

Information disclosure and labor market outcomes: Evidence from the Panama Papers

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Abstract

This paper investigates the impact of information disclosure on the labor market outcomes of exposed individuals. We leverage unique matched Brazilian employer-employee data with the named officers in the Panama papers from the International Consortium of Investigative Journalists and a dynamic differences-in-differences strategy to document an 24 p.p. more significant probability of staying in the job after an economic crisis. Last, the comparison with our not-yet-treated those affected by the disclosure of the Pandora paper suggests that these results are behavioral rather than reputational. We also find an effect on the (small) firms of exposed individuals, with about 3 to 4 fewer workers employed after the intervention and no changes in average compensation paid.

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Keywords: Tax havens, difference-in-differences, information disclosure, tax morale, behavioral effects, social effects, reputation effects, career effects, Panama Papers.

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1 Introduction

Tax evasion and avoidance have been extensively researched by the economic literature since the publication of the seminal work of [Allingham and Sandmo \(1972\)](#). With globalization and the consequent increased capital mobility across borders since the 1980s, issues related to evasion and avoidance on an international level gathered the interest of policymakers and researchers ([Saez and Zucman, 2019](#)). The severity of the situation became apparent with recent leaks from the *International Consortium of Investigative Journalists* (ICIJ), such as the Panama Papers, which hold previously undisclosed confidential financial details on affluent individuals and government figures. As the use of tax havens as tax planning tools became widespread among the wealthy, research on international tax enforcement focused on these matters ([Alstadsæter et al., 2018, 2019](#); [Zucman, 2019, 2013](#)). However, less attention has been given to the consequences of such international issues and information disclosure beyond tax outcomes.

This paper aims to contribute to investigating whether the publication of the Panama Papers impacted named individuals' careers and associated labor market outcomes. This is a relevant question whose impact is undetermined ex-ante. Although *reputational* consequences from peers and superiors could negatively impact named individuals' careers because they were caught in a potentially illegal and morally questionable tax-planning scheme, this also could reveal that those persons present tax-minimizing abilities, well-regarded in some industries. Alternatively, we can observe *behavioral responses*, in the sense that individuals act independently of their colleagues. Individuals exposed to this information shock might shift income composition between capital and labor to reduce the risk of being caught by the tax authority after the documents' leak. Or, they might face shame for their actions, affecting their labor market decision.

We start our analysis gathering all data leaked by the ICIJ (international Consortium of Investigative Journalists) to identify all named individuals who resides in Brazil according to their documentation.¹ Next, we leverage comprehensive matched employer-employee data from the Ministry of Labor (RAIS) from 2010-2018, containing information on all formally employed Brazilian residents, to build our treatment group, i.e., those that were named by the ICIJ and were found at least once in the formal Brazilian labor market. These matched individuals have higher earnings, are better educated, are older, and are more likely to be male than the average formally employed Brazilian. We focus the analysis on individuals reported in Panama papers that occurred in 2016, which had a more considerable impact in the media. To investigate the effects on the labor market, we focus on changes in earnings, job mobility, and participation in the formal market. We also examined the possible impact on firms in which they were linked: the number of employees, average earnings, earnings mass, and activity change.

Next, we build two main comparison groups. The first one (never-treated) is composed of (i) nearest-neighbor matched units and (ii) high-earners units. The second one (not-yet-treated) is composed of named individuals in the Pandora Papers (2021) found in RAIS up until 2018. We implement our dynamic differences-in-differences estimator to gauge the effects of being named in the Panama Papers on those labor outcomes of interest and to study the possible channels that led to these effects by running a mechanism checks.

The dynamic difference-in-differences estimator with our treated and control groups derived from the ICIJ Leaks and RAIS data suggests that individuals in the 2016 leak enjoyed more career stability than matched and high-earners never-treated groups, with an effect of between 20 to 24 p.p. of more job stability. The effect carries on for all post-treatment periods. In particular, during the crisis that affected Brazil soon after the leak, the comparison groups were likelier to leave the formal labor market than those under the intervention. The null effects for the not-yet-treated comparison group (Pandora Papers-2021 but treated in 2016) regressions suggest that the mechanism behind these results is behavioral rather than reputational. That is, coworkers and superiors of those named are probably not the source of the observed outcome changes. Instead, those named individual responses and behaviors seem to drive the effects. For the firm-level regressions, we find effects for small companies. Those with at least one employee named in the Panama Papers employed fewer individuals and exhibited lower payroll expenses, with no impact on activity, from 2016 to 2018.

This paper contributes to three strands of the literature. First, even though the outcomes studied here are not directly related to taxation, the tax morale-related works can help us to understand our estimations as “nonpecuniary motivations for tax compliance as well as factors that fall outside the standard, expected

¹The ICIJ is a global network of more than 290 investigative journalists in 105 countries who collaborate on in-depth investigative stories. The leaks employed in this work are the Panama (2016) and Pandora (2021) papers.

utility framework” (Luttmer and Singhal (2014)). In our context, we posit that shaming and reputation concerns coming from a tax-related public disclosure (the Panama Papers) have an effect beyond tax-related outcomes, even when tangible consequences are not involved. In particular, Perez-Truglia and Troiano (2018) find that increasing exposure to delinquency status leads to greater compliance among low-tax debt individuals. Next, from an experiment in Slovenia using a naming-and-shaming list publication, Dwenger and Treber (2018) concludes taxpayers reduce their tax debt to avoid shaming, particularly in industries where reputational concerns are essential. Slemrod et al. (2022) examine how Pakistani programs of top taxpayers’ public disclosure of tax information promote tax compliance. Finally, as a counterpoint to the works cited above, Fellner et al. (2013) deduce from a mailing experiment targeting potential TV license fee evaders that “neither appealing to morals nor imparting information about other’s behavior enhances compliance on aggregate”, even though the effect in compliance is positive and significant when detection threat is involved in the mails’ content. Hence, literature suggests that evidence is mixed, to some extent, when we consider social norms and compliance. In this study, we provide a new potential channel – the shame of being named in the leaks – on how nonpecuniary and other factors outside the usual expected utility framework might affect individual actions.

Second, as we have evidence that social and reputational concerns can affect individual decisions, we relate to papers that explore the interplay between these concerns in other contexts, such as education (Bursztyn et al., 2019), investment and consumption decisions (Bertrand and Morse, 2016), voting Bursztyn et al. (2014); Enikolopov et al. (2020), and labor market (Bursztyn et al., 2017; Kosfeld and Neckermann, 2011; Bradler et al., 2016). These instances are well summarized in Bursztyn and Jensen (2017). An issue raised by the review is that we still do not have an extensive comprehension of the mechanisms underlying social image concerns. In this work, we contribute by exploring the potential mechanisms behind the consequences of the Panama Papers publication on the named individuals while providing another instance of the reputational effects. We find that shame and moral concerns are not the main drivers of the changes in outcomes after the Panama Papers intervention.

Last, our work contributes to the literature that explores ICIJ Leaks by considering that the Panama Papers can also affect labor market outcomes. Our paper is intrinsically connected with Londoño-Vélez and Ávila-Mahecha (2021), where the authors find that wealth tax evasion responds to the credible threat of detection provided by the leak. In particular, those named in the disclosure became 27 p.p. more likely to disclose offshore assets in a Colombian voluntary disclosure program than their counterparts, suggesting that these individuals respond to exposure in such a tax-planning scheme. In Londoño-Vélez and Tortarolo (2022) and Londoño-Vélez and Ávila-Mahecha (2022), the Panama Papers are complementary to the analysis. The former states that the Panama Papers contributed to the success of Argentina’s highly successful tax amnesty program in 2016, while the second concludes that Colombian taxpayers increased activity in tax havens as a response to the reinstatement of wealth tax. Next, Ait Bihl Ouali (2019) finds that the fiscal scandal resulting from the Panama Papers led to increased preferences for redistribution policies in the United Kingdom. In Bayer et al. (2020), the conclusion is that offshore activity increases when governments become more enforcing concerning fighting organized crime (by confiscating their proceeds). Finally, Schmal et al. (2023) suggests that firms implicated in ICIJ Leaks try to hide wrongdoing and report more tax expenses after the exposure. We contribute to this literature by evaluating another dimension for the Panama Papers’ effects: the labor market.

This study is organized as follows. Section 2 presents the institutional context, both international and Brazilian, involving the Panama Papers and national conjecture. Section 3 explains the data used in the analysis (RAIS and ICIJ Leaks), as well as the method adopted to locate Panama Papers’ exposed individuals in the labor market data. Section 4 discusses the empirical strategy employed for identification and the potential mechanisms that could drive the effects. Section 5 shows the results. Finally, Section 6 concludes.

2 Institutional Setting

2.1 Tax evasion and avoidance

A common way of evading and avoiding taxes is offshoring in tax havens, which refers to individuals moving assets and income to foreign jurisdictions where tax laws are more favorable, usually to minimize or avoid paying taxes in their home country. This practice becomes more common the more we go up in the wealth

distribution – a stylized fact often reminded by the literature (Londoño-Vélez and Ávila-Mahecha, 2021, 2018; Londoño-Vélez and Tortarolo, 2022; Piketty, 2007). In particular, Zucman (2013) points out that “offshore accounts probably belong to very wealthy individuals, who play a key role in the long run evolution of income distributions”. This issue is not negligible, as approximately 10% of world GDP is held in offshore tax havens, equivalent to 8% of all household financial wealth (Alstadsæter et al., 2018). Although tax havens are technically not illegal, their opaque structures make them ideal for money laundering and other corruption schemes. Even putting aside the legal question, the issue still raises concerns about the morality of tax avoidance. It highlights the disproportionate power that wealthy individuals have in deciding how much tax they pay – a matter of ethical debate addressed by Saez and Zucman (2019).

Offshore tax evasion and avoidance become even more prominent when we consider the set of documents leaked by the *International Consortium of Investigative Journalists* (ICIJ, 2013) containing information on more than 810,000 offshore entities on over 200 countries and territories. This ICIJ data “strips away the secrecy that cloaks companies and trusts incorporated in tax havens and exposes the people behind them.” The database (which we refer to as *ICIJ Leaks*, or *Leaks*) consists of five massive leaks acquired by the ICIJ: Offshore Leaks (2013), Panama Papers (2016), Bahamas Leaks (2016), Paradise Papers (2017), and Pandora Papers (2021).

The Panama Papers was one of the first that caught the world’s attention, being awarded the Pulitzer Prize in 2017. Its publication prompted reactions from both authorities and individuals, leading to the creation of task forces, investigations, inquiries, and even the resignations of politicians occupying high positions in several countries, including but not limited to Peru, Argentina, the United States, the United Kingdom, Spain, and India. A prominent case related to the Panama Papers’ repercussions occurred in Iceland, culminating in the prime minister’s resignation, whose name was present in the leak. Comparable consequences for high-ranking officials also happened in Mongolia, Spain, and Pakistan. After 2016, as put by Keen and Slemrod (2021), “prompted by both public pressure and their own need for revenue, governments of the advanced economies have turned their attention to the problems of international taxation. They may not be setting up blockades, but the G20 members now routinely speak of taking ‘defensive measures’ against jurisdictions not complying with the new international tax standards being established.”

2.2 Brazil at the time of the Panama Papers

In Brazil, where this work focuses, the media was concerned with the illegalities associated with tax haven offshoring² (Reuters, 2016). This was mainly because many Brazilian residents named in the Panama Papers were politicians already being investigated for corruption. At the time in Brazil, the number of Google searches for the term “Panama papers” was higher than for “pedalada fiscal” (fiscal pedaling, Figure 1). The latter relates to one of the main reasons behind the president’s impeachment in office at the time, Dilma Rousseff, and coincidentally trended together with the Panama Papers, even though both were independent and unrelated events. This suggests that Brazilians were more interested in learning about the Panama Papers scandal than the motives behind the political turmoil.

The country’s delicate economic situation motivated the president’s impeachment. Brazil was facing a crisis that started in 2015 and adversely affected the labor market. According to IBGE (2024) – the national agency responsible for the official collection of statistical, geographic, cartographic, geodetic, and environmental information – the unemployment rate was about 7.2% from 2012 to 2014, on average. In 2015, it went to 8.6% and then to 11.6% in 2016. The average unemployment rate between 2016 and 2018 was 12.3%, reflecting the crisis. Together with the labor market, production was also impacted. Already showing signs of fragility in 2014, when GDP grew only 0.5%, the economy shrunk 3.5% in 2015 and 2016 each and only achieved a positive growth figure again in 2017, but still small in magnitude (1%).

Evidence points out three main causes for the Brazilian economic situation at the time. First, it is argued that mismanagement of macroeconomic policy weighted on the negative figures mentioned above, characterized mainly by fiscal and monetary neglect (de Holanda Barbosa Filho, 2017). Second, the growth reduction in China prompted commodity devaluation and hurt the basis of Brazilian exports (Bonelli and Veloso, 2016). Third, the political crisis combined with the Operation Car Wash investigations further deteriorated the confidence of economic agents. In particular, the government coalition could not develop

²Check Appendix A for examples of Brazilian news’ front pages and articles.

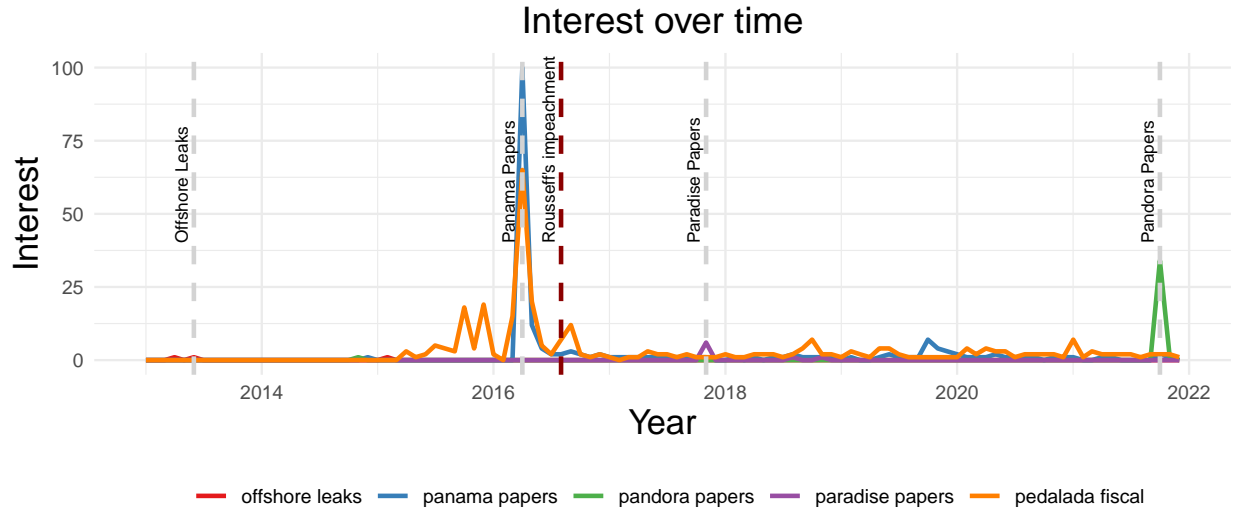


Figure 1: Google Trends in Brazil

Notes: Google trends results filtered for Brazil for the terms *offshore leaks*, *Panama papers*, *paradise papers*, *Pandora papers*, and *pedalada fiscal*, from Jan/2013 to Dec/2021.

sufficient alliances with center-right parties, which prevented economic measures and laws from being passed and disfavored President Rousseff's position during the impeachment trial.

The topic of offshore tax avoidance and evasion remains relevant in the country and is not limited to the ICIJ Leaks. Recently, the National Congress passed the law project PL 4173/2023, changing the taxation rules on offshore earnings and exclusive funds – a policy aimed at wealthy individuals. Until now, all reported overseas incomes were taxed when repatriated to Brazil. However, the new law to be applied suggests switching to an annual collection scheme, taxing realized gains regardless of their jurisdiction. According to the Ministry of Finance, offshore assets are valued at over R\$ 1 trillion (US\$ 200 billion approximately), rarely taxed since earnings and profits are held outside the country and rarely repatriated. The potential for tax collection, they argue, is over R\$ 20 billion (US\$ 4 billion) between 2024 and 2026 (Câmara dos Deputados, 2024).

