

Luiza Lins Bellon

Formal Employment and Social Assistance on the Path to (and Out of) Homelessness in Brazil

Dissertação de Mestrado

Master's Dissertation presented to the Programa de Pósgraduação em Economia, do Departamento de Economia da PUC-Rio in partial fulfillment of the requirements for the degree of Mestre em Economia.

Advisor: Prof. Juliano Assunção



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Abstract

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This study aims to fill a gap in the economic literature on homelessness in Brazil by leveraging underexplored administrative data on this population. First, I profile almost 200,000 individuals registered as homeless in Cadastro Unico, examining their demographics, formal employment histories from RAIS, and use of social assistance before and after experiencing homelessness, and compare them to housed individuals. I find that 61% of homeless individuals have had at least one formal employment relationship. Additionally, before entering this situation, they were already on a trajectory of economic vulnerability – characterized by low wages and unstable employment relationships – and that roughly 55% only began accessing social assistance after being observed as homeless. Using OLS regressions, I also find suggestive evidence that being registered in Cadastro Unico before losing one's last formal job may provide a buffer against homelessness, potentially due to improved access to financial, legal, and therapeutic support services. I then employ an event study framework to assess how another arm of social policy – the Centros de Atenção Psicossocial (CAPS) – impacts those already experiencing homelessness. The results indicate that homeless individuals living in municipalities that introduced a CAPS between 2013 and 2022 were 2.2 p.p. more likely to exit homelessness than those in municipalities that did not, after controlling for various confounders. However, CAPS initiatives do not appear to promote their (re)entry into the labor market.

Keywords

Homelessness; Labor Market; Social Assistance; Brazil.

Resumo

Bellon, Luiza; Assunção, Juliano. Emprego Formal e Assistência Social na Trajetória de Entrada e Saída da Situação de Rua no Brasil. Rio de Janeiro, 2025. 61p. Dissertação de Mestrado — Departamento de Economia, Pontifícia Universidade Católica do Rio de Janeiro.

Este estudo busca preencher uma lacuna na literatura econômica sobre as pessoas em situação de rua (PSR) no Brasil, explorando dados administrativos pouco utilizados dessa população. Primeiro, traço o perfil de quase 200 mil indivíduos registrados como em situação de rua no Cadastro Único, analisando suas características demográficas, histórico de emprego formal na RAIS e acesso à assistência social antes e depois de vivenciarem a situação de rua, comparando-os a pessoas que nunca perderam a moradia. Eu encontro que 61% das pessoas em situação de rua já tiveram ao menos um vínculo de emprego formal. Além disso, antes de se tornarem PSR, esses indivíduos já estavam em uma trajetória de vulnerabilidade econômica – caracterizada por baixos salários e relações de emprego instáveis – e aproximadamente 55% só ingressaram na rede de assistência social após serem observados como em situação de rua. Utilizando regressões MQO, também encontro indícios de que estar cadastrado no Cadastro Único antes de perder o último emprego formal pode atuar como um fator de proteção contra a situação de rua, possivelmente devido ao acesso facilitado a benefícios legais, terapêuticos e de transferência de renda. Em seguida, aplico um modelo de estudo de eventos para avaliar o impacto de outro braço da política social – os Centros de Atenção Psicossocial (CAPS) – sobre aqueles que já estão em situação de rua. Os resultados indicam que indivíduos em situação de rua em municípios que receberam um CAPS pela primeira vez entre 2013 e 2022 tiveram uma maior probabilidade 2 p.p. maior de sair dessa condição que aqueles em cidades que não receberam a política, após o controle para diversos fatores de confusão. No entanto, os CAPS não parecem influenciar sua (re)inserção no mercado de trabalho.

Palavras-chave

Situação de Rua; Mercado de Trabalho; Assistência Social; Brasil.

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List of abbreviations

BPC - Benefício de Prestação Continuada

CAPS - Centros de Atenção Psicossocial

Centro Pop
 - Centro de Referência Especializado para População em Situação de Rua

CRAS - Centro de Referência de Assistência Social

CREAS - Centro de Referência Especializado de Assistência Social

IBGE - Instituto Brasileiro de Geografia e Estatística

IPEA - Instituto de Pesquisa Econômica Aplicada

POF - Pesquisa do Orçamento Familiar

RAIS - Relação Anual de Informações Sociais

SUAS - Sistema Único de Assistência Social

UA - Unidade de Acolhimento

O bicho não era um cão, Não era um gato, Não era um rato. O bicho, meu Deus, era um homem.

Manuel Bandeira, O bicho.

Introduction

In Brazil, more than 250,000 people are officially registered as homeless¹ – a figure that is likely underreported. Homeless individuals are more exposed to malnutrition (Wiecha, Dwyer, and Dunn-Strohecker 1991; Koh et al. 2012), diseases (Baggett, Liauw, and Hwang 2018; Fazel, Geddes, and Kushel 2014), mental health conditions (Lippert and Lee 2015; Lee, Tyler, and Wright 2010), substance abuse (Vitorino, Vieira, and Guimarães 2024; McVicar, Moschion, and Van Ours 2015), death (Aldridge et al. 2018; Fazel, Geddes, and Kushel 2014), stigma (Mattos and Ferreira 2004; Dalpiaz et al. 2014), and violence (Rosa and Brêtas 2015; Moura Júnior, Ximenes, and Sarriera 2013) than the rest of the population.

Homelessness is not only an ethical issue, as it represents a severe deprivation of basic human rights, but also an economic one, ranking among the most extreme forms of poverty (Rossi 1991). It is also a major urban policy challenge, in both developed and developing countries. While qualitative and case studies in the social and medical sciences have extensively examined homelessness in Brazil, there remains a lack of evidence-based research on who these individuals were before losing housing and how existing public policies affect this population.

This study helps fill this gap by analyzing the formal employment and social assistance trajectories of individuals before they became homeless, as well as ways in which State intervention may influence homelessness. To do so, I leverage administrative microdata from Cadastro Único's supplementary homelessness module – introduced in the late 2000s but largely underutilized in social science research – and link it to RAIS, which records detailed formal employment information.

I first compare the demographic characteristics of homeless and housed individuals. Beyond traits traditionally associated with poverty – such as low education levels and a lower likelihood of having a father listed on their birth certificate – I find that homeless individuals have significantly higher rates of inter-state migration and disabilities compared to the housed population.

Next, I analyze formal employment trajectories in the RAIS data across both groups. A simple comparison, however, would be uninformative, as differences could largely reflect demographic composition – for instance, the homeless population is disproportionately male, and older. To address this, I con-

¹Based on Cadastro Único data, 2025.

struct a sample of housed individuals from the Cadastro Único that is demographically equivalent to the homeless group, using exact matching on a range of socioeconomic and geographic variables. The resulting dataset contains equal numbers of housed and homeless with nearly identical averages across all matched covariates, allowing for a comparison of employment histories that minimizes confounding from demographic heterogeneity.

I show that the future homeless already exhibited signs of economic fragility before losing housing. They earned lower wages, were more likely to hold temporary contracts and be dismissed for cause, and had significantly shorter job tenure – on average, less than half that of housed individuals. These findings suggest that homelessness stems from a prolonged trajectory of socioeconomic instability, consistent with Meyer et al. 2024 recent findings for the Unites States.

Additionally, when examining the most common past occupations across the to-be-homeless and the matched housed, I find a disproportionately higher share of construction laborers ('serventes de obras') among those who become homeless – 18%, compared to 9% among the always housed – while other occupations exhibit fairly similar proportions across the two groups.² I briefly discuss some potential explanations behind this pattern.

It is important to note that, while financial hardship plays a central role, homelessness is frequently the outcome of a broader set of extreme personal challenges (O'Flaherty 2004). Within this context, Cadastro Único – Brazil's administrative registry designed to coordinate and streamline social assistance services – could serve as an important policy tool for individuals at risk of homelessness, as it provides access to a range of legal and therapeutic services beyond direct cash transfers such as Bolsa Família and BPC. In Section 3.1, I outline the full scope of Cadastro Único's services and its physical infrastructure, including CRAS, CREAS, and Centros Pop.

A key finding is that, while 46% of the matched housed individuals were already enrolled in Cadastro Único before losing their last formal job in the RAIS database, this figure drops to only 20% among those who later became homeless. The indicator of Bolsa Família receipt before losing one's last formal link shows a similar proportional discrepancy. Broadly, most individuals only registered in Cadastro Único after already becoming homeless, highlighting a failure of the State to identify this risk and intervene in time. In Chapter 4, I formally explore the relationship between access to government assistance and homelessness through two complementary empirical exercises.

 $^{^2}$ With the exception of janitors, where a discrepancy exists but is less pronounced than for construction laborers.

First, I quantify the relative contribution of each factor to the likelihood of becoming homeless. To this end, I estimate OLS regressions where the dependent variable is an indicator for becoming homeless at some point, and the covariates include demographic characteristics, employment history, and prior access to social assistance before the last observed job loss. The analysis uses a cross-sectional dataset constructed from average characteristics of the entire homeless sample and of a weighted 5% random sample of housed individuals in the Cadastro Único and RAIS. The results reinforce the descriptive findings, particularly Cadastro Único's potential role as a protective mechanism against homelessness. While these correlations are informative, concerns about endogeneity remain, which I further discuss in the chatpter.

In the second empirical exercise, I analyze the impact of another key social policy frequently accessed by this population: the Psychosocial Care Centers (Centros de Atenção Psicossocial, or CAPS). Officially established in the early 2000s as part of Brazil's psychiatric reform, CAPS provide community-based mental health care, with the implicit goal of reducing psychiatric hospitalizations (Ribeiro 2004; Da Fonte 2013). In Section 3.2, I describe CAPS in greater detail and review qualitative evidence on their strong ties to the homeless population.

To assess CAPS's effects on individuals' ability to exit homelessness, I exploit the fact that many municipalities opened a CAPS for the first time between 2012 and 2022 – the period for which I have homelessness data – and estimate an event-study model within the Callaway and Sant'Anna 2021 framework. In this exercise, I rely exclusively on the sample of individuals who experience homelessness at some point in the Cadastro Único registry, combined with data on the opening year, location, and type of all CAPS centers, obtained through the Freedom of Information Law (LAI).

The results indicate the introduction of CAPS reduces the likelihood of remaining homeless by 2.2 percentage points in subsequent periods, compared to homeless individuals in municipalities that never implemented a CAPS facility. I incorporate a series of time-varying covariates and time-invariant municipal controls interacted with a linear time trend to mitigate potential confounding factors, following the methodology of Dias and Fontes 2024, with some modifications.

I find no evidence that CAPS increase labor market participation among homeless individuals. One possible explanation for the effect on housing outcomes is that CAPS facilitate family reunification, a mechanism documented in qualitative studies (Wijk and Mângia 2017). Although there is a significant effect on household size, limitations in the identification strategy prevent me

from establishing a clear causal link between CAPS and family reunification of homeless individuals.

