

ARTICLE

# What You See and What You Get: Direct and Indirect Political Dividends of Public Policies

Natália S. Bueno<sup>1\*</sup> , Cesar Zucco<sup>2</sup>  and Felipe Nunes<sup>3</sup> 

<sup>1</sup>Department of Political Science, Emory University, Atlanta, US, <sup>2</sup>Brazilian School of Business and Public Administration, Getulio Vargas Foundation, Rio de Janeiro, Brazil and <sup>3</sup>Department of Political Science, Federal University of Minas Gerais, Belo Horizonte, Brazil.

\*Corresponding author. E-mail: [natalia.bueno@emory.edu](mailto:natalia.bueno@emory.edu)

(Received 28 January 2022; revised 8 August 2022; accepted 18 January 2023; first published online 20 April 2023)

## Abstract

We investigated both the direct and indirect political dividends of public policies by examining *Minha Casa, Minha Vida*, a housing programme in Brazil that selects its beneficiaries by lottery. We surveyed the lottery participants and found that the winners were not more likely to support the incumbent politicians. Non-beneficiaries, a much larger group, were aware of the programme and thought well of it while the beneficiaries' responses to the programme were sometimes underwhelming. However, politicians considered the programme to be an electoral asset, and a difference-in-differences analysis of electoral results leveraging the roll-out of the programme across municipalities found that presidential and mayoral incumbent candidates performed better in localities that had implemented MCMV. Overall, when the beneficiaries formed a relatively small group, the benefits were conspicuous and the programme's objectives were widely supported. Government programmes can create electoral payoffs independently of how programmes are perceived or experienced by beneficiaries.

**Keywords:** policy feedback; housing policy; quasi-experiment; elections; urban politics

When we consider the political and electoral effects of government policies in general and social programmes in particular, we tend to think primarily of the direct effects on the beneficiaries. That is, we ask to what extent the beneficiaries alter their political behaviours and attitudes in response to the benefit received. Answering this question typically involves a comparison between beneficiaries and otherwise similar non-beneficiaries (Campbell 2012).

However, it is well established that policy feedback, where it exists and can be documented, can take on forms beyond the direct effects on the beneficiaries (Jacobs and Mettler 2018). In this paper, we argue that electoral returns of government programmes follow a counter-intuitive logic in which a programme, particularly one delivering a very large benefit such as providing a home, might generate most of its electoral returns through its impact on non-beneficiaries.

All social programmes can be construed as a form of advertising since they signal politicians' priorities and convey perceptions of competence to the general electorate, thereby creating the potential to generate policy feedback, even from voters not directly affected by the policy. Social programmes that provide very large and conspicuous benefits can, almost by definition, be extended to only a small proportion of the electorate. In such contexts, non-beneficiaries – a category which can include both individuals who are eligible for the programme and those who are not – are often a much larger group than the beneficiaries and, therefore, more important in influencing the electoral fortunes of the government leaders who implement these policies.

When this is the case, the beneficiaries' actual experiences with the programme, whether they represent failure or success in the implementation of the programme delivery, may not matter electorally. Yet, by definition, non-beneficiaries have less direct knowledge of how programmes are run than the beneficiaries, thus non-beneficiaries might support policies based on a programme's goals and values irrespective of the quality with which they are implemented. Under these circumstances, the 'social-policy-as-advertisement' logic becomes the dominant feedback channel.

We examine the relative importance of these different feedback channels by assessing the direct and indirect effects of one of the largest housing programmes in the world, *Minha Casa, Minha Vida* (MCMV) in Brazil. Due to its conspicuousness and design, we can distinguish the direct impacts of MCMV on beneficiaries from its indirect effects on the broader electorate.

Learning about the direct political effects of housing programmes is challenging. Becoming a beneficiary in a housing programme is highly correlated with income and place of residence. This correlation is true by design in means-tested programmes, but in more politicized initiatives programme selection can also depend on hard-to-observe political connections. We overcome these challenges by leveraging the lottery system implemented to select MCMV beneficiaries. In two original surveys, we interviewed approximately 3,000 MCMV applicants to compare winners with non-winners. In our first survey, which we label the 'recent lotteries' survey, we interviewed subjects just after they had been randomly selected (or not) for a new MCMV housing unit, but before any unit was delivered. In our second survey, which we call the 'early lotteries' survey, we interviewed both winners and non-winners some eight years after the delivery of the housing units. With both surveys, we can measure the effects of recently winning the lottery and the long-term effects of winning the lottery on individuals' support of politicians and their self-reported political behaviour. Furthermore, a random selection of beneficiaries allows us to estimate the causal effect of becoming a programme beneficiary on the support offered to incumbents, which we refer to as the direct effect of MCMV.

In the second part of this paper, we examine the payoffs from the broader electorate. We analyze electoral data through a differences-in-differences design that leverages the staggered rollout of MCMV across municipalities. This analysis allows us to determine whether MCMV is associated with the electoral performance of local- and national-level politicians.

Our analyses show that MCMV lottery winners, when compared to lottery non-winners, do not provide any significant direct electoral bonus to the politicians in charge of funding and implementing the programme. We also show that, despite these null direct effects, the programme is well known and well regarded both by applicants who never benefited from the programme and by voters in general, who vastly outnumber the beneficiaries. More importantly, we show that MCMV is associated with the improved electoral performance of national and, to a lesser degree, local incumbents. As the analysis of the direct effects showed that beneficiaries do not vote for incumbents at higher rates than non-beneficiaries, this improved performance must have come primarily from non-beneficiaries, who are indirectly affected by the programme and who form the overwhelming majority of the electorate.

To investigate how beneficiaries react to their experiences with the programme, we analyzed fifteen in-depth semi-structured qualitative interviews with MCMV applicants. These interviews suggest that the winners had uneven experiences with the programme and these experiences coloured their views of MCMV. Based on these interviews, we looked further into our survey and found that lottery winners who had negative experiences with MCMV and who experienced longer wait times had more negative evaluations of incumbents than those who had positive experiences (shorter wait times).

Our findings contribute to studies of policy feedback. While most studies emphasize the importance of beneficiaries as central players in a policy's support coalition, we show that support coalitions can exist even if those who know the policy first-hand do not fully (or uniformly) support it. Furthermore, our study aims to connect the study of mass political behaviour to the

political logic of policymaking. Had we just examined the direct effects, we could have inferred that politicians were not reaping electoral benefits from this policy. Had we not examined the direct effect, we would have missed the impact of uneven implementation on voter behaviour and the distinct pathways a policy affects beneficiaries and non-beneficiaries, which create perverse incentives for politicians regarding the quality of implementation. By examining both direct and indirect effects in a single study, we can highlight possible tensions and complementarities between different policy constituencies and better assess the policies' distributional consequences.

### Beneficiaries and the Electorate

Evidence on the direct electoral effects of social policies is mixed. On the one hand, studies on conditional cash transfers (CCTs) (De La O and Lorena 2012; Manacorda, Miguel, and Vigorito 2011; Zucco 2013), disaster relief spending (Bechtel and Hainmueller 2011), and other governmental transfers (Pop-Eleches and Pop-Eleches 2012) find that beneficiaries reward incumbents for social programmes. On the other hand, several studies cast doubt on these claims. De Kadt and Lieberman (2020), examining improvements in service provisions across several southern African countries, found negative electoral returns for the incumbents. Imai, King, and Velasco Rivera's (2020) analysis of a health insurance scheme and Mexico's *Oportunidades* found that beneficiaries did not vote in favour of politicians who initiated the programme. Blattman, Emeriau, and Fiala (2018) found that cash grants had, in fact, an anti-incumbent effect, and Clinton and Sances (2018) showed that the highly salient Affordable Care Act had a limited effect in mobilizing beneficiaries to vote.

Concerning housing policies, findings are fairly consistent regarding the effects on political engagement, but findings regarding voter choice and incumbent support are mixed. In the US context, homeowners turn out at higher rates in local elections and property owners are more likely to participate in local council meetings and donate during elections (Yoder 2020). Kumar (2022), on examining a housing lottery in India, found that becoming a homeowner increased local non-electoral mobilization.

In the case of the MCMV, many of its housing projects faced post-construction problems and needed to petition the government for public services. Even when all goes according to plan, beneficiaries have to deal collectively with issues pertaining to living in large apartment complexes. Recent studies have found that MCMV beneficiaries do engage in more non-electoral forms of activism (Bueno, Nunes, and Zucco 2022). However, for electoral participation, the expectations are less clear. Voting is mandatory in Brazil, baseline turnout is fairly high and beneficiaries typically need to move, which would require re-registering to vote or vote in their previous neighbourhood.<sup>1</sup>

Fewer studies have examined electoral choice. In Mexico, a government programme that issued property rights over agricultural lands increased support for the right-wing party but did not cause an increase in support for the benefactor party (de Janvry, Gonzalez-Navarro, and Sadoulet 2014). Along similar lines, Studlar, McAllister, and Ascui (1990) find that homeowners who purchase homes under the auspices of government privatization programmes rewarded the Conservatives and penalized the Labour party – a finding that was later challenged by Huberty (2011). Gilderbloom and Markham (1995), examining homeownership acquired via the marketplace, do not find a link between becoming a homeowner and voting for the incumbent in the United States.

