Executive Summary

This report summarizes the findings from the paper **"Better Neighborhoods or Better Houses? The Effects of Housing Policies on Poor Households in Brazil",** from Cecilia Machado (FGV EPGE) and Laísa Rachter (FGV EPGE). The paper evaluates the effects of Minha Casa Minha Vida (hereafter MCMV), a housing program that built houses for low-income families from the city of Rio de Janeiro (Brazil). We explore the lotteries used to select the program's beneficiaries to provide evidence of its effects on location, housing quality, housing costs, and household choices. The program induced households to move to less populated, more impoverished, and more distant neighborhoods. However, it increased the houses' quality in which these households lived and decreased their housing costs. Increases in other expenditures did not compensate for the decline in housing costs. Furthermore, we find the program did not influence labor force participation and income and weakly increased teenagers' enrollment.

Methodology & Data

This paper contributes to the literature on the consequences of housing policies in developing countries by documenting the direct and indirect effects of MCMV, a large-scale housing program implemented in Brazil in the 2010s. The MCMV consists of different initiatives that subsidized home purchases. Our research focuses on poor households (total income up to R$ 1,600 per month or US$ 300 at the current exchange rates) living in the municipality of Rio de Janeiro. These households were selected to receive highly subsidized apartments built specifically for the program using lotteries. We explore two lotteries that took place in the year 2013 to examine the direct effects of this program on neighborhood quality, housing quality, and housing costs and its indirect effects on school enrollment, labor force participation, and income.

Our investigation uses **a novel dataset linking the lotteries' official records, data of the program's contracts, geo-coded information on neighborhoods, jobs, and schools, as well as socioeconomic information from the Cadastro Único** (Brazil's unified registry of beneficiaries of social policies) from the period 2012-2018. This dataset enables us to compare winners ("treatment group"), and losers ("control group") of these lotteries both before and after the lotteries occurred and the units built under the program were delivered. To ensure comparability between these groups, we focus on beneficiaries of the Bolsa Família program (Brazil's flagship social policy) who entered into the Cadastro Único before the MCMV started. Because beneficiaries of the Bolsa Família program must update their information in 24-month intervals, the first restriction ensures we observe most of these households multiple times. Moreover, because households were supposed to register in the Cadastro Único to participate in MCMV lotteries, the second restriction ensures we focus on households who entered our data because of the program. After these restrictions, we provide evidence that the treatment and the control groups' demographic and economic outcomes were comparable for the lotteries that occurred in 2013.

Results

1. **We examine the program's take up.** Using contract records, we estimate households in the treatment group are 54 p.p. more likely to sign a contract to purchase a house built under the MCMV program than households in the control group. Using administrative data, we estimate that these households are roughly 30 p.p. more likely to live or move to the neighborhood where the MCMV projects were built. There is no evidence these numbers decrease in the first three years after the households move, contrasting with the evidence of increasing program exit over time documented by Barnhardt et al. (2017) in India.

2. **We document the MCMV effects on neighborhood quality.** Combining the MCMV's records, administrative data, and geo-coded information of neighborhoods and the location of existing schools and job opportunities, we provide evidence the program moved households to neighborhoods that are less populated, poorer, and more distant from jobs and schools.
3. **We document the MCMV effects on housing quality and housing costs.** Combining MCMV's records and administrative data, we find that households in the treatment group have houses 26% larger, 6 p.p. more likely to have wood/tile floor, and 3 p.p. more likely to be connected to the sewage system than the households in the control group. We further find these households reduce their expenditures with rents by R$ 37.8-43.8 (70-80% of the control mean). While increases in spending with utilities mitigate the reduction in rents, expenditures in general fall by R$ 28.9-33.6 (10% of the control mean). These findings highlight the heterogeneous effects of the program on houses and neighborhoods.ad, provide the reader with a general overview of how your company is run and how you do what you do.
4. **We examine the program's short-run effects on labor supply, income, and school enrollment** to understand how the heterogeneous effects of the MCMV on houses and neighborhoods map into economic outcomes. Using administrative data, we find null effects of the program on school labor supply and income both immediately and some years after the treatment. The decrease in total expenditures combined with the null effect on income indicates that households might be increasing savings or investments due to the program. Furthermore, we find evidence the program increases the enrollment of teenagers. However, we find no effects on enrollment in high school and high school completion rates, indicating age-grade distortion might be growing.

Contribution

The evidence provided in the paper contributes to the growing literature on the effects of housing programs. The literature on housing programs in developing countries highlight these programs often move families to more isolated neighborhoods (e.g., Barnhardt et al. (2017),

Picarelli (2019), and Franklin (2019)). This might deteriorate their job prospects (e.g., Picarelli (2019)) and induce program exit (e.g., Barnhardt et al. (2017)). Consistent with this literature, we document the MCMV moves households to more isolated neighborhoods. However, we find that improvements in housing quality and decreases in housing costs – benefits not previously documented in the literature – compensate for increased isolation. Furthermore, we find no evidence of program exit or reductions in employment. Indeed, our results on economic outcomes are closer to the ones from studies in developed countries (e.g., Jacob & Ludwig (2012), Oreopoulos (2003), Jacob (2004) and Chetty et al. (2016)). However, opposite to these studies, where families were induced to move to better neighborhoods, we find null effects on economic outcomes in a setting in which households move to more isolated neighborhoods. This paper further contributes to the literature on slums (e.g., Marx et al. (2013)). This literature emphasizes that closeness to city centers is important to ensure that poor households benefit from urban living. This is consistent with urban economic models, which predict that employment and income would decline in response to increases in the distance to job opportunities (e.g., Alonso et al. (1964)). However, our findings show that living close to city centers provided negligible benefits for households in employment and income. A possible explanation is that our effects are estimated for a set of households who did not have good labor market prospects.

The paper also adds to the literature evaluating the consequences of the MCMV program. Other studies use the lotteries from Rio de Janeiro and some other selected municipalities to examine the program's effects on formal employment using data from RAIS (a matched employer-employee registry of employment). Mata & Mation (2018) and Chagas et al. (2019) find small negative effects of the MCMV on formal employment. Pacheco (2019) also find negative effects of the MCMV on formal employment right after the houses are delivered but finds these effects revert in three years. She further documents the program moves households further from job opportunities. Leape (2020) extends the former work adding more lotteries the took place in Rio de Janeiro (but balancing the treatment and control groups using a propensity-score method) and finds that moving to a MCMV unit increased the likelihood of employment by 2% after four years. This literature focuses on outcomes measured using RAIS because it is hard to follow the lotteries' participants through time using other datasets. We complement this literature on two dimensions. Methodologically, we provide evidence of how it is possible to use restrictions to eliminate selection of the MCMV beneficiaries into and out of the Cadastro Único and follow them through time in this dataset. This enables us to eliminate some of the differences between lotteries' winners and losers documented in the existing literature and conduct more thorough randomization checks. Empirically, we examine the effects of the program on more outcomes. This enables us to document effects on housing quality, housing costs, formal and informal