

# PRIVATE-SECTOR SUPPORT FOR PROGRAMMATIC CANDIDATES: EVIDENCE FROM A SENEGALESE ELECTION\*

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## Abstract

There is high demand for clientelistic policy in low-income countries, which can distort politics and constrain economic growth. Firms in the informal economy form a particularly strong constituency for clientelism, as informal workers rely on forbearance and other targeted benefits. Because they form a sizable electoral bloc, however, informal workers possess the capacity to achieve programmatic policies that would serve them better in the long run. In this article, we examine whether informal workers' demand for clientelism can be attenuated. We implement an information experiment with firm owners ahead of Senegal's 2022 local elections, when an upstart political faction campaigned on programmatic policies. We find that when reminded of their coordination capacity, informal workers disengage from dominant clientelistic networks. However, this reduction does not translate into increased programmatic voting. These results demonstrate that while demand for clientelism can be mitigated, significant challenges remain in mobilizing informal workers toward programmatism.

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# 1 Introduction

Proponents of development in the Global South have long sought a shift from the targeted provision of goods and services to the implementation of universalistic policy. Clientelism, the discretionary redistribution of goods in exchange for political support, distorts political incentives and deepens voter inequalities. In low-income countries, clientelist appeals tend to dominate programmatic ones (Kitschelt and Wilkinson 2007; Hicken 2011), especially among the powerful electoral bloc of business owners (Wank 1996). The lack of programmatic voting may be explained, in part, by the large number of firms in low-income countries that operate in the informal sector (Gottlieb 2024). Informal firms tend to under-value programmatic appeals, especially as their very existence is often contingent on clientelistic policies that overlook their illegality (Holland 2016).

But while some firms benefit from this type of targeting, many do not. Informal firms may be better off from the stability that predictable policy provides, especially via codified protection from the expropriation and illegal tax extraction that informal firms regularly face. Particularly as informal firms constitute the bulk of economic units in low-income countries, they possess a latent capacity to coordinate around programmatic policies that could improve their outcomes in the long run. Regardless of demand, however, there may not be adequate supply: few low-income democracies boast candidates that effectively campaign on programmatic promises instead of clientelistic ones.

In this research note, we leverage a unique moment in Senegal’s political history to assess whether informal workers break away from the non-programmatic status quo when given the opportunity. We implemented an information experiment around Senegal’s local elections in 2022, when an arguably programmatic political coalition—mobilized from outside the *ancien regime* (Shefter 1977)—stood election against the traditionally clientelistic ruling party. In a factorial design, we primed the salience of firm owners’ economic sector (formal or informal), provided information about the benefits of the formal sector, and reminded firm owners’ of their considerable within-sector coordination capacity.

We first confirm that informal workers are generally less supportive of programmatic candidates and show that priming the salience of the informal sector pushes them even further toward the ruling party. However, reminding them of their considerable size and thus their coordination capacity reverses this effect: informal workers' support for the non-programmatic norm is attenuated. Less optimistically, this shift does not translate into support for programmatic candidates. Instead, around half of informal firm owners disengage from the political process entirely. These findings demonstrate that the informal sector's latent coordination capacity can reduce dependence on non-programmatic or clientistic candidates, but that building a truly programmatic coalition requires more than simply activating their collective identity.

## 2 Theory

Elections in the Global South have long been characterized by entrenched clientelism. Clientelist candidates offer selective material incentives to particular groups in exchange for political support, and their campaigns often rely on charisma, personalized appeals, and targeted inducements (Stokes, Dunning and Nazareno 2013). Programmatic candidates, by contrast, offer policy platforms that are broad, impersonal, and rule-based, designed to apply to all citizens regardless of their partisan or personal loyalties (Kitschelt 2000). While the effects of programmatic and clientelist appeals have been tested independently in experimental settings (e.g., Wantchekon 2003), the two strategies are not necessarily mutually exclusive, as politicians in weakly institutionalized systems frequently combine targeted handouts with general policy promises.<sup>1</sup> Nonetheless, a large body of research shows that voters' group-based characteristics (e.g., ethnicity or class) can shape support for candidates who emphasize one approach more than the other (Mares and Young 2016).

We argue that firm formality is one such characteristic that plays a critical role in moderating support for programmatic candidates. Formal firms are more likely to seek codified, rule-based

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<sup>1</sup>While parties can choose multiple linkage mechanisms and polities can have parties that vary in their primary linkage mechanism, party systems tend to be structured primarily around clientelistic appeals or programmatic appeals. Indeed, the variance in linkage mechanisms between countries is more than five times greater than the variance within countries (Kitschelt 2013).

policies rather than rely on the discretionary behavior of political patrons. This is because formalization ties firms to the regulatory state—through taxation, licensing, and legal institutions—creating incentives to support politicians who offer transparent and predictable governance. Rule-based governance is more amenable to long-term investment decisions compared to discretionary rule where outcomes rely on one’s relationship to the party in power. In addition, firm productivity is higher where contracts are credible and where recourse exists to resolve disputes, compared to contexts where favorable judicial outcomes depend on political relationships (Frye and Shleifer 1997).