Related literature: This study contributes to the limited but growing body of economics literature on homelessness.

Predicting homelessness is challenging due to the overlapping financial conditions of individuals who become homeless and those who do not (Meyer et al. 2024; O'Flaherty 2012). Personal circumstances, such as family problems (Koegel, Melamid, and Burnam 1995), illness (Curtis et al. 2013), and eviction (Collinson and Reed 2018) – which are not typically observable in administrative data – play a significant role. Nevertheless, identifying common socioeconomic trends among individuals who become homeless can potentially inform the design of preventive public policies.

The working paper by Meyer et al. 2024 on the United States is the most closely related to the descriptive section of my dissertation, as both compare the formal employment and social assistance trajectories of demographically similar homeless and housed individuals. However, while I use an exact matching approach with multiple demographic variables, they reweight the housed sample to better resemble the characteristics of the homeless population, relying on fewer variables. Additionally, although my findings on prior economic vulnerability align with theirs, I identify different patterns in family structure and previous access to social assistance, suggesting the experience of homelessness in developed countries should not be generalized to other contexts.

Most studies that investigate causal effects of public policies on homelessness are randomized controlled trials (RCTs) conducted in the United States, focusing on housing-related interventions exclusively (Kirst et al. 2015) or combined with some kind of therapeutic treatment (O'Campo et al. 2016; Stergiopoulos et al. 2015). These experiments conclude that, at individiual-level, housing subsidies effectively prevent people from returning to homelessness, specially when provided on a long-term basis. Furthermore, regarding the sole purpose of mitigating homeless, it is ineffective to rely entirely on therapy services, although therapy can be helpful when paired with housing assistance.

There are only a few papers that leverage on administrative data and robust causal identification strategies to investigate the impact of government policies on homelessness – all of them in the Unites States. Cohen 2024 employs a random case worker assignment design and finds that enrolling individuals in long-term housing programs significantly reduces the likelihood of returning to the homeless support system, especially for people with disabilities. Using the same data as Cohen 2024 and an event-study approach, Brounstein and Wieselthier 2024 documents large positive impacts on labor market

integration. Popov 2016 shows that increased funding of housing programs reduces the unsheltered homeless, exploiting an exogeneity in the allocation rules of federal grants across communities. However, when adopting a similar instrumental variable as Popov 2016 and additional relevant covariates, Lucas 2017 concludes that the funding's impact is negligible.³

Lastly, Pilkauskas and Michelmore 2019 demonstrate that expansions of the EITC (the Earned Income Tax Credit program) did not reduce the incidence of homelessness in the United States. They use a differences-in-differences framework and, perhaps surprisingly, were the only to perform an observational study about the effects of cash transfers on homelessness. Given the limited quantitative academic research on this topic, there is still no clear consensus on which public policies are effective in mitigating homelessness (O'Flaherty 2019).

Part of my empirical analysis seeks to understand how CAPS' psychosocial care impacts the homeless population, which frequently relies on this service. Dias and Fontes 2024 were the first (and, to date, remain the only) to study the causal effects of the CAPS rollout. Using event-studies, they find the policy successfully reduced psychiatric hospitalizations and increased outpatient mental health care, although it also led to a rise in crime incidence. Other observational papers evaluate the impact of various community centers on health outcomes (such as Bailey and Goodman-Bacon 2015 and Ludwig and Miller 2007), but none address the homeless population.

To the best of my knowledge, this dissertation is the first Economics study – outside of IPEA reports – to analyze homelessness microdata from Cadastro Único. It is also the first in Brazil and Latin America to conduct an extensive investigation into the formal labor market histories of homeless individuals. Moreover, it contributes to the literature by leveraging administrative data to causally assess the impact of a mental health policy on homelessness. It is worth noting that CAPS were not designed specifically for the homeless, meaning the results reflect an unintended yet positive spillover of the policy.

In the next chapter, I present the data and panel construction, and descriptive statistics on the growth, demographics, access to social assistance, and prior formal labor market participation of the homeless population in Brazil. In Chapter 3, I provide an overview of the resources available to this group, including Cadastro Único and CAPS. Chapter 4 outlines the empirical strategies and presents the estimation results for both policies, while Chapter 5 offers concluding remarks.

 $^{^3}$ Popov 2016 and Brounstein and Wieselthier 2024 are still working papers at the time of writing.

Homeless People in Brazil

2.1 Data and Panel Construction

The primary data source I use is the Cadastro Único, Brazil's administrative database that collects information on low-income households to streamline access to social assistance programs. In 2007¹, the Ministry of Social Development, responsible for managing the Cadastro Único, began recording homeless individuals through a special form (Supplementary Form 2, shown in Figure A.1 of the Appendix), which includes an indicator of whether a person is homeless and several questions related to that situation. Since then, Cadastro Único has been the most robust national data source on homeless individuals in Brazil.

One limitation of the data is that it does not allow us to distinguish between organic growth in the homeless population and improved identification efforts by the Ministry. Furthermore, there is likely underreporting², potentially introducing sample bias. Nevertheless, given the significant gap in the Economics literature on homelessness in Brazil – and Latin America more broadly – the Cadastro Único serve as a valuable resource for empirical research on this population.

I construct a panel dataset using information from Cadastro Único for all individuals identified as homeless at some point between 2012 (the earliest year the Ministry of Social Development provides Cadastro Único data) and 2022. This allows me to obtain all relevant demographic characteristics, the date of Cadúnico registration, and the indicator of participation in Bolsa Família.

Next, I link these individuals to the Annual Social Information List (Relação Anual de Informções Anuais - RAIS), another administrative database that aggregates information on all active formal employment ties each year. The linkage is performed using the CPF (Brazilian individual taxpayer registry identification), and there are some limitations. First, RAIS only includes the CPF variable from 2002 onwards, making 2002 the earliest year employment

¹https://web.archive.org/web/20250129130259/https://www.mds.gov.br/webarquivos/publicacao/bolsa_familia/Informes/Informe%20336%20Validado%20-2.pdf

²Natalino 2022, a study conducted by Brazil's Institute for Applied Economic Research (IPEA), estimated the country's homeless population at around 281,000 in 2022. This estimate is based on official data from municipalities and from the Unified Social Assistance System Census (Censo SUAS), which encompasses shelters, community centers, and other physical resources.

ties could be identified. Since my RAIS data only extends to 2018, I restricted Cadastro Único observations to at most that year. Second, some individuals lack a CPF in Cadastro Único, or at least one of the 11 digits are missing; in such cases, I excluded these observations, which accounted for approximately 1% of the dataset.

Of all the remaining 141,352 individuals identified as homeless at some point, 86,453 (61%) had had at least one formal employment tie prior to that. In the next sections, the use of the full panel with Cadastro Único information (2012-2022) or the restricted panel (2012-2018) depends on whether I am also analyzing the previous labor market variables, and is indicated in the tables.

2.1.1 Housed sample construction

The descriptive analysis aims to understand what differentiates individuals who become homeless from those who do not. To establish a baseline for comparison with the homeless findings, I also collect data on individuals who do not become homeless (hereon referred to as 'housed'). The data sources are the same – namely, Cadastro Único and RAIS – but I construct the sample in three distinct ways.

For the demographic descriptive statistics, I adopt a random sample of 5% of housed individuals from Cadastro Único. The OLS regressions in Section 4.1 also employ a random sample of the housed, but I restrict the dataset to individuals also found in RAIS, as my interest lies in understanding how employment conditions influence the probability of becoming homeless in the future.

The descriptive statistics for labor market and social assistance presented in this Chapter use a comparative housed sample that is matched one-to-one with demographic characteristics of the homeless individuals. In other words, for each homeless person in the database, I assign a housed person with the same combination of demographic values. If multiple housed individuals match a given combination, only one is selected, randomly. This allows for the creation of a balanced dataset with an equal number of homeless and housed unique individuals.

The rationale behind this approach is to mitigate sources of variation in employment history and social benefits that are confounded by factors unrelated to homelessness. While such sources of variation can only be fully controlled through regression covariates, and even then with certain limitations, this matching exercise facilitates a clearer visualization of the differences between the two groups. A similar methodology was employed by Meyer et al.

2024; however, instead of matching, they reweighted the housed sample based on the gender, race, and age distributions of the homeless population. In contrast, my study incorporates a broader range of demographic variables. The variables used and the results of the matching process are detailed in Table 2.1 below.

Table 2.1: Demographic summary statistics, Homeless data vs. Housed comparative sample

	Homeless	Housed comparative sample
N	86,453	86,453
Male (%)	92.3	92.3
	(26.6)	(26.6)
Black or brown (%)	64.9	64.9
	(47.7)	(47.7)
Age	33.7	30.8
	(10.3)	(8.9)
Highest education achieved (%)		
None	13.4	13.4
	(34.0)	(34.0)
Primary (initial years)	10.8	10.8
	(31.0)	(31.0)
Primary (final years)	43.7	43.7
	(49.6)	(49.6)
High School	30.5	30.5
	(46.0)	(46.0)
College/Graduate	1.4	1.4
	(12.0)	(12.0)
Disabled (%)	8.5	8.5
	(27.8)	(27.8)
Father in Birth Certificate (%)	84.7	84.7
	(35.9)	(35.9)
Urban (%)	97.7	97.7
	(14.7)	(14.7)
Lives in SP (%)	30.0	30.0
	(45.8)	(45.8)
Lives in BH (%)	7.7	7.7
	(26.6)	(26.6)
Lives in RJ (%)	3.8	3.8
	(19.1)	(19.1)
State*	-	-
	=	-

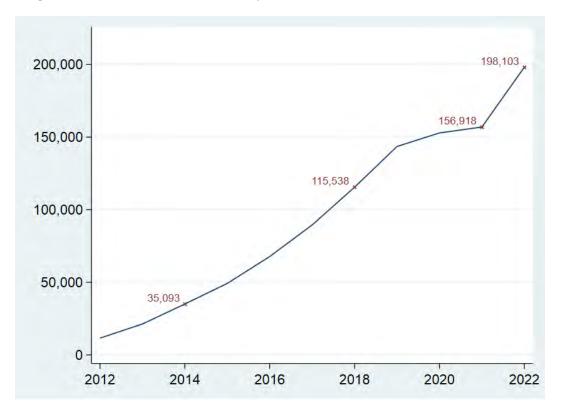
Notes: This table summarizes the average demographic characteristics of homeless individuals and the comparative housed sample, created through a matching procedure based on the homeless group's variables. All variables in the table were used for matching, which was exact except for the age variable, for which 3-year bins were employed. If more than one housed individual matched the characteristics of a given homeless person, only one housed observation was selected, randomly. Standard deviations in parenthesis.

^{*} The state variable, indicating the individual's most recent state of residence, was also used for matching, but details were omitted from the table to prevent visual clutter.

