# Bank Accessibility and Entrepreneurial Activity: Evidence from Brazil

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## Abstract

A robust body of research suggests that entrepreneurial activities benefit from financial development and external financing access. However, there is a gap on understanding how and the extent to which the accessibility to financial services is associated with entrepreneurial activity. Using an unbalanced panel of 2,104 Brazilian municipalities spanning 2010-2021 and comprised of 23,769 municipality-year observations, our results not only confirm that bank accessibility, proxied by the number of bank branches in a municipality, is positively correlated with the number of firms, but also that the relationship is nonlinear, being stronger for larger firms. By estimating a model using first differences we find a positive causal impact of an additional bank branch on the number of firms in a municipality of 0.2% (about 26 extra firms on average). Our study contributes to the literature by corroborating that access to external financing services shapes entrepreneurial activities.

**Keywords:** Financial Development; External Financing Access; Entrepreneurship; Panel Data Analysis.

# I. Introduction

Extant scholarship indicates that financial development and accessibility to external financing are associated with entrepreneurial activities (Coronel-Pango et. al., 2023; Kerr and Nanda, 2009; Vyrostková and Kádárová, 2023). Nevertheless, research still needs to explore the way through which the ease of access to financial services is associated with entrepreneurship. This association is theoretically relevant because it may shed light on an important factor that potentially shapes the heterogeneity on the levels of entrepreneurship in a given context, such as a country or a region. From a policy perspective, it is also important especially in an emerging country's context in which accessibility to different sources of funding, such as banking loans or microfinance, are highly heterogenous (Beck and Demirguc-Kunt, 2006; Yan and Chao, 2014).

To address the topic, we investigate if the number of conventional bank branches, as a proxy for financial development and external financing access, is associated to the number of firms in a municipality, which indicates the strength of entrepreneurial behavior. We hypothesize that this association is positive: the number of bank branches increases the number of firms.

We empirically analyze an unbalanced panel of 2.104 Brazilian municipalities spanning 2010-2021 and comprised of 23.769 municipality-year observations. Brazil constitutes a rich empirical setting for our study because it presents a great level of heterogeneity in the density of bank branches, that varies both across time and municipalities. It also fits with our purposes in this study because, as data from the Brazilian Central Bank (BCB) indicates, the standard banking industry plays an important role when it comes to developing business in Brazil. Our empirical strategy involves estimating panel data regression models and testing the significance of the correlation between the number of bank branches and the natural logarithm of the total number of firms in a municipality. We use different specifications to check the robustness of our findings.

Our empirical findings confirm the hypothesized association. For example, we find that an additional bank branch in a municipality is correlated to a 0.1% to 0.3% increase in the number of firms. Moreover, the results also evidence that the relationship is nonlinear: availability of bank branches in a given municipality affects more larger firms than smaller ones. We find that one additional bank branch is correlated to an increase of 0.2% in the number of small firms, but for large firms this correlation increases to 0.6%.

Our study contributes to the literature by corroborating that financial development and access to external financing shapes entrepreneurial activities. It also illuminates the role that standard banking industry play to foster entrepreneurship, especially in settings where other options, such as microfinance, are less available.

The remainder of the article is organized as follows: Section 2 presents the underlying theoretical background and hypothesis development. Section 3 presents the factual background, highlighting the characteristics of our empirical setting and why it is relevant for the study of the topic. Section 4 describes the dataset that was used in the analysis, as well as the methods employed in the empirical strategy. Sections 5 describe the results of the econometric models. Finally, Section 5 discusses the findings and presents the conclusions, with the final remarks, contributions, and limitations of the study.

## II. Theoretical Background and Hypothesis Development

According to Kerr and Nanda (2009), there is a positive relationship between financial development and economic growth as an enhanced financial industry contributes to more efficient *ex-ante* capital allocation in investment opportunities. As economic growth supports a body of literature that encompasses benefits in trading goods, services, and financial contracts (Levine, 1997), businesses could benefit from market development by obtaining external financing and more effectively allocating their assets. Empirical evidence also backs those claims by suggesting that financial intermediaries exert a large and positive impact on total factor productivity growth and physical capital growth (Beck et. al., 2000).