All in all, providing a coveted and important benefit such as a home, which is unattainable without government assistance for the overwhelming majority of individuals who qualify for government social programmes, could lead to a change in voter choice in favour of politicians who created and supported such programmes. If voters are expected to respond politically to

<sup>1</sup>Our pre-registered expectations for electoral turnout had no, or negative, effects.

government efforts to provide any good or service, housing is a leading contender for generating large political effects (Ansell 2019). Our pre-registered hypotheses were in this direction.<sup>2</sup> Yet, as we noted earlier, we failed to find such electoral rewards among beneficiaries.

Our unexpected null results are consistent with the absence of documented pro-incumbent electoral effects in government-sponsored housing or homeownership programmes (see, for example, Huberty 2011) and with the relative scarcity of studies that examine such outcomes when compared to studies that analyze mobilization. One interpretation of the studies – that find that beneficiaries do not reward benefactors – is that these policies backfired politically. By this logic, electorally motivated politicians should not insist on housing schemes. The fact that these policies often survive suggests either that politicians are making mistakes or that the political benefits lie elsewhere.

Policies are not just about beneficiaries, however. They also function as signals by which the electorate learns about the incumbents' priorities (Boas, Hidalgo, and Toral 2021), redistributive commitments (Corrêa and Cheibub 2016; Holland 2017), and competence. As Weitz-Shapiro notes, 'a policy's "audience" – that is, not its direct targets – may reward a politician for particularly effective implementation, just as they may punish him for poor implementation. [This point] also suggests an alternative mechanism that can help explain prior findings that identified the sometimes null or negative electoral effects of spending on patronage and social programmes' (Weitz-Shapiro 2014, 23). Corrêa and Cheibub (2016) examine the reception of social policy among beneficiaries and non-beneficiaries as it relates to CCTs in Latin America and they find that part of the CCT electoral bonus received by the incumbents is diminished by a backlash against these programmes. Lü (2014) makes a related point when he finds that the untargeted population, influenced by campaigns to increase policy awareness and not by the policy benefits themselves, is responsible for the effects of policy on government responsibility.

For such a signalling effect to exist, non-beneficiaries must, at a minimum, be aware of the policy. While this awareness may be a challenge in certain policy areas such as tariffs or subsidies that only are only visible to those involved (Mettler 2011), housing projects are tangible and visible to all and are, therefore, particularly suited for reaching broader audiences. As Gilbert and Ward (1985) point out, building public housing serves the purpose of showing that the state is working for the poor. Politicians often seek to further enhance the visibility of housing projects by building them close to major thoroughfares with ribbon-cutting ceremonies and housing-related stories invite media coverage that shapes awareness among the wider public (Corrêa 2002). Bueno (2022) finds that politicians attempt to claim credit for housing programmes via events and social media to reach audiences beyond the beneficiaries. Furthermore, according to the lead publicist for former president Rousseff, who was personally involved in launching MCMV, the programme was cited thirty-one times in the forty TV and radio campaign advertisements aired in 2010, and forty-five times in the thirty-nine spots broadcast in her 2014 reelection campaign.<sup>3</sup> MCMV was an important part of a communication strategy targeted far beyond just beneficiaries. In sum, being visible to local communities affected by housing construction is also well-suited for politicians to create 'visibility opportunities' via the media and personal appearances.

To fully understand the electoral effects of housing programmes, it is critical to focus on the different ways that beneficiaries and non-beneficiaries are touched by these programmes. Beneficiaries assess a policy and the incumbents connected to it based on their well-being, rewarding officeholders for positive changes and penalizing them for negative ones (Larsen *et al.* 2019). Government benefits might also induce a reciprocity bond between beneficiaries

<sup>2</sup>We expected winners to support the Workers' Party incumbents at higher rates than non-winners; we did not anticipate the null effects for incumbent support that we describe next and, consequently, we did not pre-register our observational analysis of the indirect effects among non-beneficiaries. See Appendix M for our pre-analysis plan and deviations from it.

<sup>3</sup>Personal communication on 08/12/2020.

and politicians irrespective of actual changes in their well-being, even if a programme is not corrupted by clientelism (Labonne 2013). Finally, the experience of participating in social programmes can influence electoral choices, attitudes, and broader forms of involvement in politics (Soss 1999). In sum, experience with a particular programme is a vital engine in shaping the beneficiaries' reactions to a policy.

Non-beneficiaries often use different benchmarks to evaluate policies. Arguably, implementation matters less to non-beneficiaries because they have less information on the programme's execution. Whether a programme improves others' well-being may be relevant in principle for observers when they judge a policy, but it is certainly less salient for those whose well-being is influenced. For non-beneficiaries, secondhand information on personal experiences likely has a more limited scope than other public and media sources of information on programmes that are visible and concentrated on a few beneficiaries.

As the extensive literature on policy feedback shows, the public's perception of a social programme's beneficiaries and the stereotypes associated with them tend to influence whether public opinion favours a policy. Furthermore, the characteristics of the policymaker, particularly his/her party affiliation, often weigh heavily on how the public evaluates the policies he/she initiates. Finally, a programme may be evaluated by observers based simply on its stated goals and the importance they assign to that policy goal.

From the policymaker's perspective, the relative electoral importance of beneficiaries and non-beneficiaries depends on ways that are not always obvious and have not yet been explored in the specialized literature. For many policies and programmes, MCMV included, the number of beneficiaries is much smaller than those of non-beneficiaries. Consequently, the electoral importance of beneficiaries might pale in comparison with that of non-beneficiaries.

Part of the general appeal of the programme is precisely because it creates high expectations about receiving a very desirable benefit among a very large number of potential beneficiaries. These high expectations about the programme are tough to meet, but the frustration of expectations is only ever experienced by some of the relatively very few who are selected as beneficiaries. In other words, one of the reasons why the programme is also popular among non-beneficiaries might be that non-beneficiaries are not exposed to the frustrations that beneficiaries experience with programme delivery. But the relative sizes of these groups make the whole enterprise electorally worthwhile. Crucially, this dynamic has implications for democratic accountability. If the quality of implementation affects only beneficiaries and if the non-beneficiaries vastly outnumber the beneficiaries, improving quality might be electorally irrelevant.

While we focus on large housing programmes, we believe our argument reflects a general dynamic that affects oversubscribed government programmes (with many applicants and few available spots) that offer conspicuous goods, which are considered worthy of government action by most of society. In addition to housing, places in public universities, educational vouchers, high-value work training programmes, and visa allocations are relevant examples of such types of programmes. These programmes stand in contrast with those delivering somewhat inconspicuous and continued benefits to many, such as CCTs. While these programmes can also create an indirect channel (Corréa and Cheibub 2016), the direct channel is likely more politically relevant for policymakers. Beneficiaries of programmes with relatively small benefits can add up to sizeable shares of the electorate and, as they are bound together by common interests in social policy, they can easily become a relevant constituency.

### The MCMV Programme

The Workers' Party (*Partido dos Trabalhadores*, or PT) Government launched the *Minha Casa, Minha Vida* (MCMV) programme in 2009, with the explicit goal of reducing the housing deficit while forming part of an economic stimulus package. As such, the MCMV aims to tackle different aspects of the housing problem by using a combination of subsidized credit and private provision

for the middle classes, with government provision and heavily subsidized financing for the low and lower-middle classes. Between 2009 and 2016, the MCMV programme delivered 3.14 million housing units (out of 4.4 million contracted units) at a total cost of about R\$ 319 billion (Biderman 2019, 60–5). In comparison, the well-known CCT *Bolsa Família* benefits 14 million families at a cost of about R\$ 30 billion per year. Eight years of MCMV cost more than a decade of *Bolsa Família* while covering less than a quarter of the number of families.

We focus on Tier 1 of the programme, which is geared towards lower-income families and accounts for about 36 per cent of the MCMV housing units (1.15 million) and about 26 per cent of its spending (R\$84 billion). Families that do not own a home and have an income below R\$1,800 (approximately 300 USD) per month are eligible for the programme, which subsidizes up to 90 per cent of the value of the unit. Families that are selected make monthly payments of R\$80 to R\$270, depending solely on their income, for up to 120 months. MCMV Tier 1 selects beneficiaries through public lotteries. The programme turns beneficiaries into *de jure* ‘borrowers’ but they are also *de facto* homeowners because the monthly payments are minimal and the procedures to evict defaulting beneficiaries are cumbersome. MCMV Tier 1 is all but a gift to its beneficiaries.