3 Data

For the labor characteristics of individuals, we use the *Relação Anual de Informações Sociais* (RAIS), an administrative database provided by the *Ministério do Trabalho e da Previdência* (MTE) – the Brazilian ministry of labor and social security – since 1975. The RAIS is the official matched employer-employee data, containing yearly identified information about firms and formal workers filled out by employers up to 2018. Some of its contents include municipality of residence, type of activity by the National Classification of Economic Activities (CNAE) code, type of occupation by the Brazilian Classification of Occupations (CBO) code, earnings, birth year, gender, social security number (CPF), firm identifier (CNPJ), etc. We restrict the RAIS panel to include only 2011 to 2018 in our analysis.

We also leverage the ICIJ Leaks to identify the tax planning individuals. The data contains information on individuals (*Officers*) that are part of the Pandora Papers (2021), Paradise Papers (2017), Panama Papers (2016), Offshore Leaks (2013), and other investigations. Some of its contents are the individuals’ names, source identifier (which leak the officer was named in), country of residence, etc. In this study, we use the Panama Papers to construct the treated group and the Pandora Papers to construct a not-yet-treated comparison group. These choices are particularly convenient given the available period of RAIS (up until 2018) and given that the number of Brazilian residents from these two leaks that could be mapped in RAIS is similar (See Table 2).

3.1 Finding Officers in RAIS

This subsection explains the procedure adopted to match the Officers in the RAIS data. We need to be careful when merging this data since the only identifier we have from the leaks is the name, which brings some problems: standardization and homonyms. To deal with the first, we standardize the strings from RAIS and Officers by removing accents, special characters, double spaces, upper cases, *mr.* and *mrs.* (relatively common in the Leaks), etc. The problem becomes more intricate when dealing with homonyms, mainly because we still have Type I and II errors, even when filtering all non-unique names out of RAIS.

Type I occurs when we get false positive matches between RAIS and Officers. That is, we have a unique name with correspondence common to both data, but it does not refer to the same person. This is because not all Officers residing in Brazil participate in the formal labor market, i.e., they do not have signed job contracts. This means that they do not appear in RAIS. To deal with the issue, recall the stylized fact that most of the wealth held in offshore tax havens belongs to those in the top portion of the wealth distribution (Alstadsæter et al., 2018; Londoño-Vélez and Tortarolo, 2022; Londoño-Vélez and Ávila-Mahecha, 2021). Assuming wealth positively correlates with labor market earnings for employed individuals, a solution for the Type I error is filtering RAIS to include only those who receive a monthly wage over a certain threshold. Naturally, this reduces the amount of data available to join, and we lose some Officers. On the other hand, we decrease the probability of homonym occurrence and false positives since we assume that those who own assets in tax havens are likely to be high-earners. Hence, our tradeoff is between correct matches and sample size: the greater we set the earnings filter, the more Officers we lose, but the matches are more likely to be correct.

In the main analysis, we set the earnings threshold to be R\$ 10,000 (values of Dec/2022), but the regression results are robust to other thresholds of 0, 5,000, 20,000, and 50,000 and are available in Appendix B. The number of officers in RAIS between 2011 and 2018 is 257, who have appeared on the panel for at least one year. We denote the RAIS panel data filtered with labor market earnings over R\$ 10,000 as RAIS 10k, likewise for other filter values (RAIS 5k, RAIS 20k, and RAIS 50k). We can check the procedure results in Table 1. The Complete Officers data refers to the bulk of all ICIJ Leaks (Panama, Pandora, Paradise, etc). Officers BR are the named individuals who reside in Brazil. Officers BR Panama are Brazilian residents who appeared in the Panama Papers. The remaining ones are the results after joining Officers BR Panama with RAIS 0k, RAIS 10k, RAIS 20k, and RAIS 50k, respectively. From here onward, we omit the "Officers BR" part when we refer to those. For instance, "Officers BR Panama 10k" becomes "Panama 10k."

Next, we have the possibility of Type II error (false negative), referring to the matches we lose either because of the method mentioned above (earnings and homonym filters) or other reasons, such as abbreviated names, lack of middle name, and misspellings. For the latter motives, we perform fuzzy matching to map Officers in RAIS, and since results are similar and robust to the usual perfect-match approach, we leave to

Table 1: Data sizes & matches

| Data source | n |
|-------------------------------|------------|
| Complete Officers data | 517,111 |
| Officers BR | 3,537 |
| Officers BR Panama | 1,668 |
| Officers BR Panama 0k | 392 |
| Officers BR Panama 5k | 327 |
| Officers BR Panama 10k | 273 |
| Officers BR Panama 20k | 187 |
| Officers BR Panama 50k | 100 |

Notes: n refers to the number of individual observations associated with each data. Complete Officers data is the whole ICIJ’s raw data, containing the names, country of residence, leak source, and other non-sensitive details of firms and individuals associated with an entity in a tax haven, either as an owner or partner. Officers BR is the same as Complete Officers data but is filtered to Brazilian residents. Officers BR Panama is the same but further filtered to the Panama Papers leak only. Officers BR Panama x k refers to the data constructed by matching the individuals from the ICIJ to RAIS filtered for earnings above R\$ x (of Dec/2022) and removing homonyms. Officers BR Panama 10k is in bold because it is the data we use for the main analysis.

the Appendix C.

4 Empirical Strategy

In this paper, we discuss whether individuals who appear in the Panama Papers (i) face reputational consequences from its disclosure and are ashamed of their involvement in such scandal, exhibiting behavioral responses; and (ii) shift income sources from capital to labor because of the increased risk of being caught by the tax authority after the documents’ leak.

The consequences of being caught in tax planning schemes such as those from the ICIJ are complex as ambiguity surrounds them. On the one hand, the leaked documents may indicate the tax planning skills of those exposed, which can be well-regarded and valuable in specific industries, such as in accounting, law, and consulting segments – illustrated by the common practice among wealthy individuals and corporations to employ entire teams of professionals specialized in minimizing tax debt. Additionally, some are sympathetic to the “starve the beast” political motto when it comes to public finance, whose one of the main points is to push for less tax revenue to governments to limit their distorting influence on the economy (Keen and Slemrod, 2021; Institute for Policy Innovation, 2016). In this sense, involvement in the Panama Papers could lead to positive labor market outcomes for the named.

On the other hand, the use of tax havens has a questionable moral standing and is typically frowned upon even if it is not illegal. This is evident in how the media covers the topic (New York Times, 2016) and popular opinion on the matter. As put by De Rijcker (2023), there is a “prevalence of negative sentiment, closely linked to emotions such as anger, disgust, distrust, outrage, and shock” regarding the Panama Papers discussions on Twitter. Hence, coworkers and superiors of those named in the leaks could disapprove of their offshore entities, negatively impacting their reputation.

Additionally, shame from appearing in the Panama Papers alone could induce behavioral responses, which explains why authorities worldwide use name-and-shaming methods to achieve policy goals. In Perez-Truglia and Troiano (2018), the authors point out the many instances where governments employed shaming penalties to reduce tax delinquencies in Argentina, Croatia, El Salvador, Greece, Mexico, Canada, Portugal, Spain, New Zealand, the United Kingdom, Italy and India. In many of these, the measure adopted is publicizing tax delinquency through online lists and newspapers and through other less discrete methods³. In the ICIJ Leaks case, the rationale is similar, albeit not related to tax compliance: a list of tax evaders and planners was publicized online, and thus, we can expect behavioral responses from named individuals related to labor market outcomes.

³In Bangalore, drummers are hired to visit homes of tax evaders and bang the drum if they refuse to pay.

Besides social implications, those in the leaked documents could also react in ways not associated with their reputation. For instance, since the ICIJ Leaks can be accessed by anyone, including tax authorities, named persons may repatriate their assets and adjust their tax filings to avoid legal trouble or investigation. This is particularly relevant for Brazil, as the country introduced a voluntary disclosure program in 2016, which allowed residents to disclose unreported funds and assets from legal sources without facing harsh consequences, having the perfect opportunity to adjust their tax bills with the Brazilian tax authority (*Receita Federal*) at that time. This adjustment could result in lower earnings from assets previously hidden in tax havens. Consequently, those not part of the formal labor market (i.e., did not receive wages because they did not have signed job contracts) may become active and start receiving wages to compensate for this income drop from the relocation of assets. In a way, they are worse off than before the leak because of increased formal work obligations but still compensate for the income drop, to some extent, from adjusting offshore assets with the tax authority.

Considering the potential mechanisms described above, we employ the differences-in-differences estimator with individual and time-fixed effects to identify the causal effects of being named in the Panama Papers disclosure on labor market outcomes. We reasonably claim that the leaks are exogenous events (as in [Londoño-Vélez and Ávila-Mahecha \(2021\)](#); [Schmal et al. \(2023\)](#)), and assuming that our comparison groups are suitable, satisfying the parallel trends assumption, the differences in outcomes after treatment can be attributed to the Panama Papers. Thus, the estimated event-study ATT equation for the diff-in-diff is: ARMANDO INCLUIR A REGRESSÃO DO DYNAMIC DIFF-IN-DIFF

$$y_{it} = \alpha_i + \lambda_t + \beta_t D_{it} + \varepsilon_{it}$$

Where $D_{it} = \mathbf{1}\{i \text{ treated at } t\}$, and each β_t is a parameter of interest. For the individual effects, the outcomes analyzed are earnings (in R\$ of Dec/2022), labor market participation (whether individuals are employed with a signed formal contract), and firm-switching behavior. For firm effects, we define treatment as having at least one employee named in the leak and examine activity, number of employees, and average and total earnings paid. The omitted category is 2015 (the last pre-treatment year), and standard errors are clustered at the individual (firm) level.

The challenge is to find adequate comparison groups. For individuals, we have three options: not-yet-treated, RAIS 10k, and RAIS Matched⁴. The not-yet-treated group refers to the individuals named in the Pandora Papers (2021) – these are the most natural candidates for comparison. To find the Pandora Officers in RAIS, we employ the same strategy from Section 3.1: filter labor earnings from RAIS for over R\$ 10,000 to get RAIS 10k, then remove homonyms, and join with Pandora Papers’ leak. This group is particularly convenient as a comparison group since the time window between Panama and Pandora is five years, leaving an adequate amount of time to analyze treatment effects, and also because the number of named individuals of Brazilian residence in the 2021 documents is close to the 2016 one, leaving us with roughly the same number of treated and comparison units. The overlapping of individuals across leaks is minimal (less than 20 named in more than one of the ICIJ Leaks), and we remove their occurrences.

Next, we use the RAIS 10k as a comparison group to run the diff-in-diff analysis. We compare the outcome trajectories from those named in the Panama Papers with those with earnings over 10,000. The advantage of this exercise is that we have many treated units, which can provide more confident results. Still, one might not be satisfied with this counterfactual since we only restrict the earnings characteristic. We also employ a matching algorithm to select a potentially more adequate comparison group through covariate balancing. The idea is to not only satisfy the parallel trends assumption – sufficient for identification – but also to reduce model dependence by emulating a successful randomized experiment ([Stuart, 2010](#); [Austin, 2011](#)).

For this, we gather the labor market characteristics of the Panama Officers and adopt a nearest-neighbor matching method to sample units from RAIS that are more similar to the treated group. This leads to the RAIS Matched comparison group, with six controls for each treated unit. In particular, we match the data using years of education, birth year, and gender characteristics. Note that for this type of selection, it is important to match using variables unaffected by the Panama Papers, even considering only pre-treatment periods.

Table 2 shows the descriptive statistics (mean and standard deviation) of the treated group (individuals named in the Panama Papers) and comparison groups. We also provide the national statistics from those

⁴Note that, in this paper, we use the term "match" in two different contexts: first to identify Officers in RAIS – a matter detailed in Section 3 – second to select comparison units from RAIS with similar characteristics to perform regression analysis.

Table 2: Descriptive statistics of treated and comparison groups and benchmarks

| | Treated | Comparison | | | Benchmarks | |
|----------------------------|--------------------|--------------------|--------------------|-------------------|--------------------|------------------|
| | Panama 10k | Pandora 10k | RAIS 10k | RAIS Matched | Panama 0k | RAIS 0k |
| Earnings (R\$ Dec/2022) | 20,459 (31,330) | 19,936 (29,254) | 17,743 (13,738) | 8,483 (10,949) | 13,431 (26,965) | 2,544 (4,495) |
| Labor market participation | 0.51 (0.50) | 0.53 (0.50) | 0.81 (0.39) | 0.78 (0.42) | 0.53 (0.50) | 0.70 (0.46) |
| Tenure | 10.35 (7.60) | 9.41 (7.96) | 13.57 (9.85) | 10.64 (9.45) | 7.82 (7.02) | 4.60 (5.75) |
| Years of educ | 16.33 (2.59) | 16.36 (2.53) | 16.33 (2.39) | 16.12 (2.63) | 15.51 (2.91) | 11.52 (3.44) |
| Age | 48.80 (12.91) | 46.12 (12.71) | 46.37 (10.53) | 49.72 (12.65) | 45.43 (14.47) | 35.87 (12.08) |
| Male | 0.78 (0.41) | 0.76 (0.43) | 0.67 (0.47) | 0.78 (0.41) | 0.72 (0.45) | 0.58 (0.49) |
| <i>n</i> | 273 | 279 | 21,868 | 867 | 392 | 94,266 |

Notes: Descriptive statistics table for the treated, comparison groups, and benchmarks from 2011 to 2018. For the treated group, the Panama 10k column refers to the characteristics of Officers Panama BR 10k. The same applies to Pandora 10k (not-yet-treated comparison and future treated group), but using the Pandora instead of Panama Papers. RAIS 10k refers to the statistics of RAIS filtered for earnings above R\$ 10,000 (R\$ Dec/2022). RAIS Matched refers to the statistics of the matched sample used as a comparison group based on gender, age, and education years. For the benchmarks, RAIS 0k refers to the general statistics from the Brazilian formal labor market data, contrasted to the Panama 0k. The last row *n* shows the number of individual observations across groups, e.g., 273 unique individuals were identified between 2011 and 2018 for Panama 10k.

employed in the formal labor market (RAIS 0k) to gauge how differently exposed individuals are to the bulk of the Brazilian workers compared to the most conservative and prone to Type I error officers' data (Panama 0k). Those two are under the benchmark group. Note how officers, on average, receive much higher wages (R\$ 13,431 of Dec/2022) than the average formally employed Brazilian worker (R\$ 2,545 of Dec/2022). This difference is equivalent to more than two units of standard deviation. The picture is even more striking if we consider that wages usually are not the main source of income for individuals who hold offshore assets. Additionally, the many false-positive matches between exposed and RAIS individuals pull the mean wages downward. Hence, we should expect the earnings differential to be much higher than the amount the descriptive statistics show us.

For characteristics other than earnings, note how officers were, on average, less participative in the labor market between 2011 and 2018, illustrated by the formal employment indicator row (which assumes value 1 if an individual is formally employed in a given year, 0 otherwise, averaged between 2011 and 2018). Again, this is also consistent with the idea that these individuals' main source of income is not usually from labor. Thus, they have more freedom to adjust whether they are formally employed. On the other hand, when officers are employed, they have higher tenure than the average Brazilian, illustrating an important characteristic of exposed individuals related to their potential for career stability. This point is developed and discussed in the 5 section. Finally, officers are more likely to be older, better-educated males than the national average.

For the firm-level analysis, it is challenging to find suitable comparison units since most of the large Brazilian legal entities (such as multinationals, large banks, and the government) have at least one named person, leaving us with insufficient comparable units to employ. Fortunately, we should expect no effects within this specific group since they are too large to suffer consequences from having a few exposed individuals. Hence, by restricting the sample to only small firms, we can deal with the two issues aforementioned. In the main text, as with individual analyses, we consider only those in Panama 10k and run econometric regressions for firms with 50 and 100 workers or less, employing a random sample of other firms with 50 and 100 workers or less as the comparison group. In the appendix, we provide robustness checks for Panama 0k, 5k, 20k, and 50k.

5 Results

On the individual level, regression results indicate that the Panama Papers’ officers are more stable in their professions than never-treated groups (matched and high-earners). The effects persist for all post-treatment years. In particular, officers are less affected by the Brazilian crisis, which started in 2015 (the pre-treatment year) and adversely shaped the labor market. These conclusions are robust across all specifications.