Another body of literature investigates the obstacles to entrepreneurial activities. Coronel-Pango et. al. (2023) argue that access to external financing is pivotal when it comes to creating new businesses. For instance, the accessibility of bank branches in one municipality plays such an important role in the local market that when a client decides to move from one bank to another, he/she can obtain a greater discount in comparison with other funding options. However, when a branch closes and clients need to forcefully move to another bank, they do not receive similar benefits (Bonfim et. al., 2021). Along in that line, the increase in bank branches also supports the local economy through labor finance. As evidenced by Bruhn and Love (2013), which investigated the opening of 800 bank branches across Mexico in an almost simultaneous manner, there is a significant

effect on access to finance on the labor market and income levels, especially in areas with little to no bank penetration. Following that, not only business owners can increase their operations by investing in machinery, supplies, and human capital, but individuals can enjoy a better quality of life.

Furthermore, according to Agarwal and Hauswald (2010), borrowers' proximity to lenders facilitates the compilation of soft information, leading to better contract terms. Moreover, through bank continuous relationships (*e.g.*, number of loans), borrowers can obtain an advantage in times of crisis. According to Berger et. al. (2024), relationship borrowers can obtain more favorable terms during the crisis, which was compensated by not as many advantageous terms in normal times.

There is also literature demonstrating that a more developed financial market contributes to better firm monitoring. As firms can increase their productivity through newly injected money, their capital structure becomes more aligned with different agents which increases, among others, their survival chances (Morton et. al., 1954). Therefore, the ideal capital structure is the one that maximizes company performance and value (Nguyen et. al., 2023). Nonetheless, the path between capital structure and a firm's performance is not so clear. Ross (1977) makes a pivotal contribution to this research by suggesting that a firm's value increases by leverage as the expansion would signal the market about its value, it is not clear the underlying mechanisms that play a role when it comes to maximizing firms' value through leverage.

Notwithstanding, scholarship converges on how much firms, especially newly created ones, can benefit from a stable economy and proximity to financial agents. As asymmetric information would decrease by access to hard and soft information between agents and the better scrutiny of one's financial, entrepreneurs can obtain loans at better terms in such a way they can maximize their utility and survival chances. Based on the aforementioned points, we explore the association of financial access with entrepreneurship creation.

Using the number of bank branches as a proxy for financial development and external financial access, we expect that the higher the number of bank branches in a municipality, the higher the number of overall businesses that will be developed, as a consequence of an increased entrepreneurial behavior. For that reason, we develop the following hypothesis:

***H1: The number of bank branches is positively associated with entrepreneurial activity, as measured by the number of firms in a municipality.***

In this study, we test H1 by analyzing a dataset of municipalities from a relevant emerging country, Brazil, which was classified as the eleventh biggest economy in the world in 2022[1]. Hence, the next section describes the factual background of our empirical setting.

## III. Factual Background: Financial Development and External Financial Access in Brazil

Alongside other Latin American countries, Brazil went through a period of hyperinflation in the latter part of the 1980s and early 1990s that had profound significance on its economic history (Fajardo and Dantas, 2017). After five years of persistent governmental interventions to stabilize its financial market (1989-1994), Brazil was able to control its inflation in 1994 by implementing the "Plano Real", which introduced its currency – Real (R$) – used until this day.

Following the implementation of the stabilization plan, Brazilian financial institutions endeavored to mitigate inflation-induced losses by increasing credit provision. Notably, the aggregate loans within the financial system witnessed a substantial surge of 43.7 percentage points within the initial eight months after the initiation of the stabilization plan. The accelerated extension of credit, however, transpired without due diligence in scrutinizing the risk profiles of credit applicants. This led to banks' insolvency in the following year, which required the government to use the bailout mechanism named PROER to a) increase banks' capital; or b) transfer its shareholder control; or c) merge or be acquired by another bank (Nakane and Weintraub, 2005).

With the success of the PROER, Brazil was able to develop its financial system leading to an increase in its banking activities across national territory. According to data from the Brazilian Central Bank (BCB) from 2007 (the first time it was measured), the number of bank branches significantly increased until the recent digitalization process that enabled banks to reduce human and physical capital costs (See Figure 1).

[Insert Figure 1 around here.]

