

# *Vulnerability, fear of discrimination and clientelism:* Organizer identity and the backfire of solidarity\*

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## **Abstract**

Fear of discrimination can distort the negative effect of vulnerability-reducing interventions on clientelism. Distortions should be greatest in poorer communities, and weakest in incumbent-supporting areas. We study the opposition-linked *Alimentación Solidaria* soup-kitchens in Caracas at the peak of Venezuela's humanitarian and democratic crises. Turnout rates were more resilient in kitchen-adjacent voting centers after the opposition's electoral boycott. This apparent backfire was strongest in poorer areas, and weakest in regime-supporting areas. Results are contingent to areas that experienced past electoral irregularities due to regime local mobilization efforts, and cannot be explained by concurrent redistribution initiatives.

**Keywords:** Clientelism, Vulnerability, Retribution, Venezuela

**JEL Codes:** D72, H12, H42, H53

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# 1 Introduction

An important reason why elections can fail to deliver the public goods and services necessary for development is that citizens and politicians often engage in clientelism - the exchange of votes for the transfer of private goods (Keefer, 2007; Kitschelt and Wilkinson, 2007; Carroll and Lyne, 2007; Keefer and Vlaicu, 2008; Stokes, 2011). Citizens' exposure to clientelistic arrangements is plausibly greatest at higher levels of deprivation and dependence (Dixit and Londregan, 1996; Lizzeri and Persico, 2001). From this perspective, independent interventions that ameliorate the material conditions of beneficiaries without political conditionalities should make treated individuals and communities more resilient to incumbents' clientelistic demands (Bobonis et al., 2022). This expectation, however, is built on the assumption that these interventions are void of political meaning in beneficiary communities. Indeed, clientelistic incumbents are likely to disapprove of interventions that moderate dependence, especially if their organizers are affiliated with the opposition. If citizens fear enhanced discrimination of opponents in treated communities, such treatments may induce incentives to comply with observable clientelistic demands in order to signal individual acquiescence.

In this paper, we argue that fear of discrimination can distort the expected relationship between vulnerability-reducing interventions and clientelism. We start by providing a conceptual framework to incorporate the idea of fear discrimination into a standard model of clientelism. We hypothesize that, by inducing fears of discrimination, vulnerability-reducing treatments may actually lead to an increase in compliance with clientelistic demands in beneficiary communities. This effect should be strongest in relatively vulnerable communities, as the material implications of punishment are greatest for those most deprived. Conversely, effects should be milder in communities with strong regime support, as supporters' preferences are better aligned with the regime's clientelistic demands, and their compliance is unlikely to be affected by fears of discrimination.

We test these three hypotheses in the context of the *Alimenta la Solidaridad* (ALS) kitchens

in the Caracas Capital District of Venezuela. At the peak of the country's complex humanitarian crisis (2017-2018), these kitchens provided consequential nutrition aid to vulnerable children in neighboring areas. While kitchen organizers did not ask for -and would have been unable to enforce- political support as a condition to benefit from kitchens, the main figure head and many local organizers for the initiative were recognized as members of the opposition. On the regime's part, President Maduro's flagship initiative to address the food crisis was to implement the *Comités Locales de Abastecimiento y Producción* (CLAP). This program distributed imported food staples in household-size boxes through local and highly politicized committees. Importantly, access to the CLAP food boxes was linked to the *Carnet de la Patria* (CdIP), an individual card used for streamlining access to government transfers. As the political crisis worsened, the opposition decided to boycott the 2017 local elections and the 2018 presidential elections. The Maduro regime linked the CdIP to electoral participation, hoping to stimulate higher levels of (individually observable) turnout to legitimize his re-election and the capture of local governments.

We leverage a difference-in-differences strategy to assess the effect of AIS kitchens on electoral turnout rates of neighboring voting centers after the opposition's electoral boycott. The standard theory of vulnerability and clientelism would predict that turnout drops should have been greater in kitchen-adjacent areas. However, consistent with the view that vulnerability-reducing interventions may induce fears of discrimination, we find that the opposition's boycott strategy was relatively unsuccessful in treated areas. Similarly as predicted by this "fear-based" perspective, we find that the positive effects of kitchens on turnout rates are strongest in poorer and opposition-affiliated areas.<sup>1</sup> One potential concern is that the Maduro regime may have reacted to the presence of AIS kitchens by enhancing the reach of the CdIP distribution network, and that our estimates are driven by a corresponding reciprocity to the regime (Finan and Schechter, 2012; Ravanilla et al., 2021; Chang, 2016). However, while we find that the reach of CdIPs induces

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<sup>1</sup>These results remain significant after considering the possibility of spatial correlation in the data.

an independent positive effect of on turnout rates, the estimated effects of AIS kitchens on participation in boycotted elections remain unaffected after controlling for the prevalence of the CdIP. Finally, we provide evidence directly testing the fear of discrimination theory, as we find that the counter intuitive effects of kitchens concentrate in areas in which the opposition had registered electoral irregularities (i.e. violence and propaganda efforts by the regime on election day) during prior electoral events.

This paper expands the empirical literature on clientelism and its connection to economic vulnerability (Bobonis et al., 2022; Beg, 2021). Our findings suggest that the fact that material vulnerability induces clientelism does not mean that interventions aimed at reducing citizens' vulnerabilities will necessarily reduce clientelism. This is especially important whenever the political choices of neighbors that do not benefit directly from the treatment may also be influenced. The literature on clientelism and vote-buying has long identified concerns over the external validity of experimental studies on the topic (Gallego and Wantchekon, 2012). Our findings suggest that isolating the pure effect of vulnerability through experimental methods may, by design, abstract from a key dimension of most vulnerability-reducing treatments: How beneficiary communities interpret the political meaning and implications of these treatments according to the identity of those intervening in their neighborhoods. This consideration may well be prescient for other interventions aimed at attenuating clientelism.<sup>2</sup> Access to public resources and policy capture determines incumbents' relative advantage in sustaining clientelistic relationships (Anderson et al., 2015; Mookherjee and Bardhan, 2012).<sup>3</sup> For this reason, the empirical evidence on interventions aimed at eroding clientelism often finds negative effects on the support for incumbents (Larreguy, 2013; Fergusson et al., 2018). The fact that incumbents

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<sup>2</sup>The empirical literature has found consistent evidence that information, education campaigns and public deliberation can attenuate the demand-side of clientelism (Hicken et al., 2018; Banerjee et al., 2011; Wantchekon, 2003; Fujiwara and Wantchekon, 2013). Civil-service reform and other regulations improving public management have been found to be effective in attenuating the supply-side of clientelism (Folke et al., 2011).

<sup>3</sup>In terms of scope, the conclusions from our analysis may not be prescient for circumstances in which non-incumbents are relatively capable of engaging in vote-buying (Vicente, 2014) or when rivaling electoral machines compete against each-other through vote-buying (Ravanilla et al., 2021).

benefit from clientelism should motivate opponents to engage in clientelism-reducing interventions. However, if beneficiary communities fear that incumbents will respond by engaging in further discrimination efforts, then such interventions may inadvertently induce further compliance with clientelistic demands.

We argue that this is what happened in our empirical setting. AIS kitchens were a humanitarian intervention aimed at reducing the vulnerability of beneficiary households. It was organized by opponents to an incumbent suggesting that access to consequential private transfers could become contingent on individually observable political behavior. Finding that local efforts by opposition figures aiming to ameliorate the living standards of their communities backfired against their national political strategy underscores the difficulty of intervening in a polarized environment without eliciting political reactions when organizers' identities are publicly known. We provide a simple theoretical framework that connects the presence of this kind of interventions to an increase in the fear of discrimination, and this approach yields predictions consistent with our findings.

The paper continues as follows: Section 2 outlines our conceptual framework. Section 3 introduces the empirical setting of the AIS Kitchens during Venezuela's 2017-2018 economic and political crises. Section 4 presents our data, empirical strategies and results. Section 5 concludes.

## **2 Fear of discrimination in a standard model of clientelism**

In this section, we provide a theoretical foundation for the idea that whenever vulnerability-reduction interventions (such as the kitchens discussed in our empirical section below) induce fears of future clientelistic discrimination, such interventions may inadvertently induce further clientelism in beneficiary communities. First, we blend the decreasing-returns to consumption framework with uncertainty in clientelistic discrimination to show

that citizens may become more clientelistic if they associate the presence of “kitchens”<sup>4</sup> with a higher probability of discrimination of those that do not comply with incumbents’ clientelistic demands. This section will allow us to derive the three “fear-based” hypotheses that we evaluate in the empirical section.

As discussed in the introduction, individuals may refrain from pursuing their preferred political behavior if incumbents condition the transfer of private goods to doing so. The main theoretical argument for the connection between clientelism and economic vulnerability leverages the idea of decreasing returns to the consumption of private goods: Impoverished citizens are vulnerable to clientelism because government transfers are more consequential for their wellbeing than is the case for their richer neighbors. Our main contribution in this section is to expand the standard framework by considering the idea that clientelistic discrimination is uncertain. Chiefly, we assume that while complying with incumbents’ clientelistic demands guarantees access to their transfers in the future, such benefits will be lost probabilistically whenever citizens do not comply with demands. Even when behavior is observable, incumbents may be unable to sharply enforce their conditions *ex-post*, and may need (or decide) to forbear non-compliers. In this context, while kitchens may improve the well-being of beneficiaries in the communities they serve, they may also affect the intensity of incumbents’ local discrimination efforts. If neighbors’ perceived probability of discrimination grows in the presence of a kitchen, then kitchens can end up influencing citizen behavior in the direction of clientelism. This is especially true in poorer communities, where the importance of losing access to private transfers from the incumbent is greatest. Similarly, this should be relatively important in regime-opposing areas, where the number of individuals that would prefer to act against the incumbent’s demand in the absence of clientelism is greatest.

Let’s assume that neighbor  $i$  can be either a regime opponent or a supporter. Neighbors get a value of acting against clientelistic demands of  $P_i \in \{0, P\}$  - that is, only op-

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<sup>4</sup>During the rest of this section, we use the word “kitchens” to indicate “vulnerability-reducing interventions”.

ponents get a political rent of  $P > 0$  if they act against the incumbent. Neighbor  $i$  has an income level of  $y_i > 0$ , which can be complemented with a transfer  $T > 0$  from the incumbent. While  $T$  will accrue with certainty under compliance with an observable clientelistic demand from the incumbent, there is a probability  $\alpha \in [0, 1]$  of losing access to  $T$  due to political discrimination for those that do not comply. In this context, the value that individual  $i$  derives from complying with the incumbent's clientelistic demands is:

$$V_i^c = [y_i + T]^\beta \quad (1)$$

Where  $\beta \in (0, 1)$  is a parameter that captures the decreasing returns to private consumption. Importantly, the value of rejecting the incumbent's clientelistic demands is:

$$V_i^d = [y_i + (1 - \alpha)T]^\beta + P_i \quad (2)$$

Individual  $i$  will choose to reject the clientelistic demand if:

$$V_i^d \geq V_i^c \quad \rightarrow \quad P_i \geq \underbrace{[y_i + T]^\beta - [y_i + (1 - \alpha)T]^\beta}_{Z_i} \quad (3)$$

Since  $P_i = 0$  for regime supporters, they will always comply with the incumbents' clientelistic demands. In the case of opponents ( $P_i = P$ ), the decision will depend on their specific income levels and on their expectations about the probability of being discriminated against if they decide not to comply with the incumbent's demands. Importantly, characteristics that make  $Z_i$  to become greater will influence individuals towards compliance. We can immediately derive four key analytic results:

1. *Higher transfers will induce opponents to engage in clientelism:*

$$\frac{\partial Z_i}{\partial T} = \beta(y_i + T)^{\beta-1} - \beta(y_i + (1 - \alpha)T)^{\beta-1}(1 - \alpha) \geq 0 \quad (4)$$

2. *Poorer opponents are more vulnerable to clientelism:*

$$\frac{\partial Z_i}{\partial y_i} = \beta(y_i + T)^{\beta-1} - \beta(y_i + (1 - \alpha)T)^{\beta-1} \leq 0 \quad (5)$$

3. *Higher perceived probabilities of discrimination induce opponents to engage in clientelism:*

$$\frac{\partial Z_i}{\partial \alpha} = \beta(y_i + (1 - \alpha)T)^{\beta-1}T \geq 0 \quad (6)$$

4. *Higher perceived probabilities of discrimination make poorer opponents even more vulnerable to clientelism:*

$$\frac{\partial^2 Z_i}{\partial \alpha \partial y_i} = -\beta(1 - \beta)(y_i + (1 - \alpha)T)^{\beta-1}T \leq 0 \quad (7)$$

While kitchens attenuate the economic needs of the set of neighbors that benefit from it, they can also affect the perceived probability of discrimination  $\alpha$  for both beneficiaries and non-beneficiaries. Kitchen neighbors may believe that incumbents will be more likely to enforce compliance as retribution against communities working to become less economically dependent on them. Furthermore, neighbors may fear the punishment of non-compliers if kitchens are understood as linked to the opposition. Building on the view that kitchens may induce fear of enhanced discrimination, we derive three hypotheses for our empirical tests:

**Hypothesis 1:** “Opposition-linked kitchens will induce higher electoral turnout rates in elections boycotted by the opposition”. This hypothesis comes from equation 6.

