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# In the Shadows? Informal Enterprise in Non-Democracies\*

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## Abstract

Why do regimes allow some low-income business owners to avoid taxes by operating informally? Electoral incentives are central to prevailing explanations of governments' forbearance of informal enterprise. Yet many unelected regimes host large informal economies. This article examines forbearance in non-democracies. We argue that unelected regimes forbear their supporters' informal businesses. We test this argument in Jordan. Using survey data of over 3,800 micro and small enterprises (MSEs), we find that informal businesses are more likely to operate in districts with higher rates of public sector employment, the crown jewel of the Jordanian regime's patronage. Interviews with over sixty of the surveyed firm owners across four strategically paired districts illustrate that business owners covet forbearance, and that kinship ties to public sector employees limit forbearance to regime supporters. Communities that attract higher rates of public sector employment forfeit higher levels of fiscal revenue by permitting informality. This complementarity between public sector employment and forbearance amplifies inequalities between regime supporters and opponents in non-democracies.

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\*Authors' names are listed alphabetically. The views in this paper are the authors' alone and do not represent USAID's Local Enterprise Support Project (LENS). An earlier draft was presented at the 23rd Economic Research Forum Conference in Amman, Jordan, the New England Middle East Politics Working Group's Spring 2018 meeting, and APSA 2018

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The informal economy is vital to the Arab world. Defined as economic activity that is “unregulated by the formal institutions that govern economic activities such as registration, labor laws and taxation”,<sup>1</sup> it represents a third of an average Middle East and North African (MENA) country’s Gross Domestic Product (GDP).<sup>2</sup> The majority of firms in the region - which are predominantly micro and small enterprises (MSEs) - are informal.<sup>3</sup> Why do chronically indebted Arab regimes permit such a large and untaxed shadow economy?

An emerging scholarship argues that electoral costs determine when and where politicians and bureaucrats *forbear*<sup>4</sup> informal enterprise. These electoral dynamics are largely missing in the Arab world. Insulated from the poor’s electoral demands, Arab autocracies should be *less* tolerant of informality than elected regimes in other parts of the developing world. Yet the International Labor Organization (ILO) estimates that in 2018 close to seventy percent of employment in the Arab world was informal, almost thirty percentage points higher than in the more pluralistic Americas,<sup>5</sup> despite sharing comparable levels of development.<sup>6</sup>

This article contributes to a growing research agenda on the politics of informality by exploring these dynamics in *non-democracies*. These are regimes where political participation is uncompetitive and restricted, executive recruitment is non-elected, and constraints on the chief executive are unsubstantial.<sup>7</sup> Over forty percent of countries were “non-democracies” in 2016.<sup>8</sup>

Leveraging the insight that forbearance is a form of redistribution<sup>9</sup>, we argue that the geography of forbearance varies across regime type in two ways. First, in democracies local politicians are more likely to forbear informal enter-

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<sup>1</sup>See Gatti et. al 2014, 127; ILO 2002.

<sup>2</sup>Gatti et. al 2014, 5.

<sup>3</sup>Gatti et. al 2014, 125.

<sup>4</sup>Forbearance is the “intentional and revocable non-enforcement of the law.” See Holland 2016.

<sup>5</sup>UN News 2018.

<sup>6</sup>According to the World Bank’s Development Indicators Data Bank, the Arab World’s GDP per capita in 2017 in constant 2010 USD was 6,400 USD while in Latin America it was 9,350.

<sup>7</sup>Marshall et. al 2017, 15.

<sup>8</sup>Desilver 2017.

<sup>9</sup>Holland 2017.

prise when a larger share of their electorate represent the entrepreneurial poor, whom we define as low-income business owners. A growing scholarship argues that the entrepreneurial poor *prefer* avoiding the taxes and regulations that accompany firm formality.<sup>10</sup> This preference for informality is strongest where developing states are either unwilling or unable to provide the classically cited benefits of firm formality, like secure property rights.<sup>11</sup> Armed with votes, the entrepreneurial poor can better bargain with and sanction politicians whom clamp down on informal enterprise in electorates where they constitute a majority. These electorates are predominantly urban, private sector-oriented and of a lower socio-economic status.<sup>12</sup>

In non-democracies, however, informal firms are more likely to operate among populations and in regions that constitute the base of a regime's support, *not* necessarily where the entrepreneurial poor represent the average voter. Non-elected regimes privilege forbearance to actors most central to their survival - their supporters. For example, if an unelected regime's supporters are rural, there should be a greater likelihood of forbearance outside of major cities. Firm owners who belong to groups that are politically dispensable are less likely to benefit from forbearance.

Second, in democracies formal welfare provision lowers the political costs of sanctioning informal enterprise. Voters are less hostile to their government's efforts to rein in the informal economy when safety nets are available.<sup>13</sup> There is a *substitution* between formal welfare and forbearance in democracies.

Forbearance *complements* formal welfare in non-democracies. Unelected regimes design redistributive policies to manage and counter-balance potential threats from elites and the masses.<sup>14</sup> We expect unelected regimes to channel *both* formal welfare policies and forbearance to their supporters. Supporters' defection poses a fundamental threat to unelected regimes' survival. When budgetary constraints prevent non-democratic regimes from extending formal

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<sup>10</sup>Hibou, 2011; Neuwirth, 2012.

<sup>11</sup>De Soto 1989.

<sup>12</sup>Holland 2017, 34.

<sup>13</sup>Holland 2017, 23.

<sup>14</sup>Albertus et. al 2018; Svobik 2012

welfare benefits (public sector employment, subsidized housing, etc) to *all* of their supporters, limiting forbearance to supporters who are outside of the state’s social safety net can help sustain ruling coalitions in times of economic hardship. Localities in non-democracies that disproportionately benefit from public sector spending should also be more permissive of informal enterprise. Table 1 maps our expectations about the locations of forbearance in democracies and non-democracies.

Table 1: The Geography of Forbearance Across Regime Type

<b>Locality Characteristics</b>	<b>Democracy</b>	<b>Non-Democracy</b>
<i>Majority of Residents</i>	Urban, Low-Income, Private-Sector Oriented	Regime Supporters
<i>Level of Formal Welfare</i>	Low	High
<i>Expected Levels of Forbearance</i>	High	High

We test our expectations of the geography of forbearance in non-democracies in Jordan. Using USAID survey data of 3,800 Jordanian micro and small enterprises (MSEs), we find that firm owners are more likely to report operating informal businesses in districts that benefit from higher rates of public sector employment - the crown jewel of Jordanian welfare<sup>15</sup> that has historically been reserved for the regime’s rural base of support.<sup>16</sup> Indeed, informal firm owners are more likely to report that they have *no* incentive to register their firms in districts with *higher* rates of public sector employment in business regulation and administration.

Over sixty interviews the surveyed firm owners across four strategically paired districts help unpack the mechanisms underlying these findings. Our interviews suggest that firm owners view informality as a privilege, and that kinship<sup>17</sup> ties to regulators are the primary vehicles of forbearance in Jordan. Firm owners in districts with *higher* rates of public sector employment in business regulation and administration as a share of the labor force are more likely to have these ties to local regulators. These personal or familial connections promote norms of solidarity between bureaucrat and business owner

<sup>15</sup>Marie Baylouny 2008.

<sup>16</sup>See Brand 1995; Clark 2018; Yom 2015.

<sup>17</sup>We define kinship ties as being shared familial or personal ties between individuals.

that confine forbearance to non-elected regimes' supporters.

MSEs operating in districts that are politically privileged with higher rates of public sector employment - a dominant form of welfare provision in many developing countries<sup>18</sup> - are thus more likely to be “privileged” with informality. Reforming public sector hiring and monitoring practices may be more critical to “formalizing informal economies” than lowering the traditionally perceived barriers to firm formality. Otherwise, politically privileged communities will continue to impose a double fiscal burden on their states: *higher* levels of public sector spending and greater losses in tax revenue from *higher* levels of informality.

## Informal Enterprise in Democracies and Non-Democracies

There are two prevailing explanations for informality in the developing world. The first focuses on state capacity. This literature assumes that regimes in low- and middle-income countries want to formalize their economies. Formality broadens the tax base and regulates local markets. Developing regimes simply lack the means to enforce their policies.<sup>19</sup>

More recent work questions this assumption.<sup>20</sup> A too narrow focus on state resources may miss the incentives that guide policymakers' and bureaucrats' willingness to sanction, extort, or forbear informal enterprise. This literature argues that politics dictate patterns of informality.

In democracies, politicians are contingent supporters of informal enterprise. Electoral calculations determine when and where local politicians permit and even cooperate with members of the shadow economy.<sup>21</sup> This logic predicts greater forbearance in districts where poorer, urban, and private sector-oriented constituents represent the average voter.

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<sup>18</sup>Nooruddin and Rudra 2014.

<sup>19</sup>Levitsky and Murillo 2009.

<sup>20</sup>Holland 2016.

<sup>21</sup>Cross 1998; De Soto 1989; Holland 2017; Hummel 2017.