This pattern of formal firms supporting rule-based governance at the expense of discretionary governance has been observed historically in advanced economies. As corporate organizations emerged during industrialization, they pressured parties to adopt more programmatic reforms. In the US and UK, for example, business groups “came to see clientelism and patronage as inimical to economic growth” (Kuo 2018, p. 80). Although firms in the Global South still seek out clientelistic benefits (e.g., Blaydes 2010; Schneider 2013), they should be more likely than informal firms to seek consistent policies that are not subject to the whims of frequently changing politicians. This leads to our baseline hypothesis (i.e., absent any experimental intervention):

**Hypothesis 1.** *Relative to the informal sector, the formal sector will be more likely to vote for a programmatic candidate.*

If this hypothesis is correct, then formalization should shift political preferences by altering the relationship between firm owners and the state. But in many low-income countries, the informal economy dominates the formal one, and informal firm owners perceive little benefit from entering the formal sector. They often view the state as predatory or ineffective, and do not believe that registration will yield meaningful improvements in access to credit, infrastructure, or protection from economic harassment by informal tax collectors (La Porta and Shleifer 2014). As a result, many informal firms choose to remain outside the state’s regulatory reach.

We thus ask whether making the benefits of formalization more salient can change informal firm owners’ political preferences. If informal firm owners come to believe that formal status offers

tangible advantages, they may be more inclined to support candidates who promise broad, rule-based programs. Owners who expect to benefit from firm formalization will have a greater stake in programmatic platforms that expand and protect those benefits. Thus, when a candidate campaigns on universal rules that would insulate formal firms from arbitrary harassment or enforcement, we hypothesize that making the benefits of formalization known will increase informal business owners' support for programmatic candidates.

**Hypothesis 2.** *The informal sector will be more likely to vote for a programmatic candidate when they are made aware of the benefits of formalization.*

Formalization alone, however, may not be enough. Political change, especially away from clientelism, has historically required coordination from voters and from interest groups such as unions or business coalitions. While the act of voting is an individual activity (at least when ballots are secret), political shifts often depend on voters' beliefs about whether others will act similarly (Olson 1971). An individual firm owner may thus be reluctant to back a programmatic candidate if they believe others in their group will remain loyal to clientelistic patrons. This is particularly true when the winning clientelistic candidate is expected to punish groups of voters that did not turn out for him. Voting for a programmatic candidate under a clientelist status quo can thus pose a collective action problem: while a soon-to-be formal business owner may prefer a universalistic policy regime, they may only shift away from the clientelist candidate if they believe others will as well.

As Adida et al. (2020) show, coordination capacity is necessary to shift voters from clientelistic high-performers to programmatic alternatives.<sup>2</sup> We thus consider whether coordination capacity—in addition to information about the benefits of formalization—shapes business owners' likelihood of supporting programmatism. Informal firm owners may be more willing to support programmatic candidates if they see their group as large and electorally significant.

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<sup>2</sup>In Benin, voters only considered programmatic performance information in their vote choice when they knew that a sufficient number of other voters were also getting that same information—allowing for coordination.

**Hypothesis 3.** *The informal sector will be more likely to vote for a programmatic candidate when they are made aware of the benefits of formalization and see themselves as a sufficiently large constituency.*<sup>3</sup>

Understanding the conditions under which firm owners shift their support to programmatic candidates is important for identifying pathways out of long-lasting clientelist equilibria that constrain incentives to formalize, invest, and grow.

### **3 Context**

We test these hypotheses just prior to the 2022 Senegalese local elections. Senegal’s electoral system has long been recognized as clientelistic (Kitschelt 2013), and there is a large literature describing its clientelistic broker system (O’Brien 1971; Boone 2003; Beck 2008; Koter 2013). Multiparty, free, and fair elections have existed in Senegal since 2000, with the two presidential candidates elected since then winning on the basis of clientelistic and charismatic appeals (Resnick 2013). While some programmatic opposition parties have emerged in Senegal’s history around workers’ rights and economic nationalism, their messages were limited in reach, only appealing to “a small segment of unionized urbanites and salaried professionals rather than the mass of the urban poor” (Resnick 2014, 87). The broader electorate, especially informal workers, has remained tied to parties and coalitions with strong clientelist machines.

This pattern is particularly notable given the sheer size and economic importance of Senegal’s informal sector. Informal economic activity accounts for over 90% of employment and nearly half of national GDP, encompassing occupations from petty trade and food service to retail and light manufacturing (ANSD 2016). Informal businesses are especially concentrated in Dakar, where they operate side-by-side with formal firms. Yet despite their economic scale, informal actors have

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<sup>3</sup>These three hypotheses were pre-registered prior to data collection.

historically lacked formal political representation.<sup>4</sup> Their political engagement is often mediated through personalized ties with local politicians and intermediaries, and there are few institutional mechanisms through which their collective interests are channeled (Gottlieb 2024). Instead, they are integrated into patron-client networks and urban political machines, limiting their ability to push for broader policy reforms.

In this context, we view the rise of a new programmatic political coalition in the country as a unique opportunity to assess whether programmatic discourse can gain traction within a clientelist political landscape—especially among informal workers historically attracted to clientelist appeals. Macky Sall, the incumbent president at the time of the project’s implementation, had consolidated power through a presidency centered around clientelistic and populist strategies.<sup>5</sup> Toward the end of his presidency, however, a largely programmatic opposition coalition began to gain mass appeal among large swaths of the urban and rural poor. This was the party of Ousmane Sonko, a former tax inspector who blew the whistle on government corruption in 2016 and was subsequently fired from his job by Sall. This experience gave Sonko credibility to build a political movement around a new vision of social justice and transparency (Monks 2019). In the 2019 presidential elections, Sonko campaigned against Sall on specific economic policies including moving away from the country’s colonial era currency—the CFA franc—and reducing tax evasion and expropriation by foreign firms. While Sonko only won a majority of the vote in his home region, he won a respectable 20% of the vote in Dakar (relative to 16% nationally) and his prominence in Senegalese politics continued to rise.