The MCMV programme’s institutional setting involves federal and local governments, banks, and private developers. The federal government sets the general rules and provides financing. Local governments and private developers submit proposals to the state-run bank and/or to the ministry in charge of the programme for the construction of the housing units. Local governments select the beneficiaries and also provide tax breaks, the infrastructure surrounding the housing project, a matching grant to offset construction costs, and social assistance for the beneficiaries once they move in.

Although spearheaded by the PT, the MCMV programme was widely supported by left- and right-wing parties, business elites, and housing social movements. Politicians consider the programme so important that the ministry in charge of it was ranked as the most ‘politically desirable’ of the almost forty ministries that were recently evaluated by members of Congress (Zucco, Batista, and Power 2019). Yet, despite this widespread support, the programme faces many criticisms. It tends to build housing on the outskirts of cities where land is cheaper, creating urban sprawl into areas that are often poorly supplied with public services. Studies that leverage MCMV lotteries find that lottery winners are not more (and sometimes less) likely than non-winners to hold on to jobs and more likely to sign up for CCT programmes, presumably because the projects’ locations are far from economic centres (Chagas and Rocha 2019). Unsurprisingly, despite the housing being almost a gift, many lottery winners decline the units offered to them. The programme is also criticized for achieving too little while spending too much – the housing deficit for Brazil’s lowest-income stratum remains at about 3.8 million homes and smaller municipalities have difficulty meeting the MCMV requirements and enticing contractors.

To the general public, however, the programme’s shortcomings are much less known than its achievements. Even though MCMV distributes a private good, MCMV projects in larger cities are typically large and conspicuous. In small towns, even isolated houses or condominiums with a few units are visible to voters as they follow predetermined architectural standards and look very similar across the entire country. Therefore, to the broader electorate, the MCMV projects stand out as a very visible sign of government in action.

### Do MCMV Beneficiaries Reward Incumbents?

To determine whether programme recipients are more likely than non-recipients to support incumbent politicians, we conducted two surveys based on the MCMV lotteries used to select beneficiaries. We fielded our surveys in Rio de Janeiro, the second-largest municipality in Brazil, which has conducted multiple MCMV lotteries since 2011. As of 2017, about 743,000 individuals (out of a population of 6.5 million) had participated at least once in these lotteries;

46,000 people had been selected and close to 29,000 housing units had been built and delivered. During most of the period under analysis (2011–2016), Rio de Janeiro was governed at the local and state levels by politicians affiliated with the *Movimento Democrático Brasileiro* (MDB) – Mayor Paes (2012–2018) and Governors Cabral (2007–2014) and Pezão (2014–2019). At the federal level, the PT held the presidency from 2003 to 2016 and during most of this period it was supported by the state branch of the MDB.

### Data

In our first (‘recent’) lotteries survey, we interviewed 795 lottery winners and non-winners who participated in lotteries in 2016. We used two lotteries carried out within less than a month of each other that had been the most recent at the time we conducted our survey in 2017. Lottery winners had not yet signed an MCMV agreement or received their new homes. However, the winners had been informed of the lottery outcome, except for those who could not be found by city hall, a point we discuss later. In this ‘recent’ survey treatment is defined as knowing that one had won a housing lottery, which is considered a credible promise of receiving the benefit soon.

In our second (‘early’) lotteries survey, we interviewed 2,119 individuals who participated in two lotteries in 2011, carried out within three months of each other. Lottery winners who signed the MCMV agreement moved into their units in 2012 and 2013. We selected a sample of lottery winners and non-winners and conducted interviews in the first half of 2020, so our treated sample had moved into their new homes about eight years earlier. Therefore, in this second (early) survey, treatment is defined here as being an MCMV beneficiary.

To create our samples, we selected all winners and a random sample of non-winners with the pre-registered expectation that we would be able to interview about 10 per cent of our samples. We conducted these interviews by phone. Refusal rates were relatively low, but the main challenge was finding the subjects as most of the phone numbers we obtained were non-working because individuals of lower socioeconomic status tend to change (mostly pre-paid) phone numbers frequently.<sup>4</sup>

### Design

The estimation strategy is similar in both the recent and early lotteries surveys. Our assignment to treatment variable is the indicator of whether applicant  $i$  won lottery  $j$ . Randomization takes place at the lottery level, which allows us to estimate the effect of winning lottery  $j$ . Applicants may apply to multiple lotteries, so our unit of analysis is at the applicant-lottery level.

As each of the lotteries implies different probabilities of assignment to treatment, we follow Lin (2013) and include demeaned lottery indicators (and controls, whenever appropriate) that are cross-multiplied with the treatment indicator.<sup>5</sup> We estimate equation 1,

$$Y_i = \beta_0 + \beta_1 Z_{ij} + \sum_{m=1}^M (\mu_m \mathbf{X}_i + \sigma_m Z_{ij} \times \mathbf{X}_i) + \sum_{j=1}^{J-1} (\Lambda_j B_{ij} + \gamma_j Z_{ij} \times B_{ij}) + u_{ij} \quad (1)$$

where  $Y_i$  is an outcome measure for an applicant  $i$ ,  $Z_{ij} = 1$  represents a winning applicant  $i$  in lottery  $j$ , and  $Z_{ij} = 0$  represents a non-winning applicant  $i$  in lottery  $j$ . The coefficient  $\beta_1$  represents the effect of winning a lottery.<sup>6</sup>  $\mathbf{X}_i$  is a matrix of  $m$  demeaned pre-treatment covariates,<sup>7</sup>  $\mu_m$  is the

<sup>4</sup>See Appendix A.

<sup>5</sup>Analysis follows our pre-analysis plan, see Appendix L.

<sup>6</sup>We report the complier average causal effects in Appendix G.

<sup>7</sup>Our (pre-registered) pre-treatment covariates are age, sex, race, having a formal job, (logged) formal wages, and indicator for being in the national registry for social programmes (not pre-registered). In the first survey, we also include religion, years

coefficients vector for the demeaned pre-treatment covariates, and  $\sigma_m$  is the coefficients vector on the interaction between these covariates and the treatment indicator. In this equation,  $J = 2$  – there are only two lotteries in each survey sample –  $B$  is a demeaned dummy indicator for whether the observation belongs to either lottery,  $\Lambda_j$  is lottery  $j$ 's effect, and  $\gamma_j$  is the coefficient on the interaction between the demeaned lottery indicator and treatment indicator. Standard errors are heteroscedasticity-robust and clustered at the applicant level to account for repeated observations when applicants participate in multiple lotteries. In all analyses using recent lotteries, we also include sampling weights to correct for endogenous sampling (see Appendix A). In addition to the estimation approach described in equation 1, we also estimate and show models including lotteries as fixed effects.

Although we did not administer the lotteries ourselves, the process is transparent; individuals are publicly assigned numbers prior to the drawing date and the winners are selected based on results from a national lottery. Not surprisingly, the analysis of balance (Appendix C) does not reveal any systematic differences between treatment and control groups on pre-treatment covariates. Still, we report results with and without pre-registered sociodemographic controls.

Not all lottery winners decided to become programme recipients or even learned about being lottery winners. All lotteries are public; however, only lottery winners are notified directly and they are not often found by city officials. Also, many winners are deemed ineligible or have declined the offer. We focus on the intent-to-treat analysis because we believe it to be the most politically relevant quantity. This is because non-compliance is a feature of the programme and we are interested in learning about the effects of the programme on political behaviour.

While attrition was an *ex-ante* concern, we did not find evidence of differential attrition rates across treatment and control groups in either of our surveys (Appendix D). We also took several steps to minimize the possibility that attrition might be systematically related to potential outcomes: our enumerators were blind to treatment assignment, the order for contacting subjects was randomly determined, and our protocol for contacting control and treatment subjects was the same.

We also compared our early survey sample estimates to an administrative population data 'benchmark' for which there is no non-response on two formal employment-related outcomes. Results based on our sample are statistically indistinguishable from those using this population data and both indicate that there is a null effect of winning an MCMV lottery on earnings from a formal job and having a formal job (see Appendix Table D5).

### Outcome Variables

The key variables in our analysis are respondents' evaluations of incumbents and electoral mobilization, which we grouped into indices of items related to each conceptual outcome of interest, as described in Table 1. For brevity, we focus here on the summary indices only and report results for all individual (standardized) outcome items in Appendix F. All indices were created by adding the  $z$ -scores of the variables. This procedure was pre-registered in our pre-analysis plan but we had not planned on constructing indices for all outcome groups. The use of indices, however, simplifies presentation and clearly conveys that the results were null for almost all items.