2.2 Descriptive Analysis

We begin by analyzing the growth, geographic distribution, and characteristics of the homeless population in Brazil. In 2022, the number of homeless individuals identified through Cadastro Único had reached almost 200,000 (Figure 2.1).

Figure 2.1: Homeless individuals by Cadastro Único extraction, 2012 - 2022



Notes: Author's calculations based on Cadastro Único data. The graph shows the number of individuals registered as homeless in the Cadastro Único at the end of each year. The Ministry excludes individuals from the dataset if their records have not been updated for 4 years.

Homeless individuals are generally concentrated in state capitals, with São Paulo having the largest count: 36,930, or 23.5% of Brazil's homeless population in 2022.³ Table 2.2 shows the 10 cities with the largest shares of the total homeless population at the beginning and end of the panel. Over the years, registrations have gradually spread to smaller cities, but the prominence of metropolitan areas remains.

 $^{^3{\}rm The}$ state of São Paulo, in turn, accounted for 64,243 homeless individuals in the same year.

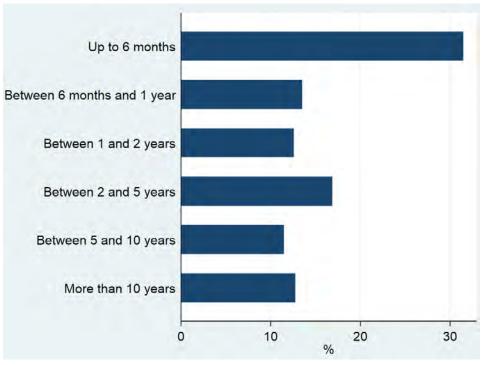
Table 2.2: Top 10 cities with the largest shares of Brazil's homeless population, 2012 and 2022

2012		2022	
City	Share $(\%)$	City	Share $(\%)$
São Paulo (SP)	31.9	São Paulo (SP)	23.5
Belo Horizonte (MG)	19.1	Belo Horizonte (MG)	5.8
Porto Alegre (RS)	6.2	Rio de Janeiro (RJ)	5.5
Fortaleza (CE)	4.4	Brasília (DF)	3.3
Curitiba (PR)	3.0	Fortaleza (CE)	2.5
Santo André (SP)	1.8	Salvador (BA)	2.5
Natal (RN)	1.0	Curitiba (PR)	1.7
Rio de Janeiro (RJ)	0.9	Porto Alegre (RS)	1.3
Guarujá (SP)	0.9	Boa Vista (RR)	1.2
Vitória (ES)	0.9	Campinas (SP)	0.8
Sum	70.1	Sum	45.6

Notes: Author's calculations based on Cadastro Único data. Santo André, Guarujá, and Campinas are the only cities in the table that are not state capitals.

Approximately 30% of these individuals report having been homeless for no more than six months, while 24% have spent at least five years in this situation. (Figure 2.2). Additionally, only 2.1% cycle in and out of homelessness (according to Cadastro Único records).

Figure 2.2: Self-reported time spent homeless



Notes: Author's calculations based on Cadastro Único data.

This may reflect different types of homelessness. Culhane et al. 2007 distinguishes the phenomenon between: (a) temporary, where individuals are in transition between stable housing situations and typically experience homelessness only once; (b) episodic, characterized by frequent and short-term periods of homelessness; and (c) long-stay or chronic homelessness – a virtually permanent condition.

Figure 2.3 details the self-reported reasons for homelessness. Around half attribute their situation to family problems; 40% to unemployment; 33% to alcohol and drug use; 20% to housing loss; and the remainder to other motives such as threats or personal preference.

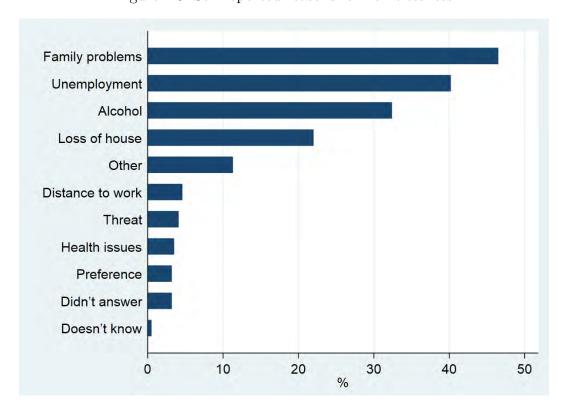


Figure 2.3: Self-reported reasons for homelessness

Notes: Author's calculations based on Cadastro Único data.

People can report more than one reason for being homeless. 'Distance to work' may refer either to someone who sleeps on the streets to stay closer to their workplace or to someone searching for a job due to the lack of opportunities near their original place of residence. 'Alcohol' also includes other drugs.

Among those who have been homeless for a shorter period, the most common reasons tend to be more 'practical,' such as unemployment and housing loss (Figure 2.4). Over time, however, unemployment declines as a reported cause, while family conflicts and substance addiction become more prevalent. One way to interpret this is that economic hardships may be easier to overcome than health or interpersonal issues. Alternatively, financial problems

might act as initial triggers for homelessness, and once individuals are on the streets, they become increasingly vulnerable to addiction and mental health disorders, making it harder for them to exit this situation. This is supported by Lippert and Lee 2015, Botti et al. 2010 and Lovisi et al. 2000. Moreover, there is likely a bidirectional relationship between substance abuse and family conflicts.

100 80 60 40 20 Loss of house Threat Alcohol Family problems Distance to work Unemployment Health issues Preference Other Doesn't know Didn't answer

Figure 2.4: Time spent homeless vs. Self-reported reasons for homelessness

Notes: Author's calculations based on Cadastro Único data.

People can report more than one reason for being homeless. 'Distance to work' may refer either to someone who sleeps on the streets to stay closer to their workplace or to someone searching for a job due to the lack of opportunities near their original place of residence. 'Alcohol' also includes other drugs.

2.2.1 Demography

Homeless individuals are predominantly male (86.9%), living in urban centers (96.3% compared to 66.1% of the general population), with an average age of 40 (Table 2.3). They are not markedly more likely to identify as Black

or Brown than the general population nor more likely to be illiterate, but they have lower levels of education, more than twice the incidence of disabilities⁴, nearly double the rate of interstate migration, and a lower likelihood of having a father listed on their birth certificate. Additionally, about 75% are beneficiaries of the Bolsa Família program, compared to 50% of the housed sample, and they tend to be solitary: only 6% report living with family members on the streets.

Table 2.3: Demographic differences between the Homeless and Housed

	Homeless	Housed random sample
N	141,352	3,981,624
Male (%)	86.9	43.2
	(33.6)	(49.5)
Black or brown (%)	65.5	66.1
	(47.5)	(47.3)
Age	40.4	36.4
	(13.1)	(19.0)
Underaged (%)*	2.2	14.6
	(14.8)	(35.3)
Father in Birth Certificate (%)	83.5	89.5
	(37.0)	(30.5)
Literate (%)	95.5	95.4
	(20.6)	(20.7)
Completed High School (%)	23.9	28.0
	(42.6)	(44.9)
Disabled $(\%)$	11.5	4.6
	(31.9)	(20.9)
Have migrated $(\%)^{\dagger}$	33.3	17.0
	(47.1)	(37.5)
'Household' size	1.1	3.2
	(0.6)	(2.2)
Urban (%)	96.3	66.1
	(16.3)	(48.0)
Bolsa Família Beneficiary (%)	75.7	50.4
	(42.3)	(49.8)

Notes: Author's calculations based on Cadastro Único data. The 'housed random sample' consists of a random 5% sample of the housed individuals in the Cadastro Único. Further details on the sample construction can be found in Section 2.1.1. Standard deviations in parentheses.

^{*} It is common for homeless women to omit the presence of their children to avoid intervention by the Conselho Tutelar (analogous to Child Protective Services in the U.S.). As a result, the proportion of underage homeless individuals is likely underreported.

[†] 'Have migrated' is a dummy variable indicating whether the person has moved to a different state at any point. This variable was constructed by comparing the state of residence in Cadastro Único, the state of birth (when available), and the states where the person has worked according to RAIS.

 $^{^4}$ The disability may be physical or cognitive, but I did not have access to this information.

It is worth noting two comments about the Bolsa Família participation rates. First, while Cadastro Único is commonly associated with the Bolsa Família program, it actually encompasses a range of federal and municipal social assistance benefits (further detailed in Section 3.1), which explains why 'only' 50% of the housed sample are Bolsa Família recipients.

Regarding the participation rate among the homeless, it is natural to expect it to be higher, as their income levels, in theory, make them eligible for the program. However, eligibility does not guarantee receipt of the benefit, given the allocation rules that govern how the program's budget is distributed to municipalities (Gerard, Naritomi, and J. Silva 2021).

Another contributing factor may be that enrolling in Bolsa Família (and other social assistance programs) requires presenting a personal identification document (Ministério da Cidadania 2022, p. 79), something many homeless individuals either do not have or have lost. In such cases, they register in CadÚnico but are advised to reapply for the benefit after securing a document. Due to the precarious living conditions of the homeless population, this step remains a significant barrier to accessing social benefits and rights.⁵

2.2.2 Formal Employment History

Next, we examine differences in formal employment history between the homeless and the housed. For this exercise, I constructed a comparative sample of housed individuals from Cadastro Único whose demographic characteristics are matched to those of the homeless population. The goal is to identify events or circumstances in the trajectories of both groups that may be related to future housing outcomes, while minimizing confounding factors such as gender, race, and others. Section 2.1.1 provides details on the construction of the comparative sample.

Among those who never experience homelessness, the average tenure — defined as the length of time a person remains employed at a single firm — is 16.7 months (Table 2.4). In contrast, for those who become homeless, average tenure is less than half of that, at 7.1 months. Individuals who become homeless also earn, on average, 13% less, experience nearly double the rate of dismissals for cause (4.9% relative to 2.6% in the housed comparative sample), have twice the share of temporary jobs (5% versus 2.4%), and hold a higher number of different jobs on record (5.2 versus 4.1).

 $^{^5{\}rm This}$ information, along with others in this dissertation, was provided by a CRAS worker I interviewed.

Eventually-homeless individuals show a lower proportion of employerinitiated dismissals not for cause, and a higher share of voluntary resignations. They also appear to work slightly more hours per week compared to the neverhomeless.

Table 2.4: Differences in formal employment history between individuals who become homeless and those who do not

	Homeless	Housed comparative sample
N	86,453	86,453
Mean tenure in jobs	7.1	16.7
	(13.6)	(25.6)
Mean job wage (BRL)*	790.9	899.6
	(407.9)	(485.9)
Share of justa causa dismissals (%)	4.9	2.6
	(14.8)	(11.6)
Share of employer-initiated dismissals, without just causa (%)	39.2	53.1
	(32.6)	(35.6)
Share of employee-initiated resignations (%)	24.1	20.3
	(28.2)	(27.9)
Share of temporary jobs (%)	5.0	2.4
	(13.8)	(9.5)
$ m Job~count^\dagger$	5.2	4.1
	(4.1)	(3.4)
Hours worked	43.2	42.7
	(3.5)	(4.5)

Notes: Author's calculations based on Cadastro Único and RAIS data. The 'housed comparative sample' consists of a sample of housed people from Cadastro Único demographically matched to the characteristics of homeless individuals found in RAIS, as described in Section 2.1.1. Standard deviations in parentheses.