The local elections in 2022 thus presented an ideal moment to assess whether programmatic appeals might sway informal workers from their usual voting behavior. Sonko ran for mayor of his home region’s capital city, Ziguinchor. His coalition, *Yewwi Askan Wi*—“liberate the people” in

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<sup>4</sup>While there does exist a union of informal businesses (UNACOIS) that was initially successful in representing the common interests of its members in the 1990s (Thiou, Diop and Boone 1998), its eventual fracturing and downfall underscore the difficulty of a small group of elite members credibly representing the broader masses of smaller firms whose interests often diverge substantially.

<sup>5</sup>Sall’s presidency culminated in a constitutional crisis when he attempted to postpone the presidential election based on widely criticized justifications. Demonstrating the strength of the country’s institutions, however, Senegal’s Constitutional Council overturned Sall’s decision.

Wolof—also ran a candidate in the nation’s capital, Dakar, Barthélémy Dias. As we confirm with our sample, the modal respondent viewed *Yewwi Askan Wi* as the more programmatic coalition, as it sought to move Senegal away from the targeted distribution and corruption of the past.<sup>6</sup>

Both Sonko and Dias won their races, demonstrating the viability of programmatic platforms in Senegal’s competitive urban centers. This shift culminated two years later when Sonko’s coalition won the presidential election with an outright majority of 54%, a clear mandate in Senegal’s pluralistic party system. Programmatism was not merely a campaign rhetorical tactic: since taking office, President Bassirou Diomaye Faye and Prime Minister Sonko have implemented several of the policy reforms they campaigned on, including an audit of public finances (which revealed a poorer than expected economic outlook) and comprehensive audits of gas and mining contracts.

We intervene in 2022 (before this presidential turnover) at a historical moment of rising programmatic discourse in the country, to assess whether and how programmatic appeals can be made attractive to members of the informal sector.

## **4 Research Design**

To better understand the relationship between informality and voter preferences, we surveyed members of both economic sectors prior to the 2022 local elections. We surveyed 1,071 private business owners (about 41% formal and 59% informal) by phone, asking about support for the two candidates running in the opposition coalition, Ousmane Sonko and Barthélémy Dias.

We argue that Sonko’s coalition was more likely to be seen as establishing credible programmatic linkages with voters due to his personal history and the ideological commitments of the party he founded. To substantiate this claim empirically, survey enumerators first define what we mean

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<sup>6</sup>This perception is, of course, correlated with vote choice and should be interpreted with this in mind. Notably, however, nearly 20% of respondents who did not intend to vote for *Yewwi Askan Wi* still identified it as the most programmatic coalition.

by programmatism<sup>7</sup> and then ask respondents which of the six main political coalitions in Senegal best reflects this linkage mechanism. Confirming our intuition, 53% of survey respondents said Sonko’s coalition was more programmatic compared to only 22% saying that of the incumbent president, Macky Sall.

#### 4.1 Sample

Our phone survey is comprised of two samples of respondents recruited face-to-face in prior projects we conducted in Senegal. The first is from a survey conducted in Greater Dakar in 2017 on political attitudes and experiences of taxation (CITATION REDACTED FOR ANONYMITY). A randomized sampling method targeted small, street-level business owners who largely tend to be informal<sup>8</sup> in 13 of Dakar’s 43 urban communes that boast a high concentration of informal sector businesses. Participants include people selling wares and providing services such as tailors, carpenters, metalworkers and hairdressers. Increasing comparability with the formal sector sample, only businesses operating inside a physical storefront were recruited, i.e., ambulatory vendors and those operating stalls in open-air markets are excluded. The second sample was originally surveyed in 2018 and targeted firms in both the formal and informal sectors (CITATION REDACTED FOR ANONYMITY). Each district of Dakar was subdivided into zones, and enumerators followed a pre-determined sampling step that varied by the size of each zone to reduce the risk of spillovers.

We define a firm as formal if they were able to provide the enumerator from the original in-person survey with their NINEA<sup>9</sup>—a national identification number received upon registering a business or association with the state. The transaction costs for acquiring a NINEA are quite low. Processing only takes a few days and requires a written request, a photocopy of one’s national ID card, a photocopy of the rental contract or property title where business is conducted, and 1000

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<sup>7</sup>We state that candidates are elected for different reasons, including personality, networks, and commitment to defending particular interests. Sometimes, there are candidates who distinguish themselves with more programmatic and less personal appeals. For example, a candidate can campaign against corruption and for the public interest, for a system of social justice and transparency. A programmatic agenda works against favoritism and for more equitable policies that benefit all citizens.

<sup>8</sup>96% of this sample was unable to provide a NINEA or evidence of business registration.

<sup>9</sup>*Numéro d’identification nationale des entreprises et des associations.*

	<b>Control</b>	<b>T2</b> <i>(benefits of formalization)</i>	<b>T2 + T3</b> <i>(benefits of formalization + coordination capacity prime)</i>
<b>Control</b>	Group 1 ( $\frac{1}{6}$ )	Group 2 ( $\frac{1}{6}$ )	Group 3 ( $\frac{1}{6}$ )
<b>T1</b> <i>(sector salience)</i>	Group 4 ( $\frac{1}{6}$ )	Group 5 ( $\frac{1}{6}$ )	Group 6 ( $\frac{1}{6}$ )

**Table 1:** Factorial design treatment groups and assignment probabilities

FCFA (less than 2 USD). However, the vast majority of business in Senegal is comprised of small, informal firms or self-employed individuals. The national statistics agency reported that among the 407,000 economic units identified in the most recent census, 97% are informal (ANSD 2016).