**Hypothesis 2:** “The effect of opposition-linked kitchens on turnout rates will be stronger in poorer communities”. This hypothesis comes from equation 7

**Hypothesis 3:** “The effect of opposition-linked kitchens on turnout rates will be weaker in communities with high levels of regime support”. This hypothesis comes from the fact that  $V_i^c > V_i^d$  for regime supporters regardless of their income levels, perceived proba-



bility of discrimination or transfer values. Hence, the effects of kitchens are bound to be strongest in opposition-leaning communities.

In the Appendix, we provide two additional theoretical arguments. First, as our hypotheses rely on citizens' expectation that the probability of discrimination of non-compliers grows in the presence of kitchens, we discuss potential reasons for regimes to respond to such interventions with further investments in a costly discrimination infrastructure. Second, we consider the fact that while not all citizens neighboring a kitchen may benefit from it, all of them may be exposed to (the fear of) higher discrimination efforts. Leveraging further simplifying assumptions, we provide conditions at which kitchens' net effects either attenuate or exacerbate the aggregate clientelistic behavior of a community.

### 3 Empirical Context

#### 3.1 Venezuela's economic crisis and Maduro's policy response.

Due to a combination of domestic distortions, macroeconomic imbalances and an external shock to oil prices, Venezuela's GDP contracted by over 70% between 2013 and 2019.<sup>5</sup> Maduro's administration failed to implement necessary reforms to an economic policy landscape characterized by price and foreign-exchange controls and the monetization of the fiscal deficit. As a consequence, the country entered into hyperinflation during 2017 and 2018.<sup>6</sup> As 90% of Venezuelan households fell under the income poverty line, academic studies found that 65% of Venezuelans lost weight involuntarily in 2017.<sup>7</sup> The government's main policy response to the crisis was the establishment of the *Comités Locales de Abastecimiento y Producción* (CLAP), a subsidized food program leveraging community

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<sup>5</sup><https://publications.iadb.org/publications/english/document/A-Look-to-the-Future-for-Venezuela.pdf>

<sup>6</sup><https://www.piiie.com/sites/default/files/documents/pb19-13.pdf>

<sup>7</sup>[https://assets.website-files.com/5d14c6a5c4ad42a4e794d0f7/5eb9bfda4ed90d3d4e8e08f8\\_encovi-2017.pdf](https://assets.website-files.com/5d14c6a5c4ad42a4e794d0f7/5eb9bfda4ed90d3d4e8e08f8_encovi-2017.pdf)

organizations for house-to-house distribution of imported food items. The CLAP system, established in April 2016, was mired with corruption controversies due to accusations of overpriced import prices and low food quality.<sup>8</sup> By December 2017, 42% of Venezuelans declared that CLAPs constituted either their main source or an important source of food for their households.<sup>9</sup> In parallel, the Maduro administration launched the *Carnet de la Patria* (CdIP) in December 2016. This personalized and digital ID card aimed at streamlining the access to the CLAP and other government transfers. According to the Government, over 50% of Venezuelans had already registered for the CdIP by the end of 2017.<sup>10</sup>

### 3.2 Turnout for food during opposition boycotts

By late 2015, public support for Maduro's government had decayed along with Venezuelans' living standards.<sup>11</sup> In this environment, the December parliamentary elections resulted in a decisive defeat for the government which granted a legislative supermajority to the opposition.<sup>12</sup> Maduro leveraged its political control over the Judiciary and over the Electoral Council in 2016 to prevent this supermajority to be sworn in, to rule any bill passed in the legislature as unconstitutional, and to prevent the opposition from calling a recall referendum on the president.<sup>13</sup> Moreover, after heavily repressing massive opposition demonstrations in 2017, Maduro called for an election to create a Constituent Assembly to assume supraconstitutional powers over the legislature. The opposition decided to boycott these elections, which were held in July 2017.

Maduro's administration succeeded that of Hugo Chávez, who passed in 2013. *Chavismo* had a long history of individual retribution against political opponents, as it had

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<sup>8</sup><https://www.reuters.com/article/us-venezuela-corruption-food/u-s-colombian-probe-targets-venezuela-food-import-program-idUSKBN1HQ3AA>

<sup>9</sup><https://transparenciave.org/project/los-clap-la-dominacion-se-entrega-puerta-puerta/>

<sup>10</sup><https://www.bbc.com/mundo/noticias-america-latina-45182511>

<sup>11</sup><https://www.elmundo.es/internacional/2015/08/28/55dff97d22601db70e8b456d.html>

<sup>12</sup>[https://www.bbc.com/mundo/noticias/2015/12/151208\\_venezuela\\_oposicion\\_mud\\_mayoria\\_dos\\_tercios\\_az](https://www.bbc.com/mundo/noticias/2015/12/151208_venezuela_oposicion_mud_mayoria_dos_tercios_az)

<sup>13</sup><https://www.bbc.com/news/world-latin-america-37724322>

leveraged electoral data to discriminate against petitioners for a recall referendum against Chávez in 2003 (Hsieh et al., 2011). In an attempt to induce a higher turnout in Chavista primaries before the 2015 legislative elections, Maduro pressured public employees and supporters by arguing that “we know who votes and who doesn’t”, and public sector workers denounced having their superiors check whether their fingers had characteristic finger ink mark that proves whether an individual had already voted.<sup>14</sup> After losing the parliamentary election, Maduro appeared in national TV saying that he was “doubting whether to build housing units, because I asked for your vote and you did not give it to me”.<sup>15</sup> As the opposition boycotted the Constituent Assembly elections of July 2017, higher turnout rates were important for the legitimacy of the outcome.<sup>16</sup> Again, the government threatened public sector employees and supporters: “you either vote, or you’re out!”.<sup>17</sup> Indeed, public sector workers denounced being fired from their jobs because they did not turn out.<sup>18</sup>

Both the opposition and neighboring countries rejected the rollout of the Constituent Assembly,<sup>19</sup> considering it as the first clear a break of Venezuela’s constitutional and democratic order.<sup>20</sup> Still, given high support for the opposition in opinion polls, its leaders decided to participate in regional elections to be held in October 2017.<sup>21</sup> Despite a polling advantage of over 20pp, the opposition lost the majority of State contests and the national vote by 10pp. The opposition denounced that there had been fraud and did not recognize the results.<sup>22</sup> Moreover, they decided to boycott the municipal elections of De-

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<sup>14</sup><https://www.elmundo.es/internacional/2015/06/29/55919c72268e3edd2e8b4588.html>

<sup>15</sup><https://www.youtube.com/watch?v=cJiDXBJI7HI>

<sup>16</sup><https://www.reuters.com/article/idUSKBN1AE08P>

<sup>17</sup><https://www.univision.com/noticias/america-latina/o-votan-o-estan-botados-la-amenaza-del-chavismo-para-que-los-funcionarios-apoyen-la-constituyente-de-maduro>

<sup>18</sup><https://www.infobae.com/america/venezuela/2017/08/04/la-dictadura-de-nicolas-maduro-castiga-a-los-empleados-publicos-que-no-votaron-en-la-constituyente-me-echaron-como-a-una-perra/>

<sup>19</sup><https://www.washingtonpost.com/news/monkey-cage/wp/2017/08/01/venezuelas-dubious-new-constituent-assembly-explained/>

<sup>20</sup><https://www.cancilleria.gov.co/newsroom/news/declaracion-lima-8-agosto-2017>

<sup>21</sup>[https://es.wikipedia.org/wiki/Elecciones\\_regionales\\_de\\_Venezuela\\_de\\_2017#/media/Archivo:2017\\_Venezuelan\\_regional\\_election\\_polls.png](https://es.wikipedia.org/wiki/Elecciones_regionales_de_Venezuela_de_2017#/media/Archivo:2017_Venezuelan_regional_election_polls.png)

<sup>22</sup><https://efectococuyo.com/politica/la-mud-no-reconocera-ninguno-de-los-resultados-de-las-elecciones-regionales-del-15oct/>

ember 2017.<sup>23</sup> Now again, Maduro was interested in stimulating a high turnout rate to legitimize his control over municipal governments. However, as opposed to 2015, a large portion of the population was now registered in the centralized CdIP system for their access to the CLAP subsidized food boxes. There were wide-spread reports of coercion to vote using the CdIP.<sup>24</sup> Indeed, Maduro and other Chavista leaders called for people to turn out to vote using their CdIP.<sup>25</sup> In Caracas, voters had to verify their CdIP in Chavista booths (“*Puntos Rojos*”) on their way to their voting centers.<sup>26 27</sup> On election day, the former mayor of Caracas and main spokesman for the Chavista campaign said that those that voted with the CdIP would receive the “gift” that President Maduro had recently offered in a nationally televised address.<sup>28</sup> Similar dynamics surrounded the May 2018 presidential election, which the opposition also decided to boycott after negotiations over electoral guarantees broke down.<sup>29</sup> The Government promised special transfers through the CdIP to those that used it to vote. Chavista booths to validate the CdIP sprung back up again in the vicinity of voting centers.<sup>30 31</sup> These patterns were especially marked through Caracas, where “*Puntos Rojos*” surrounded some of the largest voting centers in the Country.<sup>32 33</sup>

In sum, in a period of high economic vulnerability and low popularity, the Govern-

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<sup>23</sup><https://www.france24.com/es/20171031-venezuela-oposicion-elecciones-municipales-maduro>

<sup>24</sup><https://efectococuyo.com/politica/sin-testigos-cerca-de-45-de-las-mesas-de-votacion-segun-red-de-observacion-electoral-10d/>

<sup>25</sup><https://efectococuyo.com/politica/tareck-el-aissami-insta-a-electores-a-registrar-su-voto-con-el-carnet-de-la-patria/>

<sup>26</sup><https://efectococuyo.com/politica/colas-para-verificar-el-carnet-de-la-patria-son-mas-largas-que-para-votar-en-caracas/>

<sup>27</sup><https://efectococuyo.com/politica/con-ausentismo-y-puntos-rojos-abren-centros-de-votacion-en-candelaria/>

<sup>28</sup><https://efectococuyo.com/politica/jorge-rodriguez-confirma-promesa-de-regalo-a-quienes-registraron-su-voto-con-carnet-de-la-patria/>

<sup>29</sup><https://apnews.com/article/a8ac3f4c869e42f48f88965bbb52c98b>

<sup>30</sup><https://efectococuyo.com/politica/irregularidades-y-poca-participacion-marcan-primeras-6-horas-de-jornada-electoral-20may/>

<sup>31</sup><https://www.tenemosnoticias.com/noticia/fotos-vacos-20may-estn-256025/747790>

<sup>32</sup><https://efectococuyo.com/politica/con-pocos-votantes-empezaron-las-elecciones-presidenciales-en-el-municipio-libertador-fotos/>

<sup>33</sup><https://venezuelaaldia.com/2018/05/20/5y-las-garantias-centro-electoral-de-petare-escanean-carnet-de-la-patria-y-el-cne-ni-pendiente/>

ment confronted the opposition's boycott strategy by leveraging the *Carnet de la Patria* to condition the guaranteed access to the CLAP subsidized food boxes and other transfers to an observable political action: Turning out to vote.