The overall scenario appears to reflect an economic fragility that precedes homelessness, primarily manifesting in lower wages, less job stability, and poorer job quality (e.g., temporary positions). This aligns with the findings of Meyer et al. 2024 for the United States, which indicate that these individuals generally had lower permanent income, making them more vulnerable to losing their housing during periods of personal hardship.

There are two limitations in my data that pose challenges to interpretative analysis. First, I do not observe details about informal income, which means it is possible that individuals have additional earnings during their formal employment (or even afterward). Second, RAIS does not provide information on which individuals belong to the same family or household; therefore, I cannot determine whether the person lived with others before becoming homeless, nor the total income of that home. Such factors may potentially serve as buffers against homelessness.

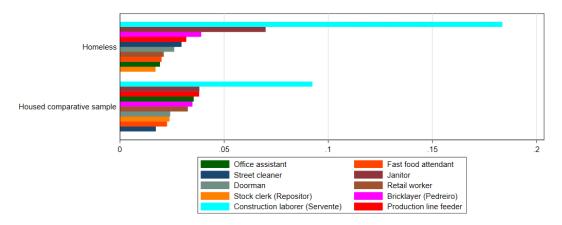
Overall, the occupations held by those in the comparative housed sample are very similar to those of the homeless group: low-skilled jobs such as street

^{*} Values adjusted for inflation, expressed in real terms as of January 2010.

[†] 'Job count' was calculated based on the number of positions an individual held at distinct firms (with different CNPJs).

cleaner, doorman, and fast-food attendant, reflecting factors like low education levels, poverty, and race. However, the role of construction laborer ('servente de obras') – and to a lesser extent, janitor – stands out due to its disparity between the two groups. While 9% of the housed sample has predominantly worked as construction laborers, this proportion is twice as high among the homeless (Figure 2.5).

Figure 2.5: Top 10 most frequent past occupations (mode), Homeless versus Housed comparative sample



Notes: Author's calculations based on Cadastro Único and RAIS data. The 'housed comparative sample' consists of a sample of housed people from Cadastro Único demographically matched to the characteristics of homeless individuals found in RAIS, as described in Section 2.1.1. The figure shows the 10 most common occupations in each group (homeless or housed), based on the proportion of individuals for whom that occupation is the modal one. If an individual had multiple modal occupations, one was randomly selected.

The reason behind this discrepancy does not seem to be wages, as homeless and housed individuals earn similar average salaries in the construction laborer occupation (Figure 2.6), which is also not the lowest-paying among the ten.

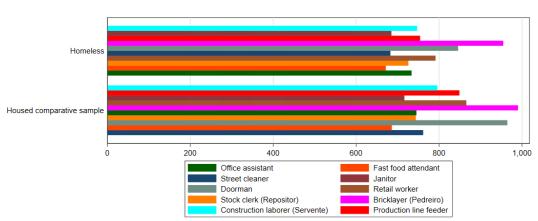


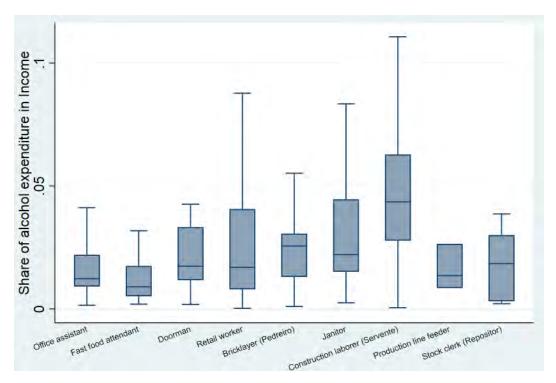
Figure 2.6: Average wages of the top 10 most frequent past occupations (mode), Homeless versus Housed comparative sample

Notes: Author's calculations based on Cadastro Único and RAIS data. The 'housed comparative sample' consists of a sample of housed people from Cadastro Único demographically matched to the characteristics of homeless individuals found in the RAIS, as described in Appendix 2.1.1. The figure shows the average group wages for the 10 most common occupations in each group (homeless or housed), based on the proportion of individuals for whom that occupation is the modal one. If an individual had multiple modal occupations, one was randomly selected. Values in BRL, adjusted for inflation and expressed in real terms as of January 2010.

One possible explanation is the high level of alcoholism associated with this job, as qualitatively reported in Oliveira 2006 and Ministério da Saúde 2001. This is further supported by Household Budget Survey (POF) data on alcohol expenditures across these ten occupations, where construction laborers rank the highest (Figure 2.7).

Other idiosyncrasies of the construction laborer occupation include physical strain leading to pain and health issues, as well as workplace harassment, given that it is the lowest-ranking position on construction sites – factors that may contribute to alcohol consumption (Oliveira 2006). Moreover, employment contracts are typically short-term, leading to volatility in labor demand, and the construction sector is highly sensitive to economic fluctuations. Interestingly, the representation of the bricklayer profession – which requires more skills and training – is quite similar in both the to-be-homeless and never-homeless groups. While understanding this phenomenon is beyond the scope of my dissertation, these findings could serve as a starting point for investigating labor market outcomes as potential determinants of homelessness.

Figure 2.7: Alcoholic beverage expenditure as share of income, top 10 most common past occupations



Notes: Author's calculations based on 2017 POF data. Since RAIS occupation codes follow the CBO classification while POF uses the COD classification, and no official conversion table exists, a manual correspondence between the two systems was necessary. The COD codes used in the POF, from left to right, were: 4110, 5120, 5153, (5211, 5221, and 5223), 7112, 9112, 9313, 9329, and 9334. COD 9312 was assigned to Street Cleaner but does not appear in the graph, as the sample had an average share of zero.

Public Policies Accessed by the Homeless

The first federal law to institutionalize care for the homeless in Brazil was the National Policy for the Homeless Population, established in 2009 by Decree 7.053/2009. The policy aims to coordinate different levels of government to ensure access to public policies and social benefits, promote professional training, conduct research, and implement specialized reference centers to serve this population, among other measures.

Since then, aside from improvements in data collection through Cadastro Único, the main large-scale policy targeting the homeless population has been the Specialized Reference Centers for the Homeless Population (Centros Pop). These centers operate as part of Brazil's Social Assistance Unified System (SUAS) and offer a range of assistencial services, including access to hygiene facilities, meals, temporary storage, and support in obtaining personal identification documents. They also function as entry points for broader social protection policies, facilitating enrollment in the Cadstro Único, mental health services, and employment initiatives. As of 2023, there were 246 Centros Pop, with 117 of them located in the Southeast region (Censo SUAS, 2023).

The other federal policy targeting this social group are the Consultórios na Rua ("Street Clinics"), which are linked to the Ministry of Health. They consist of mobile public healthcare teams offering primary care – medical or psychological – to people living on the streets, as well as referrals for specialized treatment and social assistance services. Adoption remains relatively low, as only 337 municipalities have implemented the program.¹

Homeless individuals often rely on broader social assistance policies designed for low-income or vulnerable populations in general. Among these are the Social Assistance Reference Centers (CRAS) and the Specialized Social Assistance Reference Centers (CREAS), which predated Centros Pop and influenced their structure.² There is an overlap in the services provided by these three institutions, such as support in obtaining identification documents and referrals to social services. However, while Centros Pop are tailored to the needs of the homeless population – such as food and hygiene – CREAS address general cases of rights violations, including domestic violence and child labor. The CRAS, in turn, are the 'basic' form of the policy.

¹Information provided by the Ministry of Health through the Freedom of Information Law (LAI).

²The management of CRAS, CREAS, and Centros Pop is the responsibility of the municipal government.

There are also the Unidades de Acolhimento (UAs - 'Reception Units'), which include shelters, hostels, and transitional housing, serving individuals in vulnerable situations such as homeless people, the elderly, persons with disabilities, victims of domestic violence, and those displaced by natural disasters. The rules regarding maximum length of stay, eligibility criteria, and infrastructure can vary between municipalities in the case of public UAs. Private facilities are usually linked to NGOs and philanthropic institutions. Figure 3.1 shows the (self-rerported) institutions attended by homeless individuals registered in Cadastro Único. More than half of them report attending Centros Pop, followed by public UAs, CREAS, CRAS, and NGO-run UAs.

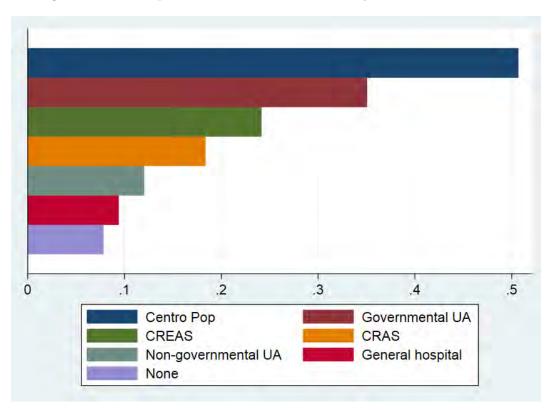


Figure 3.1: Self-reported institutions attended by homeless individuals

Notes: Author's calculations based on Cadastro Único data. The figure shows the share of homeless individuals who report attending each of the listed institutions. People can report attending more than one institution.

Other available resources to this population include low-cost community restaurants and the popular pharmacy program, which provides free or subsidized medications. Next, I describe two public policies frequently accessed by the homeless in Brazil and central to the empirical analysis of this dissertation: the Cadastro Único – which encompasses several programs, including Bolsa Família – and the Psychosocial Care Centers (CAPS).

3.1 Cadastro Único

Families seeking access to certain social assistance programs must register in Cadastro Único, a government information system that identifies and profiles low-income households. To do so, the head of the household – aged at least 16 years old and preferably female – must visit a social assistance center (CRAS, CREAS, etc.) or a municipal registration office and undergo an interview detailing family members and their respective sources of income. Cadastro Único serves as the gateway to Brazil's main cash transfer programs: the Bolsa Família and the Benefício de Prestação Continuada (BPC).

Eligibility for Bolsa Família depends on the household's per capita income meeting the program's thresholds, which vary according to the presence and number of minors in the household. Additionally, beneficiaries must comply with conditionalities such as school attendance for children and adolescents and prenatal care for pregnant women. The benefit amount also varies based on family composition, with higher weights assigned to households with young children.

