0.019)	(0.025)	(0.014)	(0.020)
# of plants	0.167***	0.246***	-0.081***	0.166***	0.251***	-0.089***	0.200***	0.246***	-0.053***	0.198***	0.244***	-0.054***
	(0.018)	(0.019)	(0.014)	(0.019)	(0.020)	(0.014)	(0.012)	(0.011)	(0.011)	(0.013)	(0.012)	(0.012)
# of establishments	0.087***	0.076***	0.016***	0.083***	0.070***	0.018***	0.098***	0.094***	-0.004	0.096***	0.089***	-0.001
	(0.016)	(0.020)	(0.006)	(0.016)	(0.020)	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.005)	(0.005)
Score	0.107***	0.060***	0.047***	0.106***	0.059***	0.047***	0.103***	0.058***	0.046***	0.102***	0.056***	0.046***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	6 11/***	1 204***	7 471***	6 150***	1 150***	7 200***	5 002***	1 404***	7 102***	6 002***	1 211***	7 750***
Constallt	(0.122)	-1.204*	(0.114)	(0.122)	-1.130	(0.122)	(0.002)	-1.404 · · · *	(0.094)	(0.025*	-1.511*	(0.000)
Observations	(0.125)	(0.109)	20218	17699	20207	(0.122)	(0.092)	(0.000)	(0.064)	(0.099)	(0.070)	(0.090)
Dusci vations	20274	25050	20218	1/000	20207	0.125	0 200	0.259	0 157	2/3//	0.250	2/319
K-squared	0.290	0.257	0.133	0.285	0.251	0.135	0.299	0.258	0.157	0.291	0.250	0.157

Table 5: DID Results for Reception as Treatment Group

Received or Not	FY 2013						FY 2014					
CFSCIJ		Base			Lagged			Base			Lagged	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	-0.014	-0.023	0.016				0.034	-0.001	0.021			
	(0.035)	(0.025)	(0.030)				(0.032)	(0.018)	(0.028)			
Lagged treatment*post dummy				-0.025	-0.029	0.011				0.027	-0.007	0.009
				(0.040)	(0.029)	(0.034)				(0.047)	(0.025)	(0.042)
Treatment dummy	0.028	0.052***	-0.020	0.027	0.050***	-0.019	-0.031**	0.008	-0.042***	-0.026*	0.011	-0.040***
	(0.020)	(0.015)	(0.017)	(0.020)	(0.015)	(0.017)	(0.014)	(0.010)	(0.012)	(0.014)	(0.009)	(0.012)
Post dummy	-0.099**	-0.034	-0.051				-0.135***	-0.039*	-0.051*			
	(0.044)	(0.030)	(0.038)				(0.035)	(0.021)	(0.031)			
Lagged post dummy				-0.071	-0.039	-0.018				-0.128***	-0.054**	-0.021
				(0.045)	(0.032)	(0.039)				(0.046)	(0.025)	(0.041)
CEO male dummy	0.181***	0.027	0.149***	0.175***	0.028	0.143***	0.226***	0.027**	0.213***	0.228***	0.024*	0.218***
	(0.028)	(0.021)	(0.024)	(0.030)	(0.022)	(0.025)	(0.022)	(0.013)	(0.018)	(0.024)	(0.014)	(0.020)
# of plants	0.172***	0.209***	-0.032***	0.176***	0.207***	-0.025**	0.183***	0.185***	0.000	0.182***	0.184***	0.001
	(0.012)	(0.011)	(0.011)	(0.013)	(0.011)	(0.012)	(0.014)	(0.010)	(0.008)	(0.014)	(0.010)	(0.009)
# of establishments	0.135***	0.096***	0.041***	0.133***	0.090***	0.046***	0.129***	0.101***	0.032***	0.136***	0.102***	0.039***
	(0.009)	(0.008)	(0.006)	(0.009)	(0.008)	(0.007)	(0.012)	(0.008)	(0.005)	(0.011)	(0.008)	(0.005)
Score	0.086***	0.048***	0.037***	0.086***	0.047***	0.037***	0.112***	0.061***	0.049***	0.112***	0.060***	0.050***
	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	6.627***	-0.870***	7.522***	6.652***	-0.827***	7.491***	5.568***	-1.395***	7.030***	5.591***	-1.305***	6.958***
	(0.114)	(0.080)	(0.091)	(0.119)	(0.085)	(0.094)	(0.082)	(0.048)	(0.070)	(0.084)	(0.050)	(0.074)
Observations	16019	17990	15987	14096	15921	14077	38723	43163	38633	34037	38109	33986
R-squared	0.260	0.230	0.150	0.258	0.228	0.152	0.307	0.262	0.163	0.307	0.259	0.166

Table 5 (Continued): DID Results for Reception as Treatment Group

Received or Not			FY 2	2013			FY 2014					
ALL		Base			Lagged			Base			Lagged	
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.010	0.009	0.002			1	0.029	0.007	0.027			
1 5	(0.019)	(0.013)	(0.017)				(0.019)	(0.012)	(0.017)			
Lagged treatment*post dummy				0.008 (0.023)	0.012 (0.015)	-0.004 (0.020)			. ,	0.024 (0.028)	0.009 (0.015)	0.018 (0.025)
Treatment dummy	-0.031***	0.000	-0.026***	-0.034***	0.000	-0.028***	-0.066***	0.001	-0.073***	-0.060***	0.001	-0.066***
	(0.011)	(0.008)	(0.010)	(0.011)	(0.008)	(0.009)	(0.009)	(0.006)	(0.007)	(0.009)	(0.006)	(0.007)
Post dummy	-0.119***	-0.081***	-0.025				-0.148***	-0.075***	-0.055***			
	(0.025)	(0.017)	(0.021)				(0.022)	(0.014)	(0.019)			
Lagged post dummy				-0.086***	-0.095***	0.023				-0.139***	-0.096***	-0.023
				(0.025)	(0.017)	(0.022)				(0.027)	(0.016)	(0.024)
CEO male dummy	0.273***	0.067***	0.206***	0.273***	0.067***	0.206***	0.266***	0.042***	0.220***	0.267***	0.041***	0.218***
	(0.019)	(0.012)	(0.017)	(0.020)	(0.013)	(0.018)	(0.016)	(0.009)	(0.013)	(0.017)	(0.010)	(0.014)
# of plants	0.167***	0.223***	-0.055***	0.169***	0.224***	-0.055***	0.181***	0.201***	-0.021***	0.179***	0.200***	-0.021***
	(0.011)	(0.010)	(0.009)	(0.012)	(0.011)	(0.009)	(0.010)	(0.008)	(0.007)	(0.010)	(0.008)	(0.007)
# of establishments	0.102***	0.082***	0.023***	0.097***	0.076***	0.026***	0.115***	0.099***	0.015***	0.119***	0.097***	0.020***
	(0.014)	(0.016)	(0.004)	(0.015)	(0.016)	(0.004)	(0.006)	(0.005)	(0.003)	(0.006)	(0.005)	(0.003)
Score	0.098***	0.055***	0.042***	0.097***	0.054***	0.042***	0.108***	0.060***	0.048***	0.108***	0.058***	0.049***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	6.256***	-1.118***	7.405***	6.280***	-1.045***	7.347***	5.764***	-1.363***	7.179***	5.787***	-1.268***	7.105***
	(0.084)	(0.063)	(0.070)	(0.089)	(0.067)	(0.074)	(0.061)	(0.038)	(0.053)	(0.064)	(0.039)	(0.056)
Observations	36284	41036	36196	31776	36119	31721	70058	78737	69873	61361	69300	61252
R-squared	0.271	0.240	0.134	0.267	0.236	0.135	0.298	0.256	0.155	0.294	0.251	0.157

Table 5 (Continued): DID Results for Reception as Treatment Group

Applied for or Not			FY 2	2013			FY 2014					
JCCI		Base			Lagged			Base			Lagged	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.024*	-0.042***	0.067***			1	0.013	-0.052***	0.050***			
1 2	(0.014)	(0.009)	(0.012)				(0.013)	(0.008)	(0.011)			
Lagged treatment*post dummy	`			0.041**	-0.038***	0.074***			. ,	0.015	-0.048***	0.041**
				(0.017)	(0.010)	(0.014)				(0.019)	(0.011)	(0.016)
Treatment dummy	0.113***	0.113***	0.001	0.111***	0.107***	0.007	0.172***	0.129***	0.051***	0.174***	0.124***	0.057***
	(0.008)	(0.006)	(0.007)	(0.008)	(0.005)	(0.007)	(0.006)	(0.004)	(0.005)	(0.006)	(0.004)	(0.005)
Post dummy	-0.083***	0.009***	-0.065***				-0.083***	0.009***	-0.065***			
	(0.002)	(0.001)	(0.002)				(0.002)	(0.001)	(0.002)			
Lagged post dummy				-0.066***	-0.015***	-0.022***				-0.066***	-0.015***	-0.022***
				(0.003)	(0.001)	(0.002)				(0.003)	(0.001)	(0.002)
CEO male dummy	0.163***	0.012***	0.153***	0.161***	0.012***	0.151***	0.164***	0.012***	0.153***	0.162***	0.012***	0.151***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
# of plants	0.200***	0.205***	-0.006***	0.201***	0.203***	-0.002*	0.199***	0.205***	-0.006***	0.201***	0.203***	-0.002*
	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)
# of establishments	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***
	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)
Score	0.159***	0.072***	0.085***	0.161***	0.072***	0.087***	0.159***	0.072***	0.085***	0.161***	0.072***	0.087***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Genetent	2 2(0***	2 010***	E 150***	2 202***	1 00/***	<i>E 25</i> 2***	2 2 (0***	2 010***	5 457***	2 202***	1 004***	5 252***
Constant	5.500***	-2.010****	5.452***	5.295***	-1.994***	5.552***	5.500***	-2.010****	5.452***	5.295***	-1.994	5.552***
Ohannatiana	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)
Observations	6005915	/3210/0	5960818	5185233	03489/4	5153610	0005915	/3210/0	5960818	5185233	03489/4	5153610
R-squared	0.331	0.263	0.199	0.332	0.264	0.202	0.331	0.263	0.199	0.333	0.264	0.202

