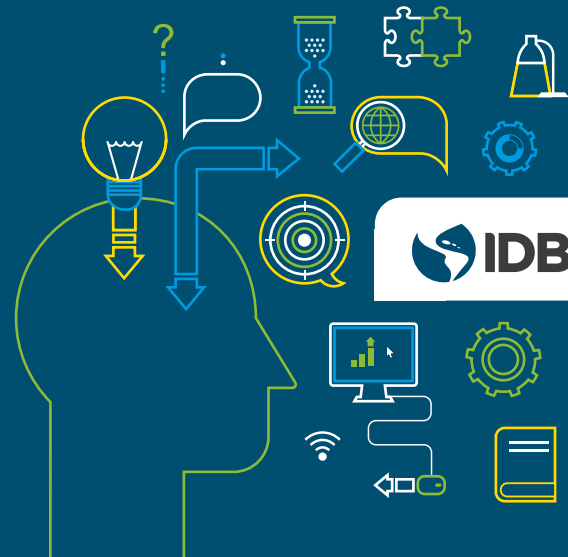


# What Are the Impacts of Bank Branch Closures on Local Firms?

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Author: Razvan Vlaicu.



- ➔ As several major banks in Latin America have reduced their branch networks in recent years, many firms have lost access to their local bank.
- ➔ Bank branch closures result in a reduction in firm establishments with active operations from 1.2% initially to 8.1% within 4-7 years, a 0.5 decline in weekly hours of formal employment, and a compression of the real wage distribution.
- ➔ Micro firms, trade and service firms, and agricultural firms are found to be the most vulnerable.



## CONTEXT

The decline in physical bank branches due to digitalization can lead to reduced access to financial services for firms in rural or under-served urban areas. In Brazil, the number of bank branches increased after the government implemented its “Banks for All” program (“Banco para Todos”) in 2004. This trend was disrupted in 2014, however, and the number has since declined. As of the end of 2022, Brazil had lost more than 5,000 bank branches, and some municipalities lost all their bank branches. These developments raise the question of how firms are impacted by the closure of their local bank branch.



## PROJECT

The analysis relies on a primary sample of private sector firms and employees in Brazil from 2011 to 2021. We exploit establishment-level cross-sectional data over time in addition to municipality-level panel data on economic and employment conditions, linking bank branch-level data with firm-level labor census data and municipality-level data on population and local economic accounts, and we concentrate on municipalities with only one branch. To identify the effects of bank branch closures on local formal employment, we adopt a staggered treatment timing design by retaining in the sample municipalities where the local branch closure was not reversed during the study period.

## RESULTS

**We conduct several analyses to investigate the impact of local bank branch closures.** First, we conduct an establishment-level analysis of firm data to see if bank branch closures impact firm operations, including market entry and exit. We find that roughly 1 percent of establishments become inactive between 0 and 3 years after a bank branch closure, and the share of inactive establishments increases from 1.2 percent to 8.4 percent between 4 and 7 years after the closure. There is no effect on the overall or specific type of firm entering or exiting.

We then evaluate the impact on local formal employment, using a municipality-level panel constructed from worker census data. Our estimates suggest that bank branch closures could have a larger and quicker impact on wages than on employment. While statistically imprecise, our point estimates show bank branch closures decrease the average wage by 1.5 to 1.7 percent in the first three years. For employment, our estimates suggest bank branch closures do not have a significant short-term effect but potentially a long-term negative effect.

### Key Concept

#### MICRO FIRMS



Also known as microenterprises, businesses with fewer than 10 employees, which play a crucial role in job creation and innovation within the economy.

Studying wage disparities, we find short-term decreases in the standard deviation of wages, but long-term decreases in the difference between the 90th and 10th percentile wage brackets. This could suggest that branch closures disproportionately affect different wage brackets—in the short run, potentially the middle-income bracket, and in the long run, the lower wage bracket. We conduct a heterogeneity analysis to characterize which types of firms are more vulnerable. We find that micro firms, trade and service firms, and agriculture firms are disproportionately impacted by local bank branch closures.

Finally, we analyze economic output accounts and find a decreasing trend in service output due to bank branch closures but not in industrial and agricultural output.

### Key Concept

#### SOFT INFORMATION



Qualitative data gathered through personal interactions, such as trustworthiness, essential for making lending decisions but difficult to quantify.