## 4.2 Informational interventions

We test our hypotheses using both descriptive and causal inference in a phone survey of this sample about one week prior to the 2022 local elections in Senegal. We randomly assign three informational treatments prior to assessing outcomes. Table 1 depicts our 2 x 3 factorial design with Control and T1 being crossed with Control, T2, and T2+T3.

Enumerators read information scripts from tablets that automatically randomized assignment to one of the six treatment groups. Correct treatment implementation was validated via audio audits. The three different information treatments are as follows:<sup>10</sup>

T1: Increases the salience of the sector of the respondent by discussing the formal or informal way in which each sector pays taxes.

T2: Provides (largely new) information about the benefits of a formal tax scheme that is applied to small businesses when they formalize.

T3: Primes the large size of each economic sector, formal or informal, according to the sector of the respondent.

<sup>10</sup>See Appendix A for the script enumerators followed for each treatment.

There is some conceptual overlap in the information conveyed by treatments T1 and T2. T1, in an effort to make the lived experiences of the informal and formal sectors salient, provides information on how firm owners pay tax differently. On the one hand, this may prompt informal business owners to view formalization as beneficial, e.g., as a way to reduce irregular interactions with tax officials or to limit exposure to bribery. On the other hand, this may instead prompt informal firm owners to view formalization as detrimental because T1 also underscores the flexibility and sporadic nature of tax payments available in the informal sector. As such, we expect that being primed to consider the differences across sectors should not, on average, lead respondents to interpret formalization as more advantageous, or, at least, the T2 prime is more likely than the T1 prime to do so. Instead, in a context where formalization rates are low, we expect that highlighting the contrasting experiences between formal and informal sectors will serve to reinforce the divide between them more than implicitly encouraging respondents to consider the potential benefits of formalization.

### 4.3 Outcome variables

Our main outcomes of interest are intention to turn out, vote choice in the 2022 local elections, and intention to vote for Sonko in the 2024 presidential elections.<sup>11</sup> Informed by previous research on the social desirability bias inherent in asking survey respondents their intention to turn out to vote (Adida et al. 2019), we preface the turnout question with a normatively acceptable excuse for not turning out to vote.<sup>12</sup> For vote choice, response options are each of the parties or coalitions running and their mayoral candidate.<sup>13</sup> We then create a binary indicator for *Vote ruling* if the response is for the incumbent coalition (*Benno Bokk Yaakaar*). We interpret voting for the ruling party as

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<sup>11</sup>At the time of the survey, Sonko was widely expected to be a presidential candidate in 2024. However, for reasons beyond the scope of this paper, he was ultimately ineligible to run. His close associate, Bassirou Diomaye Faye, became the coalition’s candidate and was broadly seen as Sonko’s *de facto* stand-in.

<sup>12</sup>We ask: “Often the turnout rate in local elections is rather low. In the eyes of most, the stakes of these elections are not as high as in other elections. Can you tell us if you are going to go vote? Just a yes or a no will suffice.”

<sup>13</sup>We ask: “Irrespective of whether you plan to turn out to vote, which coalition do you prefer in the local elections?”

a preference for a more clientelistic party as incumbents have a comparative advantage in using state resources, and there is a history of incumbents taking over the clientelistic networks of their predecessors (Osei 2013). We create the binary indicator *Vote Dias* if respondents say they will vote for the Yewwi Askan Wi coalition (because our sample of voters are in Dakar, they cannot vote directly for Sonko in these local elections). We also ask about the probability with which the respondent will vote for Ousmane Sonko in the 2024 presidential elections.

Finally, we code an indicator outcome (*Vote programmatic*) if the respondent states they are voting for the candidate that they previously identified as the most programmatic. Respondents are more likely to think their preferred candidate is the programmatic one, so we interpret this outcome with this bias in mind. Appendix Table C1 presents summary statistics for each outcome variable. We detail our specification strategy in Appendix Section B.

## 5 Results

We first approach Hypothesis 1 descriptively. The results presented in Table 2 show that, relative to informal firms, firms in the formal sector were more likely to say they would vote for the programmatic candidates; without any kind of priming, formal firm owners were 7 percentage points more likely to say they will vote for Dias in the upcoming local elections and 10 percentage points more likely to say they will vote for Sonko in the 2024 presidential elections. As evidence that the relationship between formality and programmatic support is not spurious, Table F8 shows that experimentally priming informality among informal firms (T1) increases the likelihood that they vote for the less programmatic ruling party by almost 10 percentage points.

We next examine whether informal workers can be induced to vote for more programmatic candidates, testing Hypotheses 2 and 3 about providing information about the benefits of formalization and their sector's coordination capacity.<sup>14</sup> Table F8 in Appendix F shows that providing information about the benefits of formalization (T2), either alone or in combination with a prime

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<sup>14</sup>Appendix Table E7 confirms that treatments did not shift formal sector workers' support for clientelism or programmatism as expected.