Table 6: DID Results for Application as Treatment Group

Applied for or Not			FY	2013		FY 2014						
CFSCIJ		Base			Lagged			Base			Lagged	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per
Treatment*post dummy	0.058***	0.003	0.053***			cupitu	0.032***	0.000	0.037***			cupitu
freutilient post duminy	(0.015)	(0.010)	(0.013)				(0.052)	(0.007)	(0.03)			
Lagged treatment*nost dummy	(0.015)	(0.010)	(0.015)	0 044**	0.004	0 039***	(0.012)	(0.007)	(0.010)	0.025	-0.000	0.031**
Lugged treatment post duminy				(0.018)	(0.012)	(0.015)				(0.017)	(0.009)	(0.015)
Treatment dummy	0.041***	0 072***	-0 027***	0.051***	0.073***	-0.016**	0.020***	0.057***	-0 026***	0.025***	0.057***	-0.018***
	(0.009)	(0.006)	(0.007)	(0.009)	(0.006)	(0.007)	(0.005)	(0.004)	(0.005)	(0.005)	(0.004)	(0.005)
Post dummy	-0.083***	0.009***	-0.065***	(0.005)	(01000)	(01007)	-0.083***	0.009***	-0.065***	(01002)	(01001)	(0.000)
	(0.002)	(0,001)	(0.002)				(0.002)	(0,001)	(0.002)			
Lagged post dummy	(0.002)	(0.001)	(0.002)	-0.065***	-0.015***	-0 022***	(0.002)	(0.001)	(0.002)	-0.066***	-0.015***	-0.022***
Lugged post duminy				(0.003)	(0.001)	(0.002)				(0.003)	(0.001)	(0.022)
CEO male dummy	0 163***	0.012***	0 153***	0.161***	0.012***	0.151***	0 163***	0.012***	0 153***	0 161***	0.012***	0 151***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0,002)
# of plants	0 199***	0 205***	-0.006***	0 201***	0 203***	-0.002*	0 199***	0 205***	-0.006***	0.201***	0 203***	-0.002*
" of plants	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)
# of establishments	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***
" of establishments	(0.003)	(0.02)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.02)	(0.001)	(0.003)	(0.002)	(0.001)
Score	0.150***	0.072***	0.085***	0.161***	0.072***	0.087***	0.150***	0.072***	0.085***	0.161***	0.072***	0.087***
5000	(0.000)	(0.072)	(0.000)	(0.000)	(0.000)	(0.00)	(0.000)	(0,000)	(0.000)	(0.000)	(0.072)	(0,000)
Industry fixed effect	(0.000) VES	VES										
industry fixed effect	1125	1115	1115	1115	1115	1115	1115	115	115	1115	1113	TL5
Vear effects	YES	YES										
	125	125	115	115	115	125	125	115	125	125	125	125
Constant	3.360***	-2.011***	5.452***	3.293***	-1.994***	5.352***	3.360***	-2.011***	5.452***	3.293***	-1.994***	5.352***
	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)
Observations	6005915	7321070	5960818	5185233	6348974	5153610	6005915	7321070	5960818	5185233	6348974	5153610
R-squared	0.331	0.263	0.199	0.332	0.264	0.202	0.331	0.263	0.199	0.332	0.264	0.202

Table 6 (Continued): DID Results for Application as Treatment Group

Applied for or Not			FY 2	FY 2013		Deer			YY 2014			
ALL		Base			Lagged			Base			Lagged	
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per									
	Sules	Employees	capita									
Treatment*post dummy	0.040***	-0.023***	0.061***				0.023***	-0.023***	0.043***			
	(0.010)	(0.007)	(0.009)				(0.009)	(0.005)	(0.008)			
Lagged treatment*post dummy				0.043***	-0.019**	0.059***				0.019	-0.022***	0.034***
				(0.012)	(0.008)	(0.010)				(0.013)	(0.007)	(0.011)
Treatment dummy	0.081***	0.095***	-0.011**	0.085***	0.092***	-0.004	0.089***	0.090***	0.008**	0.092***	0.088***	0.015***
	(0.006)	(0.004)	(0.005)	(0.006)	(0.004)	(0.005)	(0.004)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)
Post dummy	-0.083***	0.009***	-0.065***				-0.083***	0.009***	-0.065***			
	(0.002)	(0.001)	(0.002)				(0.002)	(0.001)	(0.002)			
Lagged post dummy				-0.066***	-0.015***	-0.022***				-0.066***	-0.015***	-0.022***
				(0.003)	(0.001)	(0.002)				(0.003)	(0.001)	(0.002)
CEO male dummy	0.163***	0.012***	0.153***	0.161***	0.012***	0.151***	0.163***	0.012***	0.153***	0.161***	0.012***	0.151***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
# of plants	0.199***	0.205***	-0.006***	0.200***	0.203***	-0.002*	0.199***	0.205***	-0.006***	0.200***	0.203***	-0.002*
	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)
# of establishments	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***
	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)
Score	0.159***	0.072***	0.085***	0.161***	0.072***	0.087***	0.159***	0.072***	0.085***	0.161***	0.072***	0.087***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
Industry fixed effect	YES											
Year effects	YES											
Constant	3.360***	-2.011***	5.452***	3.293***	-1.994***	5.352***	3.360***	-2.011***	5.452***	3.292***	-1.994***	5.351***
	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)
Observations	6005915	7321070	5960818	5185233	6348974	5153610	6005915	7321070	5960818	5185233	6348974	5153610
R-squared	0.331	0.263	0.199	0.332	0.264	0.202	0.331	0.263	0.199	0.332	0.264	0.202

Table 6 (Continued): DID Results for Application as Treatment Group

Applied for or Not			FY	2013			FY 2014					
JCCI		Base			Lagged			Base			Lagged	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.039	-0.005	0.040				0.009	-0.011	0.023			
	(0.036)	(0.023)	(0.029)				(0.030)	(0.019)	(0.024)			
Lagged treatment*post dummy				0.076*	-0.010	0.071**				0.029	-0.007	0.035
				(0.042)	(0.026)	(0.035)				(0.042)	(0.025)	(0.035)
Constant	5.197***	-1.626***	6.835***	5.128***	-1.600***	6.725***	5.198***	-1.625***	6.836***	5.129***	-1.599***	6.726***
	(0.019)	(0.013)	(0.010)	(0.012)	(0.013)	(0.009)	(0.019)	(0.013)	(0.010)	(0.012)	(0.013)	(0.009)
Observations	1816416	2194396	1811056	1583000	1919043	1579367	1816416	2194396	1811056	1583000	1919043	1579367
R-squared	0.278	0.229	0.110	0.282	0.233	0.115	0.278	0.230	0.110	0.283	0.233	0.115
	0.278 0.229 0.110 0.282 0.233 0.115											
Applied for or Not			FY	2013					FY	2014		
Applied for or Not CFSCIJ		Base	FY	2013	Lagged			Base	FY	2014	Lagged	
Applied for or Not CFSCIJ	(13)	Base (14)	FY 2	2013	Lagged (17)	(18)	(19)	Base (20)	FY (21)	2014	Lagged (23)	(24)
Applied for or Not CFSCIJ	(13) Sales	Base (14) Employees	FY 2 (15) Sales per capita	2013 (16) Sales	Lagged (17) Employees	(18) Sales per capita	(19) Sales	Base (20) Employees	FY (21) Sales per capita	2014 (22) Sales	Lagged (23) Employees	(24) Sales per capita
Applied for or Not CFSCIJ Treatment*post dummy	(13) Sales 0.058*	Base (14) Employees -0.013	FY (15) Sales per capita 0.074***	2013 (16) Sales	Lagged (17) Employees	(18) Sales per capita	(19) Sales -0.015	Base (20) Employees -0.012	FY (21) Sales per capita 0.016	2014 (22) Sales	Lagged (23) Employees	(24) Sales per capita
Applied for or Not CFSCIJ Treatment*post dummy	(13) Sales 0.058* (0.033)	Base (14) Employees -0.013 (0.022)	FY : (15) Sales per capita 0.074*** (0.027)	2013 (16) Sales	Lagged (17) Employees	(18) Sales per capita	(19) Sales -0.015 (0.024)	Base (20) Employees -0.012 (0.015)	FY (21) Sales per capita 0.016 (0.019)	2014 (22) Sales	Lagged (23) Employees	(24) Sales per capita
Applied for or Not CFSCIJ Treatment*post dummy Lagged treatment*post dummy	(13) Sales 0.058* (0.033)	Base (14) Employees -0.013 (0.022)	FY : (15) Sales per capita 0.074*** (0.027)	2013 (16) Sales 0.023	Lagged (17) Employees -0.017	(18) Sales per capita 0.048	(19) Sales -0.015 (0.024)	Base (20) Employees -0.012 (0.015)	FY (21) Sales per capita 0.016 (0.019)	2014 (22) Sales	Lagged (23) Employees	(24) Sales per capita 0.036
Applied for or Not CFSCIJ Treatment*post dummy Lagged treatment*post dummy	(13) Sales 0.058* (0.033)	Base (14) Employees -0.013 (0.022)	FY : (15) Sales per capita 0.074*** (0.027)	2013 (16) Sales 0.023 (0.040)	Lagged (17) Employees -0.017 (0.025)	(18) Sales per capita 0.048 (0.034)	(19) Sales -0.015 (0.024)	Base (20) Employees -0.012 (0.015)	FY (21) Sales per capita 0.016 (0.019)	2014 (22) Sales 0.001 (0.036)	Lagged (23) Employees -0.012 (0.019)	(24) Sales per capita 0.036 (0.029)
Applied for or Not CFSCIJ Treatment*post dummy Lagged treatment*post dummy Constant	(13) Sales 0.058* (0.033) 5.197***	Base (14) Employees -0.013 (0.022) -1.625***	FY : (15) Sales per capita 0.074*** (0.027) 6.836***	2013 (16) Sales 0.023 (0.040) 5.128***	Lagged (17) Employees -0.017 (0.025) -1.599***	(18) Sales per capita 0.048 (0.034) 6.725***	(19) Sales -0.015 (0.024) 5.198***	Base (20) Employees -0.012 (0.015) -1.625***	FY (21) Sales per capita 0.016 (0.019) 6.836***	2014 (22) Sales 0.001 (0.036) 5.129***	Lagged (23) Employees -0.012 (0.019) -1.599***	(24) Sales per capita 0.036 (0.029) 6.725***
Applied for or Not CFSCIJ Treatment*post dummy Lagged treatment*post dummy Constant	(13) Sales 0.058* (0.033) 5.197*** (0.019)	Base (14) Employees -0.013 (0.022) -1.625*** (0.013)	FY : (15) Sales per capita 0.074*** (0.027) 6.836*** (0.010)	2013 (16) Sales 0.023 (0.040) 5.128*** (0.012)	Lagged (17) Employees -0.017 (0.025) -1.599*** (0.013)	 (18) Sales per capita 0.048 (0.034) 6.725*** (0.009) 	(19) Sales -0.015 (0.024) 5.198*** (0.019)	Base (20) Employees -0.012 (0.015) -1.625*** (0.013)	FY (21) Sales per capita 0.016 (0.019) 6.836*** (0.010)	2014 (22) Sales 0.001 (0.036) 5.129*** (0.012)	Lagged (23) Employees -0.012 (0.019) -1.599*** (0.013)	(24) Sales per capita 0.036 (0.029) 6.725*** (0.009)
Applied for or Not CFSCIJ Treatment*post dummy Lagged treatment*post dummy Constant Observations	(13) Sales 0.058* (0.033) 5.197*** (0.019) 1816416	Base (14) Employees -0.013 (0.022) -1.625*** (0.013) 2194396	FY : (15) Sales per capita 0.074*** (0.027) 6.836*** (0.010) 1811056	2013 (16) Sales 0.023 (0.040) 5.128*** (0.012) 1583000	Lagged (17) Employees -0.017 (0.025) -1.599*** (0.013) 1919043	 (18) Sales per capita 0.048 (0.034) 6.725*** (0.009) 1579367 	(19) Sales -0.015 (0.024) 5.198*** (0.019) 1816416	Base (20) Employees -0.012 (0.015) -1.625*** (0.013) 2194396	FY (21) Sales per capita 0.016 (0.019) 6.836*** (0.010) 1811056	2014 (22) Sales 0.001 (0.036) 5.129*** (0.012) 1583000	Lagged (23) Employees -0.012 (0.019) -1.599*** (0.013) 1919043	(24) Sales per capita 0.036 (0.029) 6.725*** (0.009) 1579367

Table 7: DID Results for Application as Treatment Group (Construction Industry)

Applied for or Not			FY 2	2013					FY 2	2014		
ALL		Base			Lagged			Base			Lagged	
	(25)	(26) (27) (28)		(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.050**	-0.009	0.059***			-	-0.005	-0.012	0.018			-
	(0.024)	(0.016)	(0.020)				(0.019)	(0.012)	(0.015)			
Lagged treatment*post dummy				0.052*	-0.013	0.062**				0.010	-0.010	0.035
				(0.029)	(0.018)	(0.024)				(0.028)	(0.015)	(0.023)
Constant	5.197***	-1.625***	6.836***	5.128***	-1.599***	6.725***	5.200***	-1.624***	6.837***	5.130***	-1.598***	6.726***
	(0.019)	(0.013)	(0.010)	(0.012)	(0.013)	(0.009)	(0.019)	(0.013)	(0.010)	(0.012)	(0.013)	(0.009)
Observations	1816416	2194396	1811056	1583000	1919043	1579367	1816416	2194396	1811056	1583000	1919043	1579367
R-squared	0.278	0.230	0.110	0.283	0.233	0.115	0.278	0.230	0.110	0.283	0.233	0.115

***,**,* represents statistical significance at 1%,5% and 10% respectively. All explained variables are logarithmic. Robust standard errors are in parentheses. Treatment dummy variables, post dummy variables, control variables, year- and industry-fixed effects are included in the estimations but only key variables are shown to save spaces.