Welfare is a second driver of forbearance in democracies. Holland argues that the availability of formal welfare services *lowers* the electoral costs of sanctioning members of the informal economy. Voters are more sympathetic to their government’s efforts to prosecute informal business when safety nets are present. In short, the economic orientation of a district’s average voter and the availability of welfare alternatives structure patterns of forbearance in developing democracies.<sup>22</sup>

Existing work on informality in non-democracies typically casts politicians and bureaucrats as uniformly hostile towards informal business. China’s informal entrepreneurs avoid state regulators for fear of fines.<sup>23</sup> Bureaucrats in Central Asia view their posts as “investment markets” and permit informality in exchange for bribes.<sup>24</sup> Eastern Europe’s “piranha” bureaucrats harass small business.<sup>25</sup> Scholars of the Arab world view informality as a means of authoritarian control. Hibou proposes that Tunisia’s informal economy maintains “the logic of the policing state and the mechanisms that underlie the security pact” between ruler and the ruled.<sup>26</sup> The economic benefits of operating in perpetual “semi-formality” discourage the region’s owners of small- and medium-sized enterprises from political activism<sup>27</sup> for fear of straining personal ties with state officials.<sup>28</sup>

The literature on the politics on informal enterprise in non-democracies suffers from two related limitations. First, it portrays informal firm owners as unquestioningly powerless. Many argue that micro and small businesses - formal or not - are too dispersed<sup>29</sup>, over-worked<sup>30</sup> and divided<sup>31</sup> to collectively mobilize and advance their interests. More recent scholarship on informal

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<sup>22</sup>Holland 2017.

<sup>23</sup>Tsai 2005, 1147.

<sup>24</sup>Engvall 2015.

<sup>25</sup>Markus 2015.

<sup>26</sup>Hibou 2011, 240.

<sup>27</sup>Kamrava 2002.

<sup>28</sup>Greenwood 2007.

<sup>29</sup>Piven and Cloward 1979.

<sup>30</sup>Shadlen 2002.

<sup>31</sup>Fukuyama 1995.

firms in Latin America<sup>32</sup> and Sub-Saharan Africa<sup>33</sup> argues that informal enterprise and labor<sup>34</sup> can in fact be politically assertive. In fact, Baker and Velasco-Guachalla find no statistically significant difference in informal and formal workers' attitudes towards political engagement in Latin America.<sup>35</sup>

Second, by viewing members of the informal economy as inherently subservient to state actors, existing work cannot explain patterns of informality *within* non-democratic countries. If membership in ruling coalitions is defined in terms of access to private benefits<sup>36</sup>, then by most accounts low-income participants of the shadow economy reside *outside* of non-democratic regimes' coalition-building calculus. Forbearance should be reserved for elites. Indeed, Sun finds that the Chinese government is less likely to enforce land regulations on golf-course developers with connections to the country's high-level political elites.<sup>37</sup> Unlike economic elites, the unregulated and tax-evading entrepreneurial poor do not have the resources or exit options to lobby their non-democratic regimes. One might expect policymakers and bureaucrats in closed political systems to neither pity nor favor low-income members of the informal economy. And yet, as will be demonstrated, pockets of informality and formality can coexist in non-democracies, often right under the state's gaze.

Forbearance in non-democracies makes better sense if viewed as means of redistribution.<sup>38</sup> Regimes' strategic enforcement of taxes and regulations has redistributive consequences for those above the law and those forced to follow it. Non-democratic regimes redistribute to disarm and counter-balance elite and mass threats to their rule.<sup>39</sup> Forbearing low-income business owners can quell, if not blunt, the lower classes' threat of rebellion.

Scholars are divided, however, over *who* disproportionately benefits from

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<sup>32</sup>Cross 1998; De Soto 1989; Hummel 2017.

<sup>33</sup>Grossman 2016; Thioub et. al 1998.

<sup>34</sup>Agarwala 2013.

<sup>35</sup>Baker and Velasco-Guachalla 2018.

<sup>36</sup>De Mesquita et al. 2005

<sup>37</sup>Sun 2015.

<sup>38</sup>Holland 2017.

<sup>39</sup>Albertus 2015; Albertus et. al 2018; Albertus and Menaldo 2012; Piketty 2014.

redistribution in autocracies.<sup>40</sup> Some argue that unelected regimes redistribute to co-opt political outsiders<sup>41</sup> or attend to their grievances<sup>42</sup> before they protest. Others maintain that non-democracies redistribute to their supporters<sup>43</sup> and exclude outsiders as punishment.<sup>44</sup>

The logic of regime survival unites these competing expectations. Whether supporters or opponents pose a greater threat to a regime's rule drives redistribution in non-democracies. Bueno de Mesquita et al Selectorate theory captures this insight.<sup>45</sup> Autocrats are ultimately accountable to "winning coalitions." These consist of actors and groups' whose support is essential for a leader's continued rule. Rulers maintain these groups' support by distributing private and public goods. Coalition maintenance is paramount to non-elected regime's survival. The threat and consequences of supporters' defection extend to non-elites, including owners of small and medium-sized businesses. For example, alienated by the Shah's economic policies, Iran's bazaar merchants were key supporters of the Iranian Revolution.<sup>46</sup> Thus while elected regimes face pressures to forbear from *all* firm owners with a vote, non-elected regimes are chiefly accountable to those from groups incorporated into ruling coalitions.<sup>47</sup>

Under this framework, we expect non-democratic regimes to target and privilege forbearance in the same manner they target and privilege formal welfare: to their supporters.<sup>48</sup> Entrepreneurs affiliated with unelected ruling regimes should disproportionately benefit from operating informally. Several accounts from across the developing world support this hypothesis. In China, Tsai writes that many informal entrepreneurs are connected to the state as formerly employed or moonlighting public sector employees.<sup>49</sup> Where regimes

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<sup>40</sup>For a comprehensive literature review see Albertus et al. 2018, 7.

<sup>41</sup>Fenner 2016; Gandhi and Przeworski 2007.

<sup>42</sup>Kohli 2004; Lust-Okar 2005; Wallace 2014.

<sup>43</sup>Bueno de Mesquita et al. 2003.

<sup>44</sup>Magaloni 2006.

<sup>45</sup>Bueno de Mesquita et al 2005.

<sup>46</sup>Mazaheri 2008.

<sup>47</sup>Armijo and Faucher 1994; Gelman 2003; Haggard and Kaufman 1992; Perthes 2004.

<sup>48</sup>Bueno de Mesquita et al 2005.

<sup>49</sup>Tsai 2005, 1147.

promote cults of personality, as in Tunisia under Ben Ali<sup>50</sup> and Syria under Hafez Al-Assad<sup>51</sup>, shopkeepers decorate their stores with posters of their autocrats to help “grease the wheels” with local regulators. Informal actors affiliated with opposition parties and movements are less likely to get away with the privileges of informality. In ethnocracies, members of politically marginalized ethnic groups should be excluded from the benefits of informality. Turner observes that Indonesians of Chinese descent had fewer opportunities to operate informally because government officials, very few of whom were ethnically Chinese, frequently picked on them.<sup>52</sup>

Democracies and non-democracies may therefore have diverging geographies of forbearance. Forbearance is more likely to occur in poor, economically homogeneous and private sector-oriented locations in democracies, and in centers of regime support in non-democracies. Insulated from electoral pressures, policymakers in non-democracies have less incentive to offer formal welfare alternatives when sanctioning informal enterprise. Thus, while formal welfare and forbearance may act as substitutes in electoral settings, non-elected regimes are more likely to concentrate *both* types of benefits to their supporters. The complementarity of formal and informal welfare to regime supporters amplifies disparities between politically privileged and excluded populations in non-democracies. Populations favored with higher levels of public spending on formal welfare also fail to generate tax revenue because of larger informal economies. The next section tests these expectations in Jordan.

## The Geography of Forbearance in Jordan

Jordan provides fertile ground to map the geography of forbearance in non-democracies. The Jordanian regime is a closed anocracy<sup>53</sup> according to the

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<sup>50</sup>Hibou 2011, 184.

<sup>51</sup>Rabo 2005.

<sup>52</sup>Turner 2013, 99.

<sup>53</sup>Anocracies are defined as non-democratic regimes that share institutional features of both democratic and autocratic regimes. In closed anocracies, competitive political candidates are drawn from the elite.

Polity IV database.<sup>54</sup> It also has a large informal economy, particularly among MSEs. The International Monetary Fund (IMF) estimates that the informal sector represents 26 percent of the Jordanian economy, comparable to rates of informality in other Arab economies.<sup>55</sup> Finally, confronted by slow growth and mounting debts, the Jordanian regime *needs* to enforce firm formality. Expanding the formal economy raises revenue and cut deficits. For these reasons the Jordanian government pledged to crack down on its informal economy in its request for extended IMF funding in the Fall 2016.<sup>56</sup> Free from electoral constraints, an assertive parliament, or a vibrant press, the Jordanian regime and its bureaucracy should have little trouble sanctioning informal enterprise.

This expectation ignores the political origins of the institution tasked with enforcing firm formality: the Jordanian public sector. Jordan’s British colonial administration and later the Hashemite regime used public sector employment to co-opt the country’s rural, “East Bank” communities.<sup>57</sup> This became the basis of the Hashemite social contract.<sup>58</sup> Public sector employment comes with a menu of other welfare benefits in Jordan. In the 1970s, public sector employment provided access to “social security, health care, emergency loans, and inexpensive consumer goods.”<sup>59</sup> It remains an economic lifeline for many rural Jordanian communities.<sup>60</sup> Government jobs are sometimes inherited within families, bequeathing a public sector filled by graduates with strong tribal and regional affiliations<sup>61</sup>, rather than academic or professional merit.<sup>62</sup> Many Jordanians, particularly from rural communities, view public sector employment as a right and part of their communal identity.<sup>63</sup> This percep-

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<sup>54</sup>Marshall et al. 2017. Although the Hashemite regime monopolizes executive power, one of the country’s two national legislative bodies is elected. There are also elections for mayors at the municipal level. Jordan’s parliamentary districts are heavily skewed in favor of representing the country’s rural, tribal districts. See Clark 2012; Kao 2015; Lust-Okar 2009; Schwedler 2010. Scholars are more divided over the competitiveness and fairness of local elections for mayors and municipal councils. See Clark 2012, 364; Gao 2016; Sowell 2017.