	Vote intention (1)	Vote ruling (2)	Vote Dias (3)	Vote Sonko (4)	Vote programmatic (5)
Formal sector	0.017 (0.022)	-0.007 (0.026)	0.070** (0.031)	0.099*** (0.027)	0.024 (0.024)
Constant	0.850*** (0.014)	0.227*** (0.016)	0.397*** (0.019)	0.489*** (0.017)	0.869*** (0.015)
Observations	1,071	1,071	1,071	1,071	783
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01				

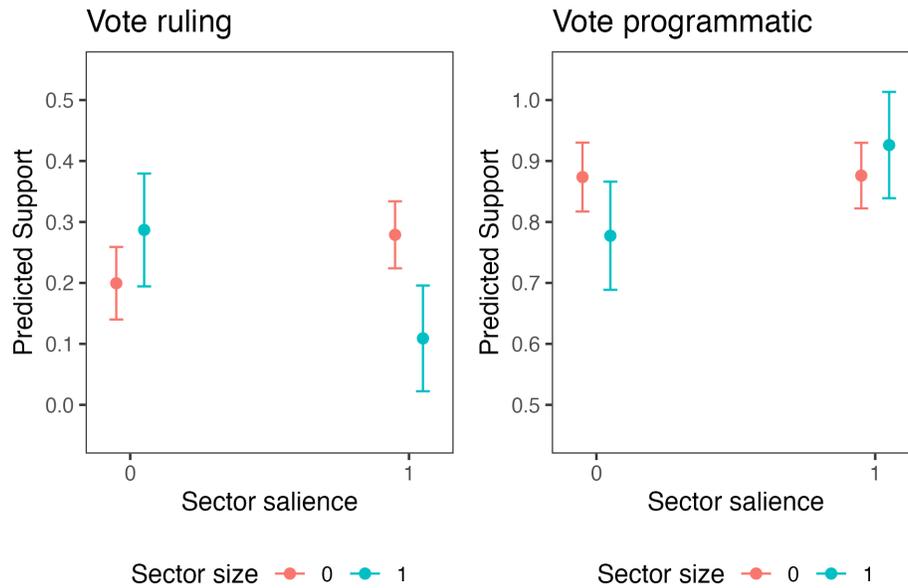
**Table 2:** Descriptive findings

for sector size (T3), did not produce the expected increase in support for programmatic candidates. If anything, these treatments reduced support for a programmatic candidate (see columns 3, 4 and 5 of Table F8). By contrast, combining these treatments (T2 + T3) with the sector salience prime (T1) fully offsets any negative effect. Contrary to expectations drawn from existing literature, these findings suggest that while information about the benefits of formalization may encourage business owners to register their firms (Rocha, Ulyssea and Rachter 2018), it does not appear to influence vote choice in favor of candidates who campaign on programmatic platforms.

More in line with our expectations, combining all three treatment conditions significantly reduces support for the clientelist ruling party among informal sector respondents (coefficients and standard errors in Table F8, column 2). To more easily facilitate comparisons across the multiple treatment arms, Figure 1 presents predicted probabilities for combinations of the sector salience prime (T1) and the formalization benefits and sector size primes (T2 + T3).<sup>15</sup> The red dots show the positive effect of the sector salience prime (T1) in the absence of the benefit and sector size primes (T2 + T3) on vote for the ruling party. But this effect is more than reversed when T1 is combined with T2 + T3; in fact, support for the ruling party under this combined treatment is roughly 8 percentage points lower than in the pure control. The right panel of Figure 1 presents complementary results for vote choice based on perceived programmatism: the depressive effect

<sup>15</sup>Appendix I reports predicted probabilities for turnout intention and other vote choice outcomes conditional on treatment assignment among informal firms.

**Figure 1:** Effects of sector salience and sector size on support for political coalitions among informal respondents



*Notes:* The left panel shows predicted support for the ruling (clientelistic) coalition, and the right panel shows predicted support for the programmatic coalition. Estimates are based on linear models including an interaction between sector salience (T1) and sector size (T3), using data from informal business owners. “Sector size” refers to the combined formalization benefits + sector size treatment, and, because the results here control for the benefits treatment, captures the additional impact of sector size alone. *Vote programmatic* is coded as 1 if the respondent reported intending to vote for the candidate they perceived as best matching the definition of a programmatic candidate provided during the survey. Points indicate predicted values; vertical lines represent 95% confidence intervals.

of T2 + T3 on support for the programmatic candidate is reversed when paired with the sector salience prime (T1).

Interestingly, however, the decline in support for the ruling party is not fully offset by increased support for a specific opposition party (only around 17 percentage points) nor by reduced vote intention (around 10 percentage points), as shown in Table F8. Instead, informal workers appear split between these two responses: when reminded about their informal status, the benefits of formalization, and their coordination capacity, some informal workers shift their support to the opposition while others disengage from the political process altogether. In other words, providing informal sector voters informational tools to think of themselves as a programmatic constituency reduces mobilization around the less programmatic incumbent, but does not necessarily increase coordination around a particular programmatic alternative.

In sum, we find both descriptive and experimental support for the claim that firm formality increases support for more programmatic candidates. We find little support for the idea that informal sector members can be induced to support programmatic candidates at a similar rate. However, we do find that invoking the salience of sector size matters in important and interesting ways. On its own, it can induce more coordination around the clientelistic (or at least less programmatic) ruling party, but when combined with a reminder about one's informal status, it can actually depress ruling party support. The former finding may be explained by the fact that reminding people of their coordination capacity in a clientelistic system can make them more likely to vote for their preferred clientelistic candidate. The latter may be attributed to the fact that priming the status of informal economic actors reminds them of the inefficiencies, corruption, and lack of transparency in their interactions with local government. We see this exploration of mechanisms as a fruitful avenue for future research to explore.