#### POLICY IMPLICATIONS

**The presence of banks can significantly influence a firm's labor demand and productivity, thereby affecting the labor market equilibrium and local economic output.** Local banks provide essential financial services, including credit, loans, and payments. Local access is particularly vital for small and medium-sized enterprises (SMEs) that may not have the same resources as larger corporations to secure financing through alternative channels and face higher costs to switching lenders. Through personal interactions, local banks obtain soft information about market conditions and business owners that allows them to better tailor financial products to the specific needs of local firms. Moreover, the proximity of banks to firms can lead to improved credit availability, as banks are more likely to lend to businesses with which they have established relationships. Understanding the intricate relationships between financial infrastructure and economic activity helps develop policy solutions to promote economic welfare.

Bank decisions to reduce their physical branch networks in Latin America are primarily driven by rapid digitalization in the banking industry. Nevertheless, at the margin, some of the closure decisions may be based on local economic conditions. Our study has several policy implications. First, it highlights the importance of physical bank branches in providing financial access, particularly for small firms. This suggests the need for policies that balance digital banking growth with preservation of adequate physical banking

infrastructure, especially in underserved areas. Second, our study shows that demand for financial services among certain types of firms, particularly in services and agriculture, is highly localized. Recognizing this, providing local financial access becomes vital to fostering inclusive regional growth. **This suggests the importance of a policy focus on strengthening financial ecosystems that support small-scale local-economy businesses.**

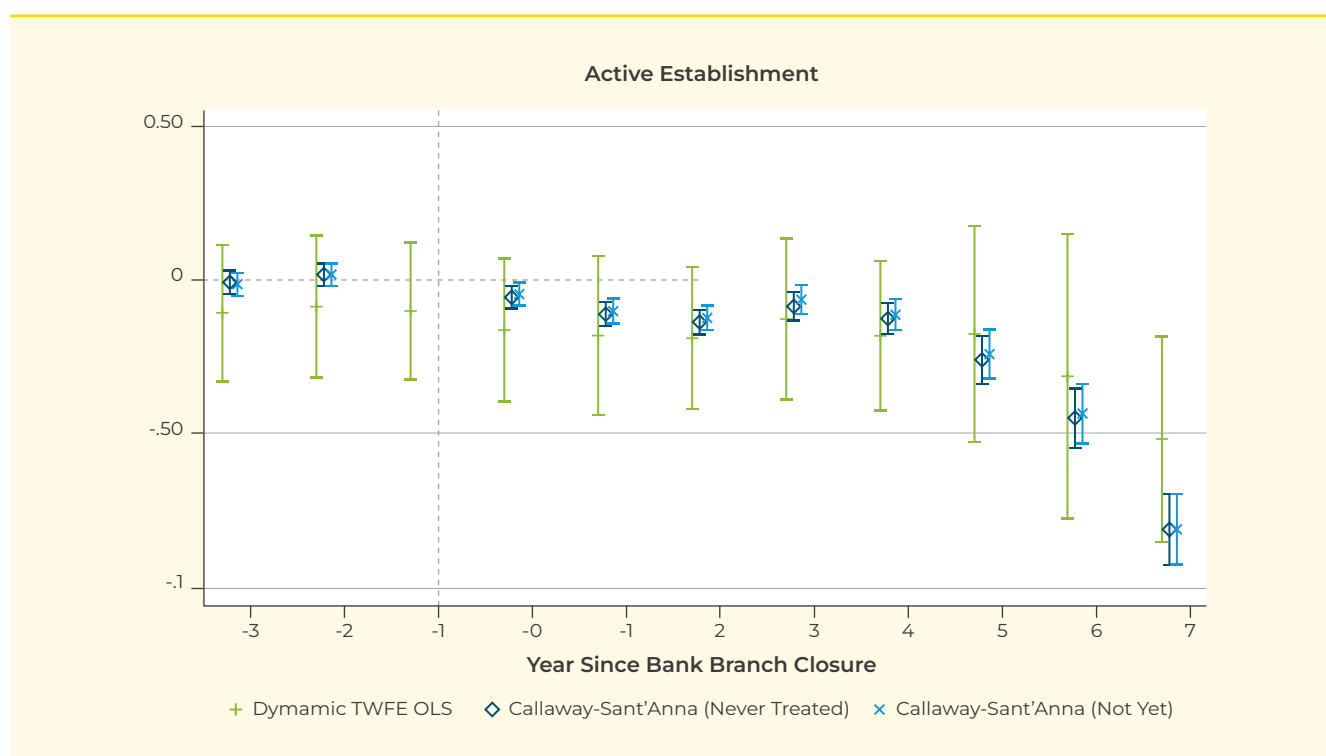
#### Key Concept

### BANKING DIGITALIZATION



Integration of digital technologies into all aspects of banking operations, including online banking, mobile apps, and automated services.