<sup>55</sup>Strategic Information and Programs 2015, 149.

<sup>56</sup>International Monetary Fund 2016, 3, 14.

<sup>57</sup>Marie Baylouny 2008.

<sup>58</sup>Tell 2013.

<sup>59</sup>Clark 2018, 53.

<sup>60</sup>Marie Baylouny 2008.

<sup>61</sup>Anani 2001, 174.

<sup>62</sup>Loewe et. al 2008, 264.

<sup>63</sup>Brand 1995.

tion solidified after the Hashemite regime purged Jordanians of “West Bank” or Palestinian descent from the public sector following the Palestinian Liberalization Organization (PLO)’s failed insurgency to topple the Hashemite monarchy in 1970.<sup>64</sup>

Bureaucracies established to co-opt communities as part of a coalition-building strategy are poorly suited to sanction informal enterprise. On the contrary, they may extend the regime’s redistributive reach to their employees’ relatives, friends, and communities through forbearance. Personal connections are the vehicles of forbearance in Jordan. Known as favoritism or “*wasta*”, this preferential enforcement (or non-enforcement) of state policies through personal ties differs from bribes in that it entails a more implicit and unspecified reciprocal obligation between citizen and state actors.<sup>65</sup>

Jordanian business owners both solicit and denounce favoritism. A third of representatives of small, medium, and large Jordanian firms in a 2006 survey listed “unfair treatment” as their main obstacle in state-business relations.<sup>66</sup> At the same time, almost half of those respondents reported “devoting substantial resources” to improving their personal relations with state officials.<sup>67</sup> Given the hassles of firm registration<sup>68</sup> and burdens of taxation in Jordan’s slow-growth economy, informality may be one of the most coveted forms of favoritism among MSE owners.

The Hashemite regime may resist taxing and regulating its supporters’ firms because it cannot afford to alienate its traditional and sometimes restive supporters. Some of Jordan’s largest Arab Spring protests occurred in the country’s rural, East Bank communities.<sup>69</sup> Public sector employees, the chief beneficiary of the regime’s patronage, led more than half of all labor protests in 2016.<sup>70</sup> Indeed, the Hashemite regime has been unwilling and unable to cut

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<sup>64</sup>Yom 2015, 211.

<sup>65</sup>Loewe et. al 2008.

<sup>66</sup>Ibid, 264.

<sup>67</sup>Ibid, 271.

<sup>68</sup>A third of respondents in the aforementioned survey reported experiencing difficulties registering. See Loewe et al. 2008, 264.

<sup>69</sup>Yom 2014.

<sup>70</sup>Jordan Labor Watch 2016, 9, Table 2.

public sector employment, despite pressures from the World Bank and IMF.<sup>71</sup> The regime is unlikely to bend to external pressures to fine and regulate its supporters' informal businesses.

Jordanian bureaucrats may also be reluctant to surrender their power to forbear. They are insulated from local electoral pressures. Although locally elected officials supervise municipal councils - the main local agency tasked with issuing business licenses - they cannot hire or fire regulators.<sup>72</sup> The Ministry of Municipal Affairs (MOMA) in the capital Amman has strict control over hiring and monitoring municipalities' administrative staff.<sup>73</sup> These measures obstruct elected officials' ability to dismiss regulators or staff local regulatory agencies with political acolytes.<sup>74</sup> Operating under weak electoral accountability and strong norms of favoritism, local bureaucrats may only care about firms' legal status when engaging with firm owners who are outside of their kinship networks.

This presents two complementary processes that structure forbearance in Jordan. At the street level, bureaucrats are unlikely to entertain questions of regime survival in their day-to-day interactions with business owners. Kinship norms determine when and where regulators forbear. At an institutional level, however, policies that limit bureaucratic hiring to politically favored communities, and then allow bureaucrats to favor their kin by weakening regulatory oversight, demonstrate a strategic effort by the regime to extend and limit forbearance to its supporters.

## Hypotheses

The Jordanian case motivates two hypotheses about forbearance in non-democracies. First, forbearance is more likely where regime supporters reside and citizens benefit from high levels of formal welfare. Public sector employment in Jordan is both a marker of regime support *and* the most valued form

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<sup>71</sup>Harrigan et al. 2006.

<sup>72</sup>Gao 2016, 1381.

<sup>73</sup>Clark 2018, 119.

<sup>74</sup>Gao 2016, 1383.

of formal welfare. As a result, we hypothesize:

- H1: Firms are *less* likely to be formal in districts with *higher* rates of public sector employment as a share of a district’s labor force.

Second, because urban, low-income, private-sector oriented districts do *not* constitute a base of support for the Jordanian regime, we expect:

- H2: Firms are *more* likely to be formal in districts where MSE owners represent a *higher* share of a district’s population.

This hypothesis differs from expectations of locations of forbearance in democracies. Electoral incentives would encourage higher rates of MSE informality in districts where MSEs owners constitute a *larger* share of a district’s electorate.

## Research Design

We adopt a mixed-methods research design to test these hypotheses. We begin by analyzing USAID’s 2014-2015 Local Enterprise Support Project (LENS) survey. The survey includes over 4,500 Jordanian MSE owners<sup>75</sup> in 35 districts across six governorates.<sup>76</sup> It covers general demographics, workforce trends, firm performance, access to finance, registration and business processes, and MSEs’ participation in various associations and networks.<sup>77</sup> Crucially, unlike the World Bank’s MENA enterprise surveys<sup>78</sup>, the LENS survey represents formal *and* informal firms. Other regional enterprise surveys that focus on informality<sup>79</sup> The LENS survey offers a rare comparative view of formal and

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<sup>75</sup>While the survey targets MSE owners, in 126 instances when firm owners were not present, managers were interviewed.

<sup>76</sup>(Amman (excluding the Greater Amman Municipality), Zarqa, Irbid, Karak, Tafleeh, and Aqaba (excluding the ASEZA special economic zone)).

<sup>77</sup>The survey employs a two-phase probability sampling strategy that was first conducted at the household level. A sub-sample list of MSEs was then drawn from the household-level sample and surveyed at their location of business. More information on the survey design is available on the LENS website (<http://www.jordanlens.org/research>).

<sup>78</sup>De Lima et al. 2016.

<sup>79</sup>See the Economic Research Forum’s MSE surveys in Lebanon (Economic Research Forum 2004) and Morocco (Economic Research Forum 2003) are significantly smaller (approximately 3,000 and 1,200 firm owners respectively).

informal entrepreneurs' locations and interactions with state actors and institutions, as well as their attitudes towards firm formality.

We complement our quantitative analysis with 62 interviews with firm owners who participated in the LENS survey in four strategically paired districts. We were able to re-select firms from the original LENS survey for follow-up qualitative interviews in the winter of 2017-18. We also interviewed several municipal council employees involved in firm licensing and regulation to clarify the state's perspective on forbearance. In addition to addressing limitations from our statistical analysis, these long-form interviews validate assumptions and mechanisms that drive the geography of forbearance in non-democracies. They expose how kinship ties between local regulators and firm owners bind and funnel formal welfare (public sector employment) and forbearance to the Hashemite regime's supporters.

## Survey Analysis

### Population of Analysis: Jordanian Fixed Store Owners

We limit our analysis to entrepreneurs who own fixed stores. We focus on fixed store owners because this is the population of entrepreneurs that should be *most* visible to regulators, and thus *most* likely to be formal. Unable to flee regulators like street vendors or hide from the state by operating in households, fixed stores' informality is less likely to be an indicator of weak state capacity. We also limit our sample population to respondents who self-identify as Jordanian nationals. This excludes from our analysis respondents whose citizenship status might influence their willingness to formalize. We only examine firms with 10 or fewer full time employees.<sup>80</sup> This produces a sample of 3,843 out of the 4,500 LENS survey respondents.

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<sup>80</sup>99 percent of firms in LENS sample reported having 10 or less full-time employees.

## Dependent Variable: Defining and Measuring Firm Informality

We operationalize formality as whether or not a firm owner reports being registered with the Jordanian Ministry of Industry and Trade (MIT)<sup>81</sup> and has a business license from their local municipality.<sup>82</sup> While formality is more complex than a binary categorization (formal firms can also participate in unregulated activities), a firm owner that undergoes the bureaucratic hurdles of registration and obtaining an annual business license is undoubtedly more formal than an owner who partially follows registration and licensing requirements, or ignores them completely.

Jordanian law requires all firm owners to register their firms with the Ministry of Industry and Trade (MIT). There is both a central firm registration office for residents in Amman, and governorate registration centers for firm owners outside of the capital. Registration fees vary according to the firm's starting capital and legal structure.<sup>83</sup> Firm owners must also have an annual "vocational" business license to operate legally. Licenses have to be obtained in the administrative district where the firm owner operates.<sup>84</sup> Licensing fees vary by sector.<sup>85</sup> Licensing procedures can require numerous ministries' approval depending on one's economic sector.<sup>86</sup> The 969 (out of the 3,843) fixed store owners in the LENS survey who responded that their firms are not registered and / or do not have a license are therefore operating illegally.<sup>87</sup> While we are mindful of social desirability bias, the anonymous nature of the survey and the high rates of reported informality (approximately 25 percent of firm

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<sup>81</sup>Question 108 in the survey.

<sup>82</sup>Question 113 in the survey.

<sup>83</sup>USAID 2015. For example, it would cost about USD 70 for an individual establishment firm with approximately USD 28,000 in capital to register their firm. See USAID 2015, 11.

<sup>84</sup>Firm owners receive their vocational license from the Greater Amman Municipality for those living in the capital, or from the local municipality outside of Amman. See USAID 2015, A72. In both cases, firm owners would need to provide two sets of documents. The first include ownership and permissions documents for the physical location of the firm, and the second include the MIT registration, Chamber of Commerce permission, rental agreements, and documents and approvals from other relevant ministries depending on the profession. See USAID 2015, A72.