### 3.3 **Alimenta la Solidaridad**

*Alimenta la Solidaridad* (AIS) is a non-profit organization founded in 2016 with the purpose of enabling the food intake of young children in communities facing the brunt of the economic crisis.<sup>34</sup> Their initial efforts concentrated in the Capital District of Caracas. Between July 2016 and September 2017, AIS had already opened 10 community kitchens that provided one lunch per day from Monday to Friday to 1,350 children. According to the AIS, each lunch provided 40% of the required caloric intake for children aged 0-12. Each kitchen is operated by volunteers from the community - mostly mothers of beneficiary children. The organization is responsible for providing supplies while the community is responsible for selecting the children, preparing the daily meals, and cleaning the cooking and eating spaces. Therefore, the organization's model is said to be based on co-responsibility and community organizing. According to AIS, the location selection for these initial 10 kitchens was not made randomly, but was based on the demands from communities across the Libertador municipality. In this sense, several meetings between AIS and the community need to be held before the opening of a kitchen in order to test the commitment and organization of the community. A team of nutritionists collects the anthropometric measures of the children to assess their levels of risk of malnutrition at the start of each kitchen initiative.

AIS did not condition access to kitchen benefits according to parents' political stance in general, or to their turnout decision during boycotted elections in particular.<sup>35</sup> How-

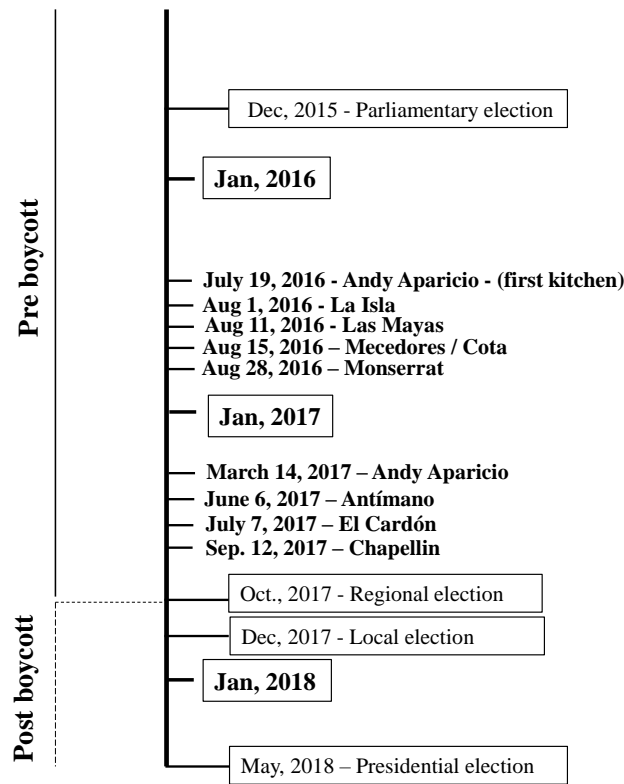
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<sup>34</sup><https://alimentalasolidaridad.org/en/home/>

<sup>35</sup>Even in the event that AIS was trying to influence turnout choices, they would have lacked individual level information about electoral participation necessary to enforce such condition, which was available to the government.

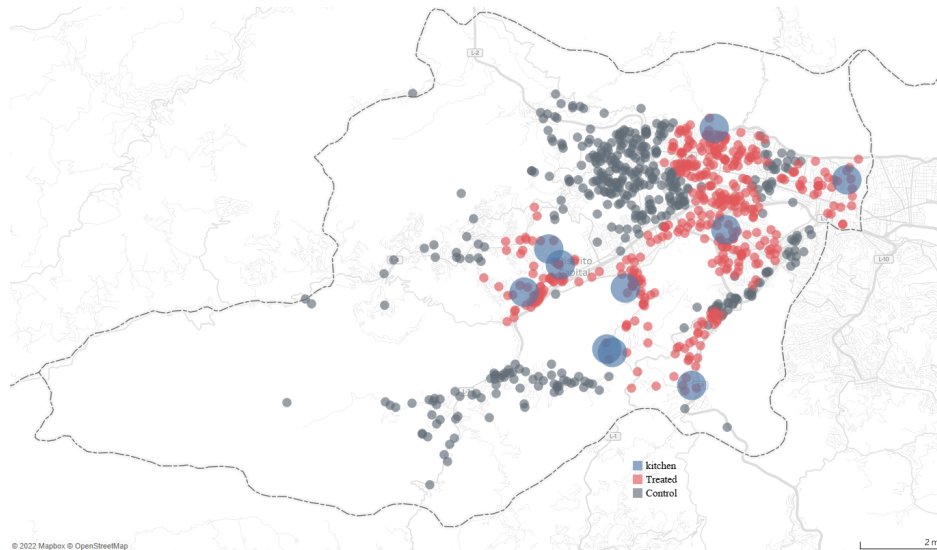
ever, the organization has clear links to Venezuela’s political opposition. Roberto Patiño, AIS’ founding director, had been a renowned figure in opposition politics for almost a decade by 2017. After spear-heading university student efforts against Chávez’s political reforms in the late-2000s, he led the GOTV campaigns for young voters in Henrique Capriles’ Presidential bids against Chávez and Maduro in 2012 and 2013. He later became a member of one of the main opposition parties in the country (“*Primero Justicia*”), and actively participated in party local organizing and mobilization activities in the Capital District of Caracas. Figure 1 provides a timeline for the opening of the first 10 kitchens before the opposition’s 2017 and 2018 boycotts. Figure 2 shows the spatial distribution of kitchens and voting centers within the Capital District of Caracas.

Figure 1: Timeline of kitchen openings and elections



Notes: Figure provides a timeline of the opening of AIS Kitchens in 2016 and 2017 and the different elections between 2015 and 2018.

Figure 2: Spatial distribution of kitchens and voting centers



Notes: Figure provides a map of the Capital District of Caracas, identifying the location of the 10 AIS kitchens and each voting center in the district. Voting centers are colored as red or grey according to whether they are at a distance to AIS kitchen that is below that of the median center or not.

## 4 Empirical analysis

### 4.1 Data

In order to estimate the effects of kitchens on communities' electoral turnout after the opposition's 2017 boycott, we combine electoral data at the voting center level from five different contests (the presidential elections of 2012, 2013 and 2018, the Parliamentary election of 2015 and the municipal elections of late 2017) with information about the location of the *Alimenta la Solidaridad* kitchens in the Capital District of Caracas.<sup>36</sup> Furthermore, we leverage complementary sources to assess poverty levels and the reach of the *Carnet de la Patria* in each voting center.

We use electoral data from the *Consejo Nacional Electoral (CNE)* to compute the turnout

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<sup>36</sup>Information about the regional elections in October 2017 is missing because the Capital District does not elect a governor.

rate, our main outcome variable, at the voting center level. *CNE* is the authority in charge of running elections at both national and local levels. Presidential elections are held every six years, while Parliamentary elections are held every five years and local elections are held every four years. All Venezuelans over the age of 18 may sign up as voters at *CNE* before registry deadlines prior to each election. We measure turnout as the ratio of the total valid votes in voting center  $i$  in election  $t$  to the total number of people registered voters.<sup>37</sup>

We construct our treatment variables leveraging geo-locations for 858 voting centers in the Capital District of Caracas and for 10 *Alimenta la Solidaridad* kitchens. We use Google's API to compute the minimum walking distance (in kms) from each voting center to its closest kitchen. In our main analyses, we focus on three complementary treatment measures. First, we mark voting centers as "treated" if their distance to the closest kitchen is below that of the median center (3.3 km). In the second variant, we mark voting centers as treated if their distance to the closest kitchen is under the 25th percentile (2.1 km), and as control if the closest kitchen is beyond the 75th percentile (4.9 km).<sup>38</sup> Finally, we take the inverse natural logarithm of the distance between a voting center and its closest kitchen as a continuous measure of the treatment.

We use two pre-treatment variables at the voting center level as our main controls of interest. First, we compute the percentage of Chavista votes in each center at the first election of our sample as our baseline measure of regime support. Second, we leverage a proxy for income poverty at the voting center level as our measure of baseline vulnerability.<sup>39</sup> Finally, we proxy for the baseline reach of the CLAP subsidized food boxes with data on the share of voters in each center that were part of three registry waves for the

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<sup>37</sup>We focus on valid votes to guarantee comparability across elections, given that our data lacks information on the small margin of null votes in most elections during our period of analysis.

<sup>38</sup>We exclude voting centers at intermediate distances from analyses leveraging this definition.

<sup>39</sup>This measure is built leveraging granular data from the 2011 population census and other sources to develop a highly localized poverty prediction model, which allows users to collect information that is representative for the vicinity of each voting center. We thank ANOVA Policy Research for sharing these predictions with us.



*Carnet de la Patria* between mid-2016 and late-2017.<sup>40</sup> Table A.1 provides key summary statistics for all these variables.

## 4.2 Empirical Strategy

Our exercise aims to assess how proximity to *Alimenta la Solidaridad* kitchens affected the electoral turnout for voting centers in the Capital District of Caracas in the 2017 municipal elections and the 2018 presidential elections. The fact that kitchens were not assigned randomly across the municipality poses two key concerns. First, kitchens may have been placed in the vicinity of voting centers with structurally different levels of political participation. The natural approach to address this concern is to pursue a difference-in-differences strategy that associates centers' proximity to kitchens with the change in turnout between post-boycott elections and previous ones.

A second concern is that kitchens may be placed in areas with particular characteristics that affected how participation changed after the opposition's boycott. This concern is worrisome for baseline economic and political confounders. Kitchens were trying to serve poor communities that were more vulnerable to the regime's clientelistic demands. Similarly, kitchens were opened leveraging organizers' opposition networks, and baseline opposition strength may have led to higher compliance with the boycott strategy. Indeed Figure A.1 suggests that while centers in the vicinity of kitchens leaned in favor of the opposition, the relationship between poverty and kitchen proximity is not immediately clear. Table A.2 further explores these relationships through a cross-section linear regression of our three main definitions of kitchen proximity as a function of the poverty rate and baseline regime support. These results confirm the connection between kitchen presence and opposition strength, along with an imprecise positive correlation between

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<sup>40</sup>Individual CdIP membership data was extracted from documents published by the central government on three separate registry waves in April 2016, January 2017 and October 2017. Importantly, the first two waves were linked to the *Hogares de la Patria* program - the precursor of the CdIP. This data was then cross-referenced with the public Electoral Registry to calculate the share of registered voters in each center that were registered in the CdIP.

kitchen presence and poverty.

To address both empirical concerns, we perform difference-in-differences specifications that control for changes in turnout rates along baseline levels of poverty and regime support. We estimate the following regression specification:

$$T_{it} = \gamma_1 Post_t \times C_i + \gamma_2 Post_t \times R_i + \gamma_3 Post_t \times P_i + \phi_i + \phi_t + \epsilon_{it} \quad (8)$$

Where  $T_{it}$  is the turnout rate in voting center  $i$  in election  $t$ ,  $C_i$  marks the proximity to a kitchen for voting center  $i$ ,  $R_i$  is the standardized Regime's vote share in voting center  $i$  in the 2012 presidential elections,  $P_i$  marks the standardized Poverty rate around voting center  $i$ ,  $Post_t$  marks elections occurring after the opening of kitchens and the opposition's electoral boycott,  $\phi_i$  and  $\phi_t$  are voting center and election fixed effects, and  $\epsilon_{it}$  is a normal error term.  $\gamma_1$  is our coefficient of interest which, captures the degree to which the proximity to kitchens affects compliance with the government's clientelistic demands for electoral turnout in elections boycotted by the opposition, after controlling for baseline levels of poverty and regime support. Standard errors are calculated allowing for errors to cluster at the voting center level.