Table 1 lists all outcomes examined in the paper. We analyze respondents' attribution of responsibility for the MCMV programme, which indicates whether respondents connect the programme to the incumbents being evaluated. The key outcome is the 'Incumbent at Treatment Evaluation Index', referring to the subjects' evaluation of incumbents who were governing at the time of treatment in any tier of government. Given the PT's status as the creator of

---

of schooling, and whether children are living at home (not available pre-treatment in the second survey). In the lotteries used in the first survey only, lottery winners were sorted by age in decreasing order, we then control for age even in the estimation 'without controls'.

**Table 1.** Survey outcomes indices and variables

Outcome	Survey Item	Type	Survey
PT Evaluation index	Lula Evaluation	5-point	Both
	Dilma Evaluation	5-point	Both
	PT ID	Binary	Both
Incumbent at treatment evaluation index	Vote Haddad 2018	Binary	Early
	Dilma Evaluation	5-point	Both
	Temer Evaluation	5-point	Recent
	Paes Evaluation	5-point	Both
Current incumbent evaluation index	Pezão Evaluation	5-point	Recent
	Bolsonaro Evaluation	5-point	Early
	Crivella Evaluation	5-point	Early
	Witzel Evaluation	5-point	Early
Mobilization index	Talk to a Candidate	Binary	Early
	Support a Candidate	Binary	Early
	Turnout in 2016	Binary	Early
	Turnout in 2018	Binary	Early
	Expected Turnout 2020	Binary	Early
Attribute to Lula, Dilma, or PT	Responsibility for MCMV	Binary	Both
Attribute to Paes, Pezão, Temer, or MDB		Binary	Both

*Notes:* All variables were standardized by subtracting the mean of the respective outcome in the control group and dividing by its standard deviation in the control group prior to analysis. See Appendix B for question wording.

MCMV, we also assess survey respondents' assessment of PT politicians and the party itself in the 'PT Evaluation Index'. We created a 'Current Incumbent Evaluation Index' to examine the effects on incumbents who were governing at the time of the survey. Finally, we include a 'Mobilization Index' that captures other electorally relevant behaviour. All outcome variables were reoriented, meaning that higher values indicated positive effects.

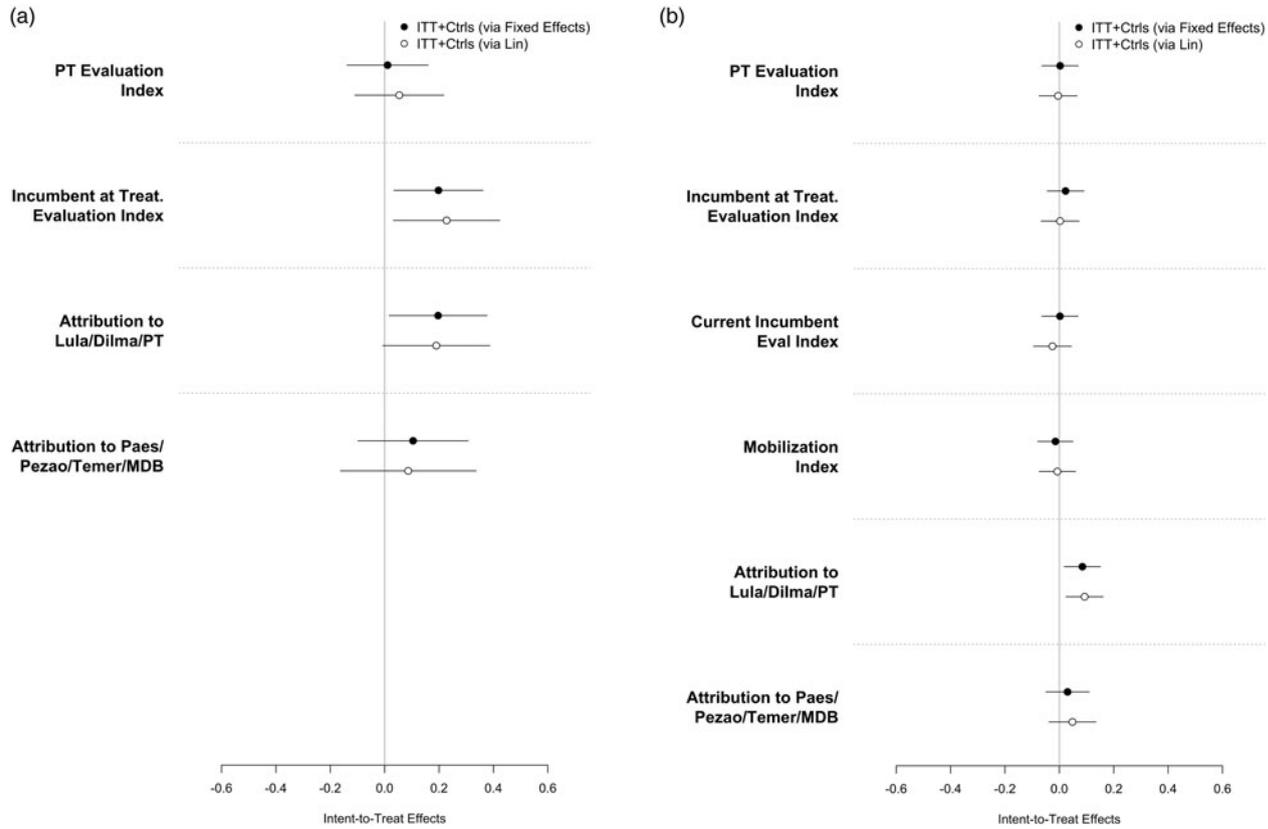
## Results

Figure 1 reports the results. In both surveys, we find that a large share of non-winners attribute the programme to PT presidents, Lula and Dilma, or the PT in general and that this share is even larger among lottery winners. This attribution bolsters the expectation that winners could reward PT incumbents since they are the ones seen as responsible for the programme.

However, we also find that lottery winners do not better evaluate the PT than non-winners. Furthermore, lottery winners are not more likely than non-winners to vote in elections, support a candidate, or talk to a candidate, as reported in the null result for the Mobilization Index, which suggests that MCMV did not lead to pro-PT or pro-incumbent mobilization.

Concerning PT politicians, this lack of effects, however surprising, cannot be ascribed to a hypothetical 'ceiling' effect either. Lula was only rated in the highest response category by 16.3 per cent and 12.6 per cent of those in the control group in our early and recent lottery surveys and his average rating was only slightly above the middle category on the five-point scale we used (0.12 and 0.19 in our early and recent lotteries surveys respectively). We can also dismiss the idea that the null findings are driven by the fact that the beneficiaries do not have full property rights. In our early lotteries survey, winners are more likely to self-identify as homeowners and about 81 per cent of the beneficiaries do so.

The fact that Lula's evaluation was not particularly high should also help dispel fears that these null effects could be the result of heavily pro-incumbent individuals signing up for the MCMV in the first place. We already knew that enrollment in MCMV was easy for all and not politically targeted but we now know that those who signed up were not particularly pro-incumbent. Moreover, fewer than 7 per cent of the respondents in the control group in our surveys expressed support for the PT. While we need a comparison of applicants and non-applicants to definitely



**Figure 1.** MCMV Effects on incumbent evaluation and mobilization.

*Notes:* Figure reports intent-to-treat effects on outcomes listed in [Table 1](#). See Appendix E for estimates without controls and Appendix F for results for each item used to construct these indices.

rule out that partisans were more likely to apply, the evidence we have weighs strongly against that possibility. Importantly, the survey was conducted in a period of aversion towards past governments, particularly those from the PT. While this might have depressed support for some of the politicians evaluated in our surveys, this lower support should have affected both winners and non-winners equally so it cannot easily explain the lack of differences between the two groups.

The few positive results that favour other incumbents are very weak. In our early lotteries survey, comparing winners and non-winners some eight years after the winners had moved to their new homes, we find that winners do not have better evaluations of the incumbents who governed at the time they won the lottery when compared to non-winners and that those winners do not hold incumbents in higher regard. Yet, our recent lotteries survey, which compares winners and non-winners after the lottery results were made public but before moving to the new house, shows that winners have higher evaluations of incumbents at treatment. This effect is almost entirely driven by recent lottery winners' higher evaluations of local-level incumbents at the time of treatment (Mayor Paes and Governor Pezão) but they do not hold higher evaluations of national incumbents at the time of treatment, or a mayoral candidate supported by Mayor Paes.