<sup>85</sup>USAID 2015.

<sup>86</sup>Skype correspondence with USAID official, Spring 2016.

<sup>87</sup>57 firm owners did not answer the survey's registration question. We coded these firms as unregistered. 109 firm owners did not answer the licensing question. We coded these firms as unlicensed.

owners) suggest that many firm owners responded honestly. Furthermore, this rate mirrors prevailing estimates of the size of Jordan’s shadow economy, whether measured in terms of undeclared output as a percent of GDP (the Schneider index)<sup>88</sup> or through other means.<sup>89</sup>

We disaggregate our informality measure to capture firms’ registration and licensing status separately as robustness checks. Over 800 of the sampled entrepreneurs acknowledged being registered but unlicensed. This variation in mediums of formality (registered, licensed, registered *and* licensed) is not unique to Jordan. At least half of MSEs in Lebanon and Morocco were registered with one of three required regulatory agencies, whereas fewer than 20 percent were unregistered in all three agencies.<sup>90</sup>

Figure 1 maps district estimated rates of MSE informality. It employs the LENS survey’s district weighted estimates for firm informality among Jordanian fixed store owners. Darker colors are associated with higher district rates of firm informality. Districts colored in white were excluded from the LENS survey. Figure 1 and Table 8 in the Appendix reveal significant variation in estimated district rates of informality within governorates in northern, central and southern Jordan.

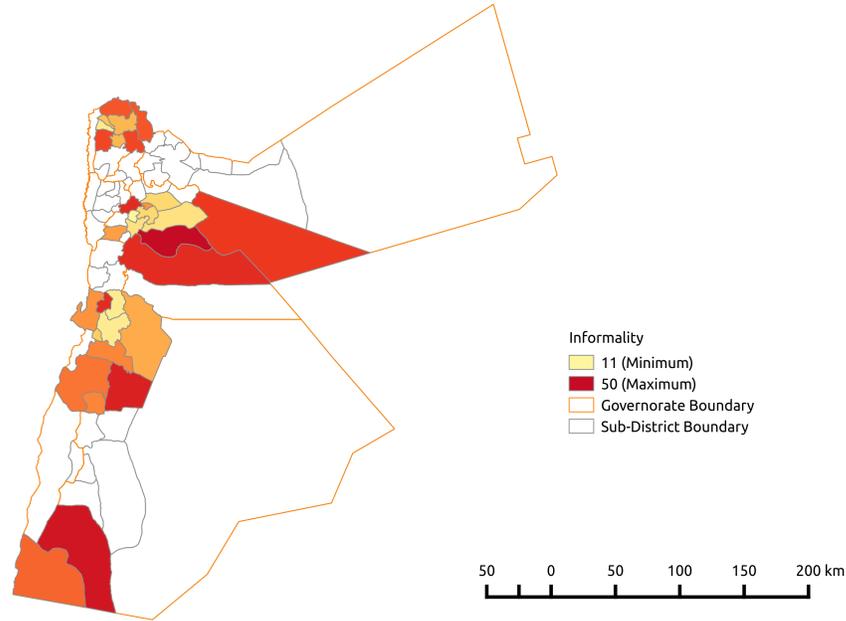
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<sup>88</sup>Approximately twenty percent, see Gatti et. al 2014, 9 Figure 0.3)

<sup>89</sup>In a 2018 Working Paper with the IMF, Medina and Schneider estimate that Jordan’s informal economy represented almost sixteen percent of the country’s GDP in 2015. See Medina and Schneider 2018,72.

<sup>90</sup>Gatti et al. 2014.

Figure 1: Informal Enterprise As a Percent of MSEs Across Districts



### Independent Variable: Defining and Measuring Regime Support and Formal Welfare Provision

We hypothesize that MSE owners in districts dominated by regime supporters are more likely to operate informally. We operationalize regime support as public sector employment as a share of a district’s labor force. As previously mentioned, public sector employment is a chief means of patronage in Jordan. It is also highly concentrated among the country’s rural, “East Bank” communities (see 2), the historical base of support for the Hashemite regime.<sup>91</sup> Districts with *higher* rates of public sector employment are more likely to be populated with regime supporters, and thus more permissive of informal enterprise.

We map public sector employment as a share of a district’s labor force with data from the 2010 Jordan Labor Market Panel Survey (JLMPS).<sup>92</sup> We first measure public sector employment broadly in terms of working in “public

<sup>91</sup>Lustick 1979; Yom 2014; 2015.

<sup>92</sup>Economic Research Forum 2010.

sector administration and defense; compulsory social security (ISIC Rev. 4 Code 84).”

A limitation of this two-digit International Standard Industrial Classification of All Economic Activities (ISIC) measure of public sector employment is that it includes public sector employees who play no role in enforcing firm formality. Jordanians involved in security services, for example, may have little knowledge of or jurisdiction over regulating firms. While this broad categorization of public sector employment proxies for regime supporters, one cannot determine whether this variable’s relationship with firm informality stems from regulators’ intentional “non-enforcement” of the law (forbearance).

We complement and prefer a more precise, three-digit ISIC classification of public sector employment involved in “administration of the state and the economic and social policy of the community (ISIC Rev. 4 Code 841).” This three-digit classification incorporates public sector employees working in “the regulation and contribution to more efficient operation of businesses” (ISIC Rev. 4 Code 8413) and public administration more specifically (ISIC Rev. 4 Code 8411). Indeed, public administrators may regulate firms in domains that affect business but are not directly linked to business regulation, like utilities or waste management. The three-digit classification of public sector employment centers our analysis to the chief actors involved in forbearance: regulators.

The JLMPS’ 2010 district rates of public sector employment in the administration of economic and social policy (ISIC Rev. 4 Code 841) constitute our main independent variable. This measure has two limitations. First, JLMPS is a household survey. There may be public sector officials who reside in one district but work in another. Second, these are 2010 estimates. This snapshot of Jordan’s 2010 labor market cannot disclose how temporal trends in rates of public sector employment in business regulation correlate with rates of firm formality. Though the LENS survey occurred four years *after* the JLMPS, more business regulators could have been dispatched to districts with higher levels of informality. Because there is no temporal data on district levels of

firm informality to our knowledge, we cannot test how *within* district changes in rates of public sector employment correlate with rates of firm informality. The ensuing analysis therefore establishes correlational evidence. In the final empirical section of the paper, we interview firm owners from the LENS survey and local regulators to ascertain the relationship and causal mechanisms linking district rates of public sector employment and forbearance.

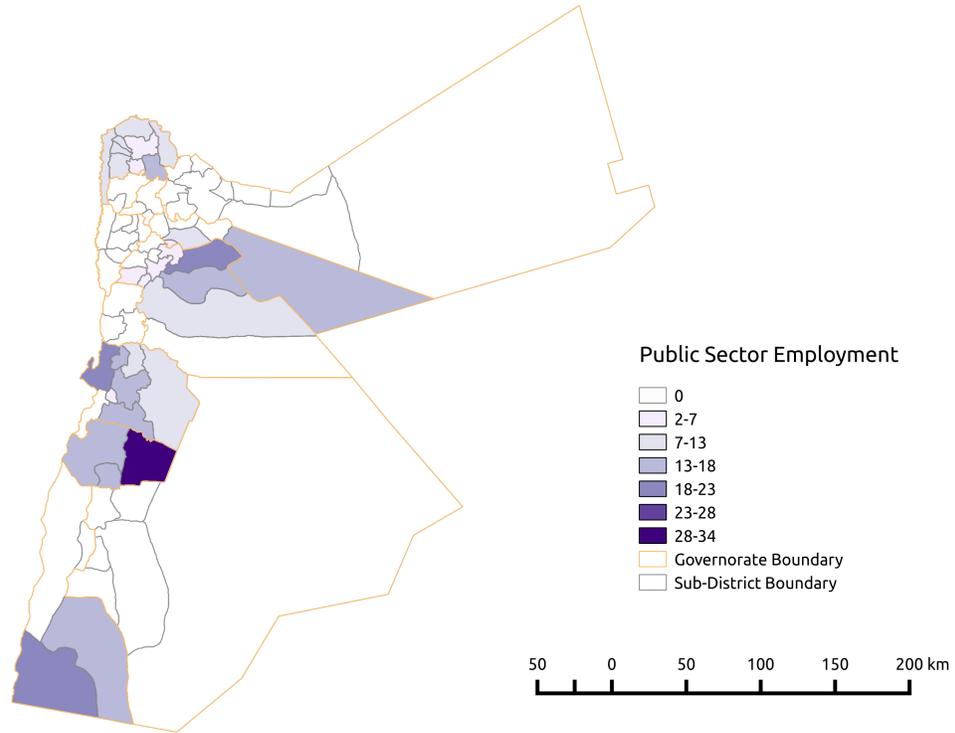
Our focus on local regulators provides a hard test for forbearance. One could expect that a greater regulatory presence would disincentivize informality by strengthening state capacity. More regulators could accelerate licensing procedures, lowering the bureaucratic barriers to formality. They could raise the costs of operating informally by conducting more patrols to monitor and fine informal businesses. These expectations ignore the politicized nature of public sector employment in Jordan. In contexts with weak institutional accountability, public sector employment may be more of a political *ends* than a *means* of “rules-based” governance. Firm owners in districts privileged with higher rates of public sector employment may also be “privileged with informality” by enjoying the benefits of firm formality (secure property rights, amicable state-business relations) without paying its fiscal and regulatory costs.