Estimates for  $\gamma_1$  will capture the causal effects of kitchen proximity on turnout rates under the identification assumption of parallel trends, which suggests that in the absence of kitchens, turnout in both proximate and distant voting centers would have evolved similarly after the opposition's boycott. To assess the plausibility of this assumption, we provide event study evidence that assesses whether turnout trends in proximate and distant centers were similar before 2017. Finally, in order to further assess the robustness of our results, we build alternative treatment definitions that iterate over different walking distance thresholds between each voting center and their closest kitchen.

### 4.3 Main results

Our main difference-in-differences results are shown in Table 1. This Table shows the estimated impact of kitchens on the post-boycott turnout rate leveraging the three main treatment definitions discussed above. Columns (1), (3) and (5) provide estimates without controlling for economic and political confounders, showing largely null effects of kitchens on post-boycott turnout. However, once we include controls for baseline levels of poverty and regime support, Columns (2), (4) and (6) show a consistent, yet unintuitive result. In Column (2), we show that centers under the median distance to kitchens observed an increase in voter turnout of 1.3 percentage points. Such an effect is about 10% of the standard deviation in turnout rates in boycotted elections. Columns (4) and (6) confirm estimated effects of a similar magnitude for the top-bottom quartile comparison and for a 1% increase in the proximity to a kitchen.

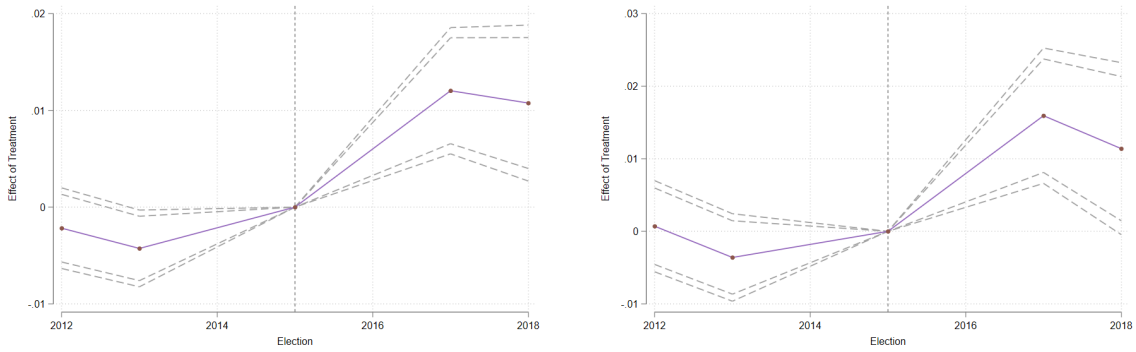
Figure 3 provides event-study results consistent with the assumption of parallel pre-treatment trends. Finally, Figure A.2 provides robustness estimates of  $\gamma_1$  for treatment definitions at increasing distances between voting centers and their closest kitchen. Beyond confirming the robustness of the results, we find that narrower thresholds yield larger (but relatively imprecise) estimates of the effects of kitchens, which is consistent with the view that the effect of kitchens tends to decay at larger distances. Taken together, this evidence contradicts the expectation that kitchens attenuated the clientelistic vulnerability of beneficiary communities, and supports the notion that kitchens may have enhanced communities' fear of discrimination in access to government transfers as a function individual participation in boycotted elections.

Table 1: Effects of proximity to community kitchens

Dependent variable: <i>Turnout</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
Treated $\times$ Post	-0.00954 (0.00727)	0.0135*** (0.00352)	-0.0174* (0.00958)	0.0146*** (0.00508)	0.00258 (0.00481)	0.00948*** (0.00234)
Regime Support $\times$ Post		0.0359*** (0.00448)		0.0332*** (0.00630)		0.0363*** (0.00450)
Poverty $\times$ Post		0.0610*** (0.00409)		0.0611*** (0.00575)		0.0603*** (0.00412)
Treatment Definition	Below Median	Below Median	Q1 v Q4	Q1 v Q4	-Log Distance	-Log Distance
Observations	4,290	4,285	2,145	2,140	4,285	4,285
R-squared	0.890	0.962	0.890	0.956	0.890	0.962
Election FE	Yes	Yes	Yes	Yes	Yes	Yes
Center FE	Yes	Yes	Yes	Yes	Yes	Yes

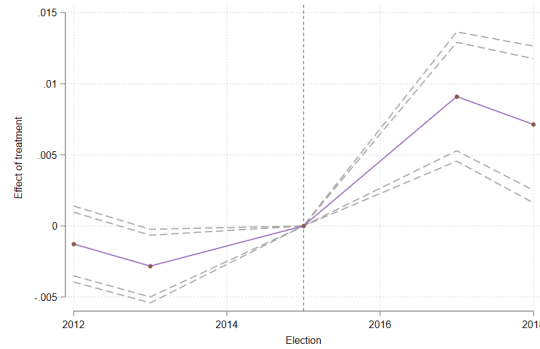
*Notes:* The table presents the estimates of specification described in equation (8) for three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). Columns (1), (3), and (5) provide estimates without controlling for baseline covariates. Columns (2), (4), and (6) provide estimates controlling for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative of the vicinity of each voting center. In all of our estimates, we include election and voting center fixed effects. Standard errors clustered at the voting center level in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Figure 3: Event studies per treatment definition



(a) Below Median

(b) Q1 v Q4



(c) -Log Distance

*Notes:* The figure presents event-study estimates for three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative of the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.

#### 4.4 Heterogeneities

The vulnerability and fear-based views yield contradictory predictions for how the effects of kitchens should change for areas with higher levels of poverty and regime support. If kitchens attenuate vulnerability, their negative effect on clientelism should be greatest in poorer areas. But if kitchens increase fear, their positive effects should be strongest

in relatively vulnerable areas. Similarly, if higher levels of regime support lead to less local sensibilities to clientelistic demands, then both theories would predict an attenuation of their main (and opposing) predictions. To assess the heterogeneity of the effects of kitchens across baseline poverty and regime support levels, we perform the following difference-in-differences specification:

$$\begin{aligned}
 T_{it} = & \gamma Post_t \times C_i + \alpha_1 Post_t \times R_i + \beta_1 Post_t \times C_i \times R_i + \\
 & \alpha_2 Post_t \times P_i + \beta_2 Post_t \times C_i \times P_i + \phi_i + \phi_t + \epsilon_{it}
 \end{aligned}
 \tag{9}$$

In this specification,  $\gamma$  stands for the effect of kitchens on turnout in boycotted elections for voting centers with average levels of baseline poverty and regime support. Importantly,  $\beta_1$  and  $\beta_2$  capture how this average effect changes in centers that show a one-standard deviation higher level of baseline regime support or poverty, respectively. As was the case above, we estimate standard errors allowing for the possibility of error clustering at the voting center level.

Table 2 provides estimates for  $\gamma$ ,  $\beta_1$  and  $\beta_2$  for each of our main treatment definitions. The first row confirms that the main effect of kitchens is to increase turnout in boycotted elections. The third row suggests that  $\beta_1$  is negative, which is consistent with the view that higher levels of regime support attenuate fear-based effects of kitchens. Finally, the fifth row shows positive estimates of  $\beta_2$ , suggesting that baseline vulnerability magnifies the fear-based considerations of treated communities.<sup>41</sup>

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<sup>41</sup>Table A.3 confirms that the main findings from Tables 1 and 2 remain significant after considering the possibility of spatial correlation in the data by estimating Conley-Robust standard errors. In unreported results, we show that the results are also significant if we cluster standard errors for all voting centers within the same Parish.

Table 2: Heterogeneity in estimates of the effects of Kitchens

	Dependent variable: <i>Turnout</i>		
	(1)	(2)	(3)
Treated $\times$ Post	0.0136*** (0.00343)	0.0219*** (0.00471)	0.0134*** (0.00228)
Regime Support $\times$ Post	0.0525*** (0.00593)	0.0567*** (0.00913)	0.0115 (0.00717)
Treated $\times$ Regime Support $\times$ Post	-0.0357*** (0.00844)	-0.0464*** (0.0117)	-0.0225*** (0.00631)
Poverty $\times$ Post	0.0517*** (0.00578)	0.0529*** (0.00867)	0.0745*** (0.00659)
Treated $\times$ Poverty $\times$ Post	0.0228*** (0.00784)	0.0239** (0.0108)	0.0123** (0.00600)
Treatment Definition	Below Median	Q1 v Q4	-Log Distance
Observations	4,285	2,140	4,285
R-squared	0.963	0.958	0.963
Election FE	Yes	Yes	Yes
Center FE	Yes	Yes	Yes

*Notes:* The table presents the estimates of the specification described in equation (9) for three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). We control and interact our treatments by the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. Standard errors clustered at the voting center level in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Figure 4 provides event-study estimates for the main effects of kitchens and its poverty and regime support heterogeneities considering centers below the median distance to kitchens as treated. The figure confirms parallel pre-treatment trends for the three results. Figures A.3 and A.5 replicate these exercises for the other two main treatment definitions and confirm parallel pre-treatment trends. Figure A.7 provides estimates for  $\gamma$ ,  $\beta_1$  and  $\beta_2$  at different treatment definitions that iterate over threshold distances to kitchens. As before, these results not only confirm robustness, but also suggest that there is spatial

decay in the effects of kitchens at different levels of baseline poverty and regime support.

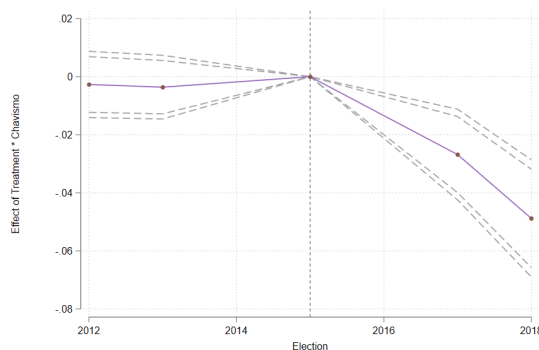
Figure 4: Event study for P50 treatment and interactions with Poverty and Chavismo



(a) Treatment



(b) Treatment  $\times$  Poverty



(c) Treatment  $\times$  Chavismo

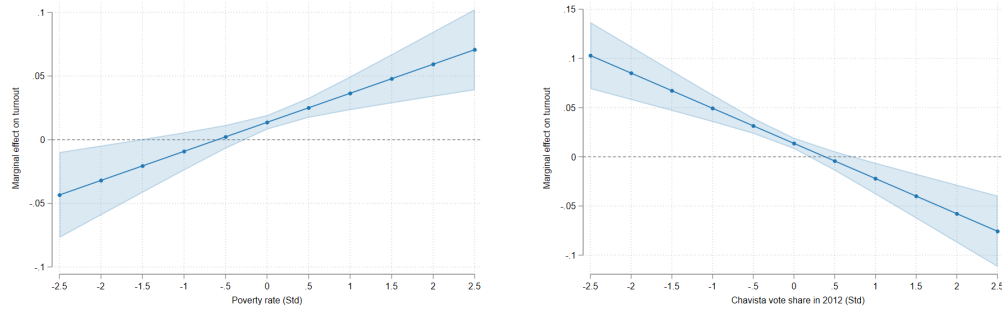
*Notes:* The figure presents event-study estimates for the Below Median treatment definition (treated if their distance to the closest kitchen is under 3.3 km). We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative of the vicinity of each voting center. In all of our estimates we include voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.

Finally, Figure 5 provides margin plots for the estimated effects of kitchen proximity (below median distance) at different baseline poverty and regime support levels. Beyond confirming that heterogeneities seem consistent with fear-based predictions, these figures show that the main vulnerability-based prediction of kitchens eroding the demand for clientelism are only observed in the richest and most regime-supporting centers in the



city. Figures A.4 and A.6 replicate this analysis for our two other treatment definitions, yielding similar conclusions.