The BPC, in turn, is set at the minimum wage and has two categories of beneficiaries. The first applies to elderly individuals with a per capita household income below one-fourth of the minimum wage, while the second covers people of any age with disabilities that prevent full participation in the labor market.

Homeless individuals can access both Bolsa Família and BPC, provided they meet the eligibility criteria. The use of Bolsa Família by this population was discussed in the previous chapter.³ Registration in Cadastro Único is also a requirement to participate in programs such as Brasil Alfabetizado (adult literacy program), Água Para Todos (water access for underserved communities), Tarifa Social de Energia Elétrica (discounted electricity tariff for low-income families), Minha Casa Minha Vida (affordable housing), and Pronatec (technical education and job training).

In addition, several social assistance services operate in close connection with Cadastro Único, even though enrollment is not a strict requirement. These include services provided by CRAS, CREAS, and Centros Pop, such as the Serviço de Proteção e Atendimento Integral à Família (PAIF), the Serviço de Atendimento Especializado a Famílias e Indivíduos (PAEFI), and Benefícios Eventuais.

 $^{^3{}m I}$ did not have access to an indicator of BPC receipt in the Cadastro Único database, so I do not know the share of homeless individuals benefiting from this program. The accumulation of both benefits is allowed.

PAIF focuses on family assistance through home visits, counseling, and referrals to federal programs, while also supporting community events that address issues like neighborhood violence and substance abuse. At a higher level of complexity, PAEFI provides specialized support for families and individuals facing severe social vulnerability. It adopts a multidisciplinary approach that integrates therapeutic care, legal assistance, and financial support.

Beneficios Eventuais (Emergency Benefits) are also aimed at households experiencing acute socioeconomic distress. These benefits are designed to address urgent needs resulting from unforeseen events, such as childbirth, the death of a family member, or extreme financial hardship. Unlike conditional cash transfer programs, emergency benefits are discretionary and nonentitlement-based, with eligibility and distribution typically determined at the municipal level.

Table 3.1 outlines social assistance services that are closely linked to Cadastro Único. Although registration in Cadastro Único is not always mandatory to acess these resources, CRAS, CREAS and Centros Pop staff are strongly encouraged to enroll beneficiaries in the Cadstro Único, as this enables a more accurate assessment of their level of vulnerability (Brasil 2014). This, in turn, supports the identification of families in need and informs the planning and implementation of social policies.

Table 3.1: Selected social assistance services within Social Protection

Service	Description
Serviço de Proteção e Atendimento Integral à Família (PAIF)	Support to families through home visits, counseling, and referrals to social programs, as well as educational events.
Serviço de Proteção e Atendimento Especializado a Famílias e Indivíduos (PAEFI)	Specialized support to families and individuals facing severe social vulnerability, integrating therapeutic, legal, and financial assistance.
Benefícios Eventuais	Financial aid to individuals and families experiencing acute socioeconomic distress due to unexpected events such as childbirth, death, or financial hardship.
Serviço de Convivência e Fortalecimento de Vínculos (SCFV)	Group activities and socialization programs to prevent isolation and promote integration within communities.
Serviço de Proteção Social Básica no domicílio para pessoas com deficiência e idosas	In-home assistance and social support to elderly individuals and people with disabilities who face mobility restrictions.
Serviço Especializado em Abordagem Social	Outreach work to identify and assist individuals in socially vulnerable situations, including those at risk of exploitation or abuse.
Serviço de Proteção Social Especial para Pessoas com Deficiência, Idosas e suas Famílias	Access to specialized care, social inclusion programs, and family support for individuals with disabilities and the elderly.
Serviço de Proteção em Situações de Calamidades Públicas e de Emergências	Emergency social assistance and basic needs support to individuals and families affected by natural disasters and other large-scale emergencies.

Notes: Author's elaboration based on the National Classification of Social Assistance Services, as defined by Conselho Nacional de Assistência Social (CNAS) Resolution No. 109 of November 11, 2009. The table does not include all services outlined in the resolution.

Given the extensive social protection network associated with Cadastro Único, it is reasonable to hypothesize that enrollment in the system may help mitigate situations of extreme vulnerability, going beyond the financial support of Bolsa Família and BPC. First, being registred implies that the individual (or their household head) has undergone the enrollment process, which involves visiting a registration facility at least once and engaging with staff. This interaction might increase awareness of available services, improving the ability to access support when needed.

Second, inclusion in Cadastro Único allows the State to have a preidentified record of individuals in vulnerable conditions, enabling social protection services to intervene more promptly in cases of worsening financial distress or family instability. This is supported by the fact that municipal governments are responsible for using Cadastro Único as a tool to identify families that may require social assistance services.⁴ For instance, families already enrolled in Bolsa Família who fail to meet the program's conditionalities are actively monitored and targeted by PAEFI (Campello and Neri 2013).

Notably, individuals who become homeless have significantly lower rates of prior registration in Cadastro Único and Bolsa Família relative to housed individuals. To compare social assistance usage between the two groups before those in the homeless sample experience homelessness, I establish a temporal reference point: the year their most recent formal employment ended. In other words, I examine social assistance access in both samples prior to the termination of their last recorded formal job in the database.⁵

Approximately 46% of individuals in the housed sample were already registered in Cadastro Único before their last job termination, compared to only 20% of those who later became homeless (Table 3.2). Likewise, around 20% of the housed received Bolsa Família benefits prior to unemployment, whereas this share drops to half among those who eventually experienced homelessness.

We can thus construct a variable measuring the time between an individual's last job separation and their registration in Cadastro Único. On average, this period is 2 years for the to-be-homeless group and -1.8 years for the housed group. In other words, those who became homeless generally entered the social assistance network two years after their last formal job ended – most often, when they were already homeless⁶ – whereas the always-housed individuals had been covered nearly two years before unemployment.

Table 3.2: Differences in access to social assistance between individuals who become homeless and those who do not

	Homeless	Housed comparative sample
N	86,399	59,893
Was in Cad Único Before Last Job Separation $(\%)$	19.9	45.9
	(38.9)	(49.8)
Received Bolsa Família Before Last Job Separation $(\%)$	9.9	20.1
	(28.3)	(37.5)
Years Between Last Job Separation and CadÚnico Registration	2.0	-1.8
	(3.3)	(5.1)

Notes: Author's calculations based on Cadastro Único and RAIS data. The 'housed comparative sample' consists of a sample of housed people from Cadastro Único demographically matched to the characteristics of homeless individuals found in RAIS, as described in Section 2.1.1. In this table, I restrict the data to individuals whose more recent formal employment link in RAIS has been terminated. Standard deviations in parentheses.

⁴CNAS Resolution No. 33 of December 12, 2012.

⁵This approach reduces the size of the comparative housed dataset, as many individuals still had an active formal job in 2018 – the last year for which my RAIS data is available.

 $^{^6\}mathrm{Among}$ the full sample of homeless individuals, 55% were already experiencing homelessness in their first appearance in Cadastro Único.

3.2 The CAPS

In the 1980s, anti-asylum ideals gained traction among mental health professionals in Brazil, advocating for the closure of psychiatric hospitals and a more humane approach to health care (Da Fonte 2013). These ideas were inspired by deinstitutionalization experiences in other countries, particularly the one in Italy in 1978, and influenced the creation of the first CAPS (Ribeiro 2004). At the time, they were public facilities aimed at psychosocial rehabilitation through outpatient treatments, such as workshops on employment skills and artistic expression.

The Psychiatric Reform in Brazil was only fully established through legal measures in the early 2000s, notably with Law 10.216/2001, which abolished asylums, redefined the rules for involuntary hospitalizations, and introduced community-based alternatives (Da Fonte 2013). Subsequently, the Ministry of Health's Ordinance 336/2002 effectively regulated the CAPS, which, two decades later, had expanded to 2,836 units across 1,910 municipalities.

The CAPS are community-based mental health facilities in Brazil that provide specialized care for individuals with severe and persistent mental disorders, as well as those with substance use disorders, aiming to replace long-term psychiatric hospitalization with outpatient and social reintegration services. They are part of the public unified health system (SUS), and operate under an 'open-door' policy: anyone can seek treatment without referrals or prior appointments.

Moreover, they employ multidisciplinary teams composed of psychiatrists, psychologists, nurses, social workers, and occupational therapists (Mateus 2013). The physical infrastructure of CAPS includes individual consultation rooms, group activity rooms, communal spaces, medication rooms, nursing stations, restrooms with showers, and dining areas. Some facilities also provide dormitories.

There are different types of CAPS, based on their capacity to provide care. CAPS III has the most extensive infrastructure and the largest team of professionals, setting itself apart by offering overnight beds and operating 24/7, including weekends and holidays.⁷ The CAPS AD (Alcohol and Drugs) and CAPS AD III (its larger version) specialize in treating substance dependence and also operate around the clock with overnight beds. Meanwhile, CAPSi are specifically designed to serve children and adolescents.

 $^{^7\}mathrm{CAPS}$ I, CAPS II and CAPSi may also offer overnight accommodation, as long as they are accredited for beds, in accordance with Ministry of Health Ordinance 854/2012.

8AM - 6PM, business

In theory, there are municipal population thresholds that determine the type of CAPS a city should receive, but these cutoffs are not binding.⁸ Table 3.3 provides details on the different types of CAPS. Cities can have more than one CAPS depending on their needs.

CAPS III Types CAPS I CAPS II CAPS AD CAPS AD III CAPSi 70,000 - 150,000 City population 15,000 - 70,000 150,000+150,000+150,000+70,000+ Target group Adults Adults Individuals Individuals Children and adoles chemical dependency chemical dependency Minimum health 1 doctor with mental 1 psychiatrist; 1 nurse psychiatrists; psychiatrist; 1 general practitioner; 1 psychiatrist, neurolnurse with men-tal health training; 1 psychiatrist; 1 nurse with experi-ence and/or training with mental ogist, or pediatrician with mental health health training: with mental health nurse team nurse; 3 university-level professionals*, 4 training; 4 profession-als with higher educahealth training; practitioner university-level training; 1 tion*, 6 mid-level proresponsible for screenmid-level professionprofessionals*: 8 midin mental health: 5 higher education pro ing, assessment, and follow-up of cliniuniversity-level pro-fessionals*; 4 nursing level professionals technicians; 4 mid-level professionals**; 1 cal intercurrences: 4 university-level professionals*; 6 midmid-level professional level professionals** for administrative activities

24/7

24/7

Table 3.3: The different types of CAPS

Notes: Author's elaboration based on Brasil 2013.

8AM - 6PM, business 24/7

days, with the possibility of operating un-

Operating hours 8AM - 6PM, business

days

Municipalities seeking to establish a CAPS should consider the population criteria and submit an application to the federal gobernment that includes a technical project and therapeutic plan. If approved, they receive financial incentives for implementation and maintenance. According to Dias and Fontes 2024⁹, the funding ranges from R\$ 800,000 to R\$ 1,000,000 for implementation, and from R\$ 30,000 to R\$ 100,000 per month for maintenance.