Figure 2 maps district-weighted estimates of the rate of public sector employment in administration and business regulation (ISIC Rev. 4 Code 841) as a share of a district’s labor force according to the 2010 Jordan Labor Market Panel Survey (JLMPS).<sup>93</sup>

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<sup>93</sup>Economic Research Forum 2010.

Figure 2: Public Sector Employment (ISIC Rev. 4 Code 841) As Percent of Labor Force Across Districts



District rates of public sector employment in administration and business regulation as a share of the labor force range from 2 to 34 percent. The median rate is 9 percent. These rates echo common portrayals of Jordan’s expansive public sector. Indeed, the Jordanian government’s Economic and Social Council’s 2015 Competitiveness Report concluded that the size of the Kingdom’s public sector is the largest in the world given its ratio to the population.<sup>94</sup> Table 8 in the Appendix lists the JLMPS’ estimated rates of public sector employment (ISIC Rev. 4 Code 841) for the districts represented in the LENS survey.

To test our second hypothesis that firms in districts where the urban, business-owning poor constitute a higher share of the population are *more* likely to be formal, we create an MSE per capita variable. We divide the LENS survey’s district-level estimates of the number of fixed Jordanian stores

<sup>94</sup>Malkawi 2016.

with ten or less full-time employees per district by the number of Jordanian citizens per district according to the 2010 JLMPS. We log this ratio to account for its wide variance. In a democracy, we would expect a negative relationship between districts rates of MSEs per capita and MSE formality. However, because the urban, private sector poor do not constitute the Hashemite regime’s traditional supporters, we predict a positive relationship between a district’s MSEs per capita ratio and the likelihood of a firm operating formally.

### Model Specifications and Controls

We use mixed model logit regressions to control for individual and firm levels characteristics that might influence a firm owner’s likelihood of operating informally. These hierarchical models incorporate random effects at the district and bloc levels to account for the added variability from the clustering in the LENS’ sampling design. By applying a distribution of intercepts at the district and bloc level, these models best incorporate location-dependent characteristics that are clustered and nested at different levels of analysis. For example, firms from similar sectors tend to be non-randomly concentrated in specific neighborhoods within districts that are best suited for the production and sale of their goods. This clustering should not be ignored.

We control for firm owners’ education level<sup>95</sup> and whether they are their household’s primary earner.<sup>96</sup> At the firm level, we control for the firm’s sector (Manufacturing, Retail, Other), number of full-time employees, and years of operation. We control for whether a district is urban based on whether its number of residents is greater than the median number of estimated residents from the 2010 JLMPS (1 = Urban).<sup>97</sup>

Table 3 in the Appendix provides summary statistics of the sample population. These figures use the design-based weights of the LENS survey. Formal and informal firm owners are remarkably similar in terms of gender, age, and

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<sup>95</sup>Coded on a 0 - 6 scale where 0 = Illiterate, 1 = Elementary, 2 = Middle school, 3 = Secondary school, 4 = Diploma / Associate degree, 5 = Bachelor degree, 6 = Graduate degree.

<sup>96</sup>Primary Earner = 1 if owner reports being his or household’s primary earner.

<sup>97</sup>The median is 87,290 Jordanian residents per district. The mean is 247,600 district Jordanian residents.

sector. Formal firm owners tend to be slightly more educated. Their firms are also generally older (9.6 vs. 5.5 mean years of operation).

Finally, we use Multivariate Imputation by Chained Equations (MICE)<sup>98</sup> to address missing data - though few of the control variables have more than 5 percent of their observations missing. MICE employs predictive mean matching to estimate values for missing observations based on other variables in the dataset (excluding our key dependent variables).

## Results

Table 4 in the Appendix presents our main results. We find that district rates of public sector employment negatively correlate with the likelihood of a firm owner reporting operating formally. This supports H1. This negative relationship is statistically significant at the 1 percent level when public sector employment is operationalized broadly (Model 1, ISIC Rev. 4 Code 84). It is statistically significant at the 10 percent level when operationalized more narrowly (Model 2, ISIC Rev. 4 Code 841). The coefficient is larger when employing the more fine grained measure of public sector employment. These results hold when standard errors are clustered at the district level (Model 3).

Figure 3 models the estimated probability of a firm owner reporting operating formally in relation to district rates of public sector employment in administration and business regulation (ISIC Rev. 4 Code 841). Using the Effects package<sup>99</sup> in R, Figure 3 plots Model 2 from Table 4 and sets all of the control variables to their means. It estimates that firm owners in districts with a 5 percent rate of public sector employment in administration and business regulation have an 81 percent probability of reporting that their business is registered and has a valid license. The probability of reporting operating a formal business falls approximately 20 percentage points in districts with public sector employment rates of 30 percent.

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<sup>98</sup>Buuren and Groothuis-Oudshoorn 2010.

<sup>99</sup>Fox 2003.

Figure 3: Firm Formality and Public Sector Employment (ISIC Rev. 4 Code 841)

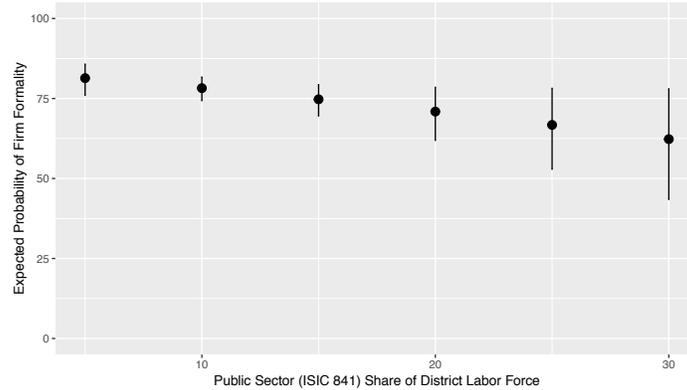


Table 5 disaggregates our measure of informality. It reveals a negative and statistically significant relationship between district rates of Public Sector Employment (ISIC Rev. 4 Code 841) and firm owners’ likelihood of reporting being registered with the MIT. We find a negative but not statistically significant correlation between district rates of public sector employment and the likelihood of a firm owner reporting having a valid license.

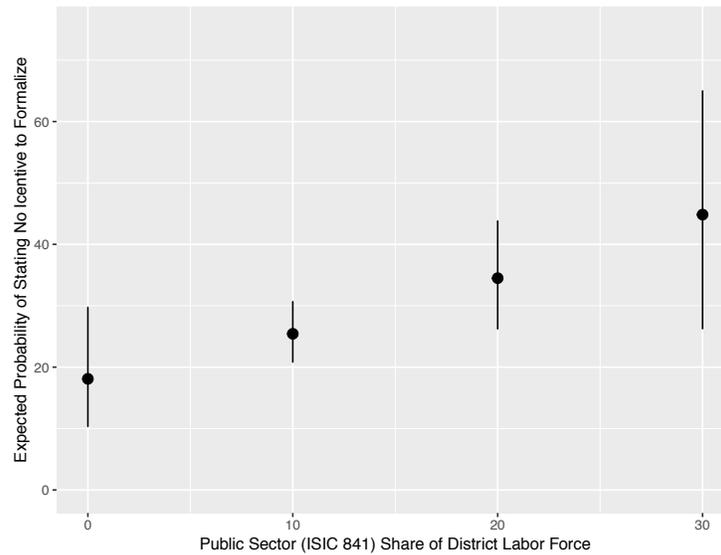
Table 4 supports H2. Contrary to what may be expected in competitive electoral settings, firm owners in districts with higher levels of MSEs per capita are *more* likely to report operating a formal enterprise. The variable’s coefficient is positive across all model specifications, and statistically significant at the 10 percent level for two of them. This finding also counters explanations linking state capacity to the geography of forbearance in Jordan. Holding rates of public sector employment in business administration and regulation as a share of the labor force constant, one would expect it to be *harder* for regulators to sanction informal enterprises in districts with higher MSEs per capita ratios. Yet Jordan exhibits the opposite.

## Unpacking MSE Owners’ Motivations

Consistent with our hypothesis that higher rates of public sector employment increase the likelihood that firms will be “privileged” with informality, we find that informal firm owners are more likely to report that they have no incentive

to formalize<sup>100</sup> in districts with *higher* 2010 rates of public sector employment (Table 6 in the Appendix). This relationship is statistically significant at the 10 percent level. Figure 4 reveals that, when setting all covariates to their means, informal firm owners operating in districts where 30 percent of the labor force works in public sector administration and business regulation are almost 20 percentage points more likely to state they have “no incentive to register” than informal firm owners in districts where public sector regulators make up 10 percent of the labor force.

Figure 4: District Rates of Public Sector Employment (ISIC Rev. 4 Code 841) and Incentives to Register



## Alternative Explanations: Bribery and State Capacity

Two alternative explanations could explain the positive correlation between district rates of public sector employment and firm informality. The first focuses on opportunities to bribe. Firm owners may prefer to bribe their way into informality if bribes are cheaper than licensing and registration costs. Districts with higher rates of public sector regulators may be more likely to have public sector employees willing to accept or offer this bargain.

<sup>100</sup>Q1091: Lack of Incentive to Register (1 = Yes), among unregistered firms in the LENS survey.

The LENS survey inquires whether firm owners have ever been asked to pay a bribe to facilitate their business.<sup>101</sup> Only 13 percent of Jordanian business owners of fixed business locations reported ever being asked to provide an “informal payment” for their business. There also appears to be little difference in reported bribe payments between formal and informal firm owners. When applying its sampling weights, the LENS survey estimates that 11 percent of informal firm owners admitted ever being asked to pay a bribe, two percentage points lower than among formal firm owners. Our logit hierarchical models present a negative and statistically significant correlation between district rates of public sector employment in administration and business regulation (ISIC Rev. 4 Code 841) and a firm owner’s likelihood of reporting ever being asked to pay a bribe (Table 7 in the Appendix). Bribery cannot explain the positive relationship between district rates of public sector employment and firm informality.