Applied for or Not			FY	2013					FY	2014		
JCCI		Base			Lagged			ALL			Base	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.003	-0.014	0.021				0.042*	-0.034**	0.046**			
	(0.028)	(0.019)	(0.023)				(0.024)	(0.017)	(0.020)			
Lagged treatment*post dummy				0.016	-0.004	0.025				0.042	-0.024	0.023
				(0.032)	(0.022)	(0.026)				(0.036)	(0.023)	(0.029)
Constant	3.809***	-2.140***	5.996***	3.731***	-2.121***	5.882***	3.809***	-2.140***	5.996***	3.732***	-2.121***	5.882***
	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)
Observations	812037	977590	810111	697729	845288	696469	812037	977590	810111	697729	845288	696469
R-squared	0.351	0.259	0.156	0.350	0.258	0.158	0.351	0.259	0.156	0.350	0.258	0.158
Applied for or Not			FY	2013					FY	2014		
CFSCIJ		Base			Lagged			ALL			Base	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per
Treatment*nost dummy	0.058**	0.023	0.033			capita	0.014	0.003	0.015			capita
meaning post duminy	(0.038)	(0.023)	(0.033)				(0.014)	(0.017)	(0.013)			
I agged treatment*nost dummy	(0.02))	(0.021)	(0.023)	0.032	0.009	0.023	(0.024)	(0.017)	(0.021)	0.012	-0.003	0.007
Lagged treatment post duminy				(0.032)	(0.00)	(0.023)				(0.035)	(0.022)	(0.030)
Constant	3 800***	-2 140***	5 997***	3 731***	(0.02 <i>3)</i> _2 121***	5 883***	3 800***	-2 140***	5 006***	3 731***	(0.022) _2 121***	5 882***
Consult	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)
	(0.010)	10.0101	11/1/17/	1 10.0107	(0.010)	11/1/17/	1 10.0101	(0.010)	(0.017)	1 (0.010)	(0.010)	(0.017)
Observations	812037	977590	810111	697729	845288	696469	812037	977590	810111	697729	845288	696469

 Table 8: DID Results for Application as Treatment Group (Manufacturing Industry)

Applied for or Not			FY	2013					FY 2	2014		
ALL		Base			Lagged			ALL			Base	
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per									
		1 5	capita									
Treatment*post dummy	0.029	0.003	0.028*				0.025	-0.018	0.029*			
	(0.020)	(0.014)	(0.016)				(0.018)	(0.012)	(0.015)			
Lagged treatment*post dummy				0.024	0.002	0.025				0.023	-0.014	0.013
				(0.024)	(0.017)	(0.019)				(0.026)	(0.016)	(0.021)
Constant	3.809***	-2.140***	5.996***	3.731***	-2.121***	5.882***	3.809***	-2.139***	5.996***	3.732***	-2.121***	5.882***
	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)
Observations	812037	977590	810111	697729	845288	696469	812037	977590	810111	697729	845288	696469
R-squared	0.351	0.259	0.156	0.350	0.258	0.158	0.351	0.259	0.156	0.350	0.258	0.158

***,**,* represents statistical significance at 1%,5% and 10% respectively. All explained variables are logarithmic. Robust standard errors are in parentheses. Treatment dummy variables, post dummy variables, control variables, year- and industry-fixed effects are included in the estimations but only key variables are shown to save spaces.

Applied for or Not			FY	2013					FY 2	2014		
JCCI		Base			Lagged			ALL			Base	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.055***	-0.049***	0.102***				0.026	-0.060***	0.072***			
	(0.018)	(0.011)	(0.016)				(0.017)	(0.010)	(0.015)			
Lagged treatment*post dummy				0.062***	-0.047***	0.101***				0.022	-0.060***	0.065***
				(0.021)	(0.013)	(0.019)				(0.025)	(0.013)	(0.022)
Constant	2.986***	-2.044***	5.079***	2.965***	-2.042***	5.028***	2.986***	-2.044***	5.079***	2.965***	-2.042***	5.028***
	(0.043)	(0.016)	(0.041)	(0.043)	(0.018)	(0.042)	(0.043)	(0.016)	(0.041)	(0.043)	(0.018)	(0.042)
Observations	3317258	4074934	3279864	2828950	3492103	2802621	3317258	4074934	3279864	2828950	3492103	2802621
R-squared	0.358	0.263	0.237	0.362	0.265	0.242	0.358	0.263	0.237	0.362	0.265	0.242
Applied for or Not			FY	2013					FY	2014		
CFSCIJ		Base			Lagged			ALL			Base	
	(13)	<i></i>										
	(15)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Sales	(14) Employees	(15) Sales per capita	(16) Sales	(17) Employees	(18) Sales per capita	(19) Sales	(20) Employees	(21) Sales per capita	(22) Sales	(23) Employees	(24) Sales per capita
Treatment*post dummy	Sales 0.071***	(14) Employees 0.009	(15) Sales per capita 0.055***	(16) Sales	(17) Employees	(18) Sales per capita	(19) Sales 0.070***	(20) Employees 0.013	(21) Sales per capita 0.057***	(22) Sales	(23) Employees	(24) Sales per capita
Treatment*post dummy	Sales 0.071*** (0.020)	(14) Employees 0.009 (0.013)	(15) Sales per capita 0.055*** (0.018)	(16) Sales	(17) Employees	(18) Sales per capita	(19) Sales 0.070*** (0.016)	(20) Employees 0.013 (0.009)	(21) Sales per capita 0.057*** (0.014)	(22) Sales	(23) Employees	(24) Sales per capita
Treatment*post dummy Lagged treatment*post dummy	(13) Sales 0.071*** (0.020)	(14) Employees 0.009 (0.013)	(15) Sales per capita 0.055*** (0.018)	(16) Sales 0.063***	(17) Employees 0.014	(18) Sales per capita 0.040**	(19) Sales 0.070*** (0.016)	(20) Employees 0.013 (0.009)	(21) Sales per capita 0.057*** (0.014)	(22) Sales 0.052**	(23) Employees 0.009	(24) Sales per capita 0.044**
Treatment*post dummy Lagged treatment*post dummy	Sales 0.071*** (0.020)	(14) Employees 0.009 (0.013)	(15) Sales per capita 0.055*** (0.018)	(16) Sales 0.063*** (0.024)	(17) Employees 0.014 (0.015)	(18) Sales per capita 0.040** (0.020)	(19) Sales 0.070*** (0.016)	(20) Employees 0.013 (0.009)	(21) Sales per capita 0.057*** (0.014)	(22) Sales 0.052** (0.023)	(23) Employees 0.009 (0.012)	(24) Sales per capita 0.044** (0.021)
Treatment*post dummy Lagged treatment*post dummy Constant	(10) Sales 0.071*** (0.020) 2.986*** 1000000000000000000000000000000000000	(14) Employees 0.009 (0.013) -2.044***	(15) Sales per capita 0.055*** (0.018) 5.079***	(16) Sales 0.063*** (0.024) 2.965***	(17) Employees 0.014 (0.015) -2.042***	(18) Sales per capita 0.040** (0.020) 5.028***	(19) Sales 0.070*** (0.016) 2.986***	(20) Employees 0.013 (0.009) -2.044***	(21) Sales per capita 0.057*** (0.014) 5.080***	(22) Sales 0.052** (0.023) 2.966***	(23) Employees 0.009 (0.012) -2.042***	(24) Sales per capita 0.044** (0.021) 5.029***
Treatment*post dummy Lagged treatment*post dummy Constant	(10) Sales 0.071*** (0.020) 2.986*** (0.043)	(14) Employees 0.009 (0.013) -2.044*** (0.016)	(15) Sales per capita 0.055*** (0.018) 5.079*** (0.041)	(16) Sales 0.063*** (0.024) 2.965*** (0.043)	(17) Employees 0.014 (0.015) -2.042*** (0.018)	(18) Sales per capita 0.040** (0.020) 5.028*** (0.042)	(19) Sales 0.070*** (0.016) 2.986*** (0.043)	(20) Employees 0.013 (0.009) -2.044*** (0.016)	(21) Sales per capita 0.057*** (0.014) 5.080*** (0.041)	(22) Sales 0.052** (0.023) 2.966*** (0.043)	(23) Employees 0.009 (0.012) -2.042*** (0.018)	(24) Sales per capita 0.044** (0.021) 5.029*** (0.042)
Treatment*post dummy Lagged treatment*post dummy Constant Observations	(10) Sales 0.071*** (0.020) 2.986*** (0.043) 3317258 (0.020)	(14) Employees 0.009 (0.013) -2.044*** (0.016) 4074934	(15) Sales per capita 0.055*** (0.018) 5.079*** (0.041) 3279864	(16) Sales 0.063*** (0.024) 2.965*** (0.043) 2828950	(17) Employees 0.014 (0.015) -2.042*** (0.018) 3492103	(18) Sales per capita 0.040** (0.020) 5.028*** (0.042) 2802621	 (19) Sales 0.070*** (0.016) 2.986*** (0.043) 3317258 	(20) Employees 0.013 (0.009) -2.044*** (0.016) 4074934	(21) Sales per capita 0.057*** (0.014) 5.080*** (0.041) 3279864	(22) Sales 0.052** (0.023) 2.966*** (0.043) 2828950	(23) Employees 0.009 (0.012) -2.042*** (0.018) 3492103	(24) Sales per capita 0.044** (0.021) 5.029*** (0.042) 2802621

 Table 9: DID Results for Application as Treatment Group (Service Industries)

Applied for or Not			FY	2013					FY 2	2014		
ALL		Base			Lagged			ALL			Base	
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per									
	Sales	Employees	capita	Bales	Employees	capita	Bales	Employees	capita	Bales	Employees	capita
Treatment*post dummy	0.062***	-0.025***	0.083***				0.048***	-0.022***	0.064***			
	(0.013)	(0.009)	(0.012)				(0.012)	(0.007)	(0.010)			
Lagged treatment*post dummy				0.063***	-0.022**	0.076***				0.036**	-0.023**	0.052***
				(0.016)	(0.010)	(0.014)				(0.017)	(0.009)	(0.015)
Constant	2.986***	-2.044***	5.079***	2.965***	-2.042***	5.028***	2.986***	-2.044***	5.080***	2.965***	-2.042***	5.028***
	(0.043)	(0.016)	(0.041)	(0.043)	(0.018)	(0.042)	(0.043)	(0.016)	(0.041)	(0.043)	(0.018)	(0.042)
Observations	3317258	4074934	3279864	2828950	3492103	2802621	3317258	4074934	3279864	2828950	3492103	2802621
R-squared	0.358	0.263	0.237	0.362	0.265	0.242	0.358	0.263	0.237	0.362	0.265	0.242

***,**,* represents statistical significance at 1%,5% and 10% respectively. All explained variables are logarithmic. Robust standard errors are in parentheses. Treatment dummy variables, post dummy variables, control variables, year- and industry-fixed effects are included in the estimations but only key variables are shown to save spaces.