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## **Appendix**

<b>A</b>	<b>Experimental Design</b>	<b>A2</b>
<b>B</b>	<b>Estimation</b>	<b>A2</b>
<b>C</b>	<b>Summary Statistics</b>	<b>A3</b>
<b>D</b>	<b>Average treatment effects</b>	<b>A3</b>
<b>E</b>	<b>Treatment effects among formal firms</b>	<b>A6</b>
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<b>G</b>	<b>Formal and informal firms combined specifications</b>	<b>A8</b>
<b>H</b>	<b>Alternate coding scheme for T2 (benefits of formalization)</b>	<b>A8</b>
<b>I</b>	<b>Predicted probabilities</b>	<b>A10</b>

## A Experimental Design

The following text (translated from French) was used for each treatment:

T1 (sector salience): “The informal sector often pays taxes but irregularly to third parties. In other words, the tax collector may accept money from the taxpayer without giving them any receipt for the payment of tax on the one hand, and on the other hand, the tax collector may reduce the taxable amount to the taxpayer in return for a commission paid to them for the service rendered. It is the collector who decides the amount to be paid, which is often negotiable, and double taxation is common due to the lack of receipts for payment. In contrast, the formal sector pays taxes regularly on the basis of a pre-determined amount according to their income brackets, directly to the government rather than to intermediaries.”

T2 (formalization benefits): “There are existing policies that give small businesses the opportunity to formalize easily by obtaining a NINEA and paying a light and regular tax. This Single Global Contribution (CGU) is paid by small formal businesses according to their income bracket. For example, someone whose turnover is less than 600,000 CFA per year will only pay 30,000 CFA in tax. This policy could be beneficial for small businesses because they could better predict, on the one hand, the amount of taxes due, while benefiting from a possibility of reducing the amount to be paid compared to what they currently pay, and on the other hand, they could make claims in the event of surcharge. Although this policy exists and is beneficial to small businesses, the current government does not promote it and does not help small businesses benefit from it.”

T3 (coordination capacity): *Formal firms*: “You are part of the formal sector which constitutes an important economic sector in Dakar. 25% of the adult population is employed in the formal sector.” *Informal firms*: “You are part of the informal sector which constitutes the largest economic sector in Dakar. There is more than one informal business for every two households. This means that your interest group has enormous power thanks to its majority size.”

## B Estimation

To test the effect of treatment on each of these outcomes,  $Y_k$ , we estimate a fully interacted OLS regression that allows us to recover the effect of each combination of treatments relative to the baseline Control group that received no information treatment. The equation takes the following form:

$$Y_{ki} = \alpha + \beta_1 T1_i + \beta_2 T2only_i + \beta_3 T3_i + \beta_4 T1_i \times T2only_i + \beta_5 T1_i \times T3_i + \varepsilon_i$$

where  $T1$  indicates the experimental group assigned to the sector salience condition,  $T2only$  indicates the group that receives the information about the benefits of the formal tax scheme applied to small business, and  $T3$  indicates the group that receives T2 plus the informational prime about the sector’s size.

Because the language of the third treatment is distinct for the formal and informal samples and because our hypotheses are conditional on sector, we estimate the regression equation separately for each of the informal and formal sector samples. Because of the interaction terms owing to the factorial design, this estimation on subsamples also avoids including triple interaction terms in the estimating equation.

## C Summary Statistics

As we see in the table below, over 85% of our sample subjects reported they would participate in the upcoming local elections. Specifically, 22% said they would vote for the incumbent candidate, while 54% intended to vote for any opposition coalition. Among the opposition candidates, 42% indicated a preference for Dias, the candidate representing Sonko’s programmatic coalition in Dakar. Additionally, respondents on average reported a 52% likelihood of voting for the programmatic candidate Ousmane Sonko in the upcoming presidential elections.

**Table C1:** Summary statistics of outcome variables

Variable	Mean	Sd	Min	Max
Vote intention	0.885	0.319	0	1
Vote ruling	0.206	0.404	0	1
Vote Dias	0.580	0.494	0	1
Vote Sonko	0.600	0.427	0	1
Vote programmatic	0.879	0.327	0	1

## D Average treatment effects

In this section, we present the average treatment effects. Note that T1 and T2 appear to have countervailing effects on the outcomes of interest, and by presenting the crossed results from our factorial design, we risk obscuring the effects of each treatment on their own without controlling for their joint impact—the approach we take in the main body. Without these interactions, the ATEs on their own are difficult to interpret.

**Table D2:** Average treatment effects

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Sector salience (T1)	−0.022 (0.021)	−0.010 (0.025)	0.020 (0.030)	0.015 (0.026)	0.037 (0.023)
Formalization benefits (T2)	0.024 (0.026)	0.022 (0.031)	−0.005 (0.036)	−0.040 (0.032)	−0.029 (0.028)
Sector size (T2 + T3)	−0.021 (0.026)	−0.041 (0.032)	−0.020 (0.037)	−0.025 (0.033)	−0.037 (0.029)
Constant	0.866*** (0.021)	0.235*** (0.026)	0.421*** (0.030)	0.541*** (0.027)	0.881*** (0.024)
Observations	1,071	1,071	1,071	1,071	783

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table D3:** Average treatment effects of sector salience