On the other hand, effects are statistically null for the not-yet-treated comparison group. Mechanism checks for people named in the 2021 leak of the Pandora Papers indicate that they are affected roughly in the same manner (slightly smaller in magnitude) as Panama Papers’ officers. In other words, people named in different leaks faced similar consequences after the 2016 leak. A possible explanation relates to the mechanisms operating behind the effects. Once the Panama Papers news flooded media outlets, there was a general mobilization from all individuals named in the ICIJ leaks. From this, we can infer that most of the consequences were behavioral rather than reputational since even though they did not have their names in Panama, Pandora’s officers exhibited effects from the 2016 leak.

On the (small) firm level, results suggest that treated units—those with at least one employee named—are laying off more individuals than their counterparts after the treatment, without significant changes in average compensation but a reduction in total compensation paid. There are no apparent effects on their activity status.

The individual and firm-level results imply that while exposed individuals face more career stability, that is not true for their firms. In particular, they are laying off employees who are not Panama Papers’ officers. Assuming that the point made in [Schmal et al. \(2023\)](#) that firms report more tax expenses after the exposure, we can infer that they are switching from payroll to tax expenses. Unfortunately, we cannot confidently check this mechanism because of a lack of data.

5.1 Individual effects

Figure 2 shows the results using clean, never-treated units from a random sample from RAIS 10k as a comparison group. The effect on wages seems weak to non-existent, especially considering that the parallel trends assumption is violated in the pre-treatment period. On the other hand, compared to the base period, those named in the Panama Papers participate more in the formal labor market, reflecting on their lower firm-switching behavior. These effects are driven by the suggestion in the bottom-right panel of 2 that Panama Papers’ officers are not increasingly entering the formal labor market; instead, their counterparts are departing more frequently, that is, they are either going to unemployment, informality, or receiving income from sources other than wages (since they do not have a signed job contract), such as profit participation in the firms they are associated with, particularly in the treatment year. From the bottom-left panel, the effect persists throughout the remaining periods, where treated individuals are about 22.7 p.p. (post-treatment average) more likely to participate in the formal labor market than their counterparts. The picture is similar for matched never-treated units (Figure 3), where the average labor market participation in the post-treatment period is 0.24 p.p. higher than in the comparison group.

These event-study estimates alone may not be enough to determine whether the Panama Papers’ exposure effects were positive or negative in their careers. Again, even though they face more stability, from our data, we do not know what happens to the compared individuals when they leave the formal labor market. However, considering that Brazil was facing a crisis period when the Panama Papers leaked, we can make a guess. The average national unemployment rate from 2012 to 2014 was about 7.2%, whereas from 2015 to 2018 was 11.6%, the highest jump was from 2014 to 2015 (8.6%). This means that the labor market was facing the effects of the crisis right before the Panama Papers leak. The crisis started in 2015, but the non-zero results from the differences-in-differences estimator are only shown after treatment. Hence, we can infer those exposed were more “protected” than their counterparts. In other words, the Panama Papers shielded its officers from the effects of the crisis. Moreover, assuming Panama Papers’ officers are often in high positions within their companies, they could respond by “channeling” the responsibility and effects of the leaks to lower-ranked workers and peers. Indeed, this is what the firm-level analysis suggests in the next subsection.

On the other hand, the change in outcomes trajectories employing the not-yet-treated comparison group (Pandora Papers’ officers) are mostly null, significant-wise, as shown in Figure 4. Albeit puzzling at first, these results can aid us in determining the mechanisms behind the effects of the Panama Papers. In particular,

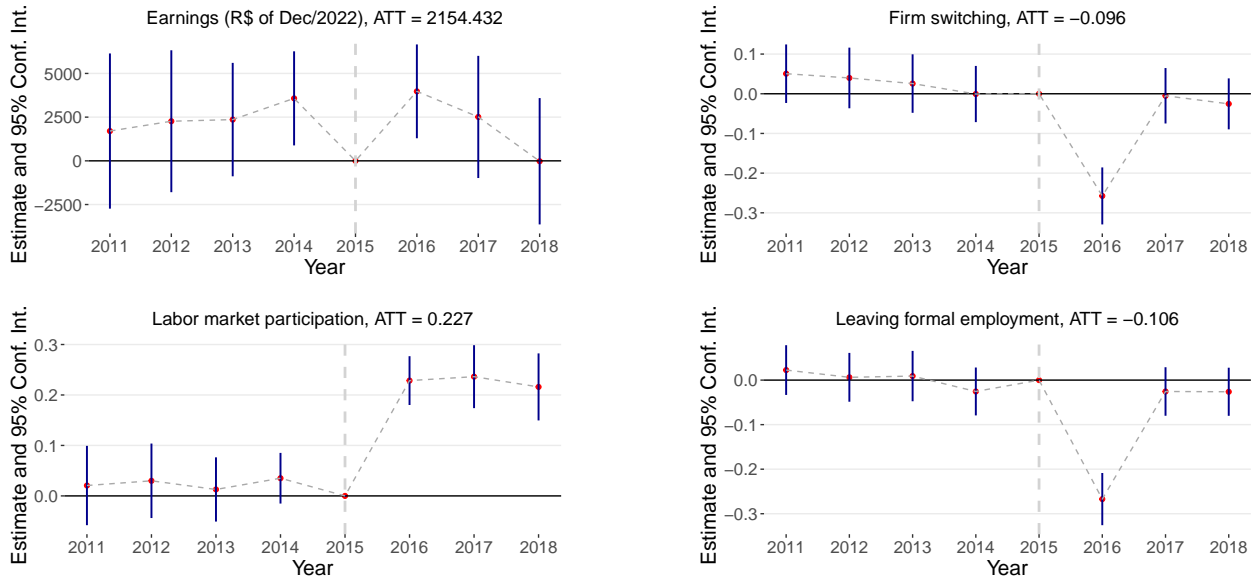


Figure 2: ATT estimates Panama 10k. Comparison group: never-treated RAIS 10k

Notes: The figure describes the ATT and the event study estimates with time and individual fixed effects, employing Panama 10k data. Post-treatment averages are displayed for the ATT values in each panel. "Earnings" refers to the labor market earnings (R\$ of Dec/2022). "Firm switching" refers to the outcome that assumes value 1 if the unit switched firms or went missing from the data compared to $t - 1$, and 0 otherwise. "Labor market participation" indicates whether the individual is present or missing in the data (that is, no formal job contract) for a given year. "Leaving formal employment" assumes value 1 when the individual switches to missing compared to $t - 1$ conditioned on her being in the data in $t - 1$. Observations are clustered at the unit level. Treatment is defined as being named in the Panama Papers leak from 2016. Never-treated units are randomly sampled from RAIS 10k and are used as the comparison group. The blue lines represent the 95% confidence interval.

we can infer that reputational concerns are not the main driver behind the results' significance. Rather, the consequences might be behavioral. To illustrate this point, consider the regressions performed in the next subsection.

5.2 Mechanism check: Pandora Papers

In this section, we rerun the same regression analysis employing the matched units as a comparison group as the previous one⁵, but instead of considering only the Panama Papers' exposed individuals, we take the Pandora Papers. The definition of treatment changes slightly in this case, becoming "being named in the (future) Pandora Papers leak when the Panama Papers came out". In other words, we are essentially constructing a scenario where officers from the 2021 leak are potentially affected by the 2016 leak. Indeed, this is what the following regression analysis suggests.

In Figure 5, we see that the results are roughly maintained⁶, both in signal and magnitude. Statistically, they are the same. Otherwise, we would find significance in the not-yet-treated analysis above. Recall the two possible channels discussed in Section 4: behavioral (individuals acting by themselves after being exposed) and reputational (individuals facing the consequences from coworkers and superiors because of their tax-planning actions). Since the ATT estimates are the same across both Pandora and Panama regression analyses, the observed effects existed for those who, at the time, had not appeared in any of the leaks as much as those who had – namely, the officers from Pandora Papers. Hence, the mechanism should not be reputational because none of their peers would know about Pandora's (2021) offshore entities by 2016. The explanation left is that, poetically, the Panama Papers' leak opened the Pandora's box of tax sanctuaries in a sense that all the individuals who hold offshore entities felt equally threatened by the first leak, likely because of the possibility of being named in a further leak or by being potential victims of a tighter tax authority.

⁵We do not include the never-treated comparison group to avoid making this work convoluted.

⁶The intersection of individuals between the Panama and Pandora Papers is minimal. Only three individuals appear in both leaks. We do not include these observations in the analyses.

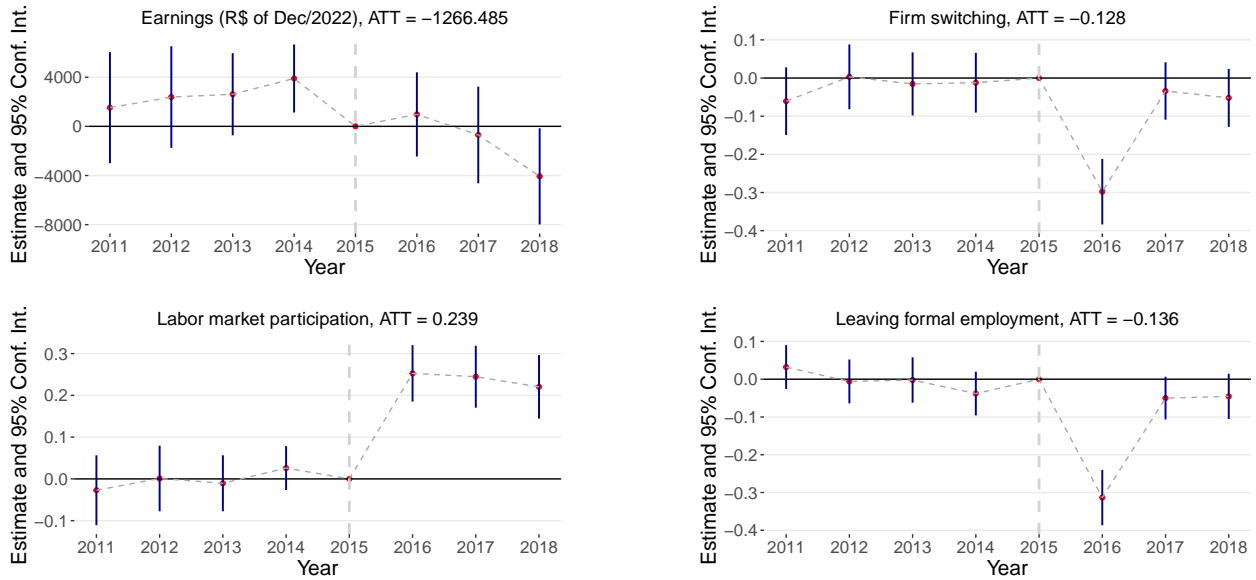


Figure 3: ATT estimates Panama 10k. Comparison group: RAIS 10k Matched

Notes: The figure describes the ATT and the event study estimates with time and individual fixed effects, employing Panama 10k data. Post-treatment averages are displayed for the ATT values in each panel. "Earnings" refers to the labor market earnings (R\$ of Dec/2022). "Firm switching" refers to the outcome that assumes value 1 if the unit switched firms or went missing from the data compared to $t - 1$, and 0 otherwise. "Labor market participation" indicates whether the individual is present or missing in the data (that is, no formal job contract) for a given year. "Leaving formal employment" assumes value 1 when the individual switches to missing compared to $t - 1$ conditioned on her being in the data in $t - 1$. Observations are clustered at the unit level. Treatment is defined as being named in the Panama Papers leak from 2016. Matched, never-treated units are acquired from RAIS 10k using age, years of education, and gender; they are used as the comparison group. The blue lines represent the 95% confidence interval.

5.3 Firm effects

In this section, we discuss how the firms of individuals exposed in the Panama Papers are affected. In particular, we provide the results for the companies associated with officers in Panama 10k in the Appendix. In Figure 6, we see the results for those employed in companies with 50 or fewer employees. The most significant results are in total compensations paid and number of employees, with average post-treatment effects of -61,022 and -3.8, respectively. The average compensation does not change significantly for the whole post-treatment period, implying that the remaining workers don't face changes in their earnings. Likewise, the results are null for the activity indicator.

The results for firms with or under 100 employees are similar, albeit less strong, than those for the above, as shown in Figure 7. There are no changes in activity and the average payroll, and we have lost significance in the number of employees – which can be explained by the lower relative importance a single worker has for larger firms. Still, there is a significant drop (but relatively smaller) in total compensations of -54,570 (simple post-treatment average).

This suggests that the firms of individuals named in the Panama Papers suffer the consequences of the intervention. Moreover, these legal entities do not necessarily have subsidiaries in tax sanctuaries – the effect analyzed here is only from having employees named in the 2016 leak. They are potentially laying off more and reducing payroll expenses after the event. This effect is relatively smaller the more we relax the definition of "small firm", in a sense that consequences are stronger the smaller the company is. This is consistent with the idea that each employee named in the Panama Papers weighs more in small entities, in relative terms, when compared to large multinationals, banks, and governments – which are much larger and well established to be affected by the intervention.

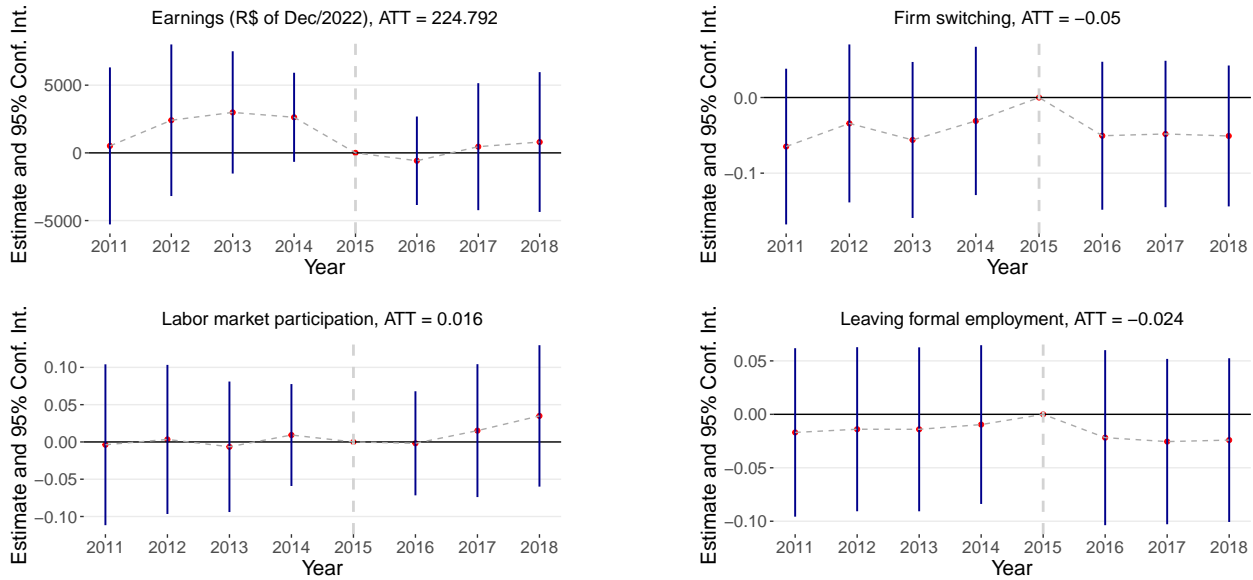


Figure 4: ATT estimates Panama 10k. Comparison group: Pandora Papers 10k

Notes: The figure describes the ATT and the event study estimates with time and individual fixed effects, employing Panama 10k data. Post-treatment averages are displayed for the ATT values in each panel. "Earnings" refers to the labor market earnings (R\$ of Dec/2022). "Firm switching" refers to the outcome that assumes value 1 if the unit switched firms or went missing from the data compared to $t - 1$, and 0 otherwise. "Labor market participation" indicates whether the individual is present or missing in the data (that is, no formal job contract) for a given year. "Leaving formal employment" assumes value 1 when the individual switches to missing compared to $t - 1$ conditioned on her being in the data in $t - 1$. Observations are clustered at the unit level. Treatment is defined as being named in the Panama Papers leak from 2016. Not-yet-treated from Pandora 10k and are used as the comparison group. The blue lines represent the 95% confidence interval.

6 Conclusions

We explore the recent Panama Papers leak, which contains information on individuals behind entities in tax sanctuaries, to analyze whether those named Brazilian individuals have careers in the formal labor market affected by the documents' disclosure. We argue two potential margins: reputational and behavioral. The first relates to the possibility of sanctions and rewards from peers and superiors within their jobs. The second is related to the individual responses to the change in probability of being detected by the tax authority when committing tax fraud through tax sanctuaries. This study contributes to the literature by introducing a novel evaluation dimension for tax-related information disclosure: assessing labor market impacts stemming from exposure in a tax-planning scheme.