The CAPS were not designed to specifically serve the homeless population, but they have become a highly relevant resource for this group. Homeless individuals experience a higher incidence of mental disorders compared to the general population (Lippert and Lee 2015; Lee, Tyler, and Wright 2010; Greenberg and Rosenheck 2010; North et al. 2004; Bassuk et al. 1998; Vitorino, Vieira, and Guimarães 2024; Botti et al. 2010; Heckert and J. d. M. F. Silva 2002; Lovisi et al. 2000), including depression, anxiety, schizophrenia, and substance addiction.

^{*} University-level professionals from the following categories: psychologist, social worker, occupational therapist, pedagogue, physical educator, or another professional required for the therapeutic project.

^{**} Mid-level professionals from the following categories: nursing technician and/or assistant, administrative technician, educational technician, and artisan.

^{***} University-level professionals from the following categories: psychologist, social worker, nurse, occupational therapist, speech therapist, pedagogue, or another professional required for the therapeutic project.

⁸This is observed in my CAPS dataset and corroborated by Dias and Fontes 2024.

⁹The authors accessed federal government records of CAPS applications submitted by municipalities in 2019 and found that most were approved.

Although there is no direct causal relationship between mental disorders and homelessness – especially because they often develop after an individual has already become homeless, as a result of adverse economic conditions and social isolation (Lippert and Lee 2015; Botti et al. 2010; Lovisi et al. 2000), – mental disorders hinder the maintenance of social bonds and reintegration into society. Thus, homeless individuals can turn to CAPS as a source of free access to psychological treatment and medication, including alcohol and drug rehabilitation when available.

However, the social support role of CAPS goes beyond psychological treatment. Qualitative studies, such as Wijk and Mângia 2017, Mendes and Horr 2014 and Dalpiaz et al. 2014, show that the care offered by CAPS extends to providing food, hygiene, clothing, and social connection. Some homeless individuals visit CAPS daily to socialize with staff and other users, as well as to participate in therapeutic workshops.

These activities serve an important function in reducing mental stress and providing distraction from the hardships of life on the streets (Dalpiaz et al. 2014). Because people experiencing homelessness face pervasive stigma, sustained engagement with CAPS staff plays a critical role in rebuilding trust in assistencial services (Amorim and Carvalho Abreu 2020). Wijk and Mângia 2017 presents accounts of homeless individuals who, with the support of the CAPS network, were able to reconnect with their families and access social benefits. They document the role of CAPS staff in providing operational assistance to homeless individuals in securing rental housing, even if precarious, as this represents a significant improvement in their living conditions.

CAPS also provide support for the families of patients, particularly drug users, offering a safe space to share concerns about a socially taboo subject (Alves et al. 2015; Paz and Colossi 2013). Group therapy sessions with family members facilitate conflict resolution and foster an understanding of addiction as a disease that can be treated. This is especially relevant for patient recovery, both because an unstable family environment is a known risk factor for addiction, and because homelessness is often the result of being expelled from the family home.

The Effects of Social Assistance on Homelessness

4.1 Cadastro Único as a Potential Prevention Tool

To quantify the roles of demography, the labor market, and social assistance in the probability of falling into homelessness, I employ an OLS framework in which the dependent variable is a dummy that equals 1 if an individual eventually became homeless, and 0 otherwise. The independent variables include demographic covariates, employment history aspects from RAIS, and information on access to Cadastro Único and Bolsa Família prior to the end of the individual's last formal employment spell.

Instead of using the panel data, I rely on a cross-sectional dataset summarizing individual averages for each variable, such as mean real wage. I include controls for year and municipality of the most recent Cadastro Único update, as well as the year and municipality of the latest formal job in RAIS. Since my regressions incorporate all homeless individuals from Cadastro Único and only a 5% sample of the housed, I assign a weight of 1 to the former group and 20 to the latter, reflecting the actual population distribution.

Table 4.1 presents the regression results including only demographic covariates. Consistent with the descriptive statistics, after controlling for city and year fixed effects, the coefficients are positive and significant for the dummies representing male gender, Black or Brown race, having migrated from another state, and having a disability. Higher levels of education and the presence of a father listed on the birth certificate are associated with a lower future likelihood of homelessness.

Table 4.1: OLS regression estimates: demographic characteristics

Dep var: Became homeless		
•	(1)	(2)
Male	0.019***	0.015***
	(0.0001)	(0.0001)
Black or Brown	-0.0007***	0.002***
	(0.0001)	(0.0001)
Father in Birth Certificate	-0.004***	-0.004***
	(0.0001)	(0.0001)
Highest educ. achieved (relative to None)		
Primary (initial years)	0.001***	-0.0004
	(0.0001)	(0.0001)
Primary (final years)	0.005***	0.002***
	(0.0001)	(0.0001)
High School	0.001***	-0.003***
	(0.0001)	(0.0001)
College/Graduate	0.0009*	-0.004***
	(0.0003)	(0.0001)
Have migrated	0.006***	0.004***
	(0.0001)	(0.0001)
Disabled	0.005***	0.003***
	(0.0001)	(0.0002)
Age	-0.000***	-0.000**
	(0.000)	(0.000)
Weights	Yes	Yes
Cad Único Municipality \times Cad Único Year FE	No	Yes
Observations	934,481	921,750
Homeless	66,913	66,905
Housed	867,568	854,845
Mean Dep. Var	0.07	0.07
Adjusted R ²	0.07	0.12

Notes: These regressions use a cross-sectional dataset of homeless people identified in RAIS, and a 5% sample of the housed in Cadastro Único, also linked to RAIS. I restrict the data to individuals whose last formal employment link in RAIS has been terminated. * p < 0.05, ** p < 0.01, *** p < 0.001.

I then introduce the RAIS covariates (Table 4.2). A 1% increase in an individual's average wage is associated with a 1.2 percentage point reduction in the likelihood of experiencing homelessness in the future, while a longer average tenure in previous jobs is linked to a 0.9 percentage point decrease. Moreover, having worked in a higher number of jobs, holding a temporary position or being terminated for cause in one's most recent employment are all associated

with a greater risk of homelessness, with a 1.4 p.p. increase observed for those dismissed for cause. Mean hours worked do not show statistical significance. With the exception of the temporary job dummy, the regression results remain consistent across fixed effects for Cadastro Único and RAIS municipalities.

Table 4.2: OLS regression estimates: past formal employment aspects

Dep var: Became homeless			
	(1)	(2)	(3)
Mean wage (log)	-0.012***	-0.013***	-0.012***
	(0.0006)	(0.0006)	(0.0002)
Mean tenure	-0.009***	-0.009***	-0.009***
	(0.0001)	(0.00002)	(0.00006)
Last job justa causa	0.016***	0.014***	0.014***
	(0.0007)	(0.0007)	(0.0007)
Last job temporary	0.004***	0.009***	0.006***
	(0.0006)	(0.0007)	(0.0006)
Job count	0.001***	0.001***	0.001***
	(0.00006)	(0.00006)	(0.00001)
Mean hours worked	-0.000	0.000	0.000
	(0.00001)	(0.00001)	(0.00001)
Weights	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes
Cad Municipality \times Cad Year FE	No	Yes	Yes
RAIS Municipality \times RAIS Year FE	No	No	Yes
Observations	934,481	921,750	904,170
Homeless	66,913	66,905	66,661
Housed	$867,\!568$	854,845	837,509
Mean Dep. Var	0.07	0.07	0.07
Adjusted R ²	0.10	0.14	0.16

Notes: These regressions use a cross-sectional dataset of homeless people identified in RAIS, and a 5% sample of the Housed in Cadastro Único, also linked to RAIS. I restrict the data to individuals whose last formal employment link in RAIS has been terminated. * p < 0.05, ** p < 0.01, *** p < 0.001.

Finally, in Table 4.3, I extend the model to include social assistance usage. Being registered in the Cadastro Único before an individual's last job ends is associated with a 1.4 p.p. decrease in the probability of becoming homeless. The results might suggest Cadastro Único's function as a safety net during periods of income disruption, either by allowing the State to more rapidly identify unstable situations and take action or by providing individuals with better means to access social assistance resources.

This is supported by the fact that being registered in Cadastro Unico

prior to dismissal for just cause – an abrupt termination without eligibility for unemployment insurance – shows a similar effect size of -1.0 p.p. In other words, although low-income individuals dismissed for just cause are typically in a precarious situation, and Cadastro Único beneficiaries are generally socioeconomically vulnerable, prior registration more than offsets this fragility in terms of homelessness risk.

Table 4.3: OLS regression estimates: social assistance usage

Dep var: Became homeless		
Dep var. Became nomeress	(1)	(2)
Was in Cad Before Last Dismissal	-0.013***	-0.014***
Was in Gad Belore Bast Bisinissa.	(0.0003)	
Was in Cad × Justa causa	-0.010***	-0.010***
Was in Cad / Susta Causa	(0.001)	(0.001)
Received PBF Before Last Dismissal	(0.001)	-0.006***
received i Di Delote East Dishiissai		(0.0007)
Received PBF × Justa causa		-0.002
Received I Dr × Justa causa		(0.004)
Maan waga (lag)	-0.011***	-0.012***
Mean wage (log)		
3.5	(0.0002)	(0.0002)
Mean tenure	-0.008***	-0.008***
	(0.00006)	(0.00006)
Last job justa causa	0.015***	0.016***
	(0.0007)	(0.0007)
Last job temporary	0.006***	0.006***
	(0.0007)	(0.0005)
Job count	0.001***	0.001***
	(0.00001)	(0.00001)
Mean hours worked	0.000	0.000
	(0.00001)	(0.00001)
Weights	Yes	Yes
Demographic controls	Yes Yes	
Cad Municipality \times Cad Year FE	Yes Yes	
RAIS Municipality \times RAIS Year FE	Yes Yes	
Observations	904,170	904,170
Homeless	66,661 66,661	
Housed	837,509	837,509
Mean Dep. Var	0.07	0.07
Adjusted \mathbb{R}^2	0.18	0.18

Notes: These regressions use a cross-sectional dataset of homeless people identified in RAIS, and a 5% sample of the Housed in Cadastro Único, also linked to RAIS. I restrict the data to individuals whose last formal employment link in RAIS has been terminated. * p < 0.05, ** p < 0.01, *** p < 0.001.

Empirical evidence indicates that homelessness often results from a combination of adverse personal and economic events (O'Flaherty 2004; Curtis et al. 2013). One can imagine a scenario in which, within a short period, an individual loses their job, is diagnosed with a health issue, and experiences the death of a financially supportive family member; or someone who, due to substance addiction and a divorce, struggles at work and ends up being dismissed for cause – the possible combinations of unfortunate events are endless. In such cases, having access to financial, legal, or therapeutic services within the scope of Cadastro Único can potientially help alleviate one or more of these compounding stressors that, together, would otherwise lead to homelessness.