One interpretation is that MCMV has a short-term effect that dissipates over time. This is a plausible interpretation but, based on our findings, any electoral short-term bonus to incumbents is likely to be electorally negligible. As a preliminary consideration, winners do not attribute MCMV to Paes or Pezão at higher rates than non-winners and, overall, only about 6 per cent of respondents attribute MCMV to Paes and Pezão combined. More importantly, the political magnitude of these statistically significant effects for Paes is small.<sup>8</sup> Paes's evaluation is 0.23 points higher among lottery winners on an evaluation scale ranging from -2 to 2. Using simulation, assuming treatment gives a boost of 0.23 points for winners in their evaluation of Paes, we estimate Paes would get on average 130 to 176 more votes out of the 2,911 lottery winners (see Appendix E).

Granted, our results cannot determine whether the beneficiaries who moved recently are the ones who will yield the greatest payoff for the incumbents. This explanation would require an inverted V-shaped response; it would assume that voters do not reciprocate when informed that they had won, that they reciprocate just after moving, and that their support decays over time. All in all, at an average cost of at least 38,000 reais per housing unit, the MCMV seems to be a poor electoral investment.

### Do Voters Reward the Incumbents for MCMV?

MCMV provides weak to no direct electoral returns from the beneficiaries. The beneficiaries are a fairly small group (less than 0.6 per cent of the population) while the programme's broader electoral audience is many times larger.

The potential electoral return of MCMV among non-beneficiaries is enormous. In the city of Rio de Janeiro only 42,000 individuals became recipients but more than 700,000 signed up for MCMV and many more know about the programme. Even if the beneficiaries do not reciprocate electorally, the opinions of eligible non-beneficiaries or even of non-eligible observers might matter more for the incumbents' electoral fortunes.

This strategy of using MCMV as advertising makes sense when we consider that the programme is held in high regard by the general public. In a nationally representative survey conducted during the 2014 presidential campaign, 95 per cent of Brazilians approved of the MCMV programme. MCMV's approval rate was then about 20 percentage points higher than other PT flagship social programmes such as *Bolsa Família* (a CCT) and *Mais Médicos* (basic medical assistance to under-served areas) and only 2 percentage points lower than the

<sup>8</sup>Our standardized effect sizes range from 0.11 to 0.19 in different specifications.

*Benefício de Prestação Continuada*, which is a pension for the low income elderly and those with special needs, written into the 1988 constitution but not initiated by the PT.

Another large survey, carried out by one of the main polling companies in Brazil in November 2015, shows that MCMV was known by 50 per cent of respondents (see Appendix H). MCMV was the second most well-known government programme or initiative at the time, behind only *Bolsa Família* (59 per cent), which is striking given that MCMV's coverage is substantially smaller.

MCMV was also well evaluated. It was rated third among the eight most well-known programmes and rated higher than *Bolsa Família*, particularly if we consider only the non-beneficiaries of both programmes. Potential MCMV beneficiaries – those who signed up for the programme but who are not recipients – also hold the programme in high regard. Using data from our survey of early lottery participants in Rio de Janeiro, we find that 80 per cent of non-beneficiaries believed MCMV made the beneficiaries' lives better or much better.

These pieces of evidence suggest that MCMV might be a political asset even if it does not garner any positive direct political effect from the beneficiaries. To systematically test whether MCMV produces electoral effects on the broader electorate, we explore the staggered introduction of MCMV across Brazilian municipalities and electoral cycles to tease out its association with the electoral performance of presidential and local incumbent candidates.

### **Empirical Setup**

We obtained the lists of all beneficiaries of the MCMV Tier 1 through to late 2021. The first beneficiaries received their units in late 2009 and by the end of 2010, 57,000 units had been delivered in about 1,800 municipalities. The programme expanded in the next cycle, reaching more than 752,000 beneficiaries in 4,000 municipalities. The MCMV delivered 171,000 units more in both 2015 and 2016 but lost momentum after that due to the acute political and economic crisis that engulfed the country. By the end of 2020, 1.4 million units had been delivered in 4,260 municipalities in the country (see Appendix I).

Our first outcome of interest is the vote share for the PT candidates in the presidential elections of 2010, 2014, and 2018 in each municipality. The other outcome of interest is the vote share for incumbent mayoral candidates. Mayoral elections in Brazil are held every four years with a two-year offset relative to the presidential elections. An important consideration for the analysis of local elections is determining who is the incumbent, which, compared to presidential elections, varies across municipalities. While cases in which the mayor personally runs for reelection are straightforward, this happens in only about half of the municipalities in each cycle. For cases in which the mayor did not run for reelection, we coded as the incumbent the candidate affiliated with the party of the mayor. As mayors often switch parties during their term, we updated the mayor's party affiliation using official party membership data. If this procedure did not allow us to identify any incumbent candidate in the municipality, we then coded as the incumbent the candidate who was a member of a party that was in the mayor's electoral coalition in the previous cycle. We identified incumbent candidates in about 90 per cent of the municipalities; in the remaining cases we coded the incumbent vote share as zero.

Delivery of MCMV units spans three presidential (2006–2010, 2010–2014, and 2014–2018) and three local election cycles (2008–2012, 2012–2016, and 2016–2020). Our empirical strategy is to estimate simple two-period difference-in-differences models for each cycle, which include only those municipalities that had not implemented MCMV in previous cycles. We do this so that we only compare municipalities 'treated' with the MCMV in the cycle compared to those that were 'never treated' or 'not yet treated' (Callaway and Sant'Anna 2021). In the third local cycle, however, only about 100 municipalities were 'treated' for the first time, very few units were delivered (approximately 80,000 in total), and the 2020 election was first postponed and then held in the throes of the Covid-19 pandemic. For this reason, we dropped it from our analysis, which was restricted to three presidential and two local electoral cycles.

Therefore, examining only not-yet-treated municipalities at the start of each cycle and for each office, we estimated variations of a simple two-period difference-in-differences model with group and period fixed effects such that:

$$V_{ij} = \beta_0 + \beta_1 MCMV_i + \beta_2 Post_j + \beta_3 MCMV_i \times Post_j + u_{ij} \tag{2}$$

where *i* represents a municipality and *j* an election (presidential or mayoral). Here, *V<sub>ij</sub>* is the vote share (between 0 and 1) obtained by the incumbent party candidate in each election *j* in municipality *i*. *MCMV<sub>i</sub>* is a binary indicator of whether a municipality implemented the MCMV programme in the election cycle being analyzed, and *Post<sub>j</sub>* indicates whether the data point is the pre- (*Post<sub>j</sub>* = 0) or the post-treatment observation (*Post<sub>j</sub>* = 1) in the cycle. In this setup,  $\beta_3$  is our coefficient of interest, describing the vote share change in MCMV-adopting municipalities relative to non-adopting ones. We cluster our standard errors at the municipality level.

MCMV’s rollout was not as-if random so municipalities that implemented MCMV could have been on a different economic or political path than those that did not implement it. Municipalities had to apply for MCMV and be approved by the federal government to receive funds to implement the programme. Via a regression discontinuity design (Appendix L), we show that MCMV did not target mayors belonging to the president’s or the minister’s party. Also, we find no evidence that MCMV funds were given earlier to mayors who were members of the president’s party, which makes sense if we consider that implementing an MCMV programme was essentially a local government decision and depended more on local government capacity than direct connections with the federal government. The MCMV was also intended as an economic stimulus so the federal government had an interest in building as many projects as possible. In Appendix K we report several robustness analyses, none of which alter the results.

**Results**

Table 2(a) reports the results of presidential elections and Table 2(b) that of mayoral elections. Each panel in the table reports results using the dichotomous operationalization of MCMV presence by cycle. We also present a combined summary result estimated on a dataset produced by stacking all three cycles, where we also add cycle fixed-effects to the estimation and a variant in which we first match municipalities with and without MCMV in each period on several

**Table 2.** MCMV Effects on incumbent candidates vote share

	Cycle-by-Cycle			Combined	
	2006–10	2010–14	2014–18	All	Matched
<b>(a) Presidential elections</b>					
MCMV × Post	0.005** (0.002)	0.031*** (0.003)	0.012** (0.006)	0.018*** (0.002)	0.018*** (0.002)
<i>N</i>	11132	7613	3232	21977	25212
Municipalities	5567	3808	1616	5570	5491
*** p < 0.01; **p < 0.05; *p < 0.01.					
	Cycle-by-Cycle		Combined		
	2008–12	2012–16	All	Matched	
<b>(b) Local elections</b>					
MCMV × Post	0.018** (0.009)	−0.003 (0.011)	0.006 (0.005)	0.006 (0.007)	
<i>N</i>	11140	5640	14340	13474	
Municipalities	5570	2820	5455	5025	
***p < 0.01; **p < 0.05; *p < 0.01.					

pre-treatment covariates (see Appendix K for details). For simplicity, we only report the substantively interesting estimates ( $\beta_3$ ) and leave the complete set of estimates for Appendix K.