Applied for or Not			FY	2013					FY	2014		
JCCI		Base			Lagged			Base			Lagged	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per capita									
Treatment*post dummy	0.027	-0.039***	0.067***			-	-0.000	-0.043***	0.026			
	(0.017)	(0.011)	(0.015)				(0.021)	(0.012)	(0.018)			
Lagged treatment*post dummy				0.035*	-0.037***	0.071***				-0.003	-0.046***	0.022
				(0.020)	(0.012)	(0.017)				(0.031)	(0.016)	(0.026)
Treatment dummy	0.120***	0.104***	0.015*	0.121***	0.100***	0.022**	0.194***	0.105***	0.102***	0.193***	0.103***	0.102***
	(0.010)	(0.007)	(0.009)	(0.010)	(0.007)	(0.009)	(0.010)	(0.006)	(0.008)	(0.010)	(0.006)	(0.008)
Post dummy	-0.083***	0.009***	-0.065***				-0.083***	0.010***	-0.065***			
	(0.002)	(0.001)	(0.002)				(0.002)	(0.001)	(0.002)			
Lagged post dummy				-0.066***	-0.015***	-0.022***				-0.065***	-0.014***	-0.022***
				(0.003)	(0.001)	(0.002)				(0.003)	(0.001)	(0.002)
CEO male dummy	0.163***	0.012***	0.153***	0.162***	0.012***	0.151***	0.163***	0.012***	0.152***	0.161***	0.012***	0.151***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
# of plants	0.200***	0.205***	-0.006***	0.201***	0.203***	-0.002*	0.199***	0.205***	-0.006***	0.201***	0.203***	-0.002*
	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)
# of establishments	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***
	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)
Score	0.159***	0.072***	0.085***	0.161***	0.072***	0.087***	0.160***	0.072***	0.085***	0.161***	0.072***	0.087***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry fixed effect	YES	YES	YES									
Year effects	YES	YES	YES									
Constant	3.359***	-2.010***	5.450***	3.291***	-1.994***	5.350***	3.355***	-2.011***	5.447***	3.287***	-1.995***	5.347***
	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)
Observations	5999735	7314070	5954654	5179826	6342815	5148213	5987224	7300042	5942181	5168915	6330508	5137322
R-squared	0.331	0.263	0.199	0.332	0.264	0.202	0.331	0.263	0.199	0.333	0.264	0.203

Table 10: DID Results for Application Without Receivers as Treatment Group

Applied for or Not			FY	2013					FY	2014		
CFSCIJ		Base			Lagged			Base			Lagged	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Sales	Employees	Sales per capita									
Treatment*post dummy	0.073**	0.018	0.044			-	0.003	-0.001	0.021			-
	(0.036)	(0.024)	(0.029)				(0.030)	(0.017)	(0.027)			
Lagged treatment*post dummy				0.071*	0.023	0.037				0.003	0.004	0.026
Treatment dummy	0.041*	0.041***	0.003	0.051**	0.043***	0.011	0.062***	0.051***	0.023**	0.064***	0.049***	0.030***
Treatment duminy	(0.021)	(0.014)	(0.017)	(0.021)	(0.014)	(0.016)	(0.013)	(0.009)	(0.011)	(0.013)	(0, 0.09)	(0.011)
Post dummy	-0.083***	0.009***	-0.065***	(0.021)	(0.011)	(0.010)	-0.083***	0.009***	-0.065***	(0.015)	(0.00))	(0.011)
	(0.002)	(0.001)	(0.002)				(0.002)	(0.001)	(0.002)			
Lagged post dummy	(01002)	(0.001)	(01002)	-0.065***	-0.015***	-0.022***	(0.002)	(01001)	(01002)	-0.065***	-0.015***	-0.022***
2466-4 post duminy				(0.003)	(0.001)	(0.002)				(0.003)	(0.001)	(0.002)
CEO male dummy	0.163***	0.012***	0.152***	0.161***	0.012***	0.151***	0.163***	0.012***	0.152***	0.161***	0.012***	0.150***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
# of plants	0.200***	0.205***	-0.006***	0.201***	0.203***	-0.002*	0.200***	0.206***	-0.006***	0.201***	0.204***	-0.002*
	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)
# of establishments	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***
	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)
Score	0.160***	0.072***	0.085***	0.161***	0.072***	0.087***	0.160***	0.072***	0.086***	0.161***	0.072***	0.087***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry fixed effect	YES	YES	YES									
5												
Year effects	YES	YES	YES									
Constant	3.356***	-2.012***	5.449***	3.288***	-1.995***	5.349***	3.352***	-2.013***	5.446***	3.284***	-1.997***	5.346***
	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)
Observations	5993395	7306979	5948318	5174198	6336490	5142587	5973745	7285263	5928720	5156940	6317360	5125358
R-squared	0.331	0.263	0.199	0.333	0.264	0.202	0.331	0.263	0.199	0.333	0.264	0.203

Table 10 (Continued): DID Results for Application Without Receivers as Treatment Group

Applied for or Not			FY 2	2013					FY2	2014		
ALL		Base			Lagged			Base			Lagged	
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per capita									
Treatment*post dummy	0.037**	-0.028***	0.063***				0.002	-0.029***	0.025			
	(0.015)	(0.010)	(0.013)				(0.018)	(0.010)	(0.015)			
Lagged treatment*post dummy				0.043**	-0.025**	0.065***				-0.001	-0.029**	0.022
				(0.018)	(0.011)	(0.015)				(0.026)	(0.013)	(0.022)
Treatment dummy	0.103***	0.092***	0.012	0.107***	0.088***	0.019**	0.149***	0.087***	0.075***	0.148***	0.086***	0.077***
	(0.009)	(0.006)	(0.008)	(0.009)	(0.006)	(0.008)	(0.008)	(0.005)	(0.007)	(0.008)	(0.005)	(0.007)
Post dummy	-0.083***	0.009***	-0.065***				-0.083***	0.010***	-0.065***			
	(0.002)	(0.001)	(0.002)				(0.002)	(0.001)	(0.002)			
Lagged post dummy				-0.066***	-0.015***	-0.022***				-0.066***	-0.014***	-0.022***
				(0.003)	(0.001)	(0.002)				(0.003)	(0.001)	(0.002)
CEO male dummy	0.163***	0.012***	0.153***	0.161***	0.012***	0.151***	0.163***	0.012***	0.152***	0.161***	0.012***	0.150***
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
# of plants	0.200***	0.205***	-0.006***	0.201***	0.203***	-0.002*	0.200***	0.205***	-0.006***	0.201***	0.203***	-0.002*
	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)	(0.004)	(0.003)	(0.001)
# of establishments	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***	0.045***	0.029***	0.020***	0.045***	0.028***	0.020***
	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)
Score	0.160***	0.072***	0.086***	0.161***	0.072***	0.087***	0.160***	0.072***	0.086***	0.161***	0.073***	0.087***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry fixed effect	YES	YES	YES									
Year effects	YES	YES	YES									
Constant	3.355***	-2.012***	5.448***	3.287***	-1.995***	5.347***	3.346***	-2.014***	5.442***	3.278***	-1.998***	5.341***
	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)	(0.009)	(0.005)	(0.008)	(0.010)	(0.005)	(0.008)
Observations	5987215	7299979	5942154	5168791	6330331	5137190	5955061	7264244	5910090	5140628	6298902	5109076
R-squared	0.331	0.263	0.199	0.333	0.264	0.203	0.331	0.263	0.199	0.333	0.264	0.203

Table 10 (Continued): DID Results for Application Without Receivers as Treatment Group

Applied for or Not			FY	2013					FY	2014		
ALL		Base		Wit	h Control Varia	ables		Base		Wit	n Control Varia	ables
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per
	Sules	Employees	capita	Sures	Employees	capita	Sures	Employees	capita	Sules	Employees	capita
Treatment*post dummy	0.021	0.019	0.036**	0.028	0.022	0.038**	0.022	-0.005	0.024*	0.028*	-0.003	0.028**
	(0.018)	(0.016)	(0.015)	(0.018)	(0.015)	(0.016)	(0.016)	(0.014)	(0.013)	(0.015)	(0.014)	(0.013)
Treatment dummy	-0.006	-0.311***	0.001	-0.001	-0.155***	-0.022***	-0.024***	-0.374***	-0.005	-0.018***	-0.200***	-0.012**
	(0.009)	(0.009)	(0.007)	(0.009)	(0.009)	(0.008)	(0.006)	(0.006)	(0.005)	(0.006)	(0.007)	(0.005)
Post dummy	-0.050***	-0.031**	-0.052***	-0.093***	-0.030	-0.081***	-0.071***	-0.007	-0.057***	-0.091***	0.003	-0.074***
	(0.015)	(0.014)	(0.012)	(0.022)	(0.019)	(0.020)	(0.012)	(0.013)	(0.010)	(0.016)	(0.015)	(0.014)
CEO male dummy				0.187***	0.065***	0.136***				0.228***	0.054***	0.187***
				(0.017)	(0.013)	(0.015)				(0.012)	(0.009)	(0.011)
# of plants				0.117***	0.221***	-0.049***				0.167***	0.183***	-0.038***
				(0.009)	(0.009)	(0.006)				(0.008)	(0.007)	(0.005)
# of establishments				0.123***	0.120***	0.036***				0.115***	0.068***	0.029***
				(0.006)	(0.004)	(0.004)				(0.007)	(0.008)	(0.003)
Score				0.112***	0.049***	0.058***				0.118***	0.054***	0.057***
				(0.001)	(0.001)	(0.001)				(0.001)	(0.001)	(0.001)
Industry fixed effect	NO	NO	NO	YES	YES	YES	NO	NO	NO	YES	YES	YES
Year effects	NO	NO	NO	YES	YES	YES	NO	NO	NO	YES	YES	YES
Constant	11.372***	1.911***	9.764***	5.661***	-0.821***	6.891***	11.353***	1.941***	9.777***	5.386***	-0.905***	6.681***
	(0.007)	(0.008)	(0.006)	(0.073)	(0.058)	(0.066)	(0.005)	(0.006)	(0.004)	(0.051)	(0.036)	(0.042)
Observations	74193	56769	73789	55444	43404	55192	153152	110913	152025	111686	83165	111296
R-squared	0.000	0.031	0.000	0.286	0.240	0.164	0.000	0.039	0.000	0.306	0.251	0.169

Table 11: PSM–DID Results for Application as Treatment Group

Applied for or Not			FY	2013					FY	2014		
ALL		Base		Wit	h Control Varia	ibles		Base		Wit	h Control Varia	ables
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Salas	Employees	Sales per	Salas	Employees	Sales per	Salas	Employaas	Sales per	Salas	Employees	Sales per
	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita
Treatment*post dummy	0.087***	0.043	0.043	0.056	0.037	0.041	0.023	-0.007	0.022	-0.005	0.012	0.018
	(0.033)	(0.030)	(0.026)	(0.036)	(0.030)	(0.031)	(0.027)	(0.025)	(0.021)	(0.028)	(0.025)	(0.025)
Control variables	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Fixed effects	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Constant	11.494***	1.946***	9.830***	7.685***	-0.264***	8.403***	11.481***	1.976***	9.868***	7.353***	-0.564***	8.209***
	(0.012)	(0.014)	(0.010)	(0.112)	(0.074)	(0.081)	(0.008)	(0.010)	(0.006)	(0.063)	(0.053)	(0.053)
Observations	17306	13011	17224	11231	8900	11070	43336	30362	43019	27179	19979	26370
R-squared	0.002	0.036	0.001	0.211	0.182	0.049	0.001	0.049	0.000	0.259	0.235	0.070

Table 12: PSM–DID Results for Application as Treatment Group (Construction Industry)

***,**,* represents statistical significance at the 1%,5% and 10% respectively. All explained variables are logarithmic. Robust standard errors are in parentheses. Treatment dummy variables and post dummy variables are included in the estimations but only key variables are shown to save spaces.