Figure 5: Margin plots for P50 treatment effect along Poverty and Chavismo levels



(a) Poverty

(b) Chavismo

Notes: The figure presents margin plots for the estimated effects of kitchen proximity using the Below Median treatment definition (treated if their distance to the closest kitchen is under 3.3 km). We control for the percentage of Chavista vote in the 2012 presidential elections (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 percent confidence intervals that consider clustered standard errors at the voting center level are provided in shaded regions.

## 4.5 Explaining counterintuitive results: Regime distributive responses vs. Fear of discrimination

So far, we have documented robust evidence that the *Alimenta la Solidaridad* kitchens had a positive effect on compliance for the clientelistic electoral turnout demands of the regime during elections boycotted by the opposition in 2017 and 2018. These results contradict the expectation that kitchens should attenuate clientelistic behavior by decreasing the vulnerability of beneficiary communities. Two alternative theories could explain these counter intuitive patterns. First, if kitchens induced an effort by the regime to expand its distributive network, then communities neighboring kitchens may have responded clientelistically either in reciprocity or not to risk such additional transfers. Alternatively, as theorized above, kitchens may trigger fears of increased discrimination against those

that do not comply with clientelistic demands.<sup>42</sup>

In order to assess whether effects are explained by regime distributive responses, we leverage data on *Carnet de la Patria* registry drives at the voting center level between 2016 and 2017. This provides a measure of the local efforts to streamline access to government benefits by the regime during the period in which the *Alimenta la Solidaridad* kitchens were opening up. We take the total number of voters registered in the CDLP during these drives and divide it by the total number of voters in a given center. Figure A.8 does not show a clear correlation between voting centers' standardized CDLP prevalence and the proximity to a kitchen. Similarly, Table A.4 evaluates this correlation after controlling for baseline poverty and regime support levels, confirming that there is no precise correlation between the CDLP prevalence and our three main definitions for the proximity to kitchens. These results already suggest that CDLP is an unlikely confounder for the findings described above. Still, Table 3 shows results for our main and heterogeneity specifications adding the CDLP registry measure. Columns (1), (3) and (5) confirm that our estimates of the average effect of kitchens for our three definitions of kitchen proximity are robust to controlling for the local reach of the CDLP. Similarly, Columns (2), (4) and (6) show that the baseline poverty and regime support heterogeneities discussed above are also robust. These columns also show that the average effect of kitchens does not seem to change at different levels of CDLP prevalence (Fifth row). Interestingly, Columns (1), (3) and (5) point to an independent and positive effect of the CDLP prevalence on the electoral turnout of a voting center in elections boycotted by the opposition. Figure A.9 confirms parallel pre-treatment trends in the effect of CDLP prevalence on turnout. This finding is meaningful in itself, as it shows that after controlling for baseline confounders,

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<sup>42</sup>Another potential mechanism that could explain this direction in the average effect of kitchens is that kitchens may increase the psychological payoff from reciprocal clientelistic exchange (Chang, 2016). Similarly, if kitchens enable neighbors to engage in political behavior, then kitchens could induce further electoral turnout overall. Both these mechanisms, however, cannot explain why the effect of kitchens is weaker in regime supporting areas, as regime supporters should arguably experience stronger psychological payoffs if they feel alienated by opposition-affiliated interventions, or would simply be more likely to turnout to vote if kitchens enabled them to do so.

a stronger reach of CDLP benefits at baseline induces more clientelistic behavior. If the CDLP prevalence proxies for access to material benefits, then it should also attenuate the vulnerability of beneficiary communities. The fear of losing these benefits in the future -and the potential reciprocity to the regime- seem to outweigh the reduction of vulnerability in determining the net effects of the CDLP on clientelism.

Table 3: Difference-in-difference estimates considering CdIP prevalence

	Dependent variable: <i>Turnout</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Treated × Post	0.0131*** (0.00350)	0.0131*** (0.00341)	0.0140*** (0.00510)	0.0213*** (0.00471)	0.00922*** (0.00235)	0.0133*** (0.00227)
CdIP × Post	0.00387* (0.00220)	0.00840** (0.00330)	0.00474* (0.00256)	0.00572 (0.00374)	0.00392* (0.00220)	0.00158 (0.00333)
Chavismo × Post	0.0345*** (0.00447)	0.0508*** (0.00575)	0.0310*** (0.00635)	0.0546*** (0.00886)	0.0348*** (0.00449)	0.0111 (0.00783)
Poverty × Post	0.0613*** (0.00406)	0.0512*** (0.00567)	0.0613*** (0.00569)	0.0526*** (0.00849)	0.0605*** (0.00409)	0.0746*** (0.00664)
Treated × CdIP × Post		-0.00748 (0.00460)		-0.00148 (0.00522)		-0.00243 (0.00244)
Treated × Chavismo × Post		-0.0345*** (0.00856)		-0.0468*** (0.0119)		-0.0216*** (0.00651)
Treated × Poverty × Post		0.0235*** (0.00780)		0.0249** (0.0107)		0.0123** (0.00590)
Treatment Definition	Below Median		Q1 v Q4		-Log Distance	
Observations	4,285	4,285	2,140	2,140	4,285	4,285
R-squared	0.962	0.963	0.957	0.958	0.962	0.963
Election FE	Yes	Yes	Yes	Yes	Yes	Yes
Center FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table presents estimates of the specifications described in equations (8) and (9) with an added control/interaction for the CdIP prevalence for three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). In addition, we control and interact our treatments for the percentage of Chavista vote in the 2012 presidential elections (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. Standard errors clustered at the voting center level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

In order to test the fear of discrimination theory, we could leverage information about the reach of the regime’s local organization capacity during the 2017 and 2018 elections. For instance, we could evaluate whether a voting center had a “*Punto Rojo*” in its vicinity on election day. Sadly, this we do not have access to this information. Nevertheless, we do have access to information on Electoral “*Incidencias*” registered by the opposition during the 2013 presidential elections. “*Incidencias*” are irregularities registered by the opposition on election day through direct communication between the central campaign and its electoral witnesses in each voting center in the country. Witnesses registered different kinds of irregularities (i.e. violence, election-day propaganda, etc.) in some voting centers, while they reported no irregularities in other ones. Taking the existence of *incidencias* as a binary measure of the regime’s pre-treatment capacities to influence elections through non-electoral means, we now evaluate whether the main effects of kitchens were specific to or stronger in areas under such influence.<sup>43</sup>

First, Table A.5 suggests that there is a positive and significant correlation between our binary treatment definitions and the existence of “*incidencias*” during the 2013 election. Table 4 shows results for our main and heterogeneity specifications adding the binary “*incidencia*” measure. Columns (1), (3) and (5) confirm that our estimates of the average effect of kitchens for our three definitions of kitchen proximity are robust to controlling for the “*incidencias*”, which do not seem to have an independent effect. However, Columns (2), (4) and (6) now show the effects of kitchens are either specific to or stronger in voting centers that experienced irregularities during the 2013 election. The baseline poverty and regime support heterogeneities remain unaffected. Figure A.10 provides event study estimates for the interaction between the different treatment definitions, the presence of “*incidencias*” in the 2013 elections and election-specific indicators. While Panel A is consistent with the presence of pre-treatment trends in the interaction specification for the Below Median treatment definition, Panels B and C confirm a disproportionate increase

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<sup>43</sup>That these “*incidencias*” were captured in 2013 is helpful, as we would not be evaluating the effects of contemporary efforts that may occur in response to the presence of opposition-affiliated kitchens.

in electoral turnout for the 2018 presidential election in treated voting centers with “incidencias” for the other two treatment definitions. Overall, these results lend empirical credence to the fear of discrimination theory described above.

Table 4: Difference-in-difference estimates considering 2013 “Incidencias”

Dependent variable: <i>Turnout</i>						
Treated × Post	0.0135*** (0.00354)	0.00535 (0.00553)	0.0150*** (0.00513)	0.00865 (0.00793)	0.00943*** (0.00235)	0.00776* (0.00395)
Incidence 2013 × Post	0.00117 (0.00362)	-0.00605 (0.00495)	-0.00427 (0.00518)	-0.0166** (0.00725)	0.00150 (0.00359)	0.0121* (0.00634)
Chavismo × Post	0.0360*** (0.00444)	0.0521*** (0.00584)	0.0329*** (0.00619)	0.0561*** (0.00880)	0.0364*** (0.00445)	0.0121* (0.00704)
Poverty × Post	0.0612*** (0.00418)	0.0508*** (0.00603)	0.0604*** (0.00597)	0.0496*** (0.00926)	0.0604*** (0.00421)	0.0761*** (0.00670)
Treated × Incidence × Post		0.0152** (0.00717)		0.0250** (0.0104)		0.00989* (0.00516)
Treated × Chavismo × Post		-0.0345*** (0.00838)		-0.0450*** (0.0115)		-0.0221*** (0.00602)
Treated × Poverty × Post		0.0247*** (0.00807)		0.0280** (0.0113)		0.0136** (0.00609)
Treatment Definition	Below Median		Q1 v Q4		-Log Distance	
Observations	4,285	4,285	2,140	2,140	4,285	4,285
R-squared	0.962	0.963	0.956	0.958	0.962	0.963
Election FE	Yes	Yes	Yes	Yes	Yes	Yes
Center FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table presents estimates of the specifications described in equations (8) and (9) with an added control/interaction for the presence of 2013 electoral “incidencias” for three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). In addition, we control and interact our treatments for the percentage of Chavista vote in the 2012 presidential elections (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. Standard errors clustered at the voting center level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## 5 Conclusion

The literature on clientelism has provided solid theoretical foundations and robust empirical evidence that economically vulnerable citizens are more likely to engage in clientelistic behavior. A natural implication of this literature is that interventions that address material vulnerabilities should attenuate clientelism. This view, however, looks past the fact that such interventions may be charged with meaning in the specific political environments in which they occur, and that such meaning may be informed by the identity of organizers that invest time and resources setting them up. If such interventions trigger fears of future discrimination against those that do not comply with incumbents' clientelistic demands, then they may inadvertently lead to higher levels of compliance.

In this paper, we provide a simple theoretical foundation for the conditions in which vulnerability-reducing but fear-inducing treatments may backfire and lead to increased clientelism. We test the key predictions from vulnerability-based and fear-based perspectives in the context of the *Alimenta la Solidaridad* kitchens in the Capital District of Caracas, which provided kids in beneficiary communities with daily lunches to supplement their nutritional and caloric intake. Importantly, while kitchens were effective in their humanitarian mandate and did not pursue electoral motives, the main kitchen organizers were affiliated with the national opposition against Nicolás Maduro. We find that these opposition-affiliated kitchens induced higher turnout rates in elections boycotted by the opposition starting in 2017. Consistent with fear-based explanations, this apparent backfire was greater in poorer and opposition-leaning areas of the city, and cannot be explained by the reach of regime transfers at baseline. Our results are not explained by the regime's contemporary distributive efforts, but are contingent to areas in which the opposition had registered electoral irregularities in prior electoral events. These patterns provide further empirical credence to the interpretation that kitchens induced fear of discrimination in areas where the local reach of the regime's party was strongest.

Access to *Alimenta la Solidaridad* kitchens was not conditional on political behavior, and

organizers were pursuing local humanitarian goals that did not relate to their national boycott strategies. From the perspective of the model and our empirical analyses, we interpret the counter intuitive effect of kitchens on electoral turnout as driven by the fact that beneficiary voters recognize organizers' political affiliations. We argue that the presence of opposition-affiliated kitchens increased fears that the regime would condition future benefits on their individually observable choice to participate in boycotted elections. These results highlight both the importance of understanding the broader political context in which vulnerability-reducing efforts are deployed, and how organizers' identities might distort the effect of such treatments on clientelistic behavior by instilling them with political meaning.