For presidential elections we see positive and statistically significant electoral effects in all three cycles. In municipalities that delivered MCMV homes, PT presidential candidates obtained between 0.5 and 3.1 percentage points (p.p.) more votes in municipalities that delivered MCMV homes and the combined estimate shows average positive effects of 1.8 p.p. in both the unmatched and matched samples. In the first cycle, while many municipalities were treated relatively few units were delivered (on average, 0.38 per 100 inhabitants, in comparison with 0.77 and 0.45 in the other two cycles) and most were delivered very close to the election, which might have contributed to the somewhat smaller effects. This pattern is compatible with the Lula government's interest in showcasing the MCMV in Rousseff's presidential campaign. The weaker effect and the smaller scope of the programme in the first cycle suggest that just over 50,000 votes were gained. This increases markedly, however, to 1.3 million and just under 400,000 votes in the second and third cycles, respectively (see Appendix J for the calculations).

Results from the mayoral elections are concentrated in the first cycle when incumbents in municipalities with MCMV received just over 1.8 p.p. more votes than in other municipalities. This estimate is in line with what we found in national elections but we find no results in the second cycle and the combined effects fall short of statistical significance. As shown in Appendix K, for both mayoral and presidential elections, results from the models using continuous operationalization of MCMV presence are substantively very similar to what we report here.

The lack of strong results at the local level could be driven by weaker attribution but political and institutional features also limit our analysis. While at the national level, where the same party was in charge for thirteen years, turnover varies considerably across municipalities. Incumbency is much harder to measure and the 2016 election came only weeks after the major political events that sparked a very strong anti-incumbent wave. Furthermore, our survey data from Rio de Janeiro, examined in the first part of this paper, indicates that a large majority of recent lottery participants (77.8 per cent) attributed MCMV to presidents Lula, Dilma, and/or the PT, which stands in contrast to the meagre 6 per cent who attributed it to the mayor and/or governor. This finding is consistent with our aggregate results, which suggest that electoral payoffs may be more consistent at the national rather than the local level. In this context, future research should examine the reasons that lead mayors to devote attention and administrative resources to implementing the MCMV programme in their municipalities.

## Discussion

Contra to our pre-registered expectations, our results reveal weak to null electoral returns among beneficiaries in terms of incumbent support and turnout. However, we find electoral payoffs for presidential candidates and, to some extent, local incumbents. This combination of results suggests that the programme impacts both beneficiaries and non-beneficiaries, all of whom compose the electorate, but no additional boost for the incumbents comes from voters who are beneficiaries.

Based on the existing literature and our ex-post conjectures about these results, we interpret these weak and null effects for incumbents among beneficiaries as a result of firsthand experience with the programme and, in particular, its implementation and consequences for well-being. The MCMV programme generates high expectations among beneficiaries and non-beneficiaries alike but delivers uneven experiences for the beneficiaries. To further explore the interpretation that beneficiaries' meagre electoral returns for incumbents result from a disappointing experience with the programme by at least a portion of the beneficiaries, we examine the programme's consequences on well-being and analyze whether beneficiaries with more positive (or negative) experiences with MCMV support incumbents at higher (or lower) rates.

If the beneficiaries reward incumbents due to improvements in their welfare (Kumar 2021), we expect that null electoral returns are accompanied by no or negative improvements in the well-being of lottery winners. And, as shown in Table D5, early lottery winners do not report higher levels of employment and formal income, which is consistent with findings by Chagas and Rocha (2019). Also, Bueno, Nunes, and Zucco (2022), examining several dimensions of welfare and happiness, do not find evidence that participating in MCMV leads to greater well-being.

Furthermore, our research suggests that MCMV delivers an uneven experience rather than a uniformly disappointing one to beneficiaries. To examine this heterogeneity, we compare individuals' evaluation of incumbents based on their wait time after registering for the programme. Given the large interest in the programme, demand outstrips supply and most applicants never receive a housing unit. Thus lottery winners can wait for years on the programme's rolls until they are selected via lottery.

Our understanding of why the wait time is salient to individuals is informed by fifteen qualitative in-depth interviews (with ten winners and five non-winners) with MCMV applicants in Rio de Janeiro in 2018. Many of our interviewed subjects did not recall when they signed up because so much time had elapsed. Indeed, a few of them used important life events to try and remember when they first registered, such as the birth of their children or divorce. For instance, S5 told us the following in his interview:

**I:** [...] do you remember when you signed up for the lotteries? **S5:** It has been too long. I can't tell you what year because I really don't know. For you to have a sense, let's calculate. I got separated, my daughter was [age] and now she is [age] and I had already signed up by then. And then you can say . . . I was [age] then, and now I am [age]. Man, I really have no idea. **I:** But if your daughter is [age] and she was [age] then, it has been 17 years . . . **S5:** Yeah, it may be that. I don't know when that was, honestly, even if I tried, I couldn't remember.

This wait time caused frustration and many indicated that it was their main complaint about the programme. Take, for example, interviewee S8's statement:

**I:** In your opinion, what was the main disappointment with the programme? **S8:** The delay in getting selected in the lottery.

S2, a lottery winner, was also frustrated by such a long wait. For her, long wait times were evidence of political corruption:

**I:** And do you think that what made you lose hope and faith was all this wait? **S2:** Yes. Yes, how come it takes so many years? There is so much money and things involved. **I:** And who do you think is responsible for all this wait? What caused all this wait, in your opinion? **S2:** Why this wait? I think there is too much corruption. It can only be too much corruption and stealing. **I:** Can you point to who is responsible? A party or group? **S2:** I think it's all of them.

On the other hand, winners with shorter wait times describe better experiences with the programme. S6, for instance, remembered exactly when she signed up:

**I:** On [the] balance what was your main expectation with the programme? [...] **S6:** I received what I expected. [...] **I:** Did you have any disappointment with the programme? **S6:** No, none so far.

To further explore these insights from the qualitative interviews, we turn to our survey of recent lottery participants. Using administrative data, we measure, for both winners and non-winners, the time elapsed from when the participant registered for the programme until

our interview of both winners and non-winners. We then compute the difference between winners and non-winners in incumbent evaluation for those who had a lower-than-median wait time and those who had a higher-than-median wait time.

The results are shown in Fig. 2. Winners who had long wait times since enrollment had markedly lower evaluations of the PT (−0.22, p-value = 0.06), Lula (−0.24, p-value = 0.04), and Dilma (−0.20, p-value = 0.09) than the control group, whereas those with shorter wait times since enrollment tended to have more positive evaluations of these incumbents than the control group (even if not always statistically significant at conventional levels). The differences between groups with long and short wait times are statistically significant for PT Inc./Lula/

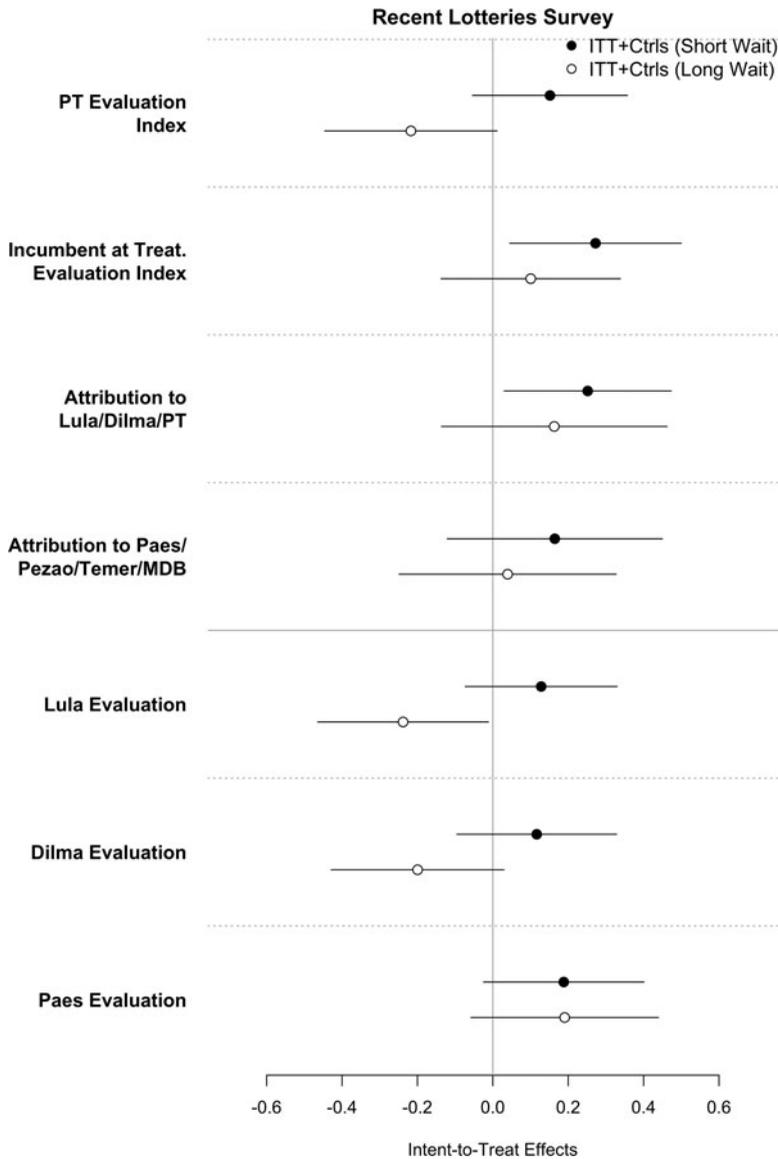


Figure 2. Effects of MCMV Condition on wait time since enrollment.