Our paper suggests positive effects on those named individuals' careers. In particular, they are more likely to be formally employed than their counterparts after the 2016 crisis. At first, those effects could be attributed to their revealed high skill level with tax planning and to the shifted incomes from offshore assets to labor earnings. However, using Pandora Papers' officers as a treated group at the time of Panam papers reveals that the effects are roughly the same, suggesting behavioral responses rather than reputational ones. Our next step is to investigate the impact of information disclosure on officers' behaviors related to entrepreneurship and partnerships as treated individuals could also have changed their association with firms as partners and entrepreneurs or even ceased their respective roles within these companies, a second dimension of the analysis provided so far.

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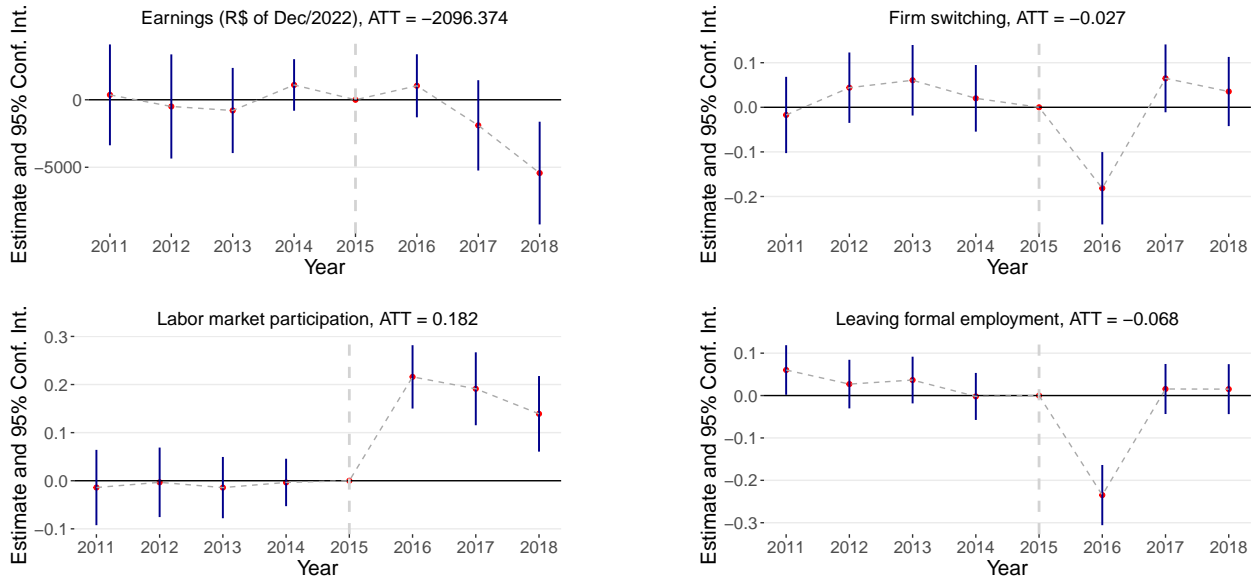


Figure 5: ATT estimates, Pandora 10k. Comparison group: never-treated RAIS 10k

Notes: The figure describes the ATT and the event study estimates with time and individual fixed effects, employing Pandora 10k data. Post-treatment averages are displayed for the ATT values in each panel. "Earnings" refers to the labor market earnings (R\$ of Dec/2022). "Firm switching" refers to the outcome that assumes value one if the unit switched firms or went missing from the data compared to $t - 1$, and 0 otherwise. "Labor market participation" indicates whether the individual is present or missing in the data (that is, no formal job contract) for a given year. "Leaving formal employment" assumes value 1 when the individual switches to missing compared to $t - 1$ conditioned on her being in the data in $t - 1$. Observations are clustered at the unit level. Treatment is defined as being named in the Pandora Papers leak (2021) when the Panama Papers came out. Never-treated units are randomly sampled from RAIS 10k and are used as the comparison group. The blue lines represent the 95% confidence interval.

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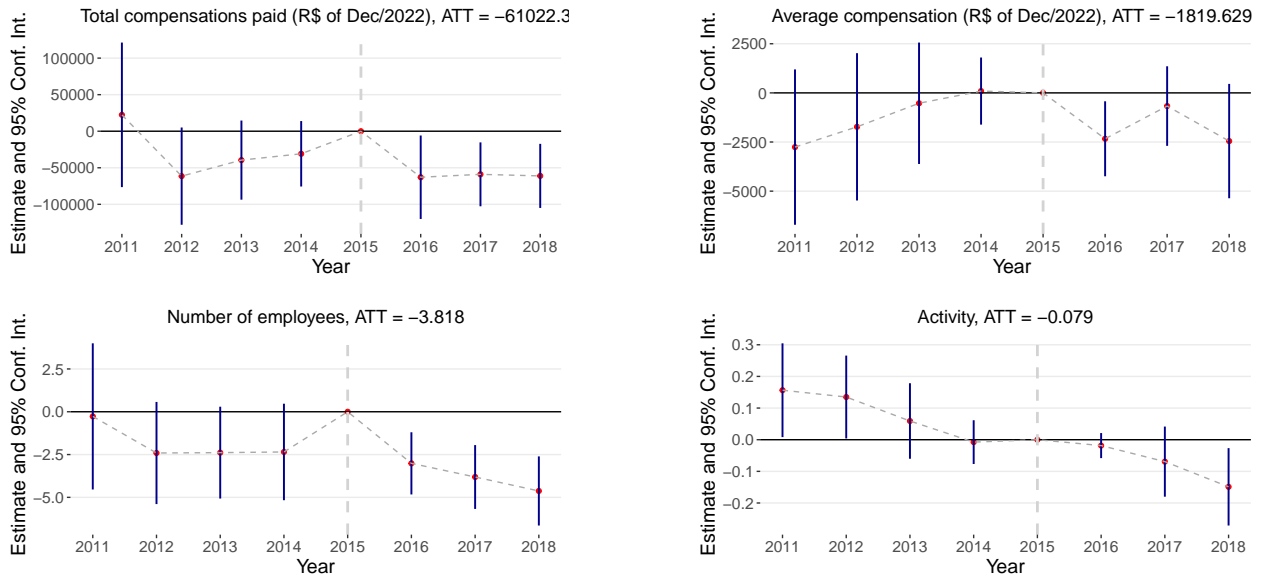


Figure 6: ATT Panama 10k's firms' estimates. Comparison group: never-treated firms under 50 employees

Notes: The figure describes the ATT and the event study estimates with time and firm fixed effects, employing the firms of Panama 10k treated individuals. Post-treatment averages are displayed for the ATT values in each panel. "Total compensations paid" refers to the total payroll expenses (R\$ of Dec/2022). "Average compensation" refers to the total payroll expenses divided by the number of employees. "Number of employees" is as the name suggests. "Activity" assumes a value of 1 when the firm has economic activity for that year and 0 otherwise. Observations are clustered at the unit level. Treatment is defined as having at least one employee named in the Panama Papers leak from 2016. Never-treated units are a random sample of firms with less than 50 employees and are used as the comparison group. The blue lines represent the 95% confidence interval.

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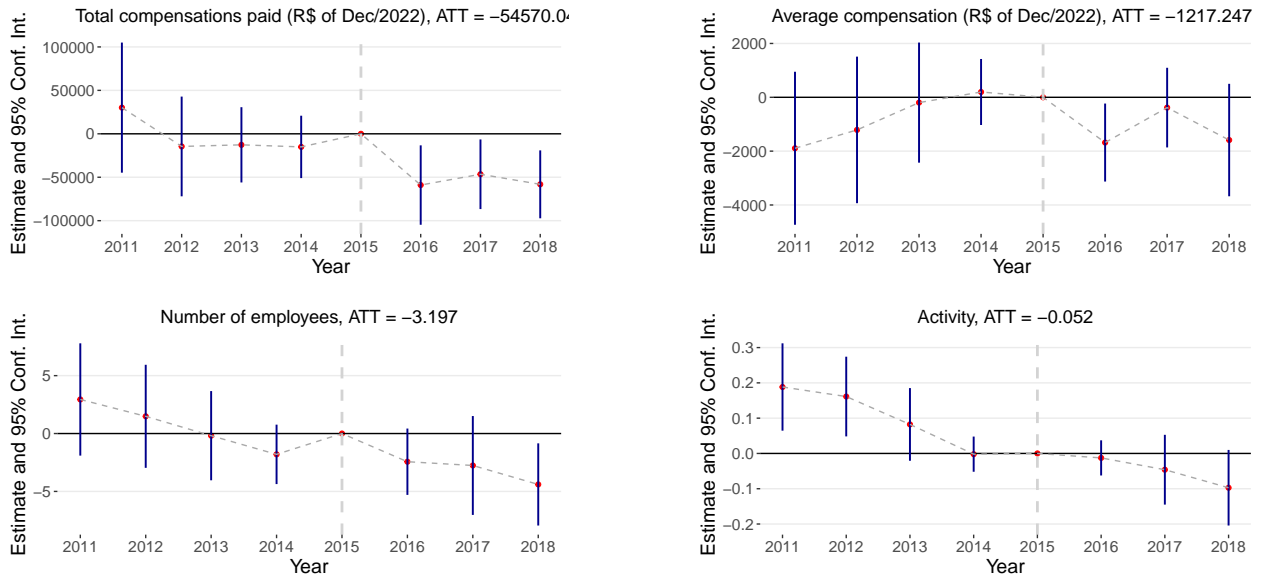


Figure 7: ATT Panama 10k's firms' estimates. Comparison group: never-treated firms under 100 employees

Notes: The figure describes the ATT and the event study estimates with time and firm fixed effects, employing the firms of Panama 10k treated individuals. Post-treatment averages are displayed for the ATT values in each panel. "Total compensations paid" refers to the total payroll expenses (R\$ of Dec/2022). "Average compensation" refers to the total payroll expenses divided by the number of employees. "Number of employees" is as the name suggests. "Activity" assumes a value of 1 when the firm has economic activity for that year and 0 otherwise. Observations are clustered at the unit level. Treatment is defined as having at least one employee named in the Panama Papers leak from 2016. Never-treated units are a random sample of firms with less than 100 employees and are used as the comparison group. The blue lines represent the 95% confidence interval.

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A Brazilian news

As mentioned in the main text, the Brazilian media was concerned with the political names in the Panama Papers. From [Reuters \(2016\)](#): “names in the leaked files included politicians from Brazil’s largest party, the PMDB, which broke away from President Dilma Rousseff’s coalition last week. Political figures from the PSDB, the most prominent opposition party in the country, were also mentioned in the leaks, as well as others from the PDT, PP, PSB, PSD, and the PTB parties.”

In Figures [A1](#) and [A2](#), we see some instances of the Panama Papers in the national media, even appearing on the front page of the most relevant news outlets. For the first week following the leak, journalistic articles were made explaining how offshore entities were used as tools for money laundering, tax evasion, and other illegal activities.

B Robustness

We dedicate this section to providing robustness regression results⁷. The overall picture does not change, even when employing different filters for RAIS when joining with officers and selecting unconditional comparison groups: named individuals face more stability in their careers after being named in the Panama Papers leak, but the results are null for not-yet-treated units (those named in the Pandora Papers 2021 leak). The main difference is that the standard errors are noisier when we employ more extreme filters for RAIS (0k being the weakest, 50k the strongest) when finding the corresponding officers.

We start by considering each filter (0k, 5k, 20k, and 50k), showing the results for each comparison group (never-treated, matched, not-yet-treated). Then, we turn to robustness in the firms’ results. Recall that we consider the maximum number of employees margin (50 or 100) and the Panama xk margin (0k, 5k, 20k, and 50k).

C Fuzzy matching regressions

C.1 Concept

In this section, based on [Van der Loo et al. \(2014\)](#), we give more details on how fuzzy matching is done, but we recommend referring to the mentioned material for a complete guide on the concept of string distances. Recall that we employ this method to join the officers’ data from the ICIJ Leaks to RAIS with an earnings filter because the only common identifying column is the individual name, which is problematic because of misspellings, lack of middle name inclusion, *mr* and *mrs* occurrences, etc.

The main issue is that we want to maximize the probability of a string a in Officers and a string b in RAIS to be correctly matched when a and b refer to the same individual and minimize the probability of a and b match when they refer to different individuals. This is equivalent to minimizing Type I and II error occurrences.

In our case, a string is a finite concatenation of characters from the alphabet. There are many ways to compute the distance α between two strings. In this work, we employ the *optimal string alignment* (OSA) distance⁸, which is computed by counting the weighted number of insertions (new character added), deletions (existing character removed), substitutions (substituting an existing character by another), and transpositions (switching adjacent characters) necessary to turn one string into another. By setting $\alpha = 2$, intuitively, we are allowing for a maximum of 2 operations (insertion, deletion, substitution, and transposition) per character, on average, to match two different strings perfectly.

⁷We omit the figures’ footnotes to save space, but they are the same, in structure, as the ones in the main text. Here, we make the differences clear right in each figure’s title.

⁸We are using the term “distance” loosely here, as many of the metrics employed – including the OSA – fail to satisfy the mathematical conditions to be considered as distances formally. Nevertheless, they are widely used in many computational contexts, such as in imperfect genome matching.

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DIRETO DA FONTE
Nando Reis. Em fase final de novo disco, cartir diz que, se há algo a ser revisito, é o amor. **PÁG. C2**

Fotografia.
Enrique Rottenberg aproveita tudo o que Cuba lhe permite. **PÁG. C3**

Caderno 2
Eterno coronel Antonio Fagundes será o Afrânio da 2ª fase de *Velho Chico*



Governo sacrifica ajuste para ajudar a negociar na crise

Equipe econômica prioriza medidas de crédito e renegociação de dívidas, como em 2014, para tentar manter apoios

Em meio ao processo de impeachment da presidente Dilma Rousseff na Câmara, o governo sacrificou o ajuste no curto prazo e adotou medidas que retardam a recuperação fiscal e revertem medidas anteriores, que deviam chegar aos R\$ 100 bilhões em 2016. Além de medidas de crédito e redução de taxas de juros em operações do INDECS, o governo pediu abatimento da meta em até R\$ 120 bilhões para acomodar mais despesas. Também precisará de recursos não previstos para os Estados de R\$ 105 bilhão como compensação

pela Lei Kandir, que desonera exportações. Ainda estão sendo arrendidos pleitos de renegociação agrícola e há pressão para a liberação dos depósitos compulsórios pelo Banco Central. Medidas impopulares, como as reformas da Previdência e trabalhistas, chegaram a ser anunciadas pelo ministro Nelson Barbosa, mas foram engavetadas. O retrato é semelhante ao seguido pelo ex-ministro Guido Mantega em 2014, ano de eleições presidenciais, quando foram adotadas bondades econômicas. **ECONOMIA/PÁG. B6**

Depois da Câmara, Planalto negocia cargos com senadores

O governo inicia nesta semana ofensiva para distribuição de cargos no Senado com o objetivo de construir um "bloco" contra o impeachment. A ideia é mostrar aos deputados indicados que a presidente Dilma Rousseff

tem apoio no Senado e incentivar o "voto útil" contra o seu afastamento na Câmara. Ontem, ela se reuniu com os ministros Ricardo Berzoini, Jaques Wagner e José Eduardo Cardozo para tratar da reforma. **POLÍTICA/PÁG. A6**

REPORTAGEM ESPECIAL THE PANAMA PAPERS

OFFSHORES ACOBERTAM CORRUPÇÃO GLOBAL

O acervo de 11,5 milhões de registros em paraíso fiscal espelha rede de offshore de líderes políticos mundiais e revela como pessoas próximas ao presidente russo Vladimir Putin movimentaram secretamente US\$ 2 bilhões. Documentos mostram quatro décadas de atuação da Mossack Fonseca retratadas em investigação do Conselho Internacional de Jornalistas Investigativos. **POLÍTICA/PÁG. A6 e A8**