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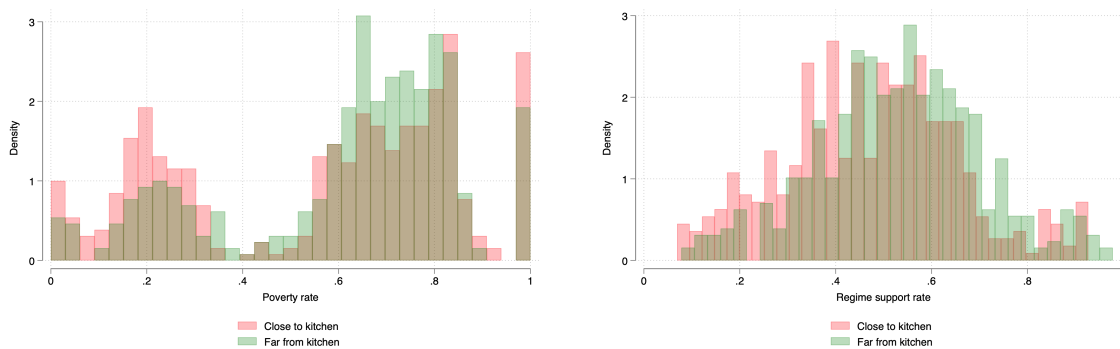
# A Appendix

Table A.1: Summary statistics

	N	Mean	S.D.	Min	Max
	(1)	(2)	(3)	(4)	(5)
Turnout rate	4,470	0.658	0.170	0.0850	1
Distance to kitchens	858	3.772	3.154	0.193	65.56
Treated (Q1 v Q4)	527	0.406	0.492	0	1
Treated (Below Median)	957	0.448	0.498	0	1
Chavista vote	899	0.504	0.179	0.0694	0.978
Poverty rate	858	0.588	0.270	0	1
Carnet Prevalence	891	0.0120	0.00743	0	0.0638

Notes: The table provides summary statistics for the main variables used in the study.

Figure A.1: Poverty, regime support and kitchen proximity



(a) Poverty

(b) Chavismo

Notes: The figure provides overlapping histograms for the distribution of baseline poverty rates (Panel A) and regime support rates (Panel B) between voting centers at a distance from kitchens that are below or above the median distance.

Table A.2: Correlation between treatment definitions, poverty and regime support

Treatment Definition	Below Median	Q1 v Q4	-Log Distance
	(1)	(2)	(3)
Chavista vote (Std.)	-0.0873** (0.0364)	-0.125** (0.0496)	-0.158*** (0.0569)
Poverty rate (Std.)	0.0233 (0.0361)	0.0224 (0.0501)	0.115** (0.0531)
Constant	0.500*** (0.0169)	0.523*** (0.0237)	-1.096*** (0.0244)
Observations	858	428	858
R-squared	0.018	0.042	0.012

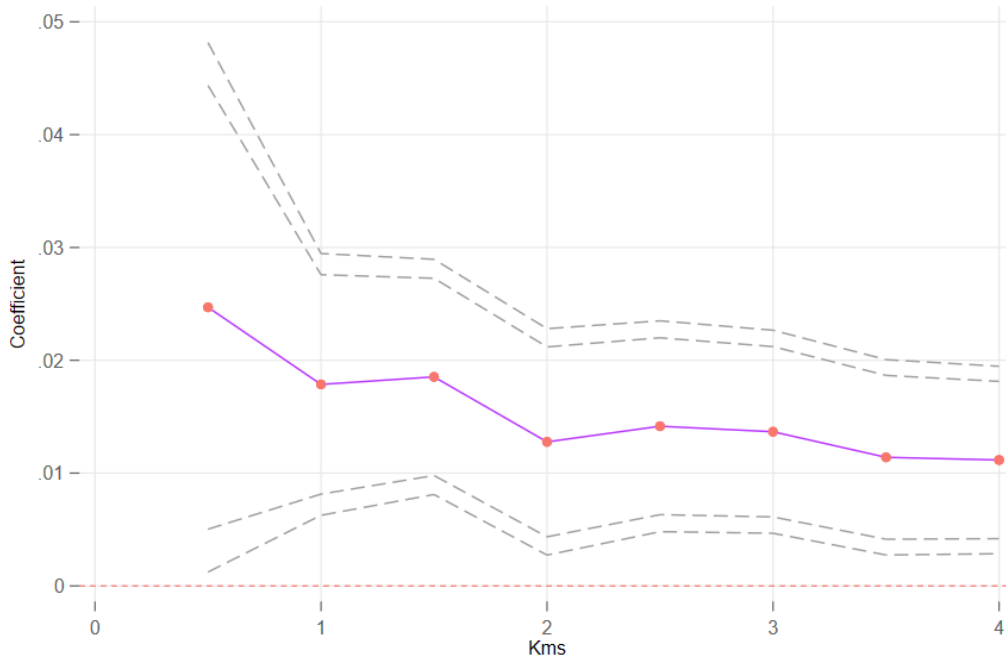
*Notes:* The table provides OLS regression results for the association between baseline poverty rates and regime support rates and three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). Robust standard errors are in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A.3: Main results allowing for spatial correlation in estimates of standard errors

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Electoral Turnout					
Treated $\times$ Post	0.0135*** (0.00491)	0.0136*** (0.00472)	0.0146** (0.00597)	0.0219*** (0.00529)	0.00948*** (0.00279)	0.0134*** (0.00284)
Regime Support $\times$ Post	0.0359*** (0.00510)	0.0525*** (0.00667)	0.0332*** (0.00684)	0.0567*** (0.00918)	0.0363*** (0.00520)	0.0115 (0.00799)
Poverty $\times$ Post	0.0610*** (0.00450)	0.0517*** (0.00631)	0.0611*** (0.00538)	0.0529*** (0.00769)	0.0603*** (0.00455)	0.0745*** (0.00699)
Treated $\times$ Regime Support $\times$ Post		-0.0357*** (0.00905)		-0.0464*** (0.0122)		-0.0225*** (0.00658)
Treated $\times$ Poverty $\times$ Post		0.0228*** (0.00844)		0.0239** (0.0104)		0.0123** (0.00599)
Treatment Definition	Below Median	Below Median	Q1 v Q4	Q1 v Q4	-Log Distance	-Log Distance
Observations	4,285	4,285	2,140	2,140	4,285	4,285
R-squared	0.658	0.664	0.607	0.621	0.658	0.665
Election FE	Yes	Yes	Yes	Yes	Yes	Yes
Center FE	Yes	Yes	Yes	Yes	Yes	Yes

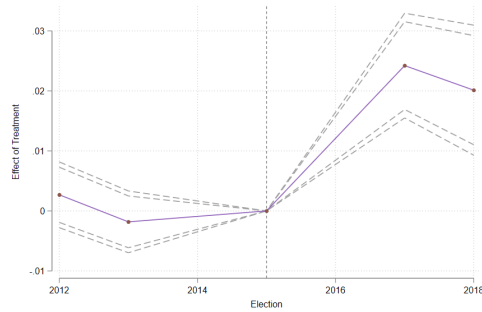
*Notes:* The table presents the estimates of specification described in equations (8) and (9) for three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). In all of our estimates, we include election and voting center fixed effects. Conley-Robust standard errors within a 1km bandwidth around each voting center are provided in order to consider the possibility of spatial correlation in the data. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Figure A.2: Iteration over different treatment thresholds

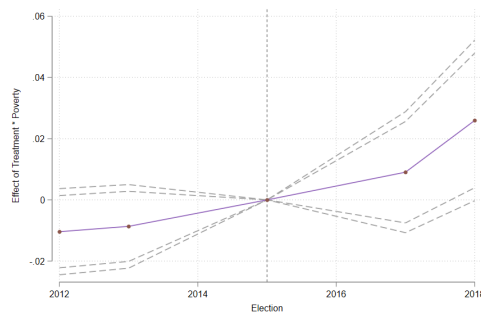


*Notes:* The figure presents the estimates of the specification described in equation (8) over different distance thresholds. We control for the percentage of Chavista vote in the 2012 election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.

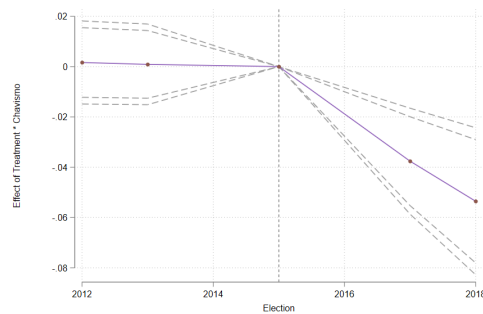
Figure A.3: Event study: Q1vQ4 treatment and interactions with Poverty and Chavismo



(a) Treatment



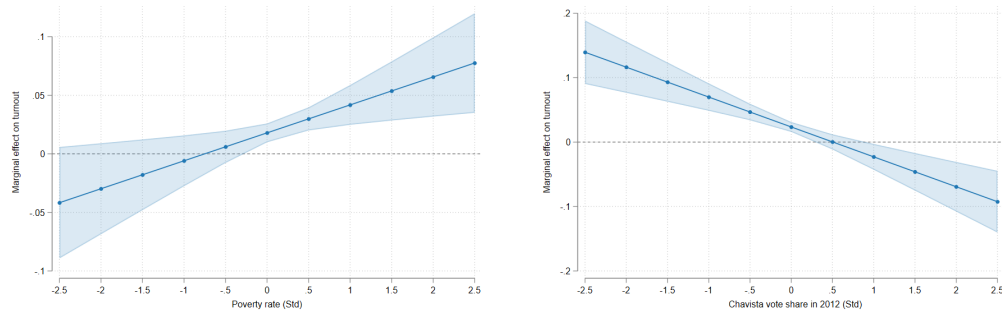
(b) Treatment  $\times$  Poverty



(c) Treatment  $\times$  Chavismo

*Notes:* The figure presents event-study estimates for the main effect and its heterogeneities using the Q1 vs Q4 treatment definition (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km). We control for the percentage of Chavista vote in the 2012 election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.

Figure A.4: Margin plots for Q1vQ4 treatment effect along Poverty and Chavismo levels

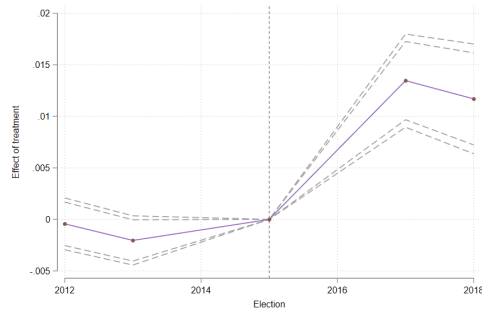


(a) Poverty

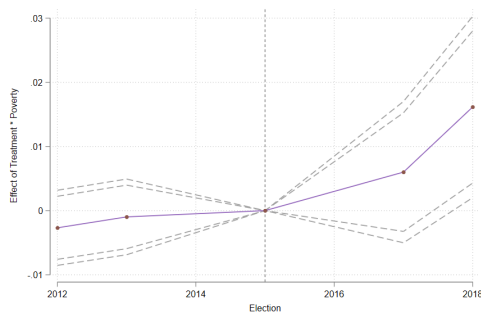
(b) Chavismo

*Notes:* The figure presents margin plots for the estimated effects of kitchen proximity using the Q1 vs Q4 treatment definition (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km). We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.

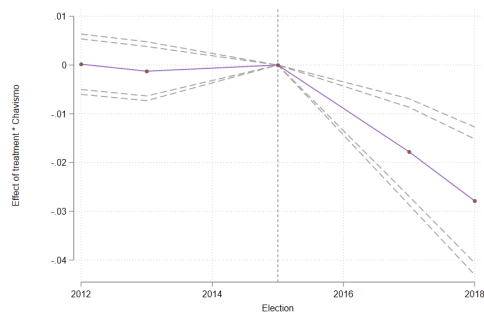
Figure A.5: Event study: -LogD treatment and interactions with Poverty and Chavismo



(a) Treatment



(b) Treatment  $\times$  Poverty

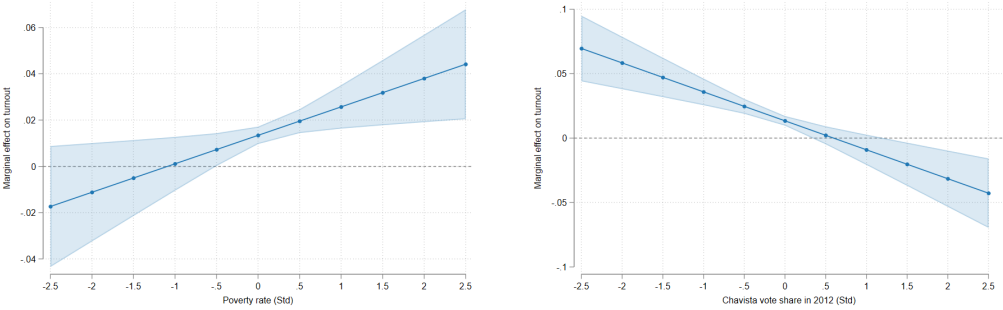


(c) Treatment  $\times$  Chavismo

*Notes:* The figure presents event-study estimates for the main effect and its heterogeneities using the continuous definition of the treatment (the inverse of the natural logarithm of the distance). We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.