State capacity is another explanation that shadows our analysis. Urban districts tend to be wealthier, more concentrated and thus easier to govern than more sparsely populated rural districts in the periphery. We take these concerns seriously and account for socio-economic differences across districts by controlling for districts’ urbanization (Urban) and business activity (MSEs Per Capita) in all of our model specifications. Nevertheless, absent of any realistic means of randomizing district rates of public sector employment, or even temporal data on changes in rates of public sector employment and firm formality, these results and their underlying mechanism are at best suggestive. We turn to long-form interviews with firm owners from the LENS survey to test our hypotheses on forbearance in non-democracies, disclose the mechanisms linking public sector employment and informality, and refute alternative explanations.

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<sup>101</sup>Question 608.

## Interview Analysis

In the winter of 2017-18 we interviewed 62 fixed store firm owners who participated in the original 2014-15 LENS survey, and a small number of public sector officials involved in firm licensing and registration. These interviews advance our analysis in three ways. First, they confirm that Jordanian firm owners do view informality as a *privilege*. If forbearance is a form of redistribution and co-optation, then firm owners should prefer to remain informal. The LENS survey does not disclose why 31 percent of informal firm owners said they “lacked an incentive to register.” Likewise, about 30 percent of informal firm owners listed “Other” as the main reason for not registering their firm, and almost a quarter listed “Other” as the main reason for not having a valid license. “Other” was the most popular answer for both questions. Our interviews reveal that MSE owners primarily view firm registration and licensing requirements as a tax they would rather not pay.

Second, these interviews expose that kinship ties between firm owners and local regulators underpin the relationship between formal welfare (public sector employment) and forbearance in Jordan. MSE owners and public sector employees disclose the centrality of kinship ties or *wasta* between state and private sector actors as a necessary condition for forbearance. Contrary to common portrayals of “piranha” bureaucrats, the majority of MSE owners we interviewed want *more* local regulators in their districts. Firm owners did not attribute firm informality to underfunded and understaffed regulators, the hallmarks of a weak and absent state.

Lastly, firm owners and public sector employees recognize that forbearance is greatest in rural communities with large tribal constituencies, the historic pillar of the Hashemite regime’s support. This system of targeting formal welfare and forbearance to pro-regime districts (H1) helps explain why the urban, entrepreneurial poor disproportionately pay the costs of formality (H2). Together, these insights help confirm assumptions and mechanisms that undergird the geography of forbearance in non-democracies.

## Qualitative Research Design

We adopt a nested design analysis<sup>102</sup> and conduct interviews in four districts that fall on the line of a positive correlation between district rates of public sector employment (ISIC Rev. 4 Code 841) and MSE informality.

We interviewed LENS survey respondents in two pairs of neighboring districts, with one pair located in the capital governorate Amman and the other in the southern and more rural Tafleeh governorate. By focusing on differences *within* governorates, our sampling design mitigates concerns that diverging socio-economic conditions across Jordan determine patterns of forbearance. Within these governorates, we interview firm owners in districts with *high* rates of public sector employment and firm informality, and neighboring districts with *low* rates of public sector employment and firm informality. Comparing levels and investigating causes of firm informality in adjacent districts also helps control for differences in state capacity that might help explain patterns of informality across Jordan.

Quesmeh and Na'our represent our paired district comparison in Amman. Quesmeh is located in the heart of the capital. It is urban, poor, and predominantly private sector-oriented. Na'our resides on the periphery of the capital. Na'our has higher rates of public sector employment than Quesmeh (7 vs. 2 percent).<sup>103</sup> One in four fixed store owners in Na'our reported being unregistered or unlicensed in the LENS survey, 11 percentage points higher than in Quesmeh. In the rural Tafleeh governorate, we interview firm owners in the Tafleeh district (Low Public Sector Employment; Low Informality) and Hessa district (High Public Sector Employment; High Informality).<sup>104</sup>

Figure 5 plots each district represented in the LENS survey according to their rates of public sector employment (ISIC Rev. 4 Code 841) on the X axis and estimated rate of MSE informality (Y axis).<sup>105</sup> The four aforementioned districts and the off-the-line district of Sahab, which will be discussed below,

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<sup>102</sup>Lieberman 2005.

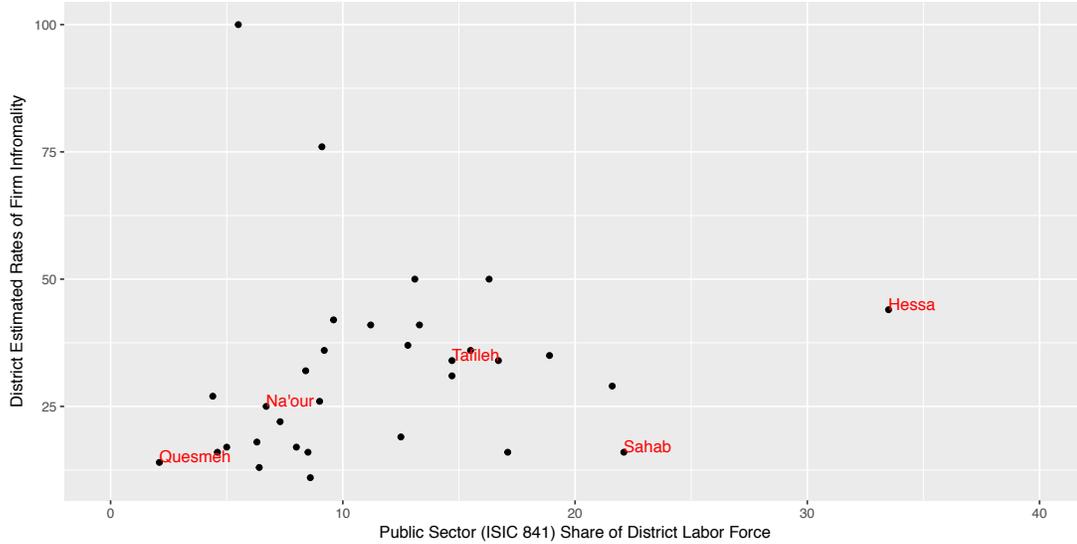
<sup>103</sup>See Figures 6 and Figure 7 Appendix.

<sup>104</sup>See Figures 8 and 9.

<sup>105</sup>See Table 8 in the Appendix for more information.

are labelled in red.<sup>106</sup>

Figure 5: District Rates of Firm Informality and Public Sector Employment (ISIC Rev. 4 Code 841)



In addition to firm owners, we interviewed three municipal council employees involved in firm licensing and registration. These interviews incorporate the local state’s perspective on when and why the state forbears. Unfortunately, and perhaps non-coincidentally, we were only able to secure interviews with public sector employees in districts with low rates of public sector employment and firm informality (Tafleeh and Quesmeh). We also interviewed a public sector official in Quesmeh’s neighboring district of Sahab. Unlike the other four districts in our qualitative analysis, Sahab has high rates of public sector employment and low estimated rates of firm informality. This off-the-line district can expose important scope conditions that are hidden in our analysis of on-the-line cases.

Table 2 summarizes the geographic characteristics, rates of public sector

<sup>106</sup>There are two outliers among the sampled districts: Taybeh (75% informality) and Al-Jami’ah (100% informality). These districts do not conform to the observed positive correlation between public sector employment and informality. Taybeh is in the northern governorate of Irbid, where many Syrian refugees settled after the Syrian civil war broke out in 2011. Many early waves of Syrians set up informal businesses, and we believe that the small sample (6 firms) may be picking up on these dynamics. Al-Jami’ah, the district with a 100 percent estimated rate of firm informality is an outlier. However, we believe this high estimation stems from the small sample (3) of fixed store owners in the LENS survey. The results presented in the previous section are robust to excluding this outlier.

employment, and firm informality across the four districts. The last row in bold previews one of our main findings. Firm owners in districts with higher rates of public sector employment (Na’our; Hessa) were more likely to report having and benefiting from kinship ties to local regulators. Firm owners across *all* districts attribute the permissibility of informality in their district to kinship ties or *wasta* to local public sector employees.

Table 2: Summary of District Variation and Interview Results

District	Quesmeh	Na’our	Tafleleh	Hessa
Governorate	Amman	Amman	Tafleleh	Tafleleh
Rate of Public Sector Employment in Regulation	Low	High	Low	High
Firm Informality	Low	High	Low	High
<b>State-Business Kinship Ties</b>	<b>Low</b>	<b>High</b>	<b>Middle</b>	<b>High</b>

We employed a local research firm and estimated a representative sample of fixed store owners across economic sectors (Manufacturing, Retail, Other) and legal status (Formal, Informal) for each of the four districts using the LENS survey data. USAID generously shared the contact information of the LENS survey respondents with the research firm for interview selection purposes. Using this contact information and sampling design, we worked with a team of four female enumerators and two supervisors to solicit interviews with firm owners at their locations of business. The team visited 93 fixed locations. They successfully completed 62 interviews, three less than the sample design population. All interviews were recorded and conducted in Arabic in the firm owners’ stores. A male supervisor accompanied the female enumerators when interviewing owners of manufacturing firms. The average interview lasted 42 minutes. Of the 62 interviewed firm owners, 15 reported either being unlicensed or unregistered in the LENS survey. As in our quantitative analysis, we categorize these firm owners as “Informal.” Table 9 in the Appendix presents our population of interviews across districts, economic sectors, and legal status.