[1] GDP (current US$) – Brazil: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=BR&most_recent_value_desc=true

Despite the recent decrease in the number of bank branches, it is relevant to observe that the financial landscape was supplemented by digitalization that allowed consumers more accessibility. Following the worldwide FinTech rise, Brazil introduced PIX in 2020 (i.e. a feeless instant payment system) to reach more consumers and further advance the Brazilian financial system. As a result, 17, 6 billion transactions were made through PIX in the first semester of 2023, which corresponds to 93% of total bank transactions, and more than 450 million of bank accounts had been registered on Pix on January of 2024 (See Figure 2). Therefore, we believe that the recent decline in bank branches is related to economic growth and financial accessibility than a decrease in financing reach.

[Insert Figure 2 around here.]

In line with the literature described in the previous section that suggests a positive relationship between financial development and economic growth (Kerr and Nanda, 2009), Brazil was able to consolidate its financial market through a stable economy and have raised its Gross Domestic Product (GDP) since 1996 (Brazilian Institute of Geography and Statistics). In the banking industry, loan volume increased by 233% while the inflation rate maintained itself stable on an average of 5.9 percentage points (See Figure 3).

[Insert Figure 3 around here.]

Based on the fact that macroeconomic variables such as inflation rate and access to funding are highly associated with entrepreneur behavior (Vyrostková and Kádárová, 2023), it is possible to infer that the Brazilian financial market growth affected the number of businesses created. Relying on the increased number of bank branches in the Brazilian financial landscape as a proxy for financial and banking growth, business owners should benefit in several manners. For example, access to external financing with lower interest rates should become easier as asymmetric information between agents is expected to decrease. This makes Brazil to became a relevant empirical context for our objectives in this study.

Finally, while some scholars advocate for microfinance as a solution for start-up funding and it might be a good source of financing (Coronel Pango et al., 2023), microfinance activities in Brazil only represented 5 percent of all financing operations in 2022. As data from BCB demonstrates, in 2023 loan volume reached 18 trillion reais vis a vis 886 billion

reais from microcredit firms. Therefore, the standard banking industry plays an important role when it comes to developing business in Brazil.

## IV. Methods

### *Data*

We collected data of the number of firms in a municipality using the RAIS dataset from Brazil. The RAIS dataset is maintained by the Ministry of Social Security to track how many employees a firm has in order to collect Social Security taxes. This dataset provides information on the number of employees from each firm, which allows us to differentiate between smaller and larger firms. In this paper we categorize smaller firms as having less than 5 employees, and larger firms having 100 or more employees.

Additionally, we collected the number of bank branches in each municipality from the ESTBAN dataset of the Brazilian Central Bank. After merging the datasets, we have information on 2,104 from all states in Brazil. In the end, our dataset is an unbalanced panel going from 2010 to 2021, the last year on the RAIS dataset. In total our dataset is comprised of 23,769 municipality-year observations.

On Table 1 we provide the descriptive statistics from our sample. The variable "Number of Firms" counts the number of registered firms in a municipality in a given year. As previously mentioned, the variable "Small Firms" captures the number of firms with less than 5 employees, and the variable "Large Firms" captures the number of firms with 100 or more employees. Finally, the "Number of Bank Branches" variable captures the total number of bank branches in a municipality-year observation.

[Insert Table 1 around here.]

### *Empirical Strategy*

Our empirical strategy for the main results involves estimating a panel data regression model and testing the significance of the correlation between the number of bank branches and the natural logarithm of the total number of firms in a municipality. We take the natural logarithm of our main dependent variable in order to reduce the impact of outliers

and to improve the interpretation of the coefficients from the regression, which can be interpreted as marginal percentages.

Our baseline regression is as follows:

$$\ln(Number\ of\ Firms)_{ijt} = \beta \cdot Number\ of\ Bank\ Branches_{ijt} + \theta_i + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

The subscript *ijt* denotes a municipality $i$ in a state $j$ on a year *t*. Additionally, $\theta_i$ is the municipality fixed-effects, $\tau_j$ is the state fixed-effects, and $\varphi_t$ represents the year fixed effects. The error term is represented by $\varepsilon_{ijt}$.

We recognize that this model is correlational in nature, and in additional estimations we estimate further models that increase the robustness of our findings. Nevertheless, this model is important since it shows the baseline correlations between our variables of interest.

## V. Results

### *Main Results*

Table 2 provides the results from main estimations. We find that an additional bank branch in a municipality is correlated to a 0.1% to 0.3% increase in the number of firms. All coefficients are significant at the 5% level. On Model 1 only year fixed effects are estimated, on Model 2 year and state fixed effects are used, and, finally, on Model 3, year and municipality fixed effects are estimated. Since coefficients and significance levels remain stable. Additionally, municipality fixed effects overfitted the model and decreased the number of degrees of freedom. Thus, in subsequent estimations we will employ state and year fixed effects on all models.