**FIGURE 1. Estimated Change in Active Establishments Relative to Branch Closure Year**



Source: Authors' calculations based on Relação Anual de Informações Sociais (RAIS) data.

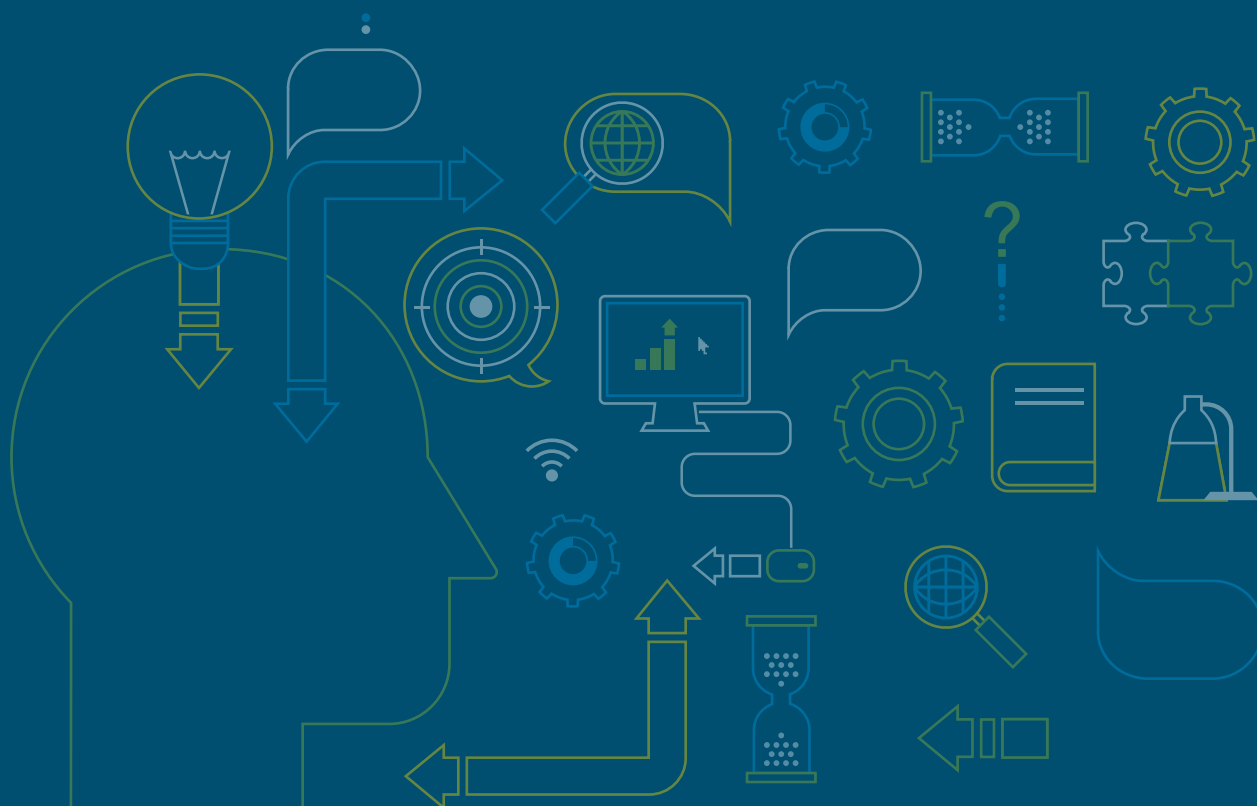
Notes: Years since bank branch closure equals 0 in the year the municipality loses its sole bank branch. We report pre-treatment trends starting from period -3. The panel is balanced between periods -3 and 0; other periods are estimated using unbalanced samples. The standard errors for the TWFE estimates are robust standard errors clustered by both year and municipality. The standard errors for the CS estimates are computed by wild bootstrap.

## FULL STUDY

Fang, Francis Haoyu and Razvan Vlaicu. 2024. "Local Banking Supply and Private Firm Activity: Evidence from Branch Closures." IDB Working Paper No. 1605. Washington, DC: Inter-American Development Bank. <http://dx.doi.org/10.18235/0013076>.

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