Figure A.6: Margin plots: -LogD treatment effect along Poverty and Chavismo levels

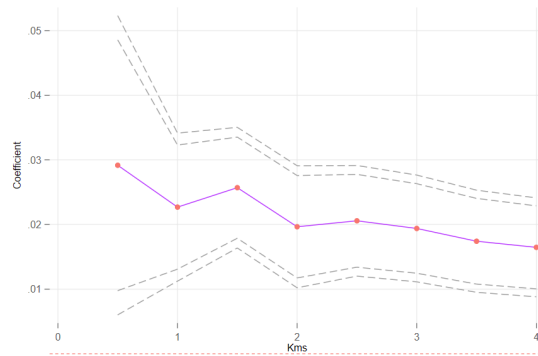


(a) Poverty

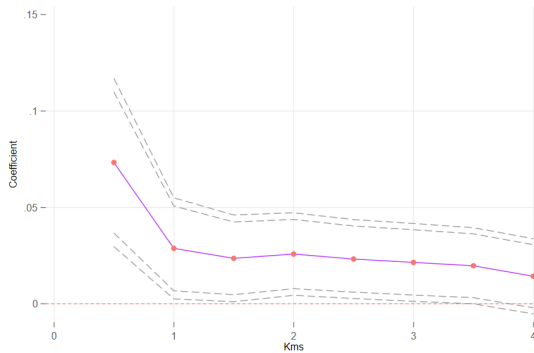
(b) Chavismo

Notes: The figure presents margin plots for the estimated effects of kitchen proximity using the continuous definition of the treatment (the inverse of the natural logarithm of the distance). We control for the percentage of Chavista vote (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 percent confidence intervals that consider clustered standard errors at the voting center level are provided in shaded area.

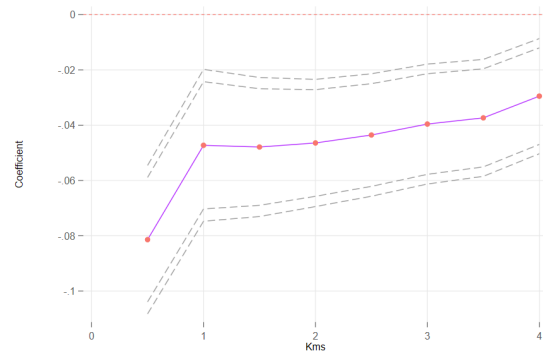
Figure A.7: Iterations over different thresholds for heterogeneity results



(a) Treatment



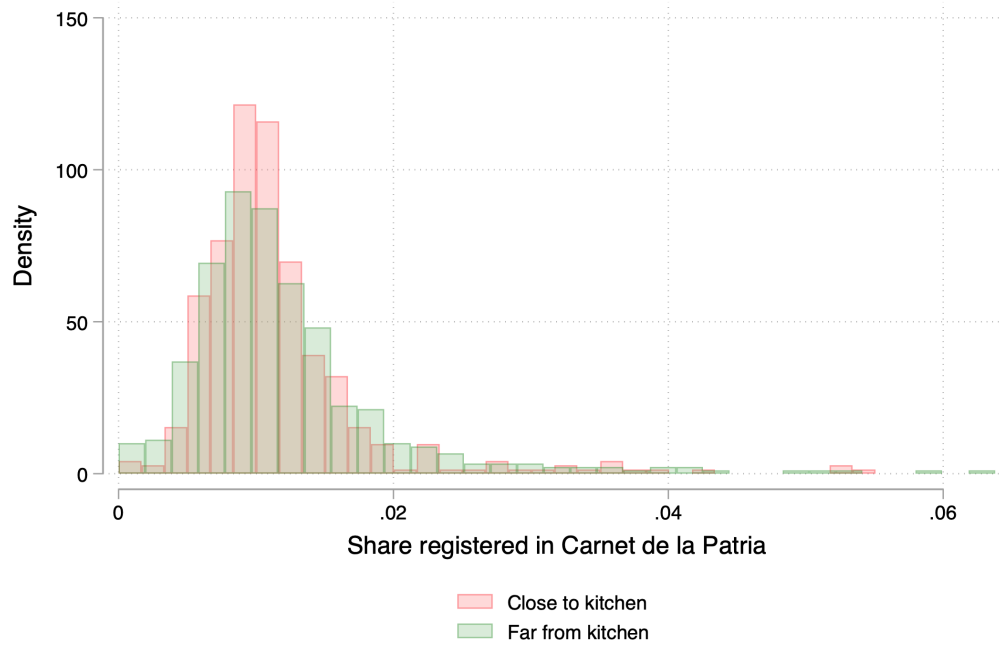
(b) Treatment  $\times$  Poverty



(c) Treatment  $\times$  Chavismo

*Notes:* The figure presents the estimates of the specification described in equation (8) over different distance thresholds for heterogeneity results. We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines.

Figure A.8: Carnet de la Patria prevalence and kitchen proximity



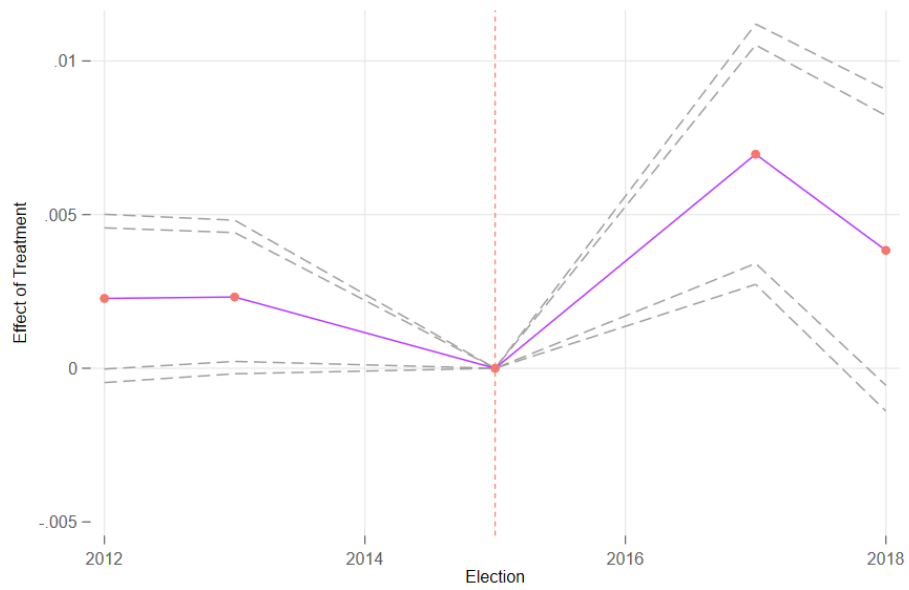
Notes: The figure provides an overlapping histogram for the distribution of baseline CdIP prevalence between voting centers at a distance from kitchens that are below or above the median distance.

Table A.4: Correlation between CDLP, treatment definitions and covariates

Treatment var.	Below Median	Q1 v Q4	-Log Distance
	(1)	(2)	(3)
Carnet Prevalence (Std.)	0.0314*	0.0272	0.0387
	(0.0184)	(0.0232)	(0.0296)
Chavista vote (Std.)	-0.0990***	-0.137***	-0.172***
	(0.0365)	(0.0498)	(0.0564)
Poverty rate (Std.)	0.0249	0.0238	0.117**
	(0.0361)	(0.0504)	(0.0532)
Observations	858	428	858
R-squared	0.022	0.045	0.014

*Notes:* The table provides OLS regression results for the association between baseline poverty rates, regime support rates, CdIP prevalence rates and three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). Robust standard errors are in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Figure A.9: Event-study estimates of the effect of CdLP Prevalence on turnout



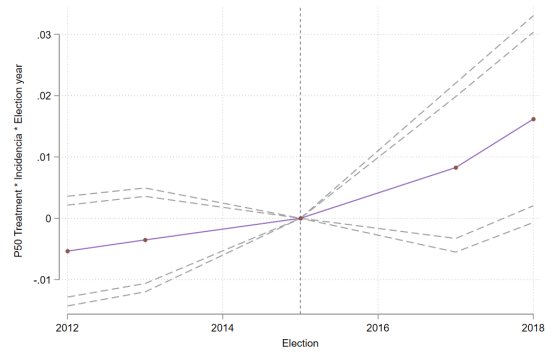
Notes: The figure presents event-study estimates for the CDLP on turnout. We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. Standard errors clustered at the voting center level in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A.5: Correlation between Incidencias, treatment definitions and covariates

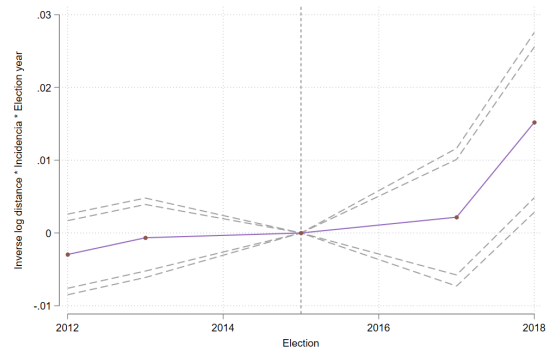
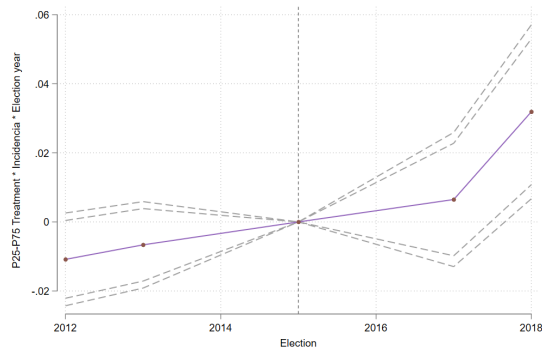
	(1)	(2)	(3)
VARIABLES	Below Median	Q1 v Q4	-Log Distance
Incidencia 2013	0.0808** (0.0372)	0.0952* (0.0515)	0.0818 (0.0562)
Chavista vote (Std.)	-0.0804** (0.0366)	-0.118** (0.0499)	-0.151*** (0.0576)
Poverty rate (Std.)	0.0333 (0.0364)	0.0364 (0.0507)	0.125** (0.0536)
Observations	858	428	858
R-squared	0.024	0.049	0.014

*Notes:* The table provides OLS regression results for the association between baseline poverty rates, regime support rates, 2013 electoral “Incidencias” and three treatment measures defined as follows: Below Median (treated if their distance to the closest kitchen is under 3.3 km), Q1 vs Q4 (treated if their distance to the closest kitchen is under 2.1 km and control if their distance is beyond 4.9 km) and -Log Distance (the inverse of the natural logarithm of the distance). Robust standard errors are in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Figure A.10: Event studies on heterogeneities over 2013 electoral “incidencias”.