[Insert Table 2 around here.]

### *Heterogeneity of the Number of Bank Branches*

In this subsection we explore the heterogeneity of the number of bank branches on entrepreneurial activity. First, we estimate the effect of a low number of bank branches on the entrepreneurial activity. Due to the fact that there are a total of five large commercial banks in Brazil (*Banco do Brasil*, *Caixa Econômica Federal*, *Itaú*, *Bradesco*,

and *Santander*), we proxy a low number of branches as a municipality having 5 or less branches. Hence, the model is estimated as follows:

$$\ln(Number\ of\ Firms)_{ijt} = \beta \cdot Low\ Number\ of\ Bank\ Branches_{ijt} + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

We also estimated the impact of having one single bank branch on entrepreneurial activity. This is assessed via a dummy variable "Single Bank Branch" that assumes the value of 1 if there is a single bank branch in the municipality. The model is estimated as follows:

$$\ln(Number\ of\ Firms)_{ijt} = \beta \cdot Single\ Bank\ Branches_{ijt} + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

These results help to find more robust correlations, since we now compare only two types of municipalities, instead of estimating a monotonic effect of the number of bank branches on entrepreneurial activity. Table 3, Models 4 and 5 present the results.

[Insert Table 3 around here].

We find that municipalities with five or less bank branches had, on average, about 29% less firms than municipalities with more than five bank branches (Model 4). We also find that a municipality with a single bank branch had a 14% smaller entrepreneurial activity, as proxied by the number of firms (Model 5). Hence, we again find a strong correlation of banking presence in a municipality and entrepreneurial activity.

### *Closings and Openings of Bank Branches*

As previously highlighted, the previous findings, albeit robust, are correlational in nature. Thus, we estimate the main model using a variable that captures the effect of a bank branch opening or closing in a municipality in a year. We first calculate the variable $\Delta(Number\ of\ Branches)$ as follows:

$$\Delta(Number\ of\ Branches)_{ijt} = Number\ of\ Branches_{i,j,t} - Number\ of\ Branches_{i,j,t-1}.$$

This first difference allows us to estimate, causally, the effect of bank presence on entrepreneurial activity, since the only way that this correlation could be spurious is for a third variable that caused a diminishing (increasing) of entrepreneurial activity and also caused a closing (or opening) of a bank branch at the same time.

We find this to be implausible since the number of bank branches in a municipality tends to be stable over time. On 86% of the sample, this first difference is zero, on about 6%

there was an increase in the number of bank branches, and on about 8% there was a decrease in this number. This empirical evidence coupled with the fact that opening and/or closing a bank branch in Brazil is extremely costly, due to labor laws and fines on vacating business leases, makes the inference much more causal than the baseline regression using the natural logarithm of the number of bank branches.

Hence, the coefficient of this difference can be interpreted as the causal effect on entrepreneurial activity of opening (or closing) a bank branch in a municipality. Therefore, we estimate the following panel regression:

$$\ln(Number\ of\ Firms)_{ijt} = \beta \cdot \Delta(Number\ of\ Branches)_{ijt} + \theta_i + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

Results are presented at Table 3, Model 6. We find that the opening of a bank branch increases the number of firms in a municipality by 0.2%, conversely, closing a bank branch decreases entrepreneurial activity by 0.2%. Given that, on average, a municipality has 13,000 firms, this translates into an increase of about 26 firms due to a new bank branch opening in that municipality. This estimation is of similar magnitude to our main results, which lends credibility to our estimations.

### *Firm Sizes*

Up to this point we estimated the effect of the number of bank branches on entrepreneurial activity proxied by the total number of firms. Nevertheless, these firms are of different sizes. It can be that bank presence increases the number of small firms but not of large firms, and *vice-versa.* Thus, in this subsection we estimate the correlation between the number of bank branches and three different dependent variables: the number of small firms, the number of larger firms, and the ratio of small firms to the total firms.

We proxy "small firms" as the natural logarithm of the number of firms that employ less than 5 people (4 or less workers). We consider "large firms" that ones that employ 100 or more people. This is the actual classification of the Ministry of Social Security in the RAIS dataset.