Applied for or Not			FY	2013					FY	2014		
ALL		Base		Wit	h Control Varia	ables		Base		Wit	h Control Varia	ables
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Salaa	Employees	Sales per	Salaa	Emularia	Sales per	Salaa	Emulariana	Sales per	Salaa	Employees	Sales per
	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita
Treatment*post dummy	0.029	0.018	0.039	0.051*	0.043	0.029	0.042	0.003	0.021	0.035	-0.005	0.029
	(0.032)	(0.031)	(0.027)	(0.031)	(0.031)	(0.028)	(0.030)	(0.028)	(0.024)	(0.028)	(0.027)	(0.024)
Control variables	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Fixed effects	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Constant	11.512***	2.137***	9.567***	6.613***	-0.595***	7.176***	11.497***	2.212***	9.564***	6.037***	-0.504***	6.702***
	(0.012)	(0.014)	(0.010)	(0.111)	(0.089)	(0.085)	(0.009)	(0.011)	(0.007)	(0.074)	(0.065)	(0.060)
Observations	17209	13679	17149	13573	10874	13526	30300	22965	30343	24128	18603	24404
R-squared	0.001	0.016	0.000	0.256	0.154	0.097	0.001	0.029	0.000	0.287	0.164	0.128

Table 13: PSM–DID Results for Application as Treatment Group (Manufacturing Industry)

***,**,* represents statistical significance at 1%,5% and 10% respectively. All explained variables are logarithmic. Robust standard errors are in parentheses. Treatment dummy variables and post dummy variables are included in the estimations but only key variables are shown to save spaces.

Applied for or Not			FY	2013					FY	2014		
ALL		Base		Wit	h Control Varia	ables		Base		Wit	h Control Vari	ables
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Salas	Employaas	Sales per	Salas	Employaas	Sales per	Salas	Employees	Sales per	Salas	Employage	Sales per
	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita
Treatment*post dummy	-0.007	0.011	0.035	0.004	0.011	0.041*	0.018	-0.004	0.030	0.041*	-0.008	0.033*
	(0.028)	(0.023)	(0.023)	(0.026)	(0.022)	(0.022)	(0.025)	(0.020)	(0.019)	(0.022)	(0.020)	(0.018)
Control variables	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Fixed effects	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Constant	11.262***	1.779***	9.825***	4.682***	-2.970***	5.835***	11.232***	1.796***	9.821***	4.198***	-3.143***	6.594***
	(0.010)	(0.011)	(0.008)	(0.084)	(0.315)	(0.070)	(0.007)	(0.008)	(0.006)	(0.154)	(0.052)	(0.048)
Observations	38917	29393	38653	30159	23215	30150	77542	56097	76733	59254	43663	59368
R-squared	0.001	0.038	0.001	0.308	0.192	0.200	0.001	0.038	0.001	0.321	0.192	0.190

Table 14: PSM–DID Results for Application as Treatment Group (Service Industries)

***, **, * represents statistical significance at 1%,5% and 10% respectively. All explained variables are logarithmic. Robust standard errors are in parentheses. Treatment dummy variables and post dummy variables are included in the estimations but only key variables are shown to save spaces.

Applied for or Not	St	andard Year: 2	2009	St	andard Year: 2	2010	St	andard Year: 2	2011	St	andard Year: 2	2012	St	andard Year: 2	2013
Sample of FY2013 Application		ALL													
Standard: 2009 ~ 2013	Wit	th Control Var	iables	Wit	h Control Var	iables	Wit	h Control Var	iables		Base		Wit	h Control Var	iables
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Sales	Employees	Sales per capita												
Treatment*post	0.016	-0.010	0.027	0.008	-0.006	0.019	0.010	-0.006	0.017	0.017	-0.009	0.015	0.030	-0.008	0.016
	(0.020)	(0.020)	(0.017)	(0.018)	(0.018)	(0.016)	(0.018)	(0.017)	(0.015)	(0.020)	(0.019)	(0.017)	(0.026)	(0.024)	(0.022)
Treatment dummy	-0.014	-0.148***	-0.042***	-0.007	-0.151***	-0.033***	-0.007	-0.152***	-0.030***	-0.007	-0.152***	-0.026***	-0.007	-0.154***	-0.024***
	(0.017)	(0.018)	(0.015)	(0.014)	(0.014)	(0.012)	(0.012)	(0.012)	(0.010)	(0.011)	(0.011)	(0.009)	(0.010)	(0.010)	(0.008)
Post dummy	-0.011	-0.001	-0.015	-0.007	-0.004	-0.011	-0.008	-0.004	-0.010	-0.011	-0.002	-0.009	-0.018	-0.003	-0.010
	(0.021)	(0.021)	(0.018)	(0.020)	(0.020)	(0.018)	(0.020)	(0.020)	(0.018)	(0.021)	(0.020)	(0.018)	(0.024)	(0.023)	(0.020)
Control Variables	YES	YES	YES												
Industry fixed effect	YES	YES	YES												
Year effects	YES	YES	YES												
Constant	5.802***	-0.880***	7.008***	5.798***	-0.878***	7.004***	5.798***	-0.877***	7.002***	5.798***	-0.877***	7.000***	5.798***	-0.876***	6.999***
	(0.087)	(0.073)	(0.076)	(0.087)	(0.072)	(0.076)	(0.086)	(0.072)	(0.076)	(0.086)	(0.072)	(0.076)	(0.086)	(0.072)	(0.076)
Observations	39783	29639	39686	39783	29639	39686	39783	29639	39686	39783	29639	39686	39783	29639	39686
R-squared	0.283	0.241	0.165	0.283	0.241	0.165	0.283	0.241	0.165	0.283	0.241	0.165	0.283	0.241	0.165

Table 15: Results of Placebo PSM-DID

Applied for or Not	Sta	ndard Year: 20	010	Sta	ndard Year: 20	011	Sta	ndard Year: 20	012	Sta	ndard Year: 2	013	Sta	ndard Year: 2	014
Sample of FY2014 Application		ALL			ALL		ALL ALL		ALL						
Standard: 2010 ~ 2014	With	n Control Varia	ables	With	Control Varia	ables	With	n Control Varia	ables	With	n Control Varia	ables	With Control Variables		
	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post	0.012	-0.027**	0.034***	0.009	-0.017	0.029***	0.012	-0.010	0.027***	0.015	0.001	0.028**	0.015	0.007	0.028*
	(0.013)	(0.014)	(0.011)	(0.012)	(0.013)	(0.010)	(0.013)	(0.013)	(0.011)	(0.014)	(0.014)	(0.012)	(0.019)	(0.018)	(0.016)
Treatment dummy	-0.026***	-0.182***	-0.035***	-0.024***	-0.191***	-0.028***	-0.023***	-0.196***	-0.023***	-0.023***	-0.200***	-0.020***	-0.020***	-0.201***	-0.016***
	(0.010)	(0.011)	(0.009)	(0.009)	(0.010)	(0.007)	(0.008)	(0.009)	(0.007)	(0.007)	(0.008)	(0.006)	(0.007)	(0.007)	(0.005)
Post dummy	-0.020	0.020	-0.042***	-0.019	0.012	-0.040***	-0.020	0.006	-0.039***	-0.022	-0.002	-0.040***	-0.022	-0.007	-0.039***
	(0.014)	(0.015)	(0.012)	(0.014)	(0.015)	(0.012)	(0.015)	(0.015)	(0.012)	(0.015)	(0.015)	(0.013)	(0.017)	(0.018)	(0.014)
Control Variables	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	5.485***	-0.942***	6.785***	5.483***	-0.935***	6.781***	5.483***	-0.930***	6.779***	5.483***	-0.927***	6.777***	5.482***	-0.926***	6.775***
	(0.056)	(0.042)	(0.047)	(0.056)	(0.042)	(0.047)	(0.056)	(0.041)	(0.046)	(0.056)	(0.041)	(0.046)	(0.056)	(0.041)	(0.046)
Observations	91101	65033	90875	91101	65033	90875	91101	65033	90875	91101	65033	90875	91101	65033	90875
R-squared	0.301	0.249	0.167	0.301	0.249	0.167	0.301	0.249	0.167	0.301	0.249	0.167	0.301	0.249	0.167

Table 15 (Continued): Results of Placebo PSM–DID

Appendix Table A1: Descriptive Statistics A. CFSCIJ

First offering in 2013

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	514	.013	.193	-1.529	1.229
Percent change in sales (2012-2014)	500	.012	.27	-1.513	1.491
Percent change in sales (2012-2015)	484	.007	.336	-1.57	1.36
# of change in employee (2012-2013)	564	.018	1.664	-27	17
# of change in employee (2012-2014)	560	.046	1.569	-13	17
# of change in employee (2012-2015)	555	.11	2.156	-24	24
Percent change in sales per emp (2012-2013)	506	057	.925	-7.395	9.762
Percent change in sales per emp (2012-2014)	492	1	1.133	-7.417	9.762
Percent change in sales per emp (2012-2014)	476	157	1.309	-7.805	8.812
Assessment Score	763	150.301	37.308	0	225.911
Subsidy received	763	.882	.323	0	1
TSR score (2012)	576	45.677	4.414	29	61
# of employees (2012)	568	6.245	4.956	1	37

Second offering in 2013

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	2004	.02	.193	-1.69	2.16
Percent change in sales (2012-2014)	1960	.027	.272	-2.205	2.75
Percent change in sales (2012-2015)	1892	.025	.335	-3.912	3.035
# of change in employee (2012-2013)	2205	05	1.352	-18	12
# of change in employee (2012-2014)	2184	.034	1.914	-18	25
# of change in employee (2012-2015)	2166	.096	2.291	-18	25
Percent change in sales per emp (2012-2013)	1982	011	.915	-8.42	7.44
Percent change in sales per emp (2012-2014)	1936	073	1.198	- 10.256	8.104
Percent change in sales per emp (2012-2014)	1868	131	1.453	- 10.225	10.563
Assessment Score	2928	153.346	24.007	55.522	265.806
Subsidy received	2928	.74	.438	0	1
TSR score (2012)	2254	45.63	4.399	23	65
# of employees (2012)	2228	6.022	4.891	1	35