Receiving Bolsa Família prior to job termination is also correlated with a lower likelihood of homelessness (-0.6 p.p.), although its interaction with termination due to just cause is not statistically significant. One way to interpret this is that, since homelessness is a multifactorial phenomenon, coverage by the broader Cadastro Único network may play a more critical role in preventing homelessness than financial support alone – particularly if the dismissal for just cause is linked to difficult conditions in an individual's personal life.

4.1.1 Addressing endogeneity concerns

The results will be biased in the presence of endogeneity. This can occur if an omitted variable is correlated with prior registration in Cadastro Único and is also relevant for explaining future housing outcomes. For instance, individuals who are more proactive – demonstrating greater perseverance, networking skills, and a willingness to seek out opportunities – may be both more likely to enroll in social programs and inherently less prone to negative outcomes such as homelessness.

This diligence can also manifest in the non-random nature of Cadastro Único enrollment: individuals anticipating unemployment or deteriorating economic conditions might enroll preemptively. Failure to account for such selection processes can thus lead to an overestimation of the program's true causal impact on homelessness prevention.

While not perfect proxies for proactivity, the past employment covariates capture important dimensions of labor-market engagement and sustained effort over time. If highly 'motivated' workers systematically invest more energy both in job searches and in securing benefits, the inclusion of these employment controls should attenuate at least part of the bias arising from unobserved

differences in time-invariant motivation or diligence.

Likewise, localities with more outreach programs, better-funded social services, or stronger administrative structures might encourage enrollment in Cadastro Único while independently reducing individuals' risk of homelessness. These factors may also have varied over time and across different administrations. In this case, municipality and year fixed effects from CadÚnico and RAIS should control for local characteristics that could confound our estimates.

As mentioned in the previous Chapter, the absence of information on family ties and informal income prior to the loss of formal employment compose key gaps in my data. These factors are highly relevant as potential buffers against homelessness and may be correlated with prior registration in Cadastro Único, precluding clear causal conclusions.

Despite the limitations of the identification strategy, Cadastro Único represents a valuable tool for preventing the further deterioration of precarious social and financial conditions. Given that more than half of homeless individuals register only after already experiencing homelessness, one might question whether earlier identification by the State could have made a difference in their trajectory.

In the following section, I turn to the CAPS network to conduct a more rigorous causal assessment of the role of direct State intervention in homelessness outcomes, focusing on individuals who are already living on the streets.

4.2 The CAPS as a Catalyst for Exiting Homelessness

4.2.1 Data and Empirical Strategy

To estimate the impact of the CAPS rollout on homelessness outcomes, I employ an event study framework. The treatment group consists of homeless individuals residing in municipalities that opened a CAPS unit for the first time, while the control group is formed by those living in cities that never receive a CAPS. My primary goal is to investigate whether the CAPS can facilitate individuals' exit from homelessness. Although the treatment is assigned at the municipal level, I analyze outcomes at the individual level, relying on the dummy variable that indicates whether a person is homeless in a given year.

I draw on information regarding the type, opening date, municipality, and operational status of all CAPS units in Brazil from 2001 to 2022. This

dataset was provided by the Ministry of Health via a Freedom of Information request (LAI). Homelessness data, in turn, come from the same source used in the previous section, Cadastro Único. I only keep in the sample individuals who were already registered as homeless at their first appearance in the panel, and exclude those who moved to a different city at any point.

Individuals registered in the Cadastro Único are required to update their information every two years or whenever there are changes in family circumstances, such as address, income, household composition, education, or documentation (Ministério da Cidadania 2022). This creates a panel balancing issue, as the frequency of updates varies across individuals.

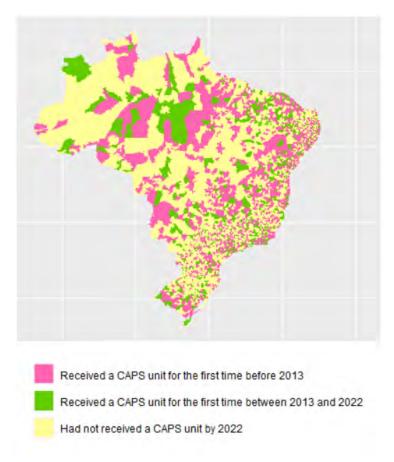
To address this problem, I standardize the frequency of all observations to an annual format. In years without an update, I carry forward the information from the most recent prior year. For example, if an individual registered in 2015 and updated their information in 2017, 2019, and 2020, I carry forward their 2015 data to 2016 and their 2017 data to 2018, while keeping all other observations unchanged. I also respect the dates of first inclusion and last appearance in Cadastro Único. In this specific example, this means I do not create observations before 2015, nor do I extend 2020 data to subsequent years.

Since my Cadastro Único data only start in 2012, I restrict the sample to the 647 municipalities that opened a CAPS (of any type)² for the first time from 2013 onward, while also including those that never received a CAPS. The latter accounts for 3,660 cities, serving as the control group. Figure 4.1 details which municipalities opened a CAPS before and during the analysis period, as well as those that had not received a facility by 2022. The final dataset contains 39,233 unique homeless individuals (distinct CPFs).

¹My Cadastro Único extractions are from December 31 of each year, meaning they capture the most recent update for that year. That is, even if an individual updated their information multiple times within a year, I only have access to the most recent one.

²I then remove from the dataset the 10 municipalities where the first CAPS facility to open was a CAPSi, for children and adolescents.

Figure 4.1: Geographic distribution of municipalities by timing of the first CAPS opening



Notes: Author's elaboration based on Ministry of Health data.

On average, 74 municipalities received a CAPS facility for the first time each year during the period, although there is a concentration in the initial years (Figure 4.2). The majority were of the CAPS I type, with 546 CAPS I, 61 CAPS II, 7 CAPS III, and 23 CAPS AD or AD III. In terms of regional distribution, 36.8% were located in the Southeast, 35.1% in the Northeast, 12.2% in the South, 7% in the Center-West, and 8.6% in the North.

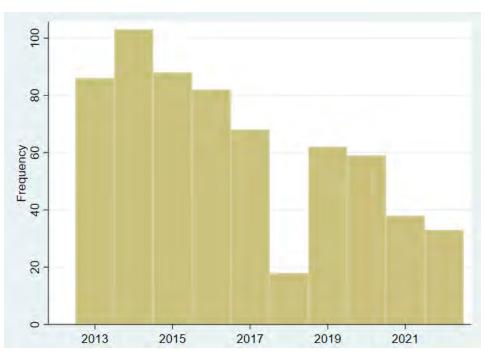


Figure 4.2: Number of municipalities receiving a CAPS for the first time by year

Notes: Author's elaboration based on Ministry of Health data. The histogram includes only municipalities that received a CAPS for the first time in a given year and excludes CAPSi (children and adolescent) facilities. The discontinuity in 2018 is likely attributable to the Ministry of Health's partial suspension of mental health funding that year due to irregularities.

The baseline event-study equation for this framework is as follows:

$$y_{it} = \sum_{z \neq -1}^{T} b_z \cdot \mathbb{1}\{t - t^* = z\} + \phi_i + \nu_t + \epsilon_{it}$$

Where y_{it} is the homelessness dummy for individual i at year t. The summation captures the impact of CAPS introduction at different relative time periods, indexed by z, which measures the number of years since (or before) the first CAPS opened in the city where the person lives. Excluding z = -1 sets the year immediately before the CAPS opening as the reference period. The coefficients b_z represent the causal change, in percentage points, in the probability of $y_{it} = 1$ for the treated at a given time z relative to the event. ϕ_i and ν_t are individual and time fixed effects, respectively.

However, because CAPS were introduced in different years across municipalities (i.e., staggered adoption) and treatment effects are likely to vary by cohort of adoption, traditional two-way fixed effects estimators can be biased (Sun and Abraham 2021; Goodman-Bacon 2021; Callaway and Sant'Anna 2021). To address this issue, I use the difference-in-differences estimator proposed by Callaway and Sant'Anna 2021, which explicitly accommodate stag-

gered treatment timing and allow for heterogeneous treatment effects across cohorts. Their method computes group-time average treatment effects for each cohort of adopters relative to an appropriate control group, and then aggregates these effects.

Ideally, municipalities in the treatment and control groups would share similar demographic and socioeconomic characteristics, allowing us to isolate the effect of CAPS openings. That is not the case here. While this discrepancy does not, in itself, compromise the identification, we must ensure that treatment assignment is not correlated with pre-existing municipal characteristics that also influence the outcome. If municipalities receiving a CAPS systematically differ from those that do not – such as having more public funding for social programs or better institutional capacity – our estimates could reflect these underlying differences rather than the true effect of CAPS.

To address this issue, I follow the approach of Dias and Fontes 2024, incorporating interactions between pretreatment municipal characteristics and linear time trends.³ Specifically, I include interactions for the Theil index, population size, poverty rate (all from the 2010 IBGE Census), and area (2012 IPEA data). Additionally, to account for differences in trends of time-varying determinants of the outcome between treatment and comparison groups, I control for per capita GDP⁴, social assistance spending, and Bolsa Família expenditures⁵ (data from IPEA), while also incorporating state-specific nonparametric trends.⁶ Standard deviations are clustered at the municipality level.

4.2.2 Results

Figure 4.3 presents the main results. I find that within four years of a city's first CAPS opening, the probability of remaining homeless decreases by 2.2 percentage points (post-event Average Treatment Effect on the Treated –

³It is worth noting that Dias and Fontes 2024 estimate a hazard model for the probability of a city receiving a CAPS between 2003 and 2016 and find no correlation between CAPS allocation and municipal socioeconomic indicators.

⁴Municipal-level GDP per capita data are available only up to 2021. To impute values for 2022, I first calculate each municipality's average annual GDP per capita growth rate between 2017 and 2019 – a period of relative economic stability following the recession and preceding the COVID-19 pandemic. Next, I apply the observed national GDP per capita growth rate from 2019 to 2022 to these municipality-specific trends, leveraging on the availability of national-level data for 2022.

⁵In the case of municipal Bolsa Família transfers, data are missing for 2014 and 2015. I impute these missing values by extrapolating each municipality's spending trend observed between 2012 and 2022.

⁶As noted by Dias and Fontes 2024, these are especially relevant given that many public policies are decided at the state level.

ATT) relative to homeless individuals in municipalities that never receive a CAPS. The effects do not appear to be immediate but rather evolve over time, consistent with the extreme circumstances these individuals face. Two years after the event, the probability of homelessness decreases by 2.5 p.p., reaching a 4.0 p.p. reduction four years after the CAPS arrival.