Enumerators asked firm owners about their professional background, the history of their business, their perceptions of firm informality in their district

as well as their relations with local public sector regulators. Mindful of social desirability biases, enumerators encouraged firm owners to comment broadly on the costs and benefits of firm formality and the nature of regulatory enforcement in their district. Finally, enumerators disclosed the LENS survey estimate of district rates of MSE informality in the interviewee’s district and in the neighboring comparison district. We solicited firm owners’ reactions to these district-level estimates, as well as their explanations as to why rates of firm informality might differ so drastically across neighboring districts.

## **Co-opting the Base: Forbearance through Kinship Ties to the State**

These interviews confirm important assumptions and mechanisms that structure the geography of forbearance in non-democracies. First, they validate that Jordanian MSE owners view informality as a privilege. Tax evasion was the most commonly cited motivation as to why some firm owners choose to remain informal, followed by an inability to go through bureaucratic paperwork. Some firm owners believe the LENS survey under-estimates district rates of informality, because, in the words of Saad<sup>107</sup>, the owner of a formal home improvement store in Quesmeh, “we haven’t been making money” to pay registration fees.<sup>108</sup> Abdullah, an informal grocer in Tafileh, shares this sentiment, lamenting that registration fees surpass firm owners’ financial capabilities.<sup>109</sup> Firm owners note that informal firms distort competition by lowering prices through tax evasion. They “take work that is not their’s”<sup>110</sup> and “monopolize”<sup>111</sup> the market. Informality is therefore a benefit that can be leveraged to co-opt regime supporters.

Second, our interviews reveal that kinship ties or *wasta* between firm own-

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<sup>107</sup>All names are pseudonyms. A full list of interviews and their corresponding pseudonyms is located in Appendix II.

<sup>108</sup>Interview with Saad, Formal Owner of Home Improvement Store, HBS 0017Q, Quesmeh, Nov. 16 2017.

<sup>109</sup>Interview with Abdullah, Owner of an Informal Grocery, HBS 0059T, Tafileh, Nov. 26 2017.

<sup>110</sup>Interview with Uday, Formal Tailor Shop Owner, HBS 0019Q, Quesmeh, Nov. 16, 2017.

<sup>111</sup>Interview with Favez, Formal Accessories Stores Owner, HBS 0044T, Tafileh, Nov. 25 2017.

ers and local regulators determine when informality is permitted. Five out of twelve informal firm owners considered themselves close to a municipal council employee - the main local government institution tasked with issuing firm permits.<sup>112</sup> Less than a third of the 48 formal firm owners who responded to this question feel close to a municipal council employee. Far from hiding from the state, Jordan's informal firm owners may in fact have more proximate, personal ties to their local regulators than their peers in the formal economy.

Firm owners and regulators also recognize that kinship ties anchor the geography of firm informality in Jordan. "There are no unlicensed firms in Quesmeh," explains Fuad, a business owner from the rural Ghor region who works in Amman. This is because:

[T]he Greater Amman Municipality (GAM)<sup>113</sup> officials and their relatives don't have shops in Quesmeh, not like in Ghor. Back home, officials let their relatives violate regulations as they like; they make it easy for them [ ... ] If you go to the village, there's no order or law. They're all family and know each other. Here in Amman, they [local regulators] need to follow up more because they do not come from the same family. In rural areas, one [family] might seize the municipality. [ ... ] Outside of Amman it's normal to be unlicensed, but here it's hard.<sup>114</sup>

Firm owners in Na'our, a neighboring district on the edge of Amman, support Fuad's assessment. They attribute Na'our's higher rates of firm informality than Quesmeh to greater kinship ties to public sector employees. More than half of the 11 Na'our firm owners we interviewed express having close ties to a municipal council employee. Only one of the 17 interviewed firm owners in Quesmeh reported having such close ties. Karim, an informal supermarket owner in Na'our, notes that "Some people with money aren't licensed because they have someone from their clan or tribe in the Na'our Municipality." "Locals work in the municipality," he adds. "It could be your cousin.

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<sup>112</sup>Three informal firm owners did not answer the question.

<sup>113</sup>This is the local government institution that issues firm licenses.

<sup>114</sup>Interview with Fuad, Formal Business Owner, HBS 0025Q, Quesmeh, Nov. 17 2017.

It just works that way. That’s the reason for firm informality. *Wasta*.”<sup>115</sup> Na’our was once under the GAM’s jurisdiction before obtaining its own municipal council. Firm owners in Na’our recall greater regulatory enforcement *prior* to decentralizing regulatory authority to local public sector officials.<sup>116</sup>

We observe similar patterns outside of the Amman governorate. In Tafleleh, the Tafleleh governorate’s urban administrative center, MSE owners report regular municipal efforts to check informal firms.<sup>117</sup> Nevertheless, Abdullah, a retired public sector employee who runs a grocery, believes that his district’s unregistered firm owners operate informally because of their “social connections.”<sup>118</sup> Abdulkarim, a regulator in Tafleleh’s municipal council, shares this assessment. Local officials let relatives and friends “get away with anything that would be forbidden in other shops.”<sup>119</sup>

There appears to be less overall enforcement and more discretionary enforcement of firm formality in Tafleleh’s neighboring district of Hessa. Though the 2010 Jordan Labor Market Panel Survey estimates that a third of Hessa’s labor force works in public sector administration and business regulation, none of the three firm owners interviewed there mentioned enforcement procedures—patrols, warnings, fines - that commonly emerged in discussions with firm owners in other districts. “*Wasta* is everything” notes Isa, a local restaurant owner.<sup>120</sup> “People [in the municipality] know which firms are informal, and often they are consciously ignored [...] you go to the municipality and somebody knows his relatives on staff, or his nephew has a kinsman in the municipality

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<sup>115</sup>Interview with Karim, Informal Supermarket Owner, HBS 0010N, Na’our, Nov 15 2017.

<sup>116</sup>Interview with Nabil, Formal Hardware Store Owner, HBS 0013N, Na’our, Nov. 15 2017; Marwan, Formal Bookstore Owner, HBS 0012N, Na’our, Nov. 15 2017.

<sup>117</sup>Interviews with Qusay, Formal Home Improvement Store, HBS 0034T, Tafleleh, Nov. 20 2017; Talal, Formal Hairdresser, HBS 0037T, Tafleleh, Nov. 21 2017; Wasfi, Formal Welding Shop Owner, HBS 0038T, Tafleleh, Nov. 21 2017; Yusuf, Formal Owner of Air Conditioner Shop, HBS 0039T, Tafleleh, Nov. 21, 2017; Bashir, Formal Owner of Unclassified Shop, HBS 0042T, Tafleleh, Nov. 23 2017; Khalid, Informal Owner of Unclassified Shop, HBS 0048T, Tafleleh, Nov. 25 2017; Mahir, Formal Cell Phone Shop Owner, HBS 0050T, Tafleleh, Nov. 25 2017; Raed, Formal Bookshop Owner, HBS 0053T, Tafleleh, Nov. 25 2017; Sami, Informal Clothes Shop Owner, HBS 0054T, Tafleleh, Nov. 26 2017; Tariq, Formal Home Improvement Store Owner, HBS 0055T, Tafleleh, Nov. 26 2017; Abdullah, Informal Grocery Store Owner, HBS 0059T, Tafleleh, Nov. 26 2017; Faisal, Informal Coffee Shop Owner, HBS 0061T, Tafleleh, Nov. 27 2017.

<sup>118</sup>Interview with Abdullah, Informal Grocery Store Owner, HBS 0059T, Tafleleh, Nov. 27 2017.

<sup>119</sup>Interview with Abdulkarim, Public Sector Official in the Tafleleh Municipality, Tafleleh, Dec. 2017.

<sup>120</sup>Interview with Isa, Formal Restaurant Owner, HBS 0063H, Hessa, Dec. 5 2017.

or the governorate. It would be *shameful* if they gave him a violation.”<sup>121</sup>

Our interviews also shed light on *how* kinship ties between regulators and firm owners promote forbearance. Existing work on Jordan’s political economy proposes that deeply entrenched norms of “allegiance, solidarity and mutual responsibility”<sup>122</sup> accompany the kinship ties that bind firm owner and bureaucrat. Many firm owners agree with this perception. Recall that Isa, a restaurant owner in the kinship dense district of Hessa, describes regulators as too “ashamed” to fine an informal business.<sup>123</sup> This stands in sharp contrast to firm owners’ accounts of regulatory enforcement in urban Quesmeh, a district where few MSE owners report having kinship ties to municipal council officials. “A little while ago they [municipal council employees] closed a lot of shops here,” explains Ibrahim, a formal bookshop and stationary store owner in Quesmeh. “After that, when owners refused to go the municipality to license, officials prohibited anyone without a license to reopen. They *scared* us. Now people have a license.”<sup>124</sup> Meanwhile, Luay, the only Quesmeh firm owner who reported having close ties to a municipal council employee, believes his connection “looks after” him.<sup>125</sup>

The public sector officials we interviewed blame norms for regulators’ favoritism.<sup>126</sup> Mumtaz, a business regulator in Sahab— the aforementioned off-the-line district with high rates of public sector employment and low rates of firm informality – maintains that forbearance is “linked to culture [...] specifically in tribal societies there’s no incentive to license. My cousin is there to look after me, so why pay?”<sup>127</sup> Kinship ties might also help firm owners threaten public sector employees. A former Minister of Industry and Trade remarks that regulators are more reluctant to fine shop owners from

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<sup>121</sup>Interview with Isa, Formal Restaurant Owner, HBS 0063H, Hessa, Dec. 5 2017.

<sup>122</sup>Loewe et al. 2008, 273.

<sup>123</sup>Interview with Isa, Formal Restaurant Owner, HBS 0063H, Hessa, Dec. 5 2017.