Thus, we estimate the following three models via panel regression:

$$\ln(Number\ of\ Small\ Firms)_{ijt} = \beta \cdot Number\ of\ Bank\ Branches_{ijt} + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

$$\ln(Number\ of\ Large\ Firms)_{ijt} = \beta \cdot Number\ of\ Bank\ Branches_{ijt} + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

$$\ln\left(\frac{Number\ of\ Small\ Firms}{Total\ Number\ of\ Firms}\right)_{ijt} = \beta \cdot Number\ of\ Bank\ Branches_{ijt} + \tau_j + \varphi_t + \varepsilon_{ijt}.$$

Results are presented on Table 4. We find that one additional bank branch is correlated to an increase of 0.2% in the number of small firms (Model 7), but for large firms this correlation increases to 0.6% (Model 8). The effect on the ratio of small firms is negative and significant, but of small magnitude (-0.01%, Model 9). Thus, we find evidence that bank presence in a municipality affects more larger firms than smaller ones. This is expected, since larger firms are the ones that tend to have better credit lines, better relationships with banks, and face less credit rationing (Elyasiani and Goldberg, 2004; Cenni et al., 2015; Angori et al., 2020).

## VI. Discussion and Conclusions

Our study empirically demonstrates that the higher the number of bank branches in a municipality, the higher the number of overall businesses that will be developed. In other words, we show that external financial access shapes entrepreneurial behavior. For instance, our analysis evidenced that an additional bank branch in a municipality is correlated to a 0.1% to 0.3% increase in the number of firms. More importantly, the results also demonstrated that the relationship is nonlinear: availability of bank branches in a given municipality affects more larger firms than smaller ones. We find that one additional bank branch is correlated to an increase of 0.2% in the number of small firms, but for large firms this correlation increases to 0.6%.

These findings are important, from a theoretical point of view, because they shed light on a factor that potentially shapes the heterogeneity on the levels of entrepreneurship in a given context, such as a municipality. More importantly, it shows a non-linear pattern that explain the heterogeneity of the effects across different firm sizes. The results contribute with extant literature by corroborating the idea that borrowers' proximity to lenders facilitates the compilation of soft information, leading to better contract terms, and, hence, to entrepreneurial success. Is also advances literature investigating obstacles to entrepreneurial activities, by demonstrating that, despite the growth of digitalization and microfinance, traditional bank branches presence is important to foster entrepreneurship,

especially in emerging settings, in which other options of external funding, such as microfinance, are less developed or heterogeneous across regions.

There are, nonetheless, some limitations in our study. Although our empirical setting is characterized by a great level of heterogeneity across municipalities, it considers only a single country. Therefore, further studies should include cross-country samples, with a greater diversity of institutional characteristics, such as levels of financial development and accessibility to external funding. Moreover, our models are correlational in nature, which inhibits us to claim a causal relationship. Indeed, we addressed this issue by running various additional estimations to increase the robustness of our findings, including a model that captures the effects of a bank branch opening or closing in a year. However, further studies should address causality in more depth.

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# Tables

**Table 1.** We present descriptive statistics of our main variables, including the number of observations, mean, and standard deviation. Data is comprised of observations from 2010 to 2021. A total of 2,104 municipalities from all Brazilian states are comprised in the dataset, forming an unbalanced panel of 23,769 observations.

| Variable | Obs. | Mean | SD |
|---|---|---|---|
| Number of Firms | 23,769 | 13271.42 | 113810.60 |
| Small Firms | 23,769 | 1312.44 | 8137.85 |
| Large Firms | 23,769 | 5857.21 | 57490.66 |
| Number of Bank Branches | 23,769 | 7.19 | 62.01 |

**Table 2.** We provide results from panel data regressions using the ln(Number of Firms) per municipality as the dependent variable. The variable Number of Bank Branches is a variable that measures the total number of bank branches on that municipality for that specific year. We use Year, State and Municipality fixed effects when noted. Municipality clustered standard errors are disclosed in parentheses. Significance levels: ***p<0.01, **p<0.05, *p<0.10.

| | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Number of Bank Branches | 0.003** | 0.003** | 0.001** |
| | (0.001) | (0.001) | (0.000) |
| N | 23,769 | 23,769 | 23,769 |
| $R^2$ | 0.07 | 0.15 | 0.96 |
| Year FE | Y | Y | Y |
| State FE | N | Y | N |
| Municipality FE | N | N | Y |
| Clustered SE | Y | Y | Y |