Papéis têm 107 empresas da Lava Jato; lista inclui políticos

Documentos obtidos no Panama Papers revelam que a Mossack Fonseca criou ou gerenciou pelo menos 107 offshore para ao menos 57 indivíduos ou empresas relacionados pela Lava Jato ao esquema de corrupção da Petrobrás. Políticos brasileiros também apareceram na lista. Integrantes de seis partidos se utilizaram da Mossack para abrir empresas ou contas no exterior. **PÁG. A9**

Análise
José Roberto de Toledo
Pega-pega global
O Brasil é um dos raros países que tomou medidas antes do #Panama-Papers, via Lava Jato. **PÁG. A6**

Apuração envolve 78 países
Repórteres do Süddeutsche Zeitung obtiveram documentos da Mossack e compartilharam com Conselho de Jornalistas Investigativos. Profissionais de 78 países participaram - no Brasil são Estado, UOL, e Rede TV!. **PÁG. A6**



Edição de Esportes Em dia de brigas e morte, Palmeiras vence Corinthians

Foram dois minutos entre o goleiro Prass defender um pênalti e o jogador Daudu fazer o gol que definiu a vitória do Palmeiras contra o Corinthians ontem, no Pacembu. Antes do clássico, confrontos entre torcedores dos dois times em três pontos da região metropolitana terminaram com um morto e dezenas de feridos. Ao todo, 57 pessoas foram detidas. **PÁG. B5 e B6**



Festa e medo.
Em campo, Prass defendeu pênalti e abriu caminho para a vitória. Nas ruas, idoso morreu baleado e PM teve torcedores após brigas

SP triplica pedido de Tamiflu

Com o surto de H1N1, o governo de São Paulo solicitou ao Ministério da Saúde triplo de unidades do antiviral Tamiflu. A estimativa é tratar 14,9 milhões de pessoas. **METRÓPOLE/PÁG. A12**

Magé (RJ) se revolta após morte de criança

Morre Sandro Vaia, ex-diretor do 'Estado'

Link LUGAR ONDE SE FABRICA 'DE TUDO'

Os Fab Lab, laboratórios de fabricação digital criados pela Prefeitura paulistana, têm de impressoras 3D a cortadores a laser. **ECONOMIA/PÁG. B8**

e.du GAMES FEITOS PARA ENSINAR

Com princípios de programação, alunos de escolas particulares de SP criam jogos com conceitos das disciplinas. **METRÓPOLE/PÁG. A10**

Negócios Cooperativas são o 6º maior banco do País

Após de juros mais baixos, 7,8 milhões de brasileiros viraram sócios de cooperativas de crédito, segundo o Banco Central. Isso tem feito as instituições crescerem, em média, 20% ao ano, ante os 10% dos grandes bancos. Justas, as quatro grandes - Sicredi, Unicredi, Sicob e Confesul - seriam o sexto maior banco de varejo do País, informa a consultoria alemã Roland Berger. **ECONOMIA/PÁG. B6**

Figure A1: Media coverage, April 4th 2016, Estado de S. Paulo

A Lei de Newton da luta armada

REINALDO AZEVEDO

O país vive um momento de notável perda de parâmetros. Alguns valores que pareciam imunes a ataques especulativos estão sendo rifados com impressionante ligeireza. E mais chocante são ora a complacência, ora a complicitade de setores da sociedade civil que deveriam constituir a vanguarda na defesa de garantias e civilidades. Refiro-me muito especialmente à imprensa. Nota-se a crítica porque quero mais livre; as esquerdas, porque querem censurá-la.

A defesa censurá-la. A defesa da antecipação da eleição presidencial — tráfudo, em estúdio, na fórmula "nem Dilma nem Temer" —, integra a lista das minhas insatisfações. A tese iguala desigualdades em favor do vício, não da virtude. Ou, para os mais pessimistas, em favor do mal maior, não do menor. E escolher o mal menor, quando não há saída deus, é um imperativo ético.

Eugênio Aragão, ministro da Justiça, comete crimes de responsabilidade em penca quando classifica de compreensível a promessa que fazem grupos de esquerda de reagir com violência ao eventual impeachment de Dilma. Disse o doutor tratar-se da Lei de Newton. E filosofou: "A manifestação de absoluta rejeição a qualquer tipo de ajustamento através de golpe me parece um movimento legítimo".

Segundo o ministro, pois, para que não haja a violência "legítima", o Congresso tem de votar a favor de Dilma. A "Lei de Newton" de Aragão tortura a agora presidente da República. É um lito moral, ético e histórico.

Até que haja evidências de que o vice tenha cometido crime de responsabilidade, por que "nem Temer"?

Leiam a Lei 1.079. O ministro mandou as favas os incisos II, III e IV do Artigo 4º do texto: atentou contra o livre exercício do Legislativo e do Judiciário, que fez o rito do impeachment, contra direitos políticos, individuais e sociais e contra a segurança interna no país. E o que leio, ouço e vejo na imprensa vai do silêncio covarde à apologia da violência — na pena de alguns colonizatos. Afinal, se os adversários são golpistas, Deus está morto.

Não atou de modo diferente o advogado geral da União, José Eduardo Cardozo, na comissão especial do impeachment. Assegurou que um eventual governo Temer seria ilegítimo. Ora, se é assim, tudo o que se fizesse de ilegal para derrubá-lo estaria justificado pela "Lei de Newton". A propósito: que sentido faz entregar a defesa se ele diz que só um resultado é aceitável? É um pouco mais sutil do que Aragão, mas não menos deloso.

De igual modo agiu Dilma Rousseff ao abrir o Palácio do Planalto ao proselitismo e ouvir, sem sombra de reprovação, um de seus aliados a fazer terrorismo aberto: ou o Congresso se ajoelha aos pés do PT,

ou ninguém governa "estopala". Em peregrinação, Lula, o presidente "de facto", promete a seus milicianos que o próximo passo será controlar a "mídia".

Quando esta Folha escreveu "Nem Dilma nem Temer", acaba, na prática, por acatar essas ameaças como instrumentos aceitáveis da luta política. Até que haja, e não há, evidências de que o vice-presidente tenha cometido crime de responsabilidade, "nem Temer" por quê? Assim como não é aceitável que as esquerdas, no poder, legitimem as ações criminosas, não se pode tolerar que deslegitimem as saídas preconstituídas na Constituição.

Até porque não é a PT que justifica a existência da democracia; é a democracia que justifica a existência do PT. É, por isso, o partido tem de parar de tentar sobri-lá. Ou migra, então, para a clandestinidade.

Facebook: <http://ppa.gi/2BAYV>

COLUNISTAS DA SEMANA segunda: Celso Rocha de Barros, terça: Maria Sérgio Conti, quarta: Elia Gaspari, quinta: João de Freitas, sexta: Reinaldo Azevedo, sábado: Demétrio Magnoli, domingo: Elia Gaspari e João de Freitas

FELIPE BÄCHTOLD
DE SÃO PAULO

Centro de um escândalo que atingiu líderes mundiais, o escritório panamenho Mossack Fonseca vendeu no Brasil pacotes de serviços que incluíam a indicação de diretores laranjas de offshore e a abertura de escritórios físicos no exterior.

Milhares de documentos da filial brasileira foram apreendidos na fase Triplô X da Lava Jato, deflagrada em janeiro, que ainda não resultou em ações na Justiça.

Um dos papéis é uma tabela de valores dos serviços ofertados. A articulação de um "conselho" de fundação para uma empresa no exterior saía por até US\$ 850.

A assistência para abertura de uma conta bancária custava US\$ 1.500. O serviço mais caro é o de instalação de um escritório físico no exterior: US\$ 19,2 mil (mais US\$ 1.000 extras por uma "placa de bronze" na sala).

Nos documentos apreendidos, nomes de diretores se repetem em diversas empresas, sem aparente ligação.

A gerente administrativa da Mossack Fonseca no Brasil, Renata Pereira Britto, que foi presa na ocasião, afirmou em depoimento à Lava Jato que os clientes brasileiros não queriam aparecer como sócios das offshore.

"Preferem que seja registrada em nome de terceiros. Para isso, a Mossack Fonseca Brasil oferece um serviço de diretores já contratados", disse ela na época. Segundo o depoimento, essas pessoas são funcionários panamenhos do escritório.

Ela afirmou ainda que dividida brasileira possuía "empresas de prateleira" em estoque, já constituídas pela matriz no Panamá e ofertadas aos clientes.

O juiz Sérgio Moro afirmou em despacho que a filial no Brasil montava offshore para envolvidos no petróleo.

No último domingo (4), um megavazamento de documentos da Mossack Fonseca, apelidado de "Panamá Papers" revelou dados de offshore que constaram em figuras como o primeiro ministro britânico David Cameron, o presidente argentino Mauricio Macri e o presidente russo Vladimir Putin. Também provocou a renúncia do primeiro-ministro da Islândia.

Os papéis da filial brasileira apreendidos na Lava Jato mostram dezenas de fichas de clientes brasileiros do serviço, incluindo empresários, advogados e profissionais do mercado financeiro. Nas fichas, o padrão é anexar opções de requisitos de paraísos fiscais pelo mundo: além do Panamá, constam Ilhas Virgens Britânicas, Bahamas, Seychelles e Samoa.

Uma das fichas apreendidas pela Lava Jato é a do conselheiro do Tribunal de Con-



GOVERNO SITIADO VAZAMENTO

OFFSHORES À LA CARTE

Alvo da Lava Jato, Mossack Fonseca Brasil providenciava diretores laranjas e registros em paraísos fiscais

OS SERVIÇOS DA MOSSACK NO BRASIL

US\$ 19,2 mil
é o valor cobrado pela unidade brasileira Mossack Fonseca para a instalação de um escritório

US\$ 1.000
é o custo para instalação de uma placa de bronze

US\$ 1.500
é quanto vale assistência da empresa para abertura de uma conta bancária

nando Hernandez Rivero, alvos na fase Triplô X.

Segundo a advogada deões no Brasil, Heloisa Herrera, os dois eram apenas subordinados da matriz panamenha e tiveram seus vínculos rompidos em razão da Lava Jato.

A advogada afirma que a representação no Brasil, que tinha sede na avenida Paulista, foi obrigada a encerrar as atividades depois da operação. Sérgio Moro proibiu Renata Pereira Britto e Ricardo Honorio Neto, apontado como "sócio" do escritório, de voltar a atuar na empresa.

Sobre as suspeitas a respeito das atividades desenvolvidas pelos dois na empresa, a advogada afirmou que vai se manifestar apenas na Justiça.

A reportagem não conseguiu localizar representantes da Mossack Fonseca no país nem Robson Marinho.

Em comunicado divulgado nesta semana, a matriz no Panamá disse que frequentemente rejeita clientes que não provam a origem de seus recursos e que previne o "mau uso" de seus serviços.

"É comum e legal para empresas estabelecer entidades comerciais em diferentes jurisdições por uma série de razões legítimas", diz a nota.

Cunha foi destinatário de US\$ 5 mi, diz doleiro

Ex-sócio de Youssef, Leonardo Meirelles afirma que não tem provas das transferências

ISRAEL FLECK
BANIER BRAGAN
DE BRASÍLIA

O doleiro Leonardo Meirelles, ex-sócio de Alberto Youssef, disse, em depoimento ao Conselho de Ética da Câmara nesta quinta (7), que o presidente da Casa, Eduardo Cunha (PMDB-RJ) foi o destinatário de transferências no valor de US\$ 5 milhões.

"Youssef me colocou de forma informal, num almoço, que esses valores eram para entrega de Eduardo Cunha", afirmou Meirelles. O doleiro disse

que não tem documentos comprovando a destinação dos US\$ 5 milhões a Cunha (aluga que a informação lhe foi passada de maneira "informal").

O doleiro lechou acordo de delação premiada com a Procuradoria-Geral da República — a qual disse já ter sido homologada pelo Supremo.

Meirelles contestou a informação, publicada nesta quinta pela Folha, de que os US\$ 5 milhões que saíram dos bancos na China foram depositados em contas na Suíça que seriam de Cunha.

"[Confirmando] as conta da

China; da transferência para a Suíça, não. A Folha de S. Paulo reproduziu de forma errada", disse. "Não tenho conhecimento de contas na Suíça de Eduardo Cunha".

Horas depois, o presidente da Câmara disse que a reportagem da Folha "foi desmentida publicamente".

"O que eu vi é que não existe nem o fato, que dirá prova. É sempre uma tentativa de me atribuir coisas das quais não sou partícipe. (...) O que vejo é que a imprensa toda hoje esperava, com base na matéria da Folha desmentida, efetivamente ter um grande escândalo, para colocar um novo delator", disse Cunha.

A informação sobre a transferência da China para a Suíça foi dada ao jornal pelo próprio advogado de Meirelles, Haroldo Nater. A Folha mantém as informações publicadas, inclusive a de que Meirelles tem provas contra Cunha.

O Conselho de Ética analisou o pedido de cassação de Cunha por quebra de decoro. Ele é suspeito de manter contas bancárias secretas no exterior e de ter mentido sobre a existência delas.



O doleiro Leonardo Meirelles durante depoimento ontem

Figure A2: Media coverage, April 8th 2016, Folha de S. Paulo

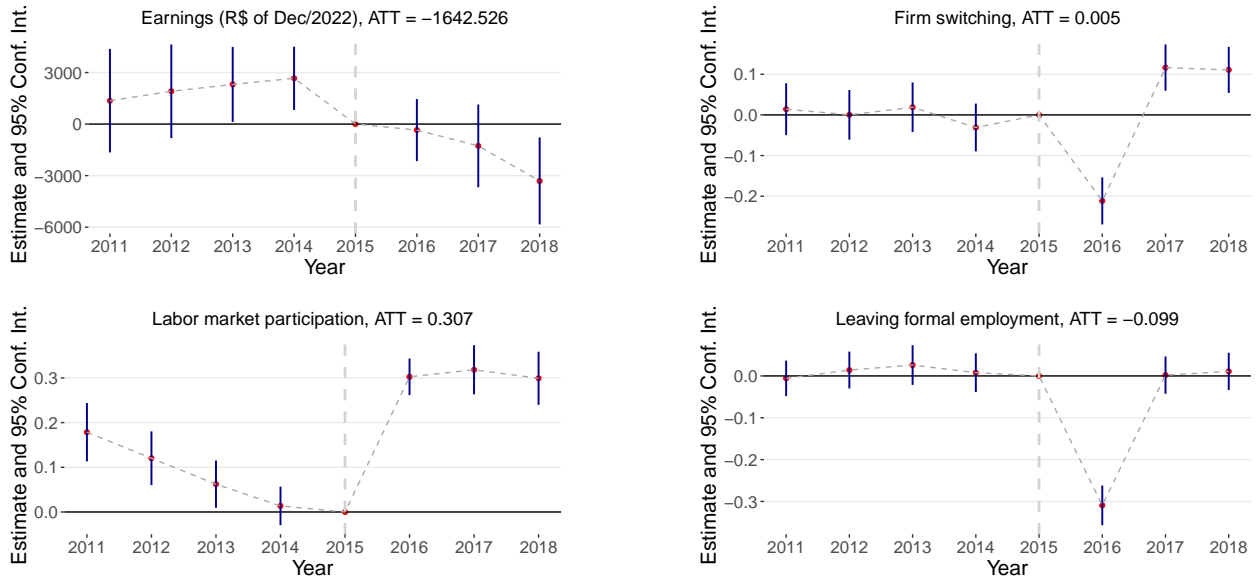


Figure A3: ATT estimates Panama 0k. Comparison group: never-treated RAIS 0k

C.2 Regressions

In this subsection, we provide the regression results with the officers' data constructed via fuzzy matching. Since this type of operation is computationally demanding, we only run the econometric analyses using RAIS 5k, 10k, 20k, and 50k (not including 0k) and restrict the sample to the state of São Paulo before the matching, where most officers are located. By fuzzy-joining two datasets, we allow for inexact matches by setting the arbitrary "tolerance" parameter α , representing how conservative the matching criterion should be since we do not have an exact match between strings. The parameter α is bounded from below by zero and unbounded from above, and the higher we set it, the more we allow for inexact matching. Setting $\alpha = 0$ is equivalent to the usual perfect match, which occurs only if the strings are the same. Here, we set $\alpha = 2$ and restrict the RAIS to include only observations from the state of São Paulo, where most officers reside, for computational reasons. Descriptive statistics for the data mentioned here are available in Table 3. The regression results are similar and robust when we compare RAIS without the location filter and $\alpha = 0$ (in the main text) to São Paulo's RAIS with $\alpha = 2$ in Figure A23. We provide only this individual result so as not to make this work more convoluted than it already is.