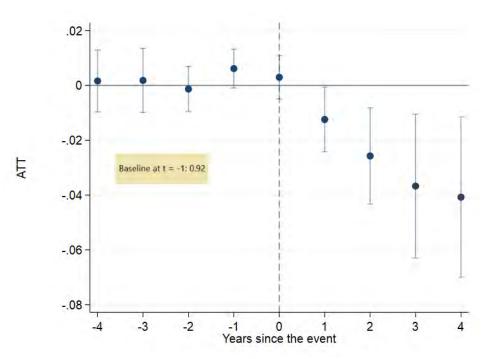


Figure 4.3: Effects of CAPS on homelessness

Notes: Each point represents the average treatment effect on the treated (ATT) of CAPS openings on the probability of staying homelessness, for each event-time period (t). Vertical bars denote 95% confidence intervals for each estimate. The model incorporates state-by-year fixed effects, and linear time trends interacted with pre-treatment municipal characteristics such as income inequality (Theil index), population size, poverty rate, and municipality area. Time-varying controls include municipal per capita GDP, spending on social assistance, and Bolsa Família transfers, all deflated using the IPCA at the end of the period. Standard errors are clustered at the municipality level. Details on the restrictions applied to the sample can be found in Section 4.2.1.

I do not interpret these results as capturing the isolated effect of mental health care – although that is possibly a contributing factor – but rather as the broader impact of State presence, represented by a new branch of social assistance services in the city. As discussed in Section 3.2, the multidisciplinary approach of CAPS and its routine presence in users' lives facilitate more intensive engagement with social service workers, helping build trust between homeless individuals and these professionals.

A potential concern regarding the homelessness results is that the arrival of CAPS, as a complementary resource to CRAS, CREAS, and Centros Pop, may attract individuals who had not updated their records in the Cadastro Único for a long time. We would not be observing the impact of CAPS on homelessness per se, but rather its effect on encouraging data updates. That is, individuals who had already exited homelessness before the arrival of CAPS might update their records, whereas those in control cities who also exited homelessness might never do so or take longer to update their information. However, the frequency of record updates is highly similar between the postevent treatment group and the control group.⁷

Notably, CAPS do not increase the likelihood of homeless individuals securing employment in subsequent periods. Re-estimating the model with an indicator for employment in the past 12 months as the dependent variable yields results that are statistically indistinguishable from zero, with large standard errors (Figure 4.4). Thus, labor market integration does not appear to be the main driver or even a direct consequence of the reduction in homelessness.

⁷The average update rate was calculated by subtracting the year of the last recorded update in the extraction from the year of the data extraction, yielding an average of 0.50 for the post-event treatment group and 0.49 for the control group.

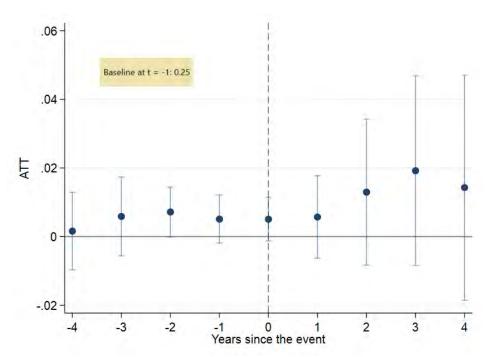


Figure 4.4: Effects of CAPS on work outcomes of homeless people

Notes: Each point represents the average treatment effect on the treated (ATT) of CAPS openings on the probability of having worked in the past 12 months, for each event-time period (t). Vertical bars denote 95% confidence intervals for each estimate. The model incorporates state-by-year fixed effects, and linear time trends interacted with pre-treatment municipal characteristics such as income inequality (Theil index), population size, poverty rate, and municipality area. Time-varying controls include municipal per capita GDP, spending on social assistance, and Bolsa Família transfers, all deflated using the IPCA at the end of the period. Standard errors are clustered at the municipality level. Details on the restrictions applied to the sample can be found in Section 4.2.1.

If individuals have exited homelessness but are not employed, it is plausible to assume that some support network (beside the CAPS), such as family, is facilitating this transition. Indeed, when analyzing the effects of CAPS on household size for those who were homeless at the start of the panel (Figure 4.5), I observe a statistically significant small increase of 0.07 p.p.

However, drawing definitive conclusions from these data is challenging. Family reunification – as documented in the qualitative literature – may have been a pathway out of homelessness for the treated, but it is also possible that it occurred after the individual's condition had improved. Additionally, given that homeless individuals often underreport the presence of minors in their living arrangements, this increase could simply reflect a catch-up effect in data reporting.

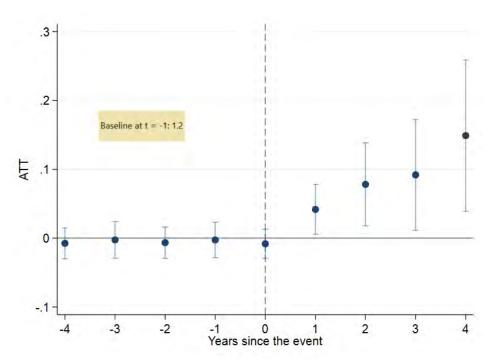


Figure 4.5: Effects of CAPS on household size of homeless people

Notes: Each point represents the average treatment effect on the treated (ATT) of CAPS openings on the individual's Cadastro Único's household size, for each event-time period (t). Vertical bars denote 95% confidence intervals for each estimate. The model incorporates state-by-year fixed effects, and linear time trends interacted with pre-treatment municipal characteristics such as income inequality (Theil index), population size, poverty rate, and municipality area. Time-varying controls include municipal per capita GDP, spending on social assistance, and Bolsa Família transfers, all deflated using the IPCA at the end of the period. Standard errors are clustered at the municipality level. Details on the restrictions applied to the sample can be found in Section 4.2.1.

Table A.1 in the Appendix provides detailed results for homelessness, work and household size by period.

Conclusion

Homelessness is both a severe personal hardship and a serious economic problem, yet quantitative research on the subject remains scarce in developing countries, largely due to the lack of reliable data. Brazil, however, has a dedicated module in Cadastro Único that collects detailed information on the homeless population, allowing linkage with other administrative datasets such as RAIS. This dissertation leverages these data to provide a more comprehensive picture of who the homeless are in Brazil – beyond basic demographics – and to assess how State intervention can influence both the prevention of and exit from homelessness.

The findings challenge some common perceptions. A substantial share of homeless individuals -61% – previously held formal jobs. Even before becoming homeless, they exhibited signs of economic vulnerability, earning lower wages and having weaker employment ties compared to a demographically similar housed population. Moreover, they take longer to engage with social assistance networks, often doing so only after losing formal employment and, in more than half of the cases, after already living on the streets. In contrast, housed individuals are more likely to be enrolled in Cadastro Único before their last formal job ends. OLS regressions reinforce these patterns, suggesting Cadastro Único could play a preventive role in homelessness, given its broad coverage of social programs.

To better understand causal effects of State presence on the homeless, I examine the role of Centros de Atenção Psicossocial (CAPS). While CAPS are not explicitly designed for the homeless, they are frequently accessed by this population. An event-study analysis shows that the arrival of a CAPS reduces the probability of remaining homeless by 2.2 percentage points in subsequent years, possibly due to the multidisciplinary care and sustained engagement with staff that these centers provide. However, the underlying mechanisms remain unclear, as results are not significant for employment outcomes, and the potential link between CAPS and family reunification is not well established. Overall, there is ample scope for further research on homelessness in Brazil using Cadastro Único data.

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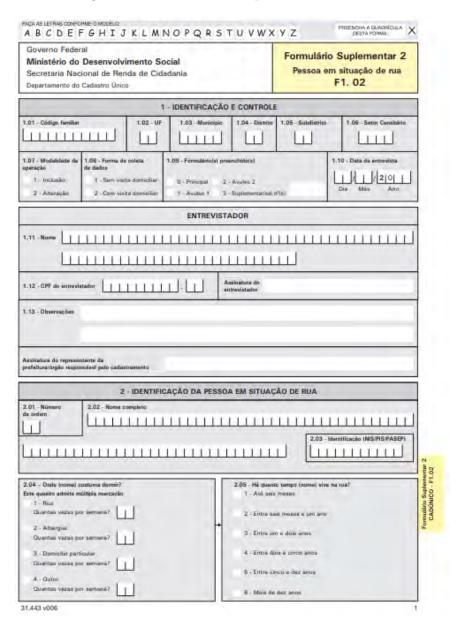
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A Appendix

A.1 Formulário Suplementar 2

Figure A.1: Formulário Suplementar 2 - Part 1



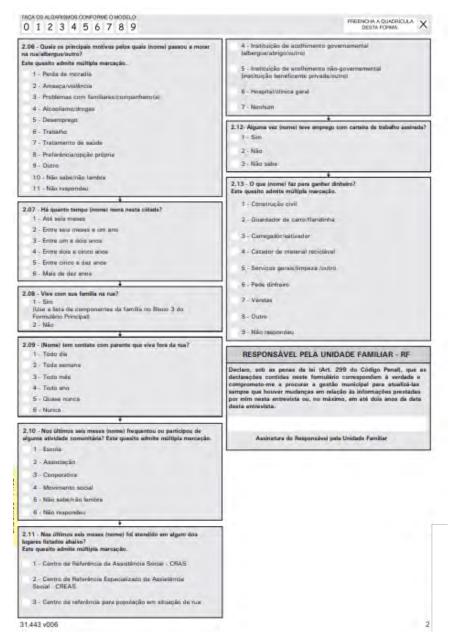


Figure A.2: Formulário Suplementar 2 - Part 2

Notes: Ministério do Desenvolvimento e Assistência Social, Família e Combate à Fome. Return to text

A.2 Detailed event-studies results

Table A.1: The effects of CAPS on three outcomes of homeless people

	Homelessness (1)	Work (2)	Household Size (3)
0-year effect	0.002	0.005	-0.008
	(0.004)	(0.003)	(0.010)
1-year effect	-0.012*	0.005	0.041*
	(0.006)	(0.006)	(0.018)
2-year effect	-0.025**	0.012	0.078*
	(0.008)	(0.010)	(0.030)
3-year effect	-0.036**	0.018	0.091*
	(0.013)	(0.014)	(0.041)
4-year effect	-0.040**	0.013	0.148**
	(0.014)	(0.016)	(0.056)
Post-event ATT	-0.025**	0.011	0.070*
	(0.007)	(0.009)	(0.028)

Notes: Column (1) reports the ATT estimates by period and the average effect of CAPS arrival on the homelessness dummy, column (2) does the same for the work dummy (indicator for having worked in the past 12 months), and column (3) for household size. The model incorporates state-by-year fixed effects, and linear time trends interacted with pre-treatment municipal characteristics such as income inequality (Theil index), population size, poverty rate, and municipality area. Time-varying controls include municipal per capita GDP, spending on social assistance, and Bolsa Família transfers, all deflated using the IPCA at the end of the period. Standard errors are clustered at the municipality level. Details on the restrictions applied to the sample can be found in Section 4.2.1. * p < 0.05, *** p < 0.01, **** p < 0.001.