**Table 3.** We provide results from panel data regressions using the ln(Number of Firms) per municipality as the dependent variable. The variable "Low Number of Bank Branches" is a dummy variable that assumes the value of 1 if the municipality had 5 or less branches for that specific year. The variable "Single Bank Branch" functions in the same way, but the variable only assumes the value of 1 if the municipality had just one bank branch. The variable Δ(Number of Bank Branches) takes the first difference of the number of bank branches on the municipality on the current year minus the value for the previous year. We use Year and State fixed effects when noted. Municipality clustered standard errors are disclosed in parentheses. Significance levels: ***p<0.01, **p<0.05, *p<0.10.

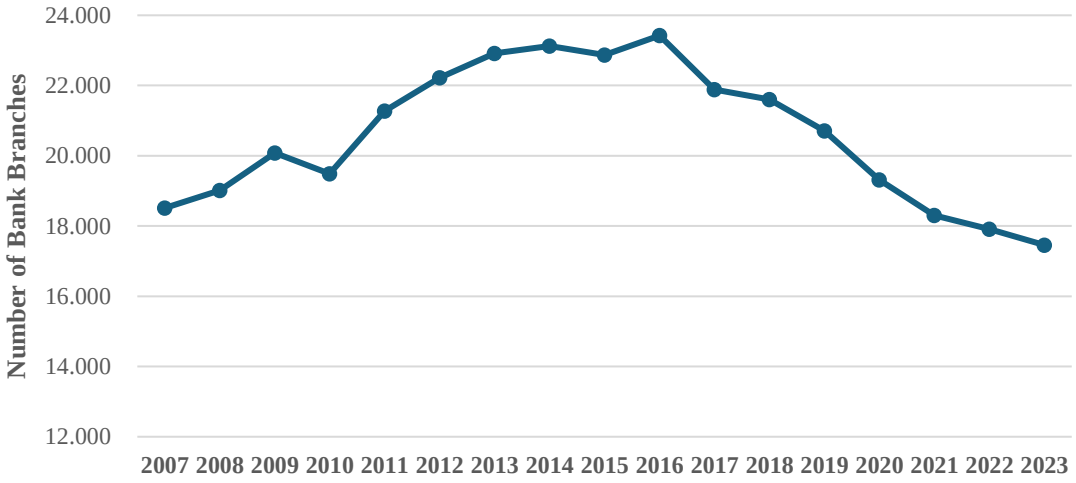
| | Model 4 | Model 5 | Model 6 |
|---|---|---|---|
| Low Number of Bank Branches | -0.297*** | | |
| | (0.039) | | |
| Single Bank Branch | | -0.146*** | |
| | | (0.019) | |
| Δ(Number of Bank Branch) | | | 0.002* |
| | | | (0.001) |
| N | 23,769 | 23,769 | 21,629 |
| $R^2$ | 0.19 | 0.20 | 0.11 |
| Year FE | Y | Y | Y |
| State FE | Y | Y | Y |
| Clustered SE | Y | Y | Y |

**Table 4.** We provide results from panel data regressions using the ln(Number of Firms) per municipality as the dependent variable. The variable Number of Bank Branches is a variable that measures the total number of bank branches on that municipality for that specific year. The dependent variable "Small" is the natural logarithm of the number of firms on that municipality that had less than 5 employees on that year. The dependent variable "Large" is the natural logarithm of the number of firms on that municipality that had 100 or more employees on that year. The dependent variable "Ratio" is the ratio between the number of small companies on that municipality divided by the total number of firms on that year. We use Year and State fixed effects when noted. Municipality clustered standard errors are disclosed in parentheses. Significance levels: ***p<0.01, **p<0.05, *p<0.10.

| | Model 7 | Model 8 | Model 9 |
|---|---|---|---|
| *Dependent variable:* | *Small* | *Large* | *Ratio* |
| Number of Bank Branches | 0.002** | 0.006** | -0.0001* |
| | (0.001) | (0.003) | (0.00007) |
| N | 23,769 | 23,769 | 23,769 |
| $R^2$ | 0.15 | 0.12 | 0.10 |
| Year FE | Y | Y | Y |
| State FE | Y | Y | Y |
| Clustered SE | Y | Y | Y |