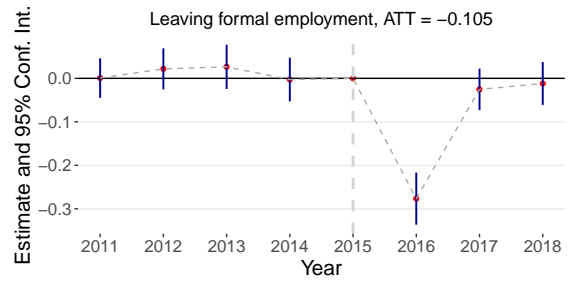
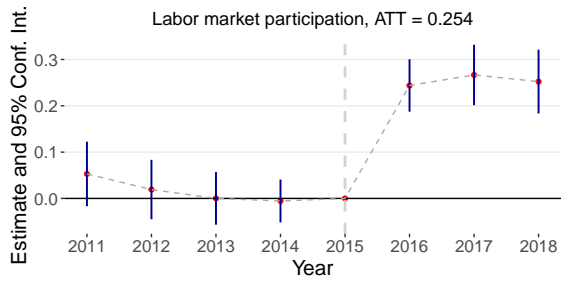
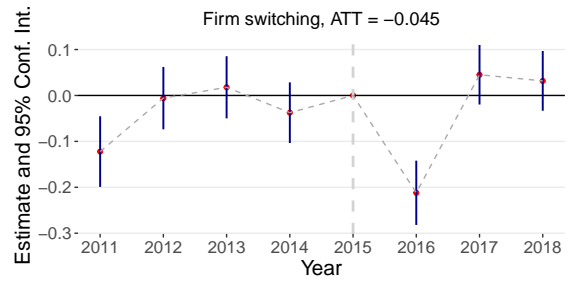
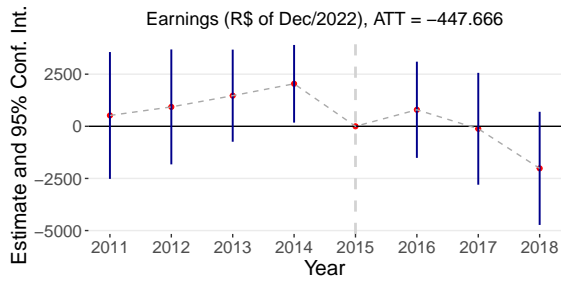


Figure A4: ATT estimates Panama 0k. Comparison group: RAIS 0k Matched

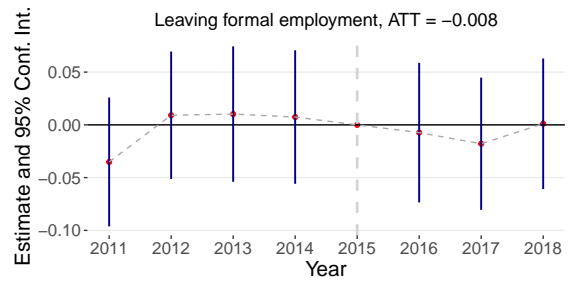
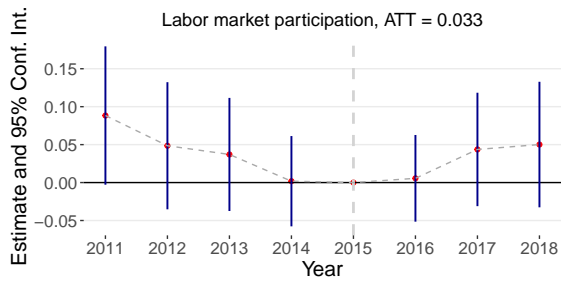
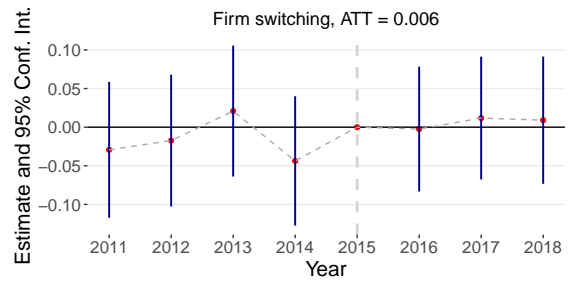
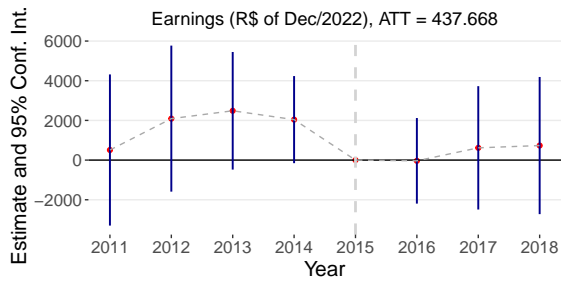


Figure A5: ATT estimates Panama 0k. Comparison group: Pandora 0k

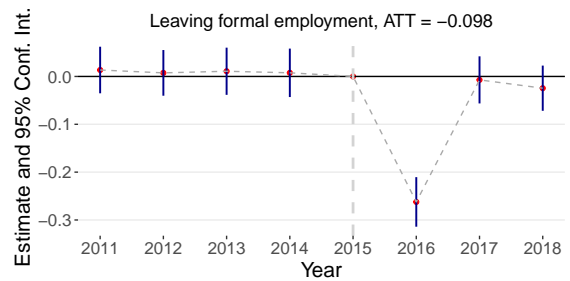
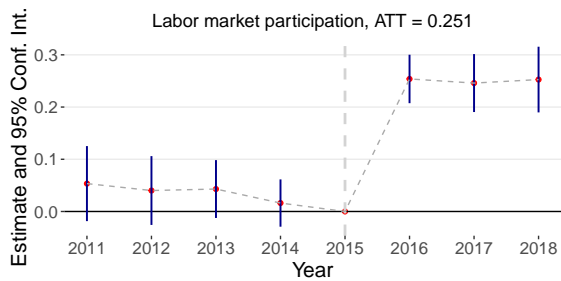
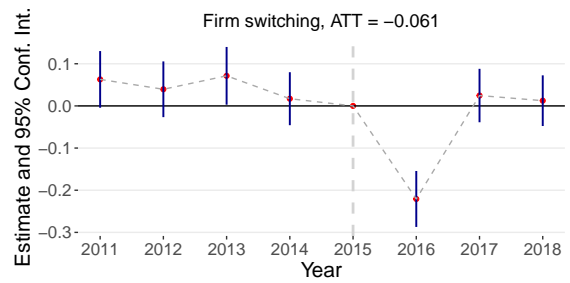
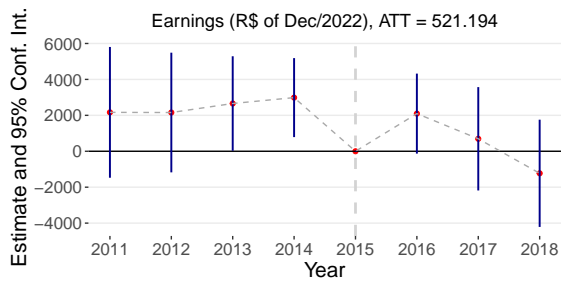


Figure A6: ATT estimates Panama 5k. Comparison group: never-treated RAIS 5k

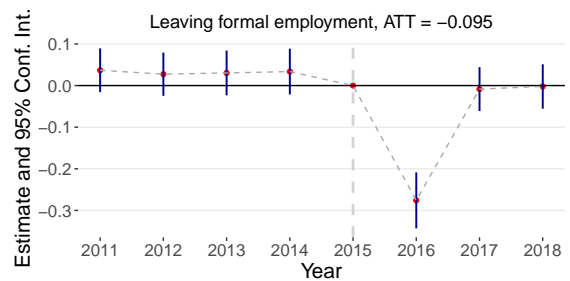
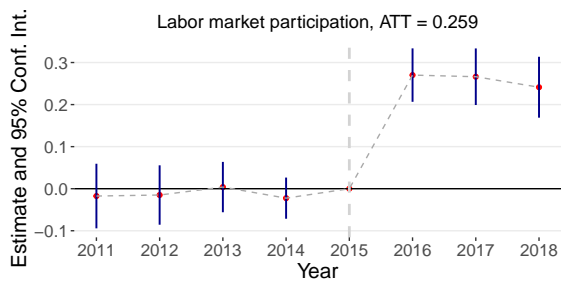
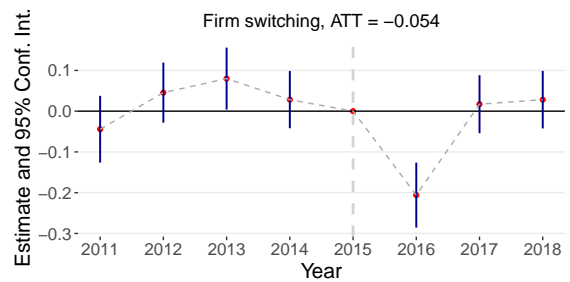
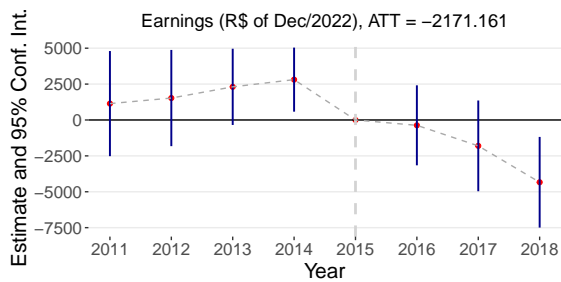


Figure A7: ATT estimates Panama 5k. Comparison group: RAIS 5k Matched

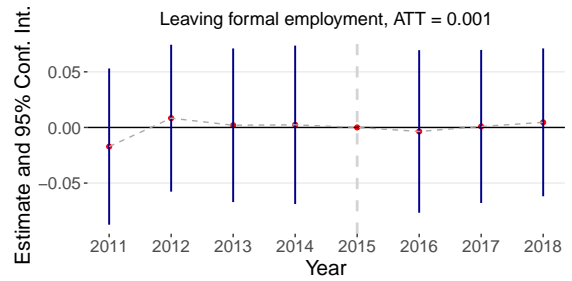
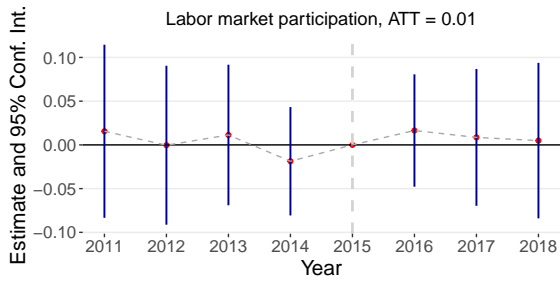
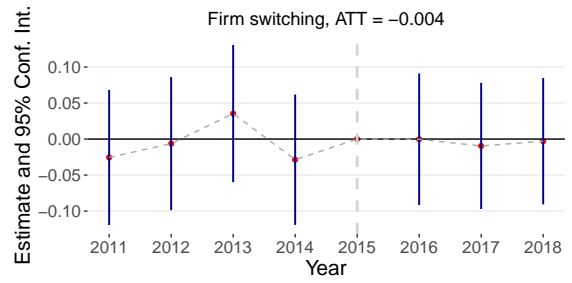
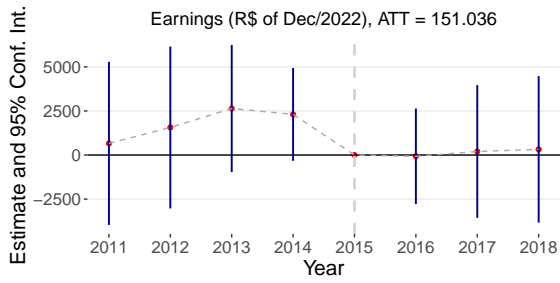


Figure A8: ATT estimates Panama 5k. Comparison group: Pandora 5k

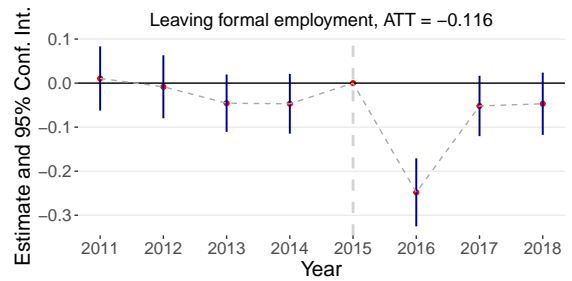
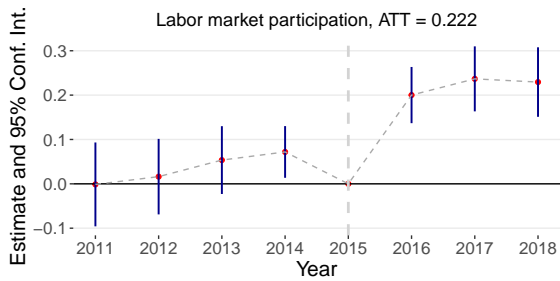
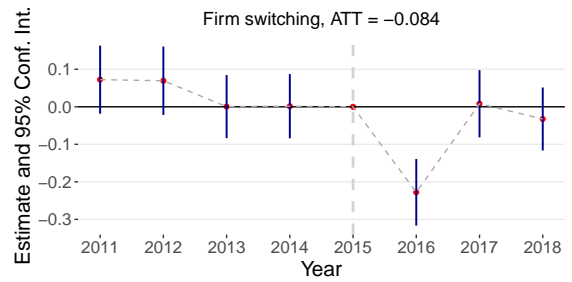
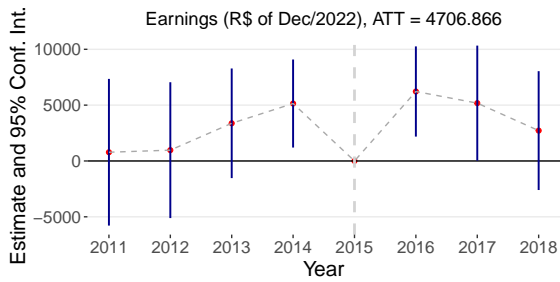


Figure A9: ATT estimates Panama 20k. Comparison group: never-treated RAIS 20k

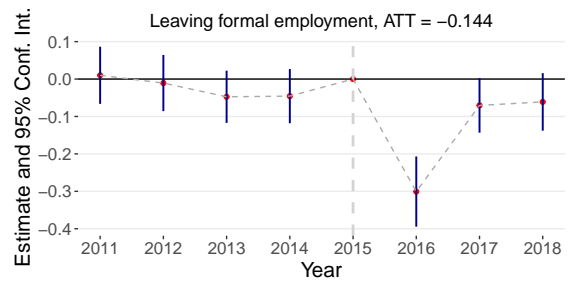
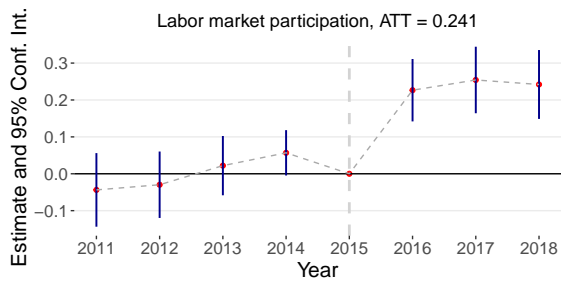
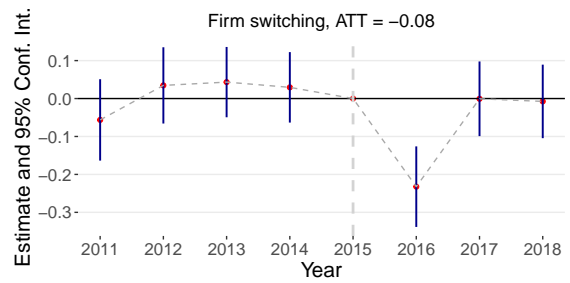
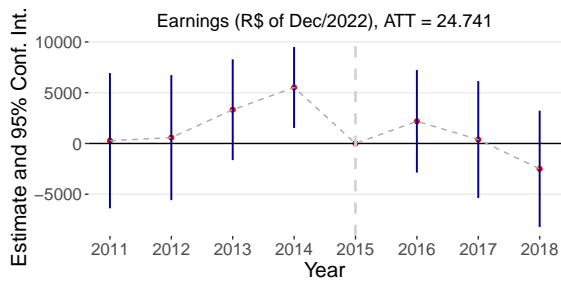