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Sector salience (T1)	-0.044 (0.027)	-0.001 (0.033)	0.004 (0.039)	0.007 (0.034)	0.047 (0.031)
Formal sector	-0.014 (0.031)	0.005 (0.037)	0.046 (0.044)	0.084** (0.039)	0.036 (0.034)
Sector salience (T1) x formal sector	0.058 (0.044)	-0.024 (0.052)	0.048 (0.062)	0.032 (0.054)	-0.023 (0.047)
Constant	0.874*** (0.020)	0.227*** (0.024)	0.395*** (0.028)	0.485*** (0.025)	0.844*** (0.022)
Observations	1,071	1,071	1,071	1,071	783

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

**Table D4:** Average treatment effects of formalization benefits (if subjects only received T2 and not T3, as per the middle column of treatment chart)

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Formalization benefits (T2)	0.064** (0.029)	0.037 (0.034)	-0.0002 (0.041)	-0.039 (0.035)	0.003 (0.032)
Formal sector	0.044 (0.027)	-0.010 (0.032)	0.065* (0.038)	0.089*** (0.033)	0.036 (0.030)
Formalization benefits (T2) x Formal sector	-0.077* (0.046)	0.011 (0.055)	0.014 (0.065)	0.030 (0.057)	-0.032 (0.049)
Constant	0.828*** (0.017)	0.214*** (0.020)	0.397*** (0.024)	0.502*** (0.021)	0.868*** (0.019)
Observations	1,071	1,071	1,071	1,071	783

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

**Table D5:** Average treatment effects of formalization benefits (as per the middle and right columns of the treatment chart)

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Formalization benefits (T2)	-0.024 (0.029)	-0.017 (0.034)	-0.017 (0.041)	-0.027 (0.035)	-0.014 (0.032)
Formal sector	-0.027 (0.037)	-0.021 (0.045)	0.060 (0.053)	0.109** (0.046)	0.055 (0.041)
Formalization benefits (T2) x Formal sector	0.067 (0.046)	0.022 (0.055)	0.014 (0.065)	-0.015 (0.057)	-0.046 (0.050)
Constant	0.865*** (0.023)	0.238*** (0.028)	0.408*** (0.033)	0.506*** (0.029)	0.878*** (0.026)
Observations	1,071	1,071	1,071	1,071	783

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table D6:** Average treatment effects of sector size

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Sector size (T2 + T3)	-0.093*** (0.029)	-0.057 (0.035)	-0.018 (0.042)	0.013 (0.036)	-0.018 (0.033)
Formal sector	-0.031 (0.026)	-0.010 (0.032)	0.070* (0.037)	0.114*** (0.033)	0.028 (0.029)
Sector size (T2 + T3) x Formal sector	0.151*** (0.047)	0.012 (0.056)	0.001 (0.067)	-0.047 (0.058)	-0.011 (0.051)
Constant	0.879*** (0.016)	0.244*** (0.020)	0.402*** (0.023)	0.485*** (0.020)	0.874*** (0.018)
Observations	1,071	1,071	1,071	1,071	783

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## E Treatment effects among formal firms

**Table E7:** Experimental results among formal firms

	<i>Dependent variable:</i>				
	Vote intention (1)	Vote ruling (2)	Vote Dias (3)	Vote Sonko (4)	Vote programmatic (5)
Sector salience (T1)	0.005 (0.057)	-0.005 (0.070)	0.062 (0.084)	0.088 (0.073)	0.061 (0.061)
Formalization benefits (T2)	-0.006 (0.056)	0.045 (0.069)	0.034 (0.083)	-0.013 (0.073)	-0.035 (0.059)
Sector size (T2 + T3)	0.084 (0.057)	-0.007 (0.071)	-0.029 (0.085)	0.003 (0.074)	-0.027 (0.062)
Sector salience (T1) x Formalization benefits (T2)	0.053 (0.080)	-0.020 (0.098)	-0.055 (0.119)	-0.042 (0.103)	-0.046 (0.083)
Sector salience (T1) x Sector size (T2 + T3)	-0.031 (0.082)	-0.041 (0.100)	0.029 (0.121)	-0.110 (0.105)	-0.066 (0.086)
Constant	0.836*** (0.040)	0.219*** (0.049)	0.438*** (0.059)	0.572*** (0.051)	0.902*** (0.043)
Observations	418	418	418	418	326

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## F Treatment effects among informal firms

	Vote intention (1)	Vote ruling (2)	Vote Dias (3)	Vote Sonko (4)	Vote programmatic (5)
Sector salience (T1)	0.005 (0.047)	0.095* (0.056)	-0.061 (0.066)	-0.055 (0.057)	-0.029 (0.054)
Formalization benefits (T2)	0.050 (0.049)	0.038 (0.058)	-0.058 (0.068)	-0.108* (0.059)	-0.055 (0.055)
Sector size (T2 + T3)	-0.022 (0.050)	0.087 (0.059)	-0.083 (0.070)	-0.043 (0.061)	-0.096* (0.056)
Sector salience (T1) x Formalization benefits (T2)	-0.046 (0.067)	-0.044 (0.079)	0.086 (0.093)	0.121 (0.081)	0.089 (0.076)
Sector salience (T1) x Sector size (T2 + T3)	-0.108 (0.069)	-0.257*** (0.081)	0.111 (0.095)	0.063 (0.083)	0.146* (0.079)
Constant	0.863*** (0.035)	0.186*** (0.041)	0.441*** (0.049)	0.537*** (0.042)	0.893*** (0.039)
Observations	653	653	653	653	457

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table F8:** Experimental results among informal firms