(a) Below Median  $\times$  Incidencia  $\times$  Election



(b) Q1-Q4  $\times$  Incidencia  $\times$  Election

(c) -Log distance  $\times$  Incidencia  $\times$  Election

*Notes:* The figure presents event-study estimates for the interaction between different treatment definitions and the presence of electoral “incidencias” in the 2013 election on turnout. Panel A considers the Below Median kitchen treatment definition. Panel B considers the Q1-Q4 treatment definition. Panel C considers the inverse log distance to the closest kitchen as treatment definition. We control for the percentage of Chavista vote in the 2012 presidential election (Regime support) and a proxy for income poverty representative at the vicinity of each voting center. In all of our estimates we include election and voting center fixed effects. 95 and 90 percent confidence intervals that consider clustered standard errors at the voting center level are provided in dashed lines. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## Further conceptual considerations

### Why would regimes enhance discrimination in response to a kitchen?

As discussed above, “kitchens” may induce clientelism if citizens believe that their presence will lead to an increase in  $\alpha$  that outweighs their local welfare effects. While the hypotheses above only rely on the assumption that citizens believe the incumbent will set a higher value of  $\alpha$  as a response to a kitchen, it is worth discussing the potential reasons that an incumbent may have for doing so. In the absence of perfect information about the characteristics of a community, kitchens may signal a higher return of stronger discrimination efforts.<sup>44</sup>

For instance, one such reason is that regimes aiming at a minimum level of compliance from the community will need to invest more in discrimination in less vulnerable communities in order to reach their goals. Assume that the incumbent only knows whether a community received a kitchen or not, but doesn’t know what specific individuals within the community receive the benefits or their baseline incomes. In this context, the regime can understand that the kitchen is increasing average incomes. Suppose that the regime sets  $\alpha$  so as to minimize the cost of making the average opponent indifferent between engaging in clientelism or not. We can model this cost  $C$  as convex in the level of discrimination, such that  $\partial C/\partial \alpha \geq 0$  and  $\partial^2 C/\partial \alpha^2 \geq 0$ . This modelling choice simply suggests that completely eliminating leakage to the opposition in the “last mile” requires a much more onerous discrimination infrastructure than setting an infrastructure that does allow

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<sup>44</sup>Commitment, credibility and reputation have been found to be important factors for incumbents deciding to engage in clientelism (Wantchekon, 2003; Keefer, 2007; Keefer and Vlaicu, 2008; Robinson and Verdier, 2013). If incumbents that threatened to discriminate face reputational considerations in the presence of organized opposition, and kitchens signal such presence, then they may decide not to forgo beneficiary communities. Similarly, heterogenous environments with party affinities lower the costs of discrimination (Dixit and Londregan, 1996; Gallego, 2015). If kitchens signal the presence of that kind of environment, they may again trigger further discrimination efforts. Finally, political competition has been shown to erode national incumbents’ investment in state capacity for the provision of public goods in order to maximize their local clientelistic advantages (Fergusson et al., 2018). Now again, if kitchens signal a competitive environment, incumbents may respond by transforming private transfers from a device for social insurance into a mechanism for political discrimination.



for some opponents to benefit. In this context, the optimal level of discrimination will be:

$$\alpha^* = \arg \min_{\alpha} C(\alpha) \quad s.t. \quad \bar{Z} - P \geq 0 \quad (10)$$

Assuming  $T$  to be fixed<sup>45</sup>, we have that:

$$\alpha^* = 1 + \frac{\bar{y} - [(\bar{y} + T)^\beta - P]^{\frac{1}{\beta}}}{T} \quad (11)$$

If the regime perceives the presence of a kitchen as increasing average incomes, then:

$$\frac{\partial \alpha^*}{\partial \bar{Y}} = [1 - \frac{[(\bar{y} + T)^\beta - P]^{\frac{1-\beta}{\beta}}}{(\bar{y} + T)^{1-\beta}}] / T \geq 0 \quad (12)$$

Similarly, if the regime has imperfect information about the current levels of regime support in a community, they may perceive that vulnerability-reducing interventions signal stronger local support for the opposition.<sup>46</sup> These areas should be more valuable for discrimination efforts as the share of individuals whose decisions can be influenced via discrimination is greater. Suppose that the share of opponents in a community is captured by the parameter  $\gamma$  and that the regime is hoping to maximize the share of neighbors that engage in clientelism while engaging in convex costs of discrimination. Assume that the local share of opponents engaging in clientelism is a linear function of the level of discrimination  $\alpha$ . In this context, the optimal level of discrimination is:

$$\alpha^* = \arg \min_{\alpha} (1 - \gamma) + \gamma * (\phi\alpha) - C(\alpha) \quad (13)$$

Where  $\phi$  is a constant fraction. The value of discrimination for the regime will be maximized when:

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<sup>45</sup>For instance, in our empirical setting, this could be thought of as a standard CLAP subsidized food box for a household per week.

<sup>46</sup>This is especially prescient in our empirical setting, as kitchens are affiliated with leaders from an opposition's political party.

$$\gamma * \phi = C'(\alpha) \tag{14}$$

Regimes interpreting the presence of a kitchen as a signal of higher opposition presence means a higher value of  $\gamma$  in the model. In this case, the gain from discrimination is greater, so that the regime will be willing to assume increasing costs of discrimination up to the point that the equality is restored. Hence, the optimal level of discrimination  $\alpha^*$  grows with the perception of a stronger local opposition presence.

In conclusion, neighbors' will fear enhanced discrimination in areas benefiting from vulnerability reducing interventions if they believe that regimes will observe their presence as a signals of both/either higher incomes or higher opposition support.

### **Net effects of kitchens on clientelism**

So far, we have seen that if vulnerability reducing interventions increase citizens' perceived probability of discrimination against those not complying with regimes' clientelistic demands, such interventions may inadvertently induce citizens to engage in clientelism. Similarly, we have seen that under sensible assumptions about regime's objectives and information, vulnerability reducing interventions can lead to higher investments in discrimination when they are interpreted as markers of higher incomes and opponents' presence. We now study the conditions under which the dual effects of vulnerability reducing interventions can net out to an increase in the degree of clientelism in a community.

Let's first assume that regimes do not know individual incomes, how incomes are distributed within a community, or who benefits from the presence of a kitchen. However, the regime knows the average income of a community, and whether the community received a kitchen or not. In this context, let's assume that the regime will set the level of discrimination  $\alpha$  that induces an individual opponent making the average income to

become indifferent between engaging in clientelism or not.

Each citizen does know their level of income and whether they benefit from the presence of a kitchen or not. In the absence of a kitchen, incomes are distributed uniformly between 0 and  $Y$ . As we know from Equation 7, having a level of  $\alpha$  that makes opponents that earn average incomes indifferent means that those earning higher incomes will abstain from clientelism, while those making lower incomes will participate in clientelism. In this context, the average income is  $\bar{y}^K = \frac{Y}{2}$  and the fraction of opponents participating in clientelism is  $\frac{Y}{2}/Y = \frac{1}{2}$ .

Finally, the opening of a kitchen increases total income in the community by  $K$ . Assume that this is distributed among the poorest  $\theta < \frac{1}{2}$  fraction of individuals. Assume the continuous population to be normalized to a size of 1. As the kitchen raises the average income, the indifference point will be set for opponents making  $\bar{y}^K = \frac{Y+K}{2}$ . As was the case above, those earning incomes above this value will not engage in clientelism, while those earning lower values will.

Opponents that weren't clientelistic without a kitchen ( $y_i > \frac{Y}{2}$ ) are too rich to receive any direct benefits from the kitchen, but are exposed to a higher degree of discrimination. Consequently, those making less than the new average income ( $y_i < \frac{Y+K}{2}$ ) will turn to clientelism. Hence, the segment of the population that becomes clientelistic as a result of a kitchen is:

$$\Delta^c = \frac{Y+K}{2}/Y - \frac{Y}{2}/Y = \frac{K}{2Y} \quad (15)$$

Importantly, notice that  $\Delta^c$  is capped at  $\frac{1}{2}$  for values of  $\frac{K}{Y} \geq 1$ . This is because such large transfers will induce levels of discrimination that make all opponents with incomes above  $\frac{Y}{2}$  to become clientelistic.

Opponents that stop being clientelistic as a result of a kitchen are those that are sufficiently poor so as to benefit from kitchens ( $y_i < \theta Y$ ) and for whom kitchen benefits make them richer than the new average opponent ( $y_i + \frac{K}{\theta} > \frac{Y+K}{2}$ ). Hence, the segment of the

population that stops being clientelistic as a result of a kitchen is:

$$\Delta^{\phi} = \frac{\theta Y}{Y} - \frac{(Y + K)/2 + K/\theta}{Y} = \frac{K}{Y} \frac{2 - \theta}{2\theta} - \frac{1 - 2\theta}{2} \quad (16)$$

Now again, notice that  $\Delta^{\phi}$  is capped at  $\theta$  for values of  $\frac{K}{Y} \geq \frac{\theta}{2-\theta}$ . This is because such large transfers will induce all kitchen beneficiaries to stop being clientelistic.

With these results, clientelism will worsen in a community as a result of a kitchen if:

$$\Delta^c \geq \Delta^{\phi} \quad (17)$$

This will be the case depending on the magnitude of the income transfer associated with the kitchen. We identify three segments of  $K$ :

1.  $\frac{K}{Y} \geq 1$ : All previously non-clientelistic opponents will become clientelistic ( $\Delta^c = \frac{1}{2}$ ), while all kitchen beneficiaries will become non-clientelistic ( $\Delta^{\phi} = \theta$ ). Because the former outweighs the latter, clientelism will grow as a result of a kitchen that provides such large transfers.
2.  $1 > \frac{K}{Y} \geq \frac{\theta}{2-\theta}$ : While only a portion of those that were previously non-clientelistic will become clientelistic ( $\Delta^c = \frac{K}{2Y}$ ), all kitchen beneficiaries will become non-clientelistic ( $\Delta^{\phi} = \theta$ ). In this context, clientelism will grow as a result of a kitchen if:

$$\Delta^c \geq \Delta^{\phi} \rightarrow \frac{K}{2Y} \geq \theta \rightarrow \frac{K}{Y} > 2\theta = T^H \quad (18)$$

3.  $\frac{K}{Y} < \frac{\theta}{2-\theta}$ : In this case,  $\Delta^c = \frac{K}{2Y}$  and  $\Delta^{\phi} = \frac{K}{2Y} \frac{2-\theta}{\theta} - \frac{1-2\theta}{2}$ . The condition for clientelism to increase as a result of a kitchen is that:

$$\frac{K}{Y} \leq \frac{\theta - 2\theta^2}{2(1-\theta)} = T^L \quad (19)$$

We focus our attention away from condition 1.  $T^H$  and  $T^L$  indicate the high and low

thresholds for kitchens to induce clientelism. If the transfer associated with the kitchen as a proportion of total incomes is greater than  $T^H$ , discrimination will grow with average incomes to the point that the opponents induced to engage in clientelism outweigh the total beneficiaries of the program. Similarly, if the transfer associated with kitchens as a proportion of total incomes is lower than  $T^L$ , then the share of beneficiaries that are persuaded not to engage in clientelism is so low that they do not outweigh the share of opponents choosing to engage in clientelism due to the increase in discrimination.

This point highlights that vulnerability reducing interventions may be either too timid or too strong to attenuate clientelism, and may actually worsen it. For instance, in our empirical context, Kitchens served 1,359 children in a city with 281,000 children under the age of 10. We could think the ratio of these values as an estimate for  $\theta$  of 0.5%. For this value of  $\theta$ , the corresponding ratios  $T^H$  and  $T^L$  are such that we should only expect for the kitchens to reduce clientelism if the value of  $\frac{K}{Y} \in (0.25\%, 1\%)$ , which is a very narrow range. Table A.6 provides the corresponding ranges for  $T^L$  and  $T^H$  at different values of  $\theta$ .

$\theta$	$T^H$	$T^L$
0.1%	0.20%	0.05%
0.5%	1.00%	0.25%
1%	2.00%	0.49%
2%	4.00%	0.98%
3%	6.00%	1.45%
4%	8.00%	1.92%
5%	10.00%	2.37%
10%	20.00%	4.44%
15%	30.00%	6.18%
20%	40.00%	7.50%
30%	60.00%	8.57%
40%	80.00%	6.67%
49%	98.00%	0.96%

Table A.6: Model  $\frac{K}{Y}$  ranges for kitchens to erode clientelism at different values of  $\theta$ .