First offering in 2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	2530	002	.194	-1.45	4.144
Percent change in sales (2012-2014)	2423	004	.288	-1.872	5.598
Percent change in sales (2012-2015)	1723	005	.316	-2.538	2.24
# of change in employee (2012-2013)	2815	.012	1.384	-18	26
# of change in employee (2012-2014)	2793	.044	1.878	-22	26
# of change in employee (2012- 2015)	2746	.083	2.338	-22	28
Percent change in sales per emp (2012-2013)	2501	057	.897	- 11.209	7.757
Percent change in sales per emp (2012-2014)	2398	098	1.195	- 11.255	8.793
Percent change in sales per emp (2012-2014)	1707	108	1.398	11.255	8.773
Assessment Score	3496	165.65	25.186	0	275.804
Subsidy received	3496	.545	.498	0	1
TSR score (2012)	2879	45.432	4.505	24	63
# of employees (2012)	2839	6.04	5.843	1	120

Second offering in 2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	3697	011	.215	-2.414	3.006
Percent change in sales (2012-2014)	3556	011	.303	-3.089	3.354
Percent change in sales (2012-2015)	2577	.001	.371	-3.284	3.731
# of change in employee (2012-2013)	4062	.005	2.071	-101	19
# of change in employee (2012-2014)	4022	.051	1.687	-24	15
# of change in employee (2012- 2015)	3977	.093	2.259	-31	38
Percent change in sales per emp (2012-2013)	3656	05	.838	-8.747	8.163
Percent change in sales per emp (2012-2014)	3519	09	1.197	-8.821	9.021
Percent change in sales per emp (2012-2014)	2551	131	1.401	- 11.093	9.482
Assessment Score	4996	170.931	24.941	0	262.274
Subsidy received	4996	.675	.469	0	1
TSR score (2012)	4148	45.5	4.461	26	65
# of employees (2012)	4099	5.98	5.912	1	125

Third offering in 2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	1587	004	.206	-1.25	3.006
Percent change in sales (2012-2014)	1525	016	.295	-2.006	3.354
Percent change in sales (2012-2015)	1103	01	.341	-2.462	3.352
# of change in employee (2012-2013)	1735	.04	2.127	-38	46
# of change in employee (2012-2014)	1724	.084	3.069	-38	86
# of change in employee (2012-2015)	1699	.117	3.378	-38	86
Percent change in sales per emp (2012-2013)	1563	039	.796	-8.726	6.965
Percent change in sales per emp (2012-2014)	1504	076	1.19	- 10.941	9.021
Percent change in sales per emp (2012-2014)	1091	144	1.429	- 10.948	9.021
Assessment Score	2178	175.43	27.366	0	266.729
Subsidy received	2178	.95	.217	0	1
TSR score (2012)	1776	45.37	4.447	26	67
# of employees (2012)	1746	6.208	9.604	1	314

B. JCCI First offering in 2013

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	503	.011	.22	-1.025	.915
Percent change in sales (2012-2014)	492	005	.337	-2.058	1.24
Percent change in sales (2012-2015)	459	.009	.436	-4.407	1.526
# of change in employee (2012-2013)	554	.002	1.258	-9	10
# of change in employee (2012-2014)	548	.206	2.108	-9	20
# of change in employee (2012-2015)	534	.069	2.575	-15	20
Percent change in sales per emp (2012-2013)	491	02	.827	-7.875	7.638
Percent change in sales per emp (2012-2014)	480	114	1.32	-9.664	9.21
Percent change in sales per emp (2012-2014)	448	068	1.469	-9.669	9.21
Assessment Score	814	143.746	28.834	39	223
Subsidy received	814	.533	.499	0	1
TSR score (2012)	573	45.438	4.185	26	57
# of employees (2012)	560	6.877	6.152	1	50

Second offering in 2013

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	2618	.015	.195	-2.367	1.482
Percent change in sales (2012-2014)	2523	.014	.306	-2.93	3.15
Percent change in sales (2012-2015)	2431	.025	.37	-2.668	3.507
# of change in employee (2012- 2013)	2889	.026	2.38	-20	90
# of change in employee (2012-2014)	2852	.02	2.963	-43	90
# of change in employee (2012-2015)	2826	029	2.954	-46	45
Percent change in sales per emp (2012-2013)	2582	026	.996	- 10.963	9.71
Percent change in sales per emp (2012-2014)	2486	106	1.275	- 10.963	9.21
Percent change in sales per emp (2012-2014)	2398	113	1.508	- 10.546	9.21
Assessment Score	4221	140.934	29.044	31.2	238.1
Subsidy received	4221	.235	.424	0	1
TSR score (2012)	2970	45.535	4.25	23	65
# of employees (2012)	2929	6.443	5.917	1	55

First offering in 2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	1610	005	.229	-1.745	2.966
Percent change in sales (2012-2014)	1523	.001	.335	-3.089	2.611
Percent change in sales (2012-2015)	1051	.014	.412	-3.119	2.9
# of change in employee (2012-2013)	1806	006	1.781	-43	11
# of change in employee (2012-2014)	1779	08	2.569	-42	17
# of change in employee (2012-2015)	1747	07	2.942	-42	21
Percent change in sales per emp (2012-2013)	1590	074	1.084	-11.18	10.793
Percent change in sales per emp (2012-2014)	1504	051	1.425	- 11.495	11.987
Percent change in sales per emp (2012-2014)	1038	049	1.62	10.362	12.004
Assessment Score	2469	144.745	27.623	18.4	251.2
Subsidy received	2469	.454	.498	0	1
TSR score (2012)	1861	45.311	4.406	28	74
# of employees (2012)	1837	6.397	9.351	1	300

Second offering in 2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	3020	002	.213	-1.897	1.414
Percent change in sales (2012-2014)	2881	.008	.302	-2.011	2.083
Percent change in sales (2012-2015)	2028	.014	.377	-3.588	2.9
# of change in employee (2012-2013)	3389	.025	1.746	-47	22
# of change in employee (2012-2014)	3346	.04	2.303	-47	30
# of change in employee (2012- 2015)	3284	.069	2.992	-46	43
Percent change in sales per emp (2012-2013)	2994	067	1.004	- 11.224	9.821
Percent change in sales per emp (2012-2014)	2856	108	1.34	- 11.584	10.354
Percent change in sales per emp (2012-2014)	2011	108	1.464	-9.976	10.38
Assessment Score	4645	141.925	26.367	10.851	249.571
Subsidy received	4645	.406	.491	0	1
TSR score (2012)	3472	45.42	4.45	22	66
# of employees (2012)	3440	6.583	8.908	1	300

Third offering in 2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent change in sales (2012-2013)	1364	006	.206	-1.567	1.144
Percent change in sales (2012-2014)	1283	.007	.3	-1.845	2.25
Percent change in sales (2012-2015)	913	.009	.349	-2.011	2.492
# of change in employee (2012-2013)	1525	.016	1.4	-13	16
# of change in employee (2012-2014)	1500	.007	1.983	-15	16
# of change in employee (2012-2015)	1474	.019	2.573	-20	19
Percent change in sales per emp (2012-2013)	1349	01	1.132	-8.476	10.793
Percent change in sales per emp (2012-2014)	1270	042	1.481	- 11.033	10.778
Percent change in sales per emp (2012-2014)	903	121	1.551	-9.786	10.097
Assessment Score	2148	142.382	26.005	38.839	254.065
Subsidy received	2148	.655	.476	0	1
TSR score (2012)	1567	45.294	4.523	22	67
# of employees (2012)	1548	6.421	7.253	1	189

Table A2: Continui	ty-Based Ana	lysis for Pred	letermined	Covariates
	2	2		

JCCI				-						
	Firs	t offering in 2	.013	Secor	nd offering in	2013				
	TSR score (2012)	# of emp (2012)	sales (2012)	TSR score (2012)	# of emp (2012)	sales (2012)				
RD_Estimate	0.0583	-0.918	-0.348	-0.00594	0.215	0.0586				
Std. Err.	(0.846)	(1.585)	(0.273)	(0.510)	(0.917)	(0.127)				
Observations	573	560	523	2,970	2,929	2,729				
	Firs	t offering in 2	.014	Secor	nd offering in	2014	Third offering in 2014			
	TSR score (2013)	# of emp (2013)	sales (2013)	TSR score (2013)	# of emp (2013)	sales (2013)	TSR score (2013)	# of emp (2013)	sales (2013)	
RD_Estimate	1.217*	-0.974	-0.0188	0.0894	1.229	0.109	1.514*	-0.184	-0.225	
Std. Err.	(0.668)	(1.187)	(0.155)	(0.405)	(0.853)	(0.102)	(0.813)	(0.793)	(0.192	
Observations	1,660	1,636	1,507	3,176	3,143	2,903	1,427	1,401	1,293	

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A2	(Continued	l): Continuit	ty-Based Analy	ysis for Prec	letermined C	ovariates
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CFSCIJ

	Firs	t offering in 2	2013	Secor	d offering in	2013			
	TSR score (2012)	# of emp (2012)	sales (2012)	TSR score (2012)	# of emp (2012)	sales (2012)			
RD_Estimate	-0.554	-0.829	0.210	-0.292	-0.503	-0.0177			
Std. Err.	(1.128)	(1.396)	(0.270)	(0.579)	(0.619)	(0.123)			
Observations	576	568	533	2,254	2,228	2,078			
	Eine	t offening in 7	014	Casar	1	2014	This	1 offening in	2014
	Firs	t offering in 2	2014	Secor	d offering in	2014	Thir	d offering in	2014
	Firs TSR score (2013)	t offering in 2 # of emp (2013)	sales (2013)	Secor TSR score (2013)	# of emp (2013)	sales (2013)	Thir TSR score (2013)	d offering in 2 # of emp (2013)	2014 sales (2013)
RD_Estimate	Firs TSR score (2013) 0.347	t offering in 2 # of emp (2013) 0.0467	sales (2013) 0.0972	Secor TSR score (2013) 0.955*	d offering in # of emp (2013) 0.00617	sales (2013) -0.0431	Thir TSR score (2013) 1.449	d offering in 2 # of emp (2013) 0.187	2014 sales (2013) 0.0326
RD_Estimate Std. Err.	Firs TSR score (2013) 0.347 (0.576)	t offering in 2 # of emp (2013) 0.0467 (0.478)	2014 sales (2013) 0.0972 (0.140)	Secor TSR score (2013) 0.955* (0.577)	d offering in # of emp (2013) 0.00617 (0.646)	2014 sales (2013) -0.0431 (0.149)	Thir TSR score (2013) 1.449 (1.227)	d offering in 2 # of emp (2013) 0.187 (1.200)	2014 sales (2013) 0.0326 (0.378)