## G Formal and informal firms combined specifications

**Table G9:** Heterogeneous treatment effects by firm sector (combined specification)

	<i>Dependent variable:</i>				
	Vote intention (1)	Vote ruling (2)	Vote Dias (3)	Vote Sonko (4)	Vote programmatic (5)
Sector salience (T1)	0.005 (0.047)	0.095* (0.056)	-0.061 (0.067)	-0.055 (0.058)	-0.029 (0.052)
Formalization benefits (T2)	0.050 (0.048)	0.038 (0.058)	-0.058 (0.068)	-0.108* (0.060)	-0.055 (0.054)
Sector size (T2 + T3)	-0.022 (0.050)	0.087 (0.059)	-0.083 (0.071)	-0.043 (0.061)	-0.096* (0.055)
Formal sector	-0.027 (0.053)	0.033 (0.064)	-0.003 (0.076)	0.036 (0.066)	0.009 (0.059)
Sector salience (T1) x Sector size (T2 + T3)	-0.046 (0.066)	-0.044 (0.079)	0.086 (0.094)	0.121 (0.081)	0.089 (0.073)
Sector salience (T1) x Formal sector	0.0002 (0.075)	-0.100 (0.089)	0.123 (0.106)	0.143 (0.092)	0.090 (0.083)
Formalization benefits (T2) x Formal sector	-0.057 (0.075)	0.007 (0.090)	0.092 (0.107)	0.095 (0.093)	0.020 (0.082)
Sector salience (T1) x Sector size (T2 + T3)	-0.108 (0.068)	-0.257*** (0.081)	0.111 (0.096)	0.063 (0.084)	0.146* (0.076)
Sector size (T2 + T3) x Formal sector	0.106 (0.077)	-0.094 (0.092)	0.054 (0.110)	0.046 (0.096)	0.069 (0.085)
Sector salience (T1) x Formalization benefits (T2) x Formal sector	0.098 (0.105)	0.024 (0.126)	-0.141 (0.150)	-0.163 (0.130)	-0.135 (0.114)
Sector salience (T1) x Sector size (T2 + T3) x Formal Sector	0.076 (0.108)	0.217* (0.129)	-0.081 (0.153)	-0.173 (0.134)	-0.212* (0.119)
Constant	0.863*** (0.034)	0.186*** (0.041)	0.441*** (0.049)	0.537*** (0.043)	0.893*** (0.038)
Observations	1,071	1,071	1,071	1,071	783

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## H Alternate coding scheme for T2 (benefits of formalization)

In the following tables, the second treatment arm—the benefits of formalization—is coded as 1 if any amount of the treatment was present (which is true for the middle and right columns in our factorial design).

**Table H10: Formal firms (alternative coding for T2)**

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Sector salience (T1)	0.005 (0.057)	-0.005 (0.070)	0.062 (0.084)	0.088 (0.073)	0.061 (0.061)
Formalization benefits (T2)	-0.006 (0.056)	0.045 (0.069)	0.034 (0.083)	-0.013 (0.073)	-0.035 (0.059)
Sector size (T2 + T3)	0.091 (0.058)	-0.052 (0.071)	-0.063 (0.085)	0.016 (0.074)	0.008 (0.060)
Sector salience (T1) x Formalization benefits (T2)	0.053 (0.080)	-0.020 (0.098)	-0.055 (0.119)	-0.042 (0.103)	-0.046 (0.083)
Sector salience (T1) x Sector size (T2 + T3)	-0.084 (0.082)	-0.021 (0.100)	0.084 (0.121)	-0.068 (0.105)	-0.019 (0.084)
Constant	0.836*** (0.040)	0.219*** (0.049)	0.438*** (0.059)	0.572*** (0.051)	0.902*** (0.043)
Observations	418	418	418	418	326

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

**Table H11: Informal firms (alternative coding for T2)**

	<i>Dependent variable:</i>				
	Vote intention	Vote ruling	Vote Dias	Vote Sonko	Vote programmatic
	(1)	(2)	(3)	(4)	(5)
Sector salience (T1)	0.005 (0.047)	0.095* (0.056)	-0.061 (0.066)	-0.055 (0.057)	-0.029 (0.054)
Formalization benefits (T2)	0.050 (0.049)	0.038 (0.058)	-0.058 (0.068)	-0.108* (0.059)	-0.055 (0.055)
Sector size (T2 + T3)	-0.073 (0.050)	0.049 (0.059)	-0.025 (0.069)	0.065 (0.060)	-0.041 (0.057)
Sector salience (T1) x Formalization benefits (T2)	-0.046 (0.067)	-0.044 (0.079)	0.086 (0.093)	0.121 (0.081)	0.089 (0.076)
Sector salience (T1) x Sector size (T2 + T3)	-0.062 (0.068)	-0.213*** (0.081)	0.024 (0.095)	-0.059 (0.083)	0.057 (0.078)
Constant	0.863*** (0.035)	0.186*** (0.041)	0.441*** (0.049)	0.537*** (0.042)	0.893*** (0.039)
Observations	653	653	653	653	457

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

# I Predicted probabilities

Figure 11 illustrates the predicted probabilities of our turnout intention and vote choice outcomes conditional on treatment assignment among informal firms. The estimates in the figure are based on the regression results displayed in Table F8. The sector salience treatment and sector size prime are responsible for the biggest experimental effects in our design. Additionally, we see how the interaction between the sector salience treatment and the sector size prime negatively affects turnout intentions.

**Figure 11:** Predicted probabilities of turnout and vote choice among informal firms