Figure A10: ATT estimates Panama 20k. Comparison group: RAIS 20k Matched

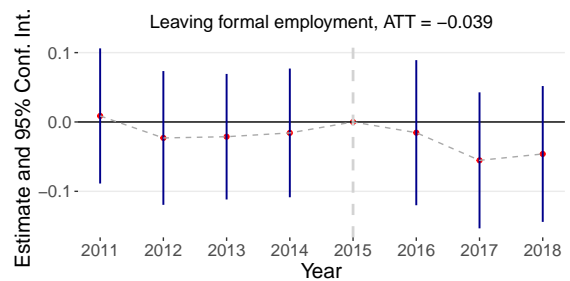
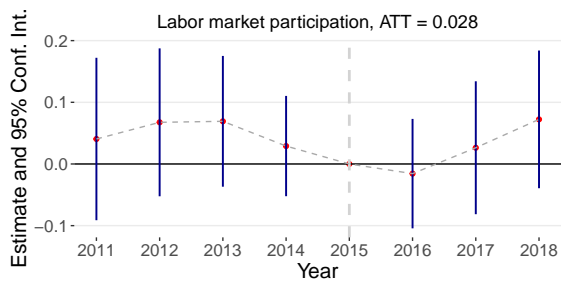
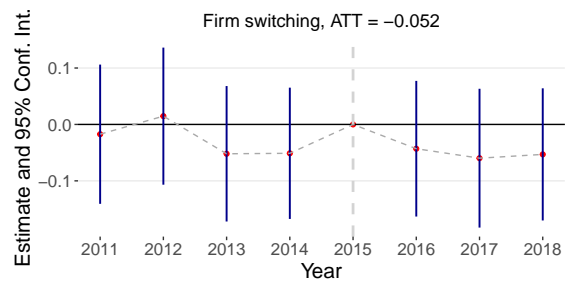
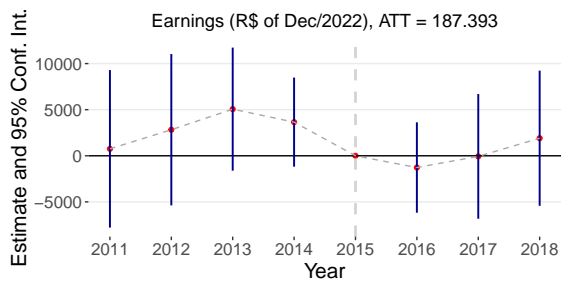


Figure A11: ATT estimates Panama 20k. Comparison group: Pandora 20k

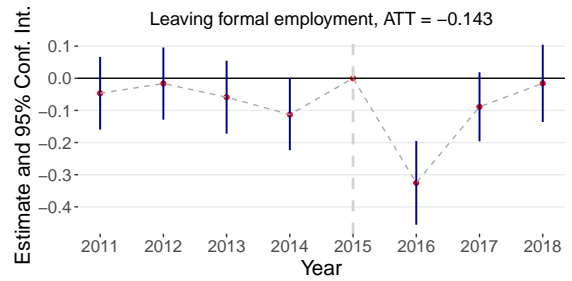
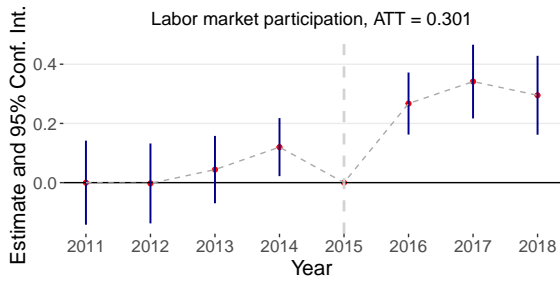
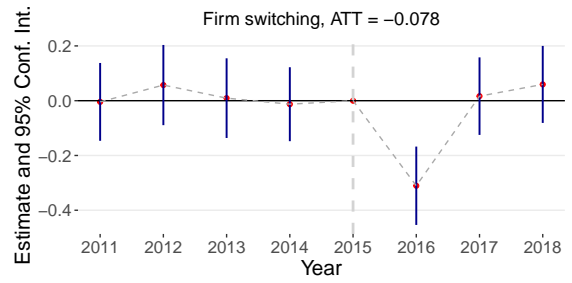
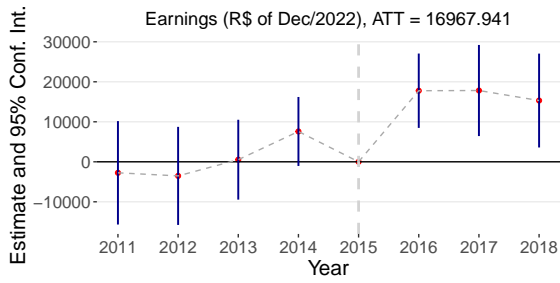


Figure A12: ATT estimates Panama 50k. Comparison group: never-treated RAIS 50k

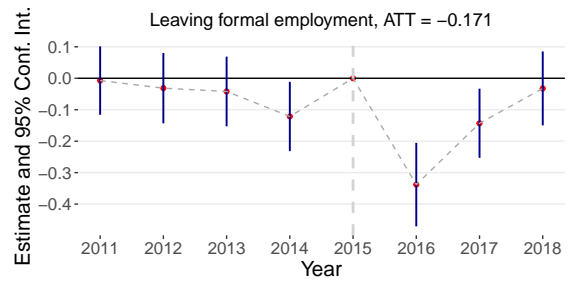
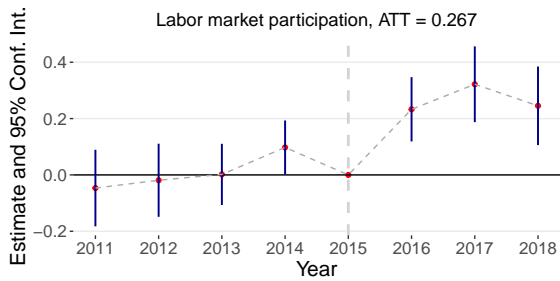
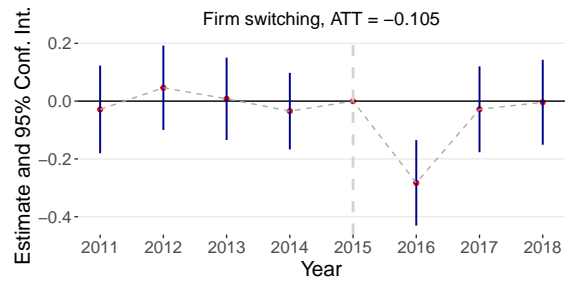
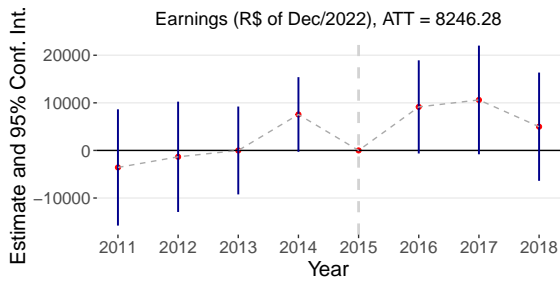


Figure A13: ATT estimates Panama 50k. Comparison group: RAIS 50k Matched

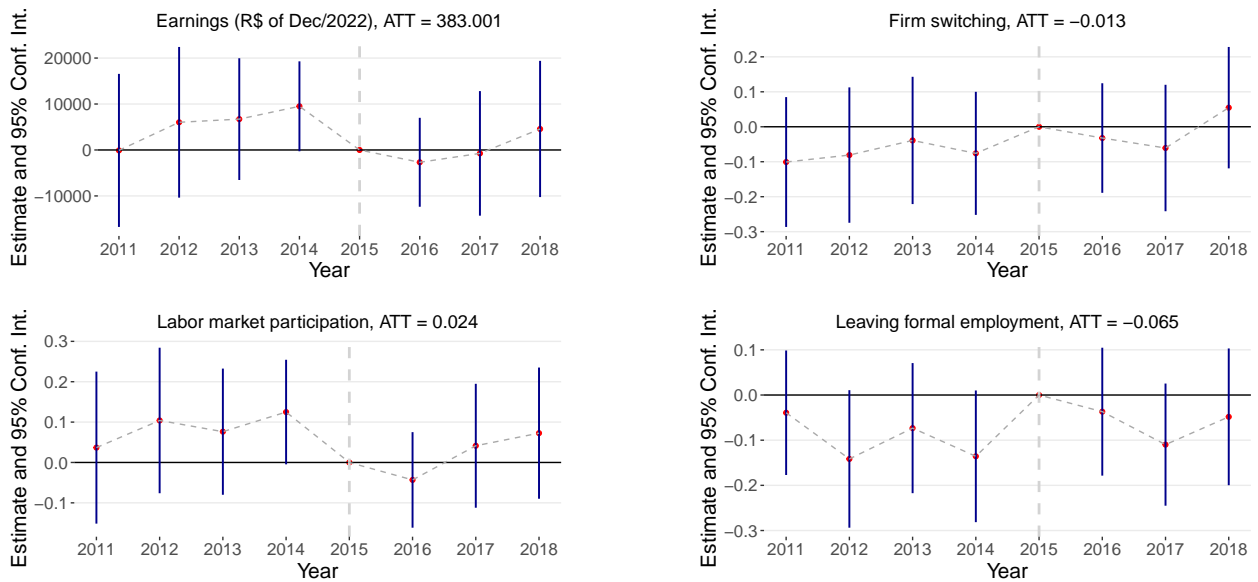


Figure A14: ATT estimates Panama 50k. Comparison group: Pandora 50k

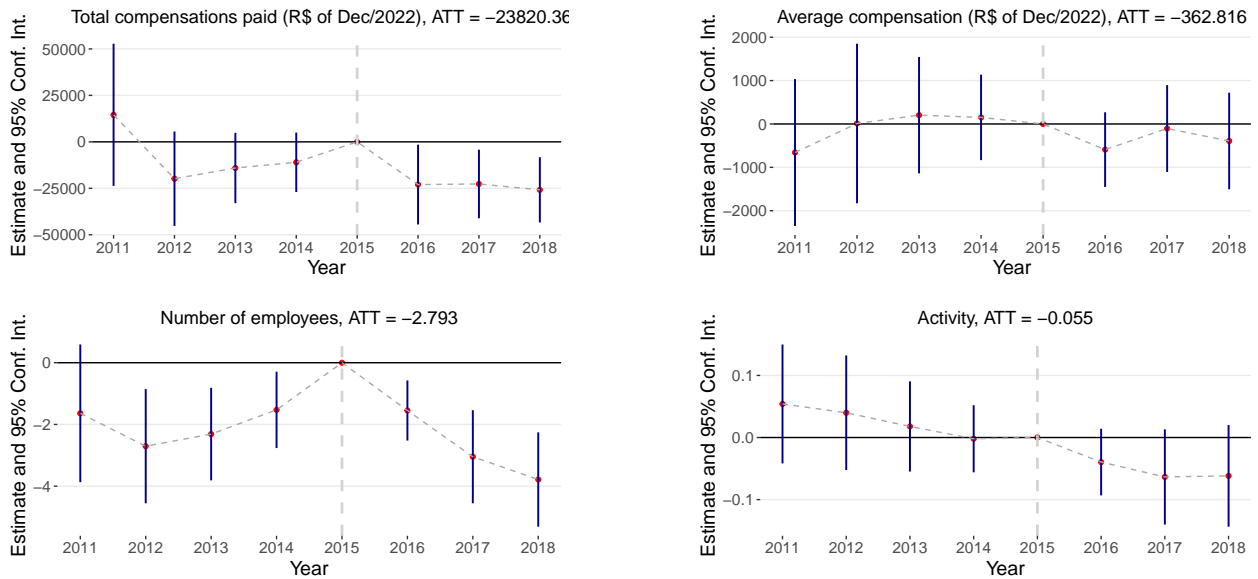


Figure A15: ATT Panama 0k's firms' estimates. Comparison group: never-treated firms under 50 employees

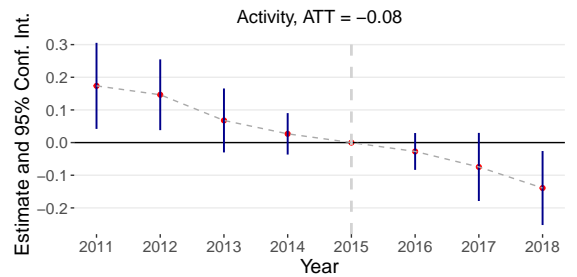
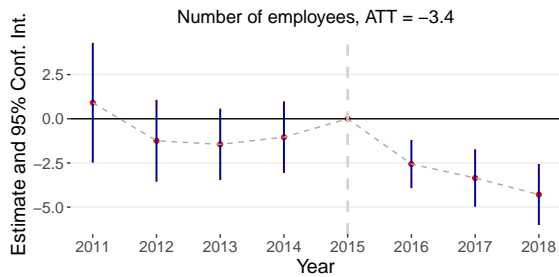
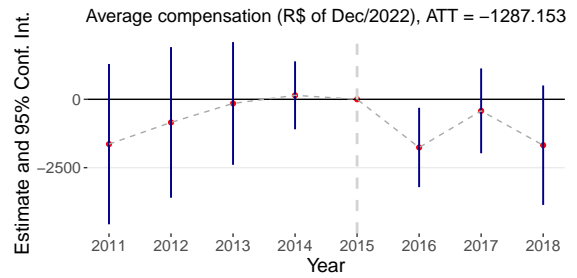
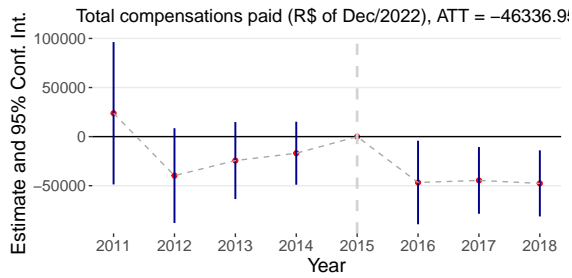


Figure A16: ATT Panama 5k's firms' estimates. Comparison group: never-treated firms under 50 employees

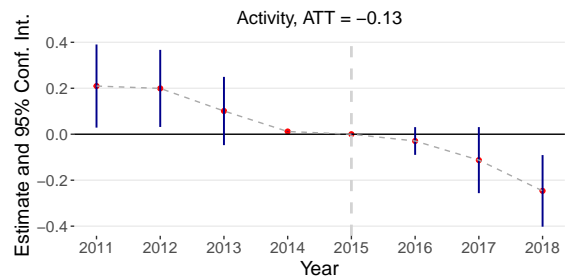
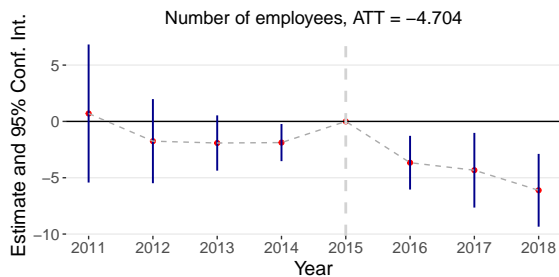
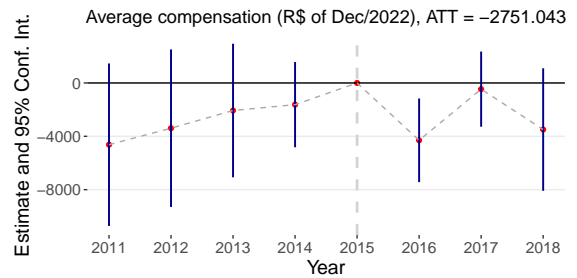
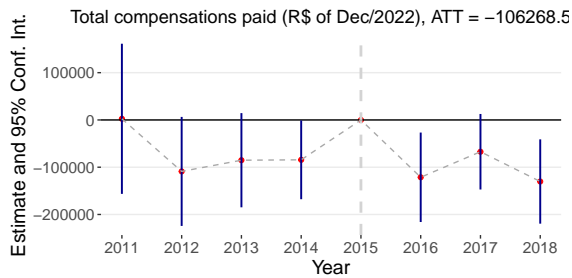


Figure A17: ATT Panama 20k's firms' estimates. Comparison group: never-treated firms under 50 employees