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

2013		JCCI			CFSCIJ			ALL	
	(1)	(2)	(3)	(7)	(8)	(9)	(13)	(14)	(15)
	Salaa	Employees	Sales per	Salar	Emularias	Sales per	Salaa	Emulariasa	Sales per
	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita
Treatment*post dummy	0.012	0.005	-0.021	0.035	-0.000	0.056	-0.008	0.009	-0.017
	(0.058)	(0.038)	(0.051)	(0.078)	(0.049)	(0.067)	(0.041)	(0.026)	(0.035)
Treatment dummy	0.004	0.023	-0.007	0.023	0.032	-0.018	-0.013	0.008	-0.018
	(0.036)	(0.028)	(0.032)	(0.049)	(0.037)	(0.041)	(0.026)	(0.019)	(0.023)
Post dummy	-0.066*	-0.020	-0.026	-0.138*	-0.008	-0.125**	-0.079**	-0.019	-0.045
	(0.034)	(0.021)	(0.030)	(0.071)	(0.045)	(0.062)	(0.031)	(0.019)	(0.027)
Receive dummy#2007_year	-0.008	-0.019	0.008	-0.017	0.021	-0.019	-0.056	-0.025	-0.026
	(0.056)	(0.044)	(0.050)	(0.075)	(0.058)	(0.064)	(0.040)	(0.031)	(0.035)
Receive dummy#2008_year	-0.020	-0.011	-0.012	0.001	0.020	0.002	-0.038	-0.023	-0.011
	(0.055)	(0.044)	(0.049)	(0.075)	(0.058)	(0.064)	(0.039)	(0.030)	(0.035)
Receive dummy#2009_year	-0.037	0.005	-0.046	0.005	0.019	-0.000	-0.027	-0.004	-0.023
	(0.060)	(0.044)	(0.053)	(0.074)	(0.057)	(0.062)	(0.041)	(0.030)	(0.036)
Receive dummy#2010_year	0.028	0.014	0.007	0.027	0.034	0.014	0.005	0.003	0.006
	(0.055)	(0.042)	(0.049)	(0.072)	(0.055)	(0.061)	(0.039)	(0.029)	(0.034)
Receive dummy#2011_year	0.030	0.014	0.004	0.010	0.029	-0.006	-0.006	-0.005	-0.001
	(0.054)	(0.041)	(0.048)	(0.070)	(0.054)	(0.060)	(0.038)	(0.028)	(0.034)
Receive dummy#2012_year	0.004	-0.005	0.002	0.008	0.018	-0.004	-0.019	-0.006	-0.014
	(0.052)	(0.040)	(0.046)	(0.069)	(0.053)	(0.059)	(0.037)	(0.027)	(0.033)
Receive dummy#2013_year	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE
Constant	6.059***	-1.364***	7.493***	6.631***	-0.899***	7.563***	6.216***	-1.183***	7.430***
	(0.120)	(0.108)	(0.112)	(0.116)	(0.083)	(0.093)	(0.082)	(0.062)	(0.070)
Observations	20274	23056	20218	16019	17990	15987	36284	41036	36196
R-squared	0.290	0.257	0.133	0.260	0.230	0.150	0.272	0.240	0.134

Table A3: Parallel Trend Check about Reception

2014		JCCI			CFSCIJ	•		ALL	
	(1)	(2)	(3)	(7)	(8)	(9)	(13)	(14)	(15)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	-0.002	0.004	-0.003	0.042	-0.012	0.017	0.007	0.004	0.001
	(0.046)	(0.028)	(0.039)	(0.056)	(0.032)	(0.049)	(0.034)	(0.020)	(0.030)
Treatment dummy	0.015	0.027	-0.024	-0.022	0.020	-0.037	-0.045**	0.008	-0.056***
	(0.029)	(0.020)	(0.025)	(0.035)	(0.023)	(0.030)	(0.022)	(0.015)	(0.019)
Post dummy	-0.057	-0.030	-0.024	-0.123**	0.001	-0.061	-0.081***	-0.020	-0.038
	(0.036)	(0.021)	(0.031)	(0.051)	(0.029)	(0.045)	(0.030)	(0.017)	(0.026)
Receive dummy#2007_year	-0.048	0.025	-0.060	-0.012	-0.015	-0.009	-0.047	-0.004	-0.043
	(0.044)	(0.033)	(0.039)	(0.053)	(0.039)	(0.045)	(0.033)	(0.024)	(0.029)
Receive dummy#2008_year	-0.032	0.031	-0.049	-0.041	-0.022	-0.027	-0.048	-0.004	-0.040
	(0.045)	(0.032)	(0.039)	(0.052)	(0.039)	(0.045)	(0.033)	(0.024)	(0.029)
Receive dummy#2009_year	-0.001	0.043	-0.036	-0.028	-0.009	-0.021	-0.027	0.001	-0.027
	(0.045)	(0.031)	(0.039)	(0.052)	(0.038)	(0.046)	(0.034)	(0.023)	(0.029)
Receive dummy#2010_year	-0.005	0.040	-0.039	-0.055	-0.030	-0.035	-0.042	-0.005	-0.036
	(0.043)	(0.031)	(0.038)	(0.052)	(0.036)	(0.045)	(0.033)	(0.023)	(0.028)
Receive dummy#2011_year	-0.013	0.009	-0.027	0.029	-0.010	0.021	-0.005	-0.012	-0.004
	(0.043)	(0.030)	(0.037)	(0.051)	(0.035)	(0.044)	(0.032)	(0.022)	(0.027)
Receive dummy#2012_year	-0.017	-0.008	-0.014	0.006	-0.018	0.017	-0.013	-0.020	-0.001
	(0.043)	(0.029)	(0.037)	(0.052)	(0.034)	(0.045)	(0.032)	(0.022)	(0.028)
Receive dummy#2013_year	-0.012	0.003	-0.018	0.007	-0.002	0.004	-0.008	-0.003	-0.009
	(0.042)	(0.029)	(0.036)	(0.051)	(0.034)	(0.044)	(0.031)	(0.021)	(0.027)
Receive dummy#2014_year	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE
Constant	5.891***	-1.478***	7.393***	5.541***	-1.436***	7.038***	5.698***	-1.421***	7.168***
Observations	(0.091)	(0.005)	(0.065)	(0.065)	(0.030)	(0.071)	70058	(0.038)	(0.033)
Descrivations Descrivations	51590	53045 0.259	0.157	36/23	43103	30033 0 162	10058	10/3/	078/3
R-squared	0.299	0.258	0.157	0.307	0.262	0.163	0.298	0.256	0.155

Table A3 (Continued): Parallel Trend Check about Reception

2013		JCCI			CFSCIJ			ALL	
	(1)	(2)	(3)	(7)	(8)	(9)	(13)	(14)	(15)
	Color.	F 1	Sales per	C-1	E	Sales per	G-1	F 1	Sales per
	Sales	Employees	capita	Sales	Employees	capita	Sales	Employees	capita
Treatment*post dummy	0.052*	-0.015	0.048*	-0.004	-0.004	-0.004	0.028	-0.010	0.025
	(0.030)	(0.018)	(0.026)	(0.032)	(0.020)	(0.027)	(0.022)	(0.013)	(0.019)
Treatment dummy	0.115***	0.084***	0.038**	0.082***	0.074***	0.016	0.101***	0.079***	0.028**
	(0.019)	(0.013)	(0.016)	(0.021)	(0.015)	(0.018)	(0.014)	(0.010)	(0.012)
Post dummy	-0.108***	-0.000	-0.077***	-0.107***	-0.000	-0.077***	-0.108***	-0.000	-0.077***
	(0.003)	(0.001)	(0.002)	(0.003)	(0.001)	(0.002)	(0.003)	(0.001)	(0.002)
Receive dummy#2007_year	-0.026	0.068***	-0.094***	-0.125***	0.011	-0.133***	-0.070***	0.043***	-0.112***
	(0.029)	(0.021)	(0.025)	(0.033)	(0.024)	(0.027)	(0.022)	(0.016)	(0.019)
Receive dummy#2008_year	-0.009	0.066***	-0.074***	-0.073**	0.006	-0.077***	-0.038*	0.040**	-0.076***
	(0.029)	(0.021)	(0.025)	(0.032)	(0.024)	(0.027)	(0.021)	(0.016)	(0.018)
Receive dummy#2009_year	-0.021	0.025	-0.050*	-0.043	-0.005	-0.042	-0.031	0.012	-0.047**
	(0.030)	(0.020)	(0.026)	(0.032)	(0.023)	(0.026)	(0.022)	(0.015)	(0.019)
Receive dummy#2010_year	-0.003	0.024	-0.034	-0.028	-0.005	-0.027	-0.015	0.012	-0.032*
	(0.028)	(0.020)	(0.025)	(0.031)	(0.022)	(0.026)	(0.021)	(0.015)	(0.018)
Receive dummy#2011_year	0.007	0.027	-0.032	-0.031	-0.015	-0.024	-0.011	0.009	-0.029
	(0.028)	(0.019)	(0.025)	(0.031)	(0.022)	(0.026)	(0.021)	(0.014)	(0.018)
Receive dummy#2012_year	0.023	0.019	-0.002	-0.023	-0.000	-0.029	0.003	0.010	-0.014
	(0.027)	(0.019)	(0.024)	(0.030)	(0.021)	(0.025)	(0.020)	(0.014)	(0.017)
Receive dummy#2013_year	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE
Constant	3.385***	-2.001***	5.464***	3.385***	-2.001***	5.464***	3.385***	-2.001***	5.464***
	(0.009)	(0.004)	(0.008)	(0.009)	(0.004)	(0.008)	(0.009)	(0.004)	(0.008)
Observations	6005915	7321070	5960818	6005915	7321070	5960818	6005915	7321070	5960818
R-squared	0.331	0.263	0.199	0.331	0.263	0.199	0.331	0.263	0.199

Table A4: Parallel Trend Check about Application

2014		JCCI	,		CFSCIJ	11		ALL	
	(1)	(2)	(3)	(7)	(8)	(9)	(13)	(14)	(15)
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita
Treatment*post dummy	0.017	-0.028**	0.019	-0.014	-0.007	-0.002	-0.001	-0.017*	0.006
	(0.024)	(0.014)	(0.020)	(0.021)	(0.013)	(0.018)	(0.016)	(0.009)	(0.014)
Treatment dummy	0.171***	0.097***	0.082***	0.060***	0.061***	0.014	0.110***	0.078***	0.044***
	(0.015)	(0.010)	(0.013)	(0.014)	(0.009)	(0.012)	(0.010)	(0.007)	(0.009)
Post dummy	-0.072***	0.002**	-0.043***	-0.072***	0.002*	-0.043***	-0.072***	0.002**	-0.043***
	(0.003)	(0.001)	(0.002)	(0.003)	(0.001)	(0.002)	(0.003)	(0.001)	(0.002)
Receive dummy#2007_year	-0.036	0.059***	-0.094***	-0.117***	0.007	-0.130***	-0.081***	0.030***	-0.114***
	(0.023)	(0.016)	(0.020)	(0.021)	(0.015)	(0.018)	(0.016)	(0.011)	(0.013)
Receive dummy#2008_year	0.003	0.060***	-0.058***	-0.071***	0.009	-0.083***	-0.037**	0.032***	-0.072***
	(0.023)	(0.016)	(0.020)	(0.021)	(0.015)	(0.018)	(0.016)	(0.011)	(0.013)
Receive dummy#2009_year	0.007	0.053***	-0.048**	-0.064***	-0.014	-0.059***	-0.031**	0.016	-0.054***
	(0.024)	(0.016)	(0.020)	(0.021)	(0.014)	(0.018)	(0.016)	(0.011)	(0.013)
Receive dummy#2010_year	0.027	0.040***	-0.022	-0.046**	-0.014	-0.035**	-0.014	0.010	-0.029**
	(0.023)	(0.016)	(0.020)	(0.021)	(0.014)	(0.018)	(0.016)	(0.010)	(0.013)
Receive dummy#2011_year	0.006	0.037**	-0.031	-0.037*	-0.012	-0.030*	-0.018	0.010	-0.031**
	(0.023)	(0.015)	(0.019)	(0.020)	(0.014)	(0.017)	(0.015)	(0.010)	(0.013)
Receive dummy#2012_year	-0.003	0.026*	-0.025	-0.022	-0.004	-0.024	-0.014	0.010	-0.025*
	(0.023)	(0.015)	(0.019)	(0.020)	(0.013)	(0.017)	(0.015)	(0.010)	(0.013)
Receive dummy#2013_year	0.001	0.007	-0.004	-0.012	-0.001	-0.010	-0.006	0.003	-0.007
	(0.022)	(0.015)	(0.019)	(0.020)	(0.013)	(0.017)	(0.015)	(0.010)	(0.013)
Receive dummy#2014_year	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE	BASE
Constant	3.350***	-2.003***	5.430***	3.350***	-2.003***	5.430***	3.349***	-2.003***	5.430***
	(0.009)	(0.004)	(0.008)	(0.009)	(0.004)	(0.008)	(0.009)	(0.004)	(0.008)
Observations	6005915	7321070	5960818	6005915	7321070	5960818	6005915	7321070	5960818
R-squared	0.331	0.263	0.199	0.331	0.263	0.199	0.331	0.263	0.199