Notes: Bars indicate 95 per cent confidence intervals. Short and long wait times at the median. All estimates using lotteries as fixed effects.

Dilma evaluations. We see less variation in the evaluation of local-level incumbents who are seen more positively overall. PT incumbents appear to receive both credit and blame for the programme, as can be expected by the subjects' higher levels of attribution to them. Overall, this evidence is consistent with the interpretation that individuals' evaluation of incumbents varies with their experience of the programme, particularly for incumbents more closely associated with the programme.

Regarding non-beneficiaries, we believe that a part of the electoral returns is at least partially driven by official advertisement and credit-claiming attempts by incumbents. Greater association of the MCMV with the PT presidents could be a consequence of the centrality of the programme in both the 2010 and 2014 presidential campaigns. According to Santana:

MCMV was part of a broader context that encompassed upward social mobility, the dream of owning a home, buying a car, having meat on the table, etc. In other words, it was part of a package that Brazilians in general – and the poorest in particular – were experiencing at the time.<sup>9</sup>

MCMV was an important part of a general audience communication strategy for the Workers' Party that targeted far beyond just the programme's beneficiaries.

Electoral rewards for mayors were confined to the first cycle only but mayors still behave as though they perceive the MCMV as an electoral asset. Bueno (2022), for instance, shows that in local election years, politicians time the delivery of MCMV housing to the period in which they can legally attend public ribbon-cutting events and post coverage thereof on social media.

MCMV can create electoral dividends among beneficiaries because of its goals and its conspicuous and concrete benefits, which combine to create broad social consensus. Providing home ownership to low-income individuals, primarily through newly built units, is a programme goal that is not likely to invite backlash. In our survey in Rio de Janeiro, for instance, more than 90 per cent of participants agreed with the statement that 'homeownership is a dream'. Moreover, the survey data we presented in Section 4 also shows that evaluations of the MCMV vary less with income than the evaluation of other social programmes, suggesting broad-based support.

What the general public sees in the case of MCMV are the new houses being built and people in need moving into them. For most outside observers, delays in delivering the units or the low desirability of their location may not be as salient as it is to beneficiaries. Crucially, the very large group of non-beneficiaries will never have direct contact with the programme and will not, therefore, experience any associated disappointment. Hence, a visible programme that caters to the dreams of the masses can be a political asset even if it does not completely fulfil the expectations of beneficiaries.

Naturally, there are other pathways in which MCMV could have affected non-beneficiaries. MCMV could have impacted local economic growth and construction jobs. Consistent with sociotropic theories of economic voting, this could have led to boosts to incumbent evaluation through paths other than credit claiming.

Importantly, our interpretation relies on the assumption that the aggregate effects we document must primarily come from the non-beneficiaries who compose the majority of the electorate. This assumption implies that the differences in incumbent evaluation between beneficiaries and non-beneficiaries are weak or null in places other than Rio de Janeiro.

While our evidence on the direct effects comes from a single, very large city, we have reasons to expect similar null or weak electoral effects among beneficiaries found in other contexts. In the general population, MCMV is better evaluated among beneficiaries than non-beneficiaries (evaluation is 1.21 higher than the baseline evaluation of 6.39,  $p < 0.01$ ). However, this analysis includes all MCMV tiers in all types of municipalities. If we restrict our analysis to individuals whose

<sup>9</sup>Personal communication on 08/12/2020.

reported family income makes them potentially eligible to be an MCMV beneficiary, the positive association is smaller (0.97,  $p < 0.01$ ) and even smaller if we restrict the analysis to cities that are state capitals (0.89,  $p = 0.06$ ). These results are compatible with the findings of our survey and suggest that, perhaps, the MCMV was less effective in capitals in general. Furthermore, as in Rio de Janeiro, beneficiaries elsewhere are not better off in terms of their labour market prospects (Chagas and Rocha 2019). MCMV housing projects in other metropolitan areas are also often located on the outskirts of cities, where land is cheaper. Based on our qualitative understanding of the programme and anecdotal evidence, long wait times are also common elsewhere.

Finally, we estimate that the aggregate increase in votes associated with MCMV is about one-half to a million votes in support of the presidential incumbent – using the estimates from Table 2. If this number of votes were to come exclusively from beneficiaries, we would be assuming, with certainty, that a majority of all beneficiaries both turned out to vote and voted for the incumbent. But, while possible, we find this case implausible. Furthermore, it may be that it was not only those who ‘observed’ MCMV in their municipalities who were affected by the programme. Given the prominent role of MCMV in the Workers’ Party ad strategy and its overall salience, individuals living in places without MCMV were, probably, also exposed to the programme’s publicity. While we are unable to measure its influence in ‘untreated’ municipalities, it is likely that our estimates of the overall indirect effects are conservative.

## Conclusion

We find that lottery winners are not more likely to turn out, vote for, or support politicians associated with the programme than non-winners. Despite beneficiaries being no more likely to support the incumbent than non-beneficiaries, we identify an aggregate boost in the electoral performance of incumbents through a difference-in-difference analysis that leverages the staggered implementation of MCMV. Whereas our combined evidence suggests that beneficiaries do not offer an extra boost to incumbents because of programme implementation issues, non-beneficiaries perceive the programme to be valuable and evaluate it differently from non-beneficiaries.

Beyond the case of MCMV, the extent to which indirect electoral benefits via non-beneficiaries matter politically is likely a function of a combination of the degree of the non-beneficiaries size and the policy’s visibility, implementation, and normative appeal. We expect programmes in which a sizable share of the electorate is eligible, which the electorate finds appealing, are the ones in which the programme’s ‘indirect’ electoral returns are greater, more so if the programme is well run and largely visible (due to publicity and also benefit conspicuousness). And, while implementation issues may dampen support among beneficiaries, we show that they may also reduce support among non-beneficiaries if the visibility needed to reach these audiences also exposes the programme’s flaws, suggesting a possible trade-off between visibility and quality of implementation.<sup>10</sup> Finally, a programme board’s normative appeal is a function of a programme’s objectives and the extent to which ideology or partisan identity shapes individual attitudes towards policy issues. In polarized and divided electorates in which partisan identity permeates opinions about most (if not all) policy issues, achieving broad appeal and reaping indirect benefits broadly may be more difficult.

While the notion that policies create constituencies and politics is not novel, further empirical developments and theoretical refinements are needed. It is clear that the existence of multiple feedback channels leads to questions about their relative importance, whether they are substitutes or complements, the conditions under which politicians favour one channel over others, and their significance in the creation of coalitions in support of different policies. Moreover, several unanswered questions remain about the potential tradeoffs between these feedback channels.

<sup>10</sup>We thank Rafaela Dancygier for raising this point.

In the case of the MCMV programme, we found that promoting tangible improvements to direct beneficiaries was not a prerequisite for generating positive indirect political dividends through other feedback channels (non-beneficiaries). This dovetails with suggestive evidence indicating that several other ambitious social housing programmes in Latin America, such as Venezuela's *Gran Misión Vivienda* or Mexico's Infonavit-backed private-public partnerships, have been costly, apparently inefficient, yet popular and seemingly electorally viable (Marosi 2017; Polga-Hecimovich 2016). We believe future studies can elaborate on the circumstances under which the electorate evaluates policies that differ from the direct beneficiaries and what other feedback channels can influence the electoral dividends of public policy.

**Supplementary material.** Online appendices are available at <https://doi.org/10.1017/S0007123423000017>.

**Data Availability Statement.** Replication data for this article can be found in Harvard Dataverse at: <https://doi.org/10.7910/DVN/TILA6E>.