<sup>124</sup>Interview with Ibrahim, Formal Bookshop Owner, HBS 0027Q, Quesmeh, Nov. 18 2017.

<sup>125</sup>Interview with Luay, Formal Dessert Shop Owner, HBS 0030Q, Quesmeh, Nov. 18. 2017 .

<sup>126</sup>Interview with Sherif, local regulator at the Greater Amman Municipality, Quesmeh, Jan. 2018; Abdulkarim, local regulator in Tafleeh, Tafleeh, Dec. 2017; Interview with Mumtaz, local regulator in Sahab, Jan. 2018.

<sup>127</sup>Interview with Mumtaz, local regulator, Sahab.

large tribes for fear of getting embroiled in tribal politics.<sup>128</sup> Crucially, none of the public sector officials we interviewed linked regulatory agencies' funding, training or support for different levels of firm informality across Jordan.

MSE owners value kinship ties to public sector officials. Forty percent of the interviewed firm owners acknowledge that having personal ties to a municipal council employee would strengthen their relations with the public sector. Only 22 percent report that it would not make a difference.<sup>129</sup> A majority of firm owners agree with the statement that business would be better if their district hired *more* public sector employees. The owner of a barbershop in Tafleeh explains the logic behind this prevailing sentiment:

If you know more people employed in the public sector, then you have more choices [about who to approach]. If you don't have a friend or relative in [the municipal council], then another friend or relative will know someone there."<sup>130</sup>

Kinship ties thus bind the formal welfare of public sector employment with forbearance in Jordan. Given the politically and regionally targeted nature of public sector employment in Jordan<sup>131</sup>, firm owners from communities historically favored by the Hashemite regime - chiefly the country's rural, tribal, East Bank populations - are more likely to have kinship ties to local regulators and benefit from forbearance.

Our four-district case selection supports this assessment. Within Amman, many residents in Quesmeh (Low Public Sector Employment, Low Firm Informality) are Jordanians of Palestinian descent. Quesmeh is located near a Palestinian refugee camp. It hosts the Wihdat soccer club, which emerged from a United Nations Relief and Works Agency for Palestinian Refugees in the Near East (UNRWA) youth center to become a dominant team in Jordan's soccer league and symbol of Palestinian nationalism<sup>132</sup>. Palestinian-Jordanians, particularly from poorer socio-economic backgrounds, have his-

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<sup>128</sup>Interview with Former Minister of Industry and Trade, Amman, Nov. 9 2017.

<sup>129</sup>The remainder of respondents either answered "Maybe" or did not answer the question.

<sup>130</sup>Interview with Zaki, Formal Owner of Hair Salon, HBS 0040T, Tafleeh, Nov. 23 2017.

<sup>131</sup>Brand 2005; Yom 2015.

<sup>132</sup>Tuastad 2014.

torically been excluded from the Hashemite regime's ruling coalition.<sup>133</sup> It is unsurprising that Quesmeh has both lower rates of public sector employment *and* firm informality than neighboring Na'our which has a more rural, predominantly East Bank population.

In Tafleleh, regulators and analysts characterize Hessa (High Public Sector Employment, High Informality) as more "Bedouin" than neighboring Tafleleh (Low Public Sector Employment, Low Firm Informality).<sup>134</sup> In the 2016 parliamentary elections, Hessa was the only district in Tafleleh to be designated a tribal or "Badia" electorate. "Badia" districts represent Jordan's tribal populations.<sup>135</sup> Scholars have longed accused Jordan's electoral system of disenfranchising the country's predominantly urban, Palestinian populations while ensuring East Bank and tribal dominance.<sup>136</sup> Hessa benefited from approximately one elected parliamentarian per 9,500 residents in the 2016 parliamentary elections. Tafleleh has one parliamentarian per 15,600 residents.<sup>137</sup> Jordan's Bedouin populations have traditionally dominated the country's security services.<sup>138</sup>

Taken together, our interviews help illustrate the mechanisms underlying the geography of forbearance in non-democracies. They suggest that firm owners covet forbearance, obtain forbearance through kinship ties to local regulators, and that non-elected regimes privilege forbearance to their traditional support base. We find little evidence that municipal councils' resource constraints are the primary determinants of firm informality in Jordan.

While forbearance through kinship extends redistributive benefits to supporters who cannot or no longer benefit from public sector employment - 5 out of the 15 informal firm owners interviewed reported previously working in the public sector versus only 9 out of the 47 formal firm owners - it is costly.

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<sup>133</sup>Marie Baylouny 2008; Yom 2015.

<sup>134</sup>Interview with former minister from Tafleleh, November 28, 2017. Interview with Abdulkarim, local regulator in Tafleleh.

<sup>135</sup>Sowell 2015.

<sup>136</sup>Schwedler 2010.

<sup>137</sup>Parliamentary seat-to-citizen ratios were calculated using the United Nations Development Program (UNDP)'s "2016 Atlas of Electoral Districts" and the JLMPS 2010's district population estimates. See UNDP 2016.

<sup>138</sup>McLauchlin 2010, 343.

Forbearance forfeits fiscal revenue. It delegitimizes tax collection among tax-paying firm owners, further straining state-business relations at a time when the Jordanian regime needs the private sector's support.

## Conclusion

Our mixed-methods investigation of firm informality in Jordan contributes to a growing literature on forbearance in the developing world in three ways. Most directly, it extends the study of forbearance to non-democracies. We show that, absent of electoral pressures, non-elected regimes limit forbearance to their supporters' businesses. We also propose that forbearance complements, not substitutes, formal welfare in non-democracies. Using survey data of over 3,800 MSEs, we find that higher rates of public sector employment - a prevailing form of welfare in many developing countries<sup>139</sup> - correlate with a greater permissibility of firm informality. Interviews with firm owners and local public sector officials involved in firm registration and licensing suggest that kinship ties to regulators enable forbearance. This binds formal welfare (public sector employment) and forbearance in non-democracies. Regimes' strategic co-optation of supporters through public sector employment extends the redistributive benefits of forbearance to their supporters' kinship networks. Identifying *who* belongs to ruling coalitions is therefore central to mapping the geography of forbearance in non-democracies. This insight complements Holland's work in Turkey.<sup>140</sup> She finds that as the Justice and Development Party's (AKP's) electoral base evolved to represent formal small business owners of Turkish origin, AKP mayors became more likely to prosecute informal street vendors, who are disproportionately Kurdish and small business owners' chief competitors.

Second, our analysis cautions against assuming an inherently predatory or antagonistic relationship between state actors and members of the shadow economy. Kinship ties determine favoritism in Jordan. Party affiliation, sect,

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<sup>139</sup>Noorudin and Rudra 2014.

<sup>140</sup>Holland 2017.

or history of military service could color the nature of state-business relations in other contexts. The privileged, private sector beneficiaries of public sector favoritism may be as opposed to the retrenchment of public sector employment and benefits as their peers in the civil service. Our findings also suggest that many in the informal economy may in fact support the authoritarian status quo.<sup>141</sup>

Lastly, we hope this analysis encourages scholars of informal economies to continue investigating the political origins and motivations of bureaucracies. As Davis reminds us in her reflections on the politics of informality, bureaucracies vary tremendously across the developing world.<sup>142</sup> The Jordanian case illustrates that when regulatory agencies are also instruments of community-level patronage, their presence can paradoxically promote unregulated markets by extending kinship ties to the private sector. Disrupting state-business kinship ties by assigning public sector employees to posts outside of their native district, as done in India,<sup>143</sup> could help enforce firm formality. Such measures, however, obstruct the redistributive basis of patronage-based bureaucracies.

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<sup>141</sup>Mazaheri and Monroe 2018.

<sup>142</sup>Davis 2018.

<sup>143</sup>Kohli 1987.

## Appendix 1: Quantitative Analysis

Table 3: Formal and Informal Fixed Store MSE Owner Population Estimates

	Formal	Informal
MSEs in LENS Survey	2,874	969
Total Population (LENS Estimate)	51,976	13,773
Female (Percent)	6.9	7.4
Age (Mean)	42	41.7
Education* (Mean)	3	2.6
Primary Earner (Percent)	82	78
Full Time Employees	0.86	0.42
Age of Firm (Mean)	9.6	5.5
Sectors (Percent) Weighted Estimates		
Retail	63	62
Manufacturing	15	13
Other	22	25
Distribution Across Governorates (Percent) Weighted Estimates		
Amman	45	32
Zarqa	21	21
Irbid	25	34
Karak	6	8
Tafleeh	2	4
Aqaba	1	2

*Note: \* Education level (0 - 6)  
0 = Illiterate; 6 = Post College*

Table 4: Regime Support and MSE Formality

	<i>DV: Is your firm formal (1 = Yes)?</i>		
	(1)	(2)	(3)
<b>Public Sector Share of District's Labor Force</b>	-2.392*** (0.697)	-3.886* (1.992)	-3.039** (1.489)
<b>MSEs Per Capita (Logged)</b>	0.381*** (0.123)	0.227* (0.137)	0.071 (0.116)
Education (1 - 7)	0.250*** (0.035)	0.251*** (0.035)	0.258*** (0.031)
Primary Earner (1 = Yes)	0.374*** (0.110)	0.382*** (0.110)	0.283*** (0.097)
Years of Operation (Decades)	0.407*** (0.051)	0.409*** (0.051)	0.408*** (0.074)
Full Time Employees	0.343*** (0.049)	0.344*** (0.049)	0.366*** (0.045)
Urban (1 = Yes)	0.087 (0.234)	0.259 (0.264)	0.375** (0.187)
Constant	1.935*** (0.687)	0.891 (0.632)	0.157 (0.507)
Observations	3,843	3,843	3,843
Log Likelihood	-