Table A4 (Continued): Parallel Trend Check about Application

Received or Not			FY	2013			FY 2014						
JCCI		Base			Lagged			Base			Lagged		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per	Sales	Employees	Sales per	
		F <i>j</i>	capita			capita			capita			capita	
Treatment*post dummy	-0.007	-0.001	-0.005				0.029	0.000	0.015				
	(0.028)	(0.020)	(0.024)				(0.029)	(0.019)	(0.026)				
Lagged treatment*post dummy				0.016	0.010	-0.002				0.035	-0.003	0.012	
				(0.033)	(0.023)	(0.028)				(0.044)	(0.025)	(0.039)	
Treatment dummy	0.005	0.021*	-0.008	-0.008	0.017	-0.016	-0.021	0.006	-0.033***	-0.018	0.008	-0.031***	
	(0.016)	(0.012)	(0.014)	(0.016)	(0.012)	(0.014)	(0.013)	(0.010)	(0.012)	(0.013)	(0.009)	(0.012)	
Post dummy	-0.113***	-0.101***	-0.002							-0.123***	-0.056**	-0.012	
	(0.031)	(0.021)	(0.027)							(0.043)	(0.025)	(0.038)	
Lagged post dummy				-0.085***	-0.123***	0.051*	-0.121***	-0.037*	-0.037				
				(0.032)	(0.022)	(0.027)	(0.033)	(0.021)	(0.029)				
CEO male dummy	0.327***	0.087***	0.243***	0.333***	0.087***	0.249***	0.206***	0.031**	0.188***	0.205***	0.028**	0.190***	
	(0.025)	(0.016)	(0.023)	(0.027)	(0.017)	(0.025)	(0.019)	(0.013)	(0.016)	(0.021)	(0.014)	(0.017)	
# of plants	0.167***	0.246***	-0.081***	0.166***	0.251***	-0.089***	0.156***	0.181***	-0.020**	0.155***	0.181***	-0.020**	
	(0.018)	(0.019)	(0.014)	(0.019)	(0.020)	(0.014)	(0.012)	(0.010)	(0.008)	(0.013)	(0.010)	(0.008)	
# of establishments	0.087***	0.076***	0.016***	0.083***	0.070***	0.018***	0.120***	0.096***	0.028***	0.127***	0.097***	0.035***	
	(0.016)	(0.020)	(0.006)	(0.016)	(0.020)	(0.006)	(0.011)	(0.008)	(0.005)	(0.011)	(0.008)	(0.005)	
Score	0.107***	0.060***	0.047***	0.106***	0.059***	0.047***	0.108***	0.061***	0.046***	0.108***	0.060***	0.046***	
	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Constant	6.240***	-1.123***	7.435***	6.258***	-1.005***	7.329***	5.727***	-1.431***	7.207***	5.759***	-1.342***	7.153***	
	(0.117)	(0.112)	(0.107)	(0.126)	(0.118)	(0.112)	(0.075)	(0.049)	(0.061)	(0.076)	(0.051)	(0.063)	
Observations	19679	22342	19628	17182	19604	17148	37694	41983	37616	33152	37083	33108	
R-squared	0.294	0.255	0.136	0.290	0.249	0.139	0.307	0.261	0.161	0.307	0.259	0.164	

Table A5: DID Results for Reception as Treatment Group with RD sample

Received or Not			FY	2013			FY 2014						
CFSCIJ		Base			Lagged			Base			Lagged		
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	
	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	Sales	Employees	Sales per capita	
Treatment*post dummy	-0.014	-0.025	0.019			1	0.029	0.000	0.015			1	
1 5	(0.035)	(0.025)	(0.030)				(0.029)	(0.019)	(0.026)				
Lagged treatment*post dummy	× /	· /	()	-0.027	-0.032	0.014	· · /		· /	0.035	-0.003	0.012	
				(0.040)	(0.029)	(0.034)				(0.044)	(0.025)	(0.039)	
Treatment dummy	0.028	0.054***	-0.022	0.027	0.052***	-0.021	-0.021	0.006	-0.033***	-0.018	0.008	-0.031***	
5	(0.020)	(0.015)	(0.017)	(0.020)	(0.015)	(0.017)	(0.013)	(0.010)	(0.012)	(0.013)	(0.009)	(0.012)	
Post dummy	-0.097**	-0.031	-0.054			· /	· · /		· /	-0.123***	-0.056**	-0.012	
2	(0.044)	(0.030)	(0.038)							(0.043)	(0.025)	(0.038)	
Lagged post dummy	× /	· /	()	-0.067	-0.035	-0.021	-0.121***	-0.037*	-0.037	, ,	()		
				(0.045)	(0.032)	(0.039)	(0.033)	(0.021)	(0.029)				
CEO male dummy	0.181***	0.027	0.149***	0.175***	0.028	0.143***	0.206***	0.031**	0.188***	0.205***	0.028**	0.190***	
5	(0.028)	(0.021)	(0.024)	(0.030)	(0.022)	(0.025)	(0.019)	(0.013)	(0.016)	(0.021)	(0.014)	(0.017)	
# of plants	0.172***	0.209***	-0.032***	0.177***	0.208***	-0.025**	0.156***	0.181***	-0.020**	0.155***	0.181***	-0.020**	
1	(0.012)	(0.011)	(0.011)	(0.013)	(0.011)	(0.012)	(0.012)	(0.010)	(0.008)	(0.013)	(0.010)	(0.008)	
# of establishments	0.134***	0.095***	0.041***	0.133***	0.090***	0.046***	0.120***	0.096***	0.028***	0.127***	0.097***	0.035***	
	(0.009)	(0.008)	(0.006)	(0.009)	(0.008)	(0.007)	(0.011)	(0.008)	(0.005)	(0.011)	(0.008)	(0.005)	
Score	0.086***	0.048***	0.037***	0.086***	0.048***	0.037***	0.108***	0.061***	0.046***	0.108***	0.060***	0.046***	
	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Industry fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
-													
Year effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Constant	6.626***	-0.875***	7.527***	6.653***	-0.831***	7.496***	5.727***	-1.431***	7.207***	5.759***	-1.342***	7.153***	
	(0.114)	(0.080)	(0.091)	(0.119)	(0.085)	(0.094)	(0.075)	(0.049)	(0.061)	(0.076)	(0.051)	(0.063)	
Observations	16003	17972	15971	14083	15906	14064	37694	41983	37616	33152	37083	33108	
R-squared	0.260	0.230	0.150	0.258	0.228	0.152	0.307	0.261	0.161	0.307	0.259	0.164	

Table A5 (Continued): DID Results for Reception as Treatment Group with RD sample

Received or Not			FY	2013			FY 2014					
ALL		Base			Lagged			Base			Lagged	
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
	Sales	Employees	Sales per									
			capita			capita			capita			capita
Treatment*post dummy	0.012	0.013	0.001				0.023	0.005	0.023			
	(0.019)	(0.013)	(0.017)				(0.019)	(0.012)	(0.016)			
Lagged treatment*post dummy				0.009	0.015	-0.007				0.023	0.007	0.017
				(0.022)	(0.015)	(0.019)				(0.027)	(0.016)	(0.023)
Treatment dummy	-0.034***	-0.000	-0.027***	-0.036***	-0.000	-0.029***	-0.063***	0.004	-0.075***	-0.058***	0.003	-0.067***
	(0.011)	(0.008)	(0.009)	(0.011)	(0.008)	(0.009)	(0.008)	(0.006)	(0.007)	(0.008)	(0.006)	(0.007)
Post dummy	-0.119***	-0.083***	-0.022							-0.128***	-0.093***	-0.012
	(0.025)	(0.017)	(0.021)							(0.026)	(0.016)	(0.022)
Lagged post dummy				-0.087***	-0.098***	0.025	-0.136***	-0.072***	-0.044**			
				(0.025)	(0.017)	(0.022)	(0.021)	(0.014)	(0.018)			
CEO male dummy	0.271***	0.065***	0.204***	0.271***	0.067***	0.204***	0.242***	0.041***	0.196***	0.240***	0.040***	0.193***
	(0.019)	(0.013)	(0.017)	(0.020)	(0.013)	(0.018)	(0.015)	(0.009)	(0.012)	(0.016)	(0.010)	(0.013)
# of plants	0.156***	0.218***	-0.061***	0.157***	0.219***	-0.061***	0.160***	0.197***	-0.036***	0.158***	0.196***	-0.036***
	(0.011)	(0.010)	(0.009)	(0.011)	(0.011)	(0.009)	(0.009)	(0.008)	(0.006)	(0.010)	(0.008)	(0.007)
# of establishments	0.098***	0.081***	0.021***	0.094***	0.075***	0.024***	0.107***	0.095***	0.010***	0.110***	0.093***	0.015***
	(0.014)	(0.015)	(0.004)	(0.014)	(0.016)	(0.004)	(0.006)	(0.005)	(0.003)	(0.006)	(0.005)	(0.003)
Score	0.097***	0.055***	0.042***	0.096***	0.053***	0.042***	0.106***	0.060***	0.046***	0.106***	0.059***	0.046***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Industry fixed effect	YES											
2												
Year effects	YES											
Constant	6.303***	-1.061***	7.393***	6.320***	-0.991***	7.327***	5.875***	-1.393***	7.305***	5.902***	-1.298***	7.239***
	(0.083)	(0.063)	(0.069)	(0.088)	(0.067)	(0.072)	(0.058)	(0.039)	(0.049)	(0.060)	(0.040)	(0.051)
Observations	35673	40304	35590	31257	35501	31204	68283	76658	68118	59853	67519	59756
R-squared	0.273	0.238	0.136	0.270	0.234	0.138	0.295	0.256	0.152	0.292	0.251	0.154

Table A5 (Continued): DID Results for Reception as Treatment Group with RD sample

Appendix Figure A1 Density Function A. CFSCIJ