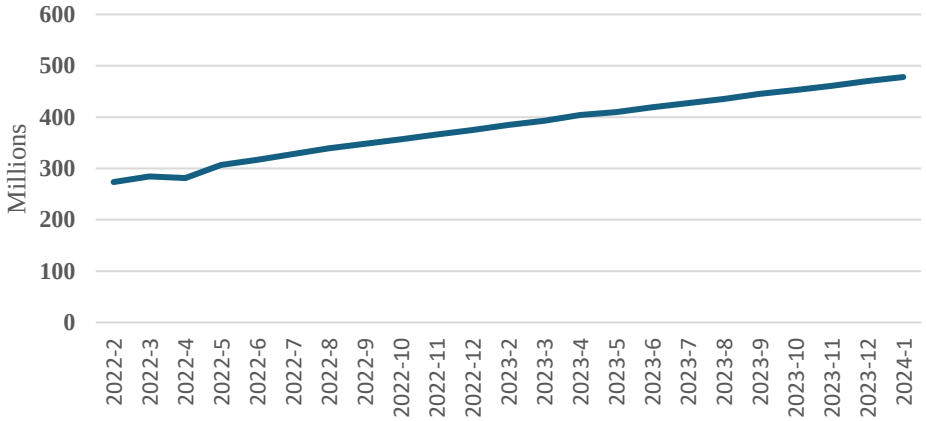
# Figures

**Figure 1.** Number of bank branches in Brazil from 2007 to 2023



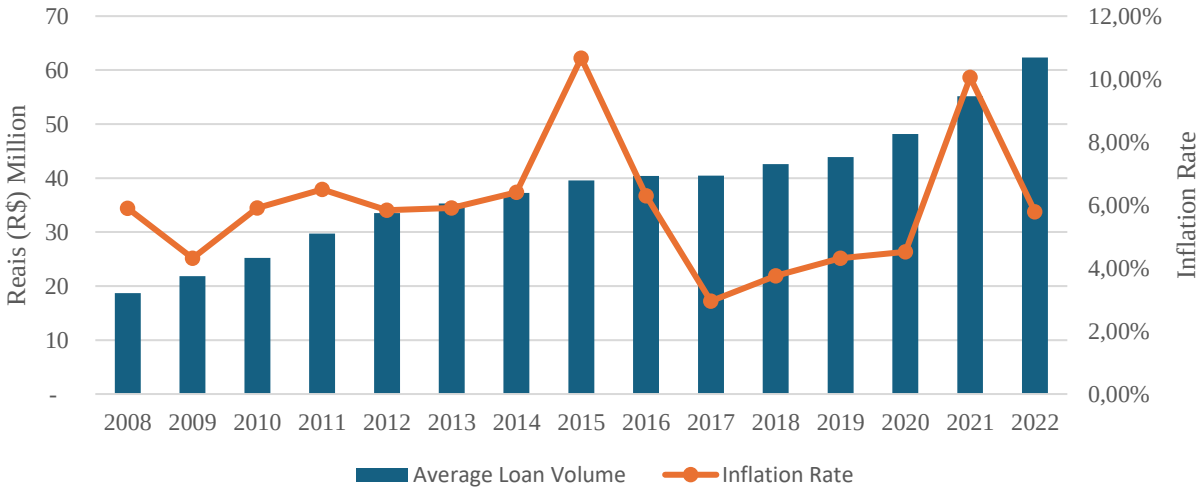

**Source:** Brazilian Central Bank (https://www.bcb.gov.br/fis/info/agencias.asp?frame=1

**Figure 2.** Total number of registered bank accounts on PIX




**Source:** Brazilian Central Bank (https://www.bcb.gov.br/estatisticas/detalhamentoGrafico/graficospix/PixContasDICT)

**Figure 3.** Average Loan Volume in the Brazilian financial market and yearly inflation rate from 2008 - 2022




**Source:** Estban (https://www.bcb.gov.br/estatisticas/estatisticabancariamunicipios) and Inflation Rate from the Brazilian Institute of Geography and Statistics (https://www.ibge.gov.br/estatisticas/economicas/precos-e-custos/9256-indice-nacional-de-precos-ao-consumidor-amplo.html?t=series-historicas&utm_source=landing&utm_medium=explica&utm_campaign=inflacao#plano-real-mes