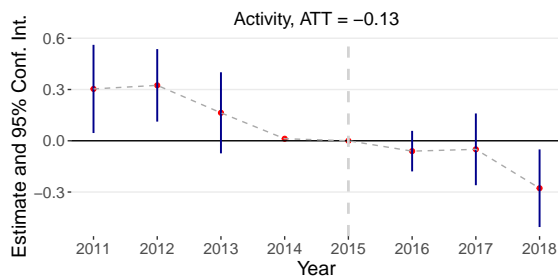
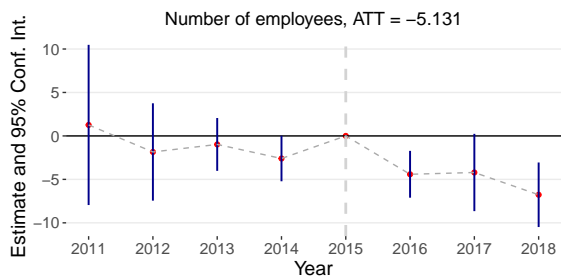
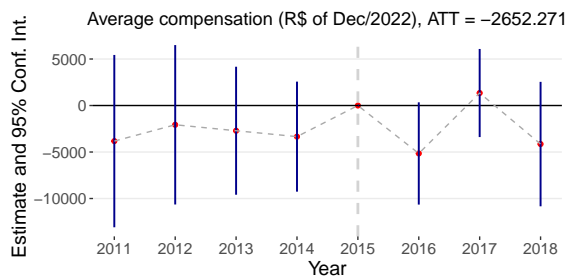
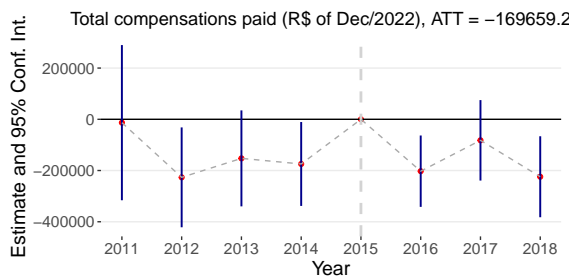


Figure A18: ATT Panama 50k's firms' estimates. Comparison group: never-treated firms under 50 employees

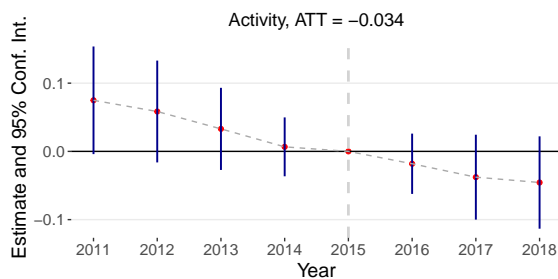
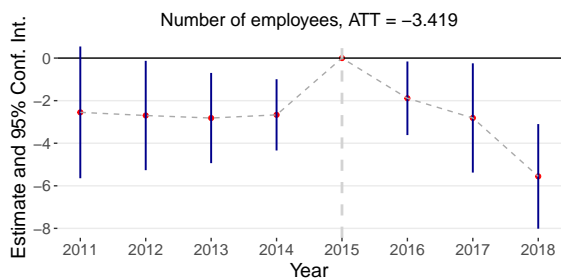
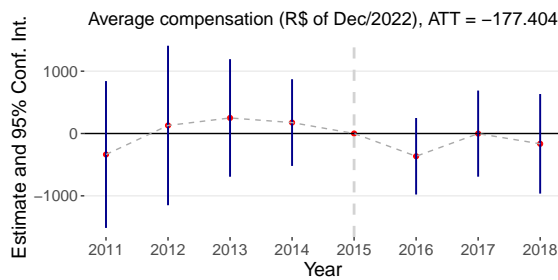
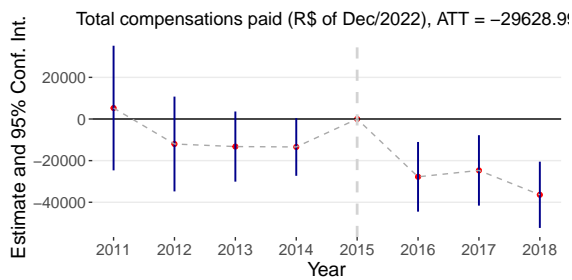


Figure A19: ATT Panama 0k's firms' estimates. Comparison group: never-treated firms under 100 employees

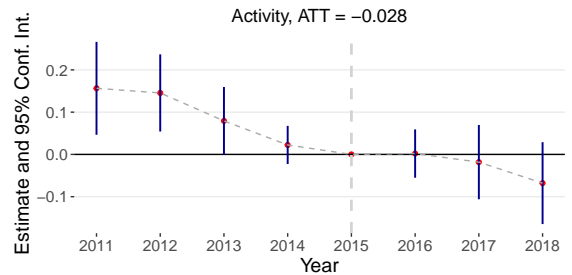
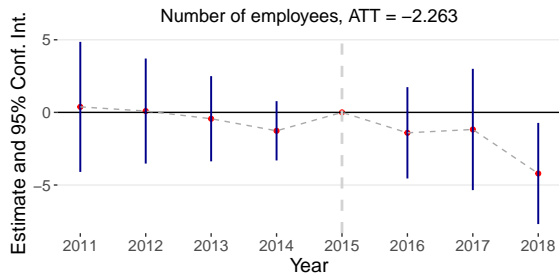
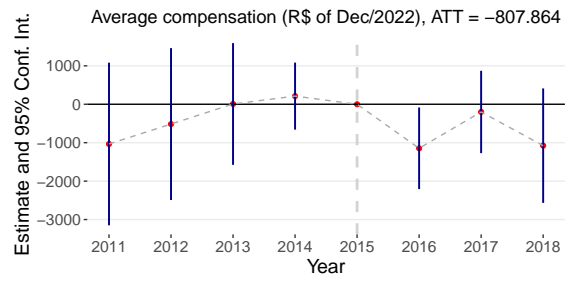
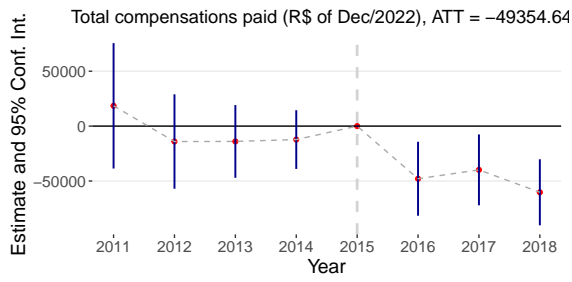


Figure A20: ATT Panama 5k's firms' estimates. Comparison group: never-treated firms under 100 employees

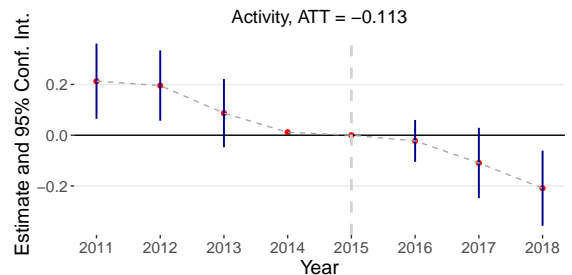
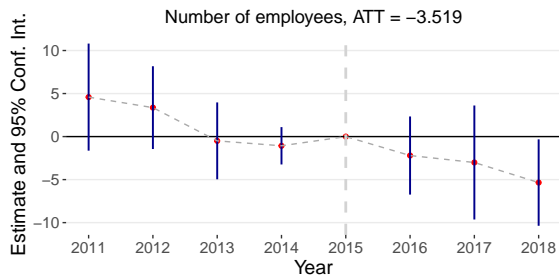
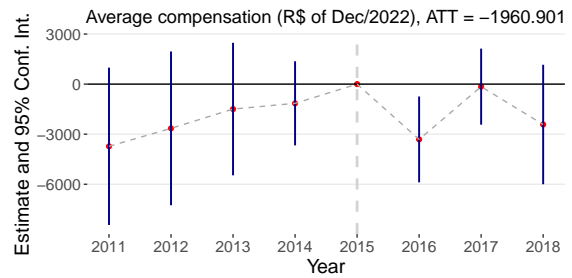
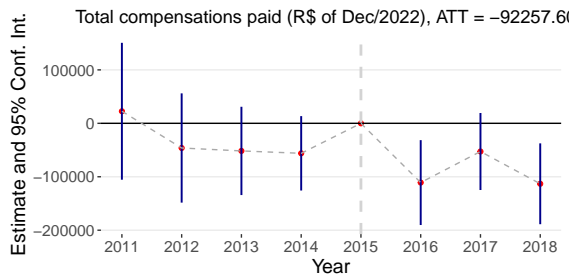


Figure A21: ATT Panama 20k's firms' estimates. Comparison group: never-treated firms under 100 employees

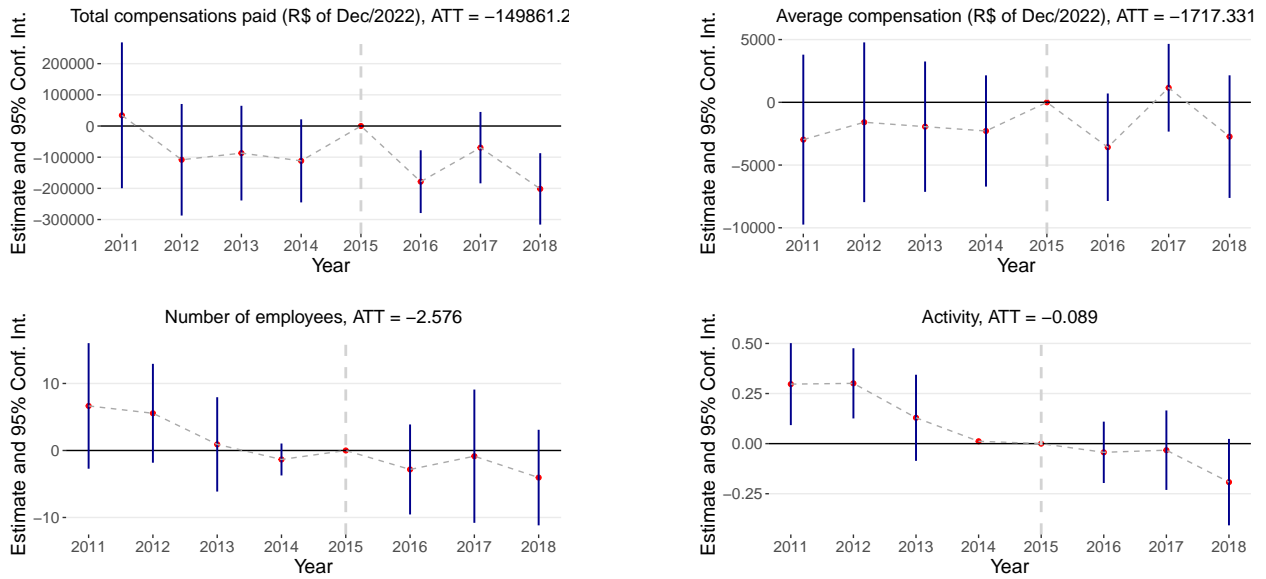


Figure A22: ATT Panama 50k's firms' estimates. Comparison group: never-treated firms under 100 employees

Table 3: Descriptive statistics of treated and comparison groups and benchmarks (fuzzy matching)

| | Treated | | Comparison | | Benchmarks | |
|----------------------------|---------------------|--------------------|--------------------|--------------------|------------|--|
| | Panama 10k SP Fuzzy | RAIS 10k | Panama 10k SP | Panama 10k | | |
| Earnings (R\$ Dec/2022) | 15,830 (26,754) | 17,743 (13,738) | 20,771 (32,208) | 20,459 (31,330) | | |
| Labor market participation | 0.48 (0.50) | 0.81 (0.39) | 0.50 (0.50) | 0.51 (0.50) | | |
| Tenure | 9.64 (7.02) | 13.57 (9.85) | 9.21 (7.45) | 10.35 (7.60) | | |
| Years of educ | 16.05 (2.84) | 16.33 (2.39) | 16.76 (2.30) | 16.33 (2.59) | | |
| Age | 47.14 (12.43) | 46.37 (10.53) | 48.14 (12.65) | 48.80 (12.91) | | |
| Male | 0.80 (0.40) | 0.67 (0.47) | 0.79 (0.41) | 0.78 (0.41) | | |
| n | 239 | 21,868 | 145 | 273 | | |

Notes: Descriptive statistics table for the treated, comparison groups, and benchmarks from 2011 to 2018. For the treated group, the Panama 10k SP Fuzzy column refers to the characteristics of Officers Panama BR 10k filtered to São Paulo state only and fuzzy-matched with RAIS 10k without homonyms. RAIS 10k refers to the general characteristics of the formally employed population with earnings over R\$ 10,000 (of Dec/2022). Panama 10k contains statistics from Panama Papers' officers that perfectly match RAIS 10k. Panama 10k is the same but filtered only to the state of São Paulo. The last two columns illustrate how similar the data is independent of the São Paulo filter. The last row n shows the number of individual observations across groups, e.g., 239 unique individuals were identified between 2011 and 2018 for Panama 10k SP Fuzzy.

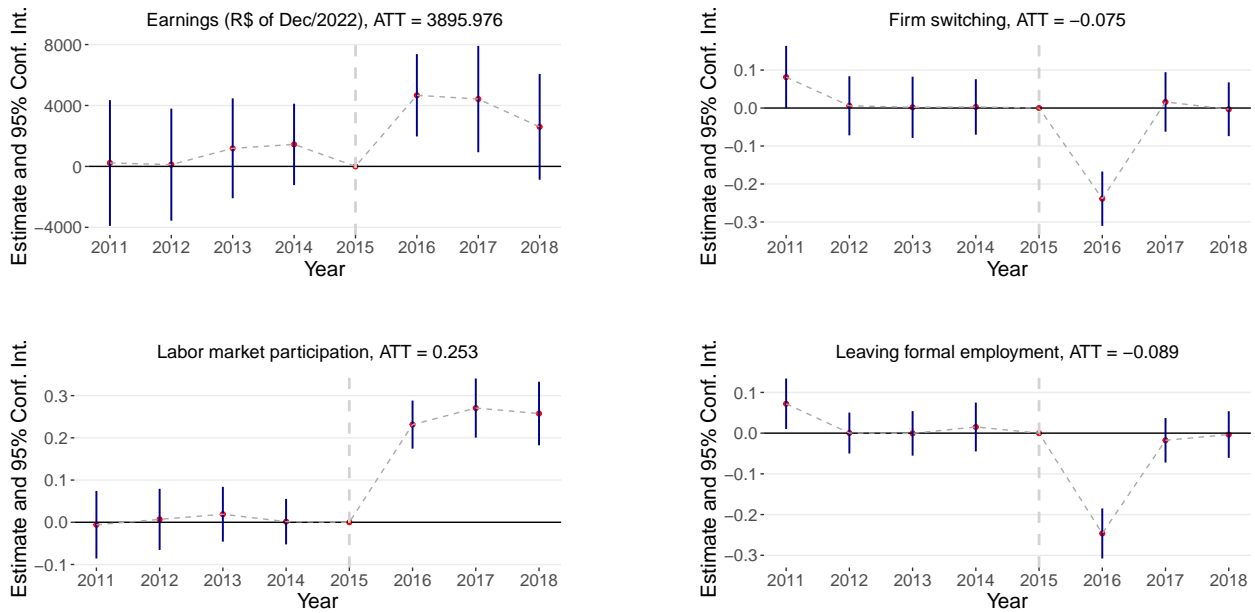


Figure A23: ATT estimates with fuzzy matched data. Comparison group: never-treated RAIS 10k

Notes: The figure describes the ATT and the event study estimates with time and individual fixed effects, employing Panama 10k fuzzy-matched data. Post-treatment averages are displayed for the ATT values in each panel. "Earnings" refers to the labor market earnings (R\$ of Dec/2022). "Firm switching" refers to the outcome that assumes value 1 if the unit switched firms or went missing from the data compared to $t-1$, and 0 otherwise. "Labor market participation" indicates whether the individual is present or missing in the data (that is, no formal job contract) for a given year. "Leaving formal employment" assumes value 1 when the individual switches to missing compared to $t-1$ conditioned on her being in the data in $t-1$. Observations are clustered at the unit level. Treatment is defined as being named in the Panama Papers leak from 2016. Never-treated are randomly sampled from RAIS 10k and are used as the comparison group. The blue lines represent the 95% confidence interval.