**Acknowledgements.** The authors gratefully acknowledge funding from Yale's Institute for Social and Policy Studies, the MacMillan Center, CNPq (#444488/2015-4, #402768/2016-7), FAPERJ (224544), Getulio Vargas Foundation (RPPA/2016), and Quaest Pesquisas & Consultoria. This research was reviewed and deemed exempt by Yale Human Subject Committee (#2000020455) and approved by Emory's Human Subjects Committee (#IRB00101802) and FGV Ethics Committee (#04/2017). We thank Gabriela Terentim, Tainá Souza, Lianne Anderson, and Joaquim Meira for excellent research assistance; P. M. Aronow, Guillermo Calvo, Nahomi Ichino, Chad Hazlett, Wendy Hunter, Miguel Rueda, Anjali Thomas, Rebecca Weitz-Shapiro, and participants at APSA 2021 and the Atlanta Area Comparative Political Economy Working Group for comments on earlier versions; and Laisa Rachter Dias and Claudia Acosta for a detailed discussion of MCMV data and programme rules. The authors also thank the reviewers and the editor for their insightful comments. Natália S. Bueno benefited from a fellowship from the SciBr Foundation while developing this project, and Cesar Zucco from a CNPq productivity grant.

**Financial Support.** This work was supported by Yale's Institute for Social and Policy Studies (2016, NSB), the MacMillan Center (2014, NSB), CNPq (#444488/2015-4, #402768/2016-7, CZ), FAPERJ (224544, CZ), Getulio Vargas Foundation (RPPA/2016, CZ), and Quaest Pesquisas & Consultoria (2017, FN). Natália S. Bueno benefited from a fellowship from the SciBr Foundation while developing this project, and Cesar Zucco from a CNPq productivity grant.

**Conflicts of Interest.** The authors declare no competing interests. For the sake of transparency, Felipe Nunes is the CEO at *Quaest Consultoria & Pesquisa* and partly financed the research conducted for this study.

**Ethical Standard.** This research was reviewed and deemed exempt by Yale Human Subject Committee (#2000020455) and approved by Emory's Human Subjects Committee (#IRB00101802) and FGV Ethics Committee (#04/2017). We obtained voluntary and informed consent for all subjects we interviewed.

## References

- Ansell BW (2019) The politics of housing. *Annual Review of Political Science* 22(1), 165–85.
- Bechtel MM and Hainmueller J (2011) How lasting is voter gratitude? An analysis of the short- and long-term electoral returns to beneficial policy. *American Journal of Political Science* 55(4), 852–68.
- Biderman C (2019) Morar Longe: O Programa Minha Casa Minha Vida e a expansão das Regiões Metropolitanas. Technical report Cepesp and Instituto Escolhas São Paulo. Available from <https://tinyurl.com/3h3jdkcc>.
- Blattman C, Emeriau M and Fiala N (2018) Do anti-poverty programs sway voters? Experimental evidence from Uganda. *The Review of Economics and Statistics* 100(5), 891–905.
- Boas TC, Hidalgo FD and Toral G (2021) Competence versus priorities: Negative electoral responses to education quality in Brazil. *The Journal of Politics* 83(4), 1417–31.
- Bueno NS (2022) The timing of public policies: Political budget cycles and credit claiming. *American Journal of Political Science*. <https://doi.org/10.1111/ajps.12688>.
- Bueno NS, Nunes F and Zucco C (2022) Making the bourgeoisie? Values, voice, and state-provided homeownership. *The Journal of Politics* 84(4), 2064–79.
- Bueno NS, Zucco C and Nunes F (2023) “Replication Data for: What You See and What You Get: Direct and Indirect Political Dividends of Public Policies”. <https://doi.org/10.7910/DVN/TILA6E>, Harvard Dataverse, V1.
- Callaway B and Sant'Anna PHC (2021) Difference-in-Differences with multiple time periods. *Journal of Econometrics* 225(2), 200–30.
- Campbell AL (2012) Policy makes mass politics. *Annual Review of Political Science* 15(1), 333–51.

- Chagas ALS and Rocha GM** (2019) Housing programme and social conditions impact: Evidences from Minha Casa Minha Vida programme lotteries in Brazil. Working paper 40, Department of Economics USP São Paulo. Available from [http://www.usp.br/nereus/wp-content/uploads/TD\\_Nereus\\_11\\_2019.pdf](http://www.usp.br/nereus/wp-content/uploads/TD_Nereus_11_2019.pdf).
- Clinton JD and Sances MW** (2018) The politics of policy: The initial mass political effects of medicaid expansion in the States. *American Political Science Review* **112**(1), 167–85.
- Corrêa S** (2002) Lar, Doce Lar? Folha de São Paulo. Aug 11. Available from <https://www1.folha.uol.com.br/fsp/cotidian/ff1108200201.htm>.
- Corrêa DS and Cheibub JA** (2016) The anti-incumbent effects of conditional cash transfer programmes. *Latin American Politics and Society* **58**(1), 49–71.
- de Janvry A, Gonzalez-Navarro M and Sadoulet E** (2014) Are land reforms granting complete property rights politically risky? *Journal of Development Economics* **110**, 216–25.
- De Kadt D and Lieberman ES** (2020) Nuanced accountability: Voter responses to service delivery in Southern Africa. *British Journal of Political Science* **50**(1), 185–215.
- De La O and Lorena A.** (2012) Do conditional cash transfers affect electoral behavior? Evidence from a randomized experiment in Mexico. *American Journal of Political Science* **57**(1), 1–14.
- Gilbert A and Ward PM** (1985) *Housing, the State, and the Poor: Policy and Practice in Three Latin American Cities*. Cambridge: Cambridge University Press.
- Gilderbloom JI and Markham JP** (1995) The impact of homeownership on political beliefs. *Social Forces* **73**(4), 1589–1607.
- Holland AC** (2017) *Forbearance as Redistribution: The Politics of Informal Welfare in Latin America*. Cambridge Studies in Comparative Politics Cambridge: Cambridge University Press.
- Huberty M** (2011) Testing the ownership society: Ownership and voting in Britain. *Electoral Studies* **30**(4), 784–94.
- Imai K, King G and Velasco Rivera C** (2020) Do nonpartisan programmatic policies have partisan electoral effects? Evidence from two large-scale experiments. *The Journal of Politics* **82**(2), 714–30.
- Jacobs LR and Mettler S** (2018) When and how new policy creates new politics: Examining the feedback effects of the affordable care act on public opinion. *Perspectives on Politics* **16**(2), 345–63.
- Kumar T** (2021) The housing quality, income, and human capital effects of subsidized homes in urban India. *Journal of Development Economics* **153**, 102738.
- Kumar T** (2022) Home price subsidies increase local-level political participation in Urban India. *The Journal of Politics* **84**(2), 831–45.
- Labonne J** (2013) The local electoral impacts of conditional cash transfers: Evidence from a field experiment. *Journal of Development Economics* **104**, 73–88.
- Larsen MV et al.** (2019) When do citizens respond politically to the local economy? Evidence from registry data on local housing markets. *American Political Science Review* **113**(2), 499–516.
- Lin W** (2013) Agnostic notes on regression adjustments to experimental data: Reexamining freedman’s critique. *The Annals of Applied Statistics* **7**(1), 295–318.
- Lü X** (2014) Social policy and regime legitimacy: The effects of education reform in China. *American Political Science Review* **108**(2), 423–37.
- Manacorda M, Miguel E and Vigorito A** (2011) Government transfers and political support. *American Economic Journal: Applied Economics* **3**(3), 1–28.
- Marosi R** (2017) A failed vision. LA Times, Nov. 26. Available from <https://www.latimes.com/projects/la-me-mexico-housing/>.
- Mettler S** (2011) *The Submerged State: How Invisible Government Policies Undermine American Democracy*. Chicago: The University of Chicago Press.
- Polga-Hecimovich J** (2016) The Best Intentions? Politicization in the Gran Misión Vivienda Venezuela. University of Pittsburgh’s Center for Latin American Studies. Available from <https://tinyurl.com/bdcnde4f>.
- Pop-Eleches C and Pop-Eleges G** (2012) Targeted government spending and political preferences. *Quarterly Journal of Political Science* **7**(3), 285–320.
- Soss J** (1999) Lessons of welfare: Policy design, political learning, and political action. *The American Political Science Review* **93**(2), 363–80.
- Studlar DT, McAllister I and Ascuí A** (1990) Privatization and the British electorate: Microeconomic policies, macroeconomic evaluations, and party support. *American Journal of Political Science* **34**(4), 1077–1101.
- Weitz-Shapiro R** (2014) *Curbing Clientelism in Argentina: Politics, Poverty, and Social Policy*. Cambridge: Cambridge University Press.
- Yoder J** (2020) Does property ownership lead to participation in local politics? Evidence from property records and meeting minutes. *American Political Science Review* **114**(4), 1213–29.
- Zucco C** (2013) When payouts pay off: Conditional cash-transfers, clientelism, and voting behavior. *American Journal of Political Science* **47**(3), 810–22.
- Zucco C, Batista M and Power TJ** (2019) Measuring portfolio salience using the Bradley–Terry model: An illustration with data from Brazil. *Research & Politics* **6**(1), 2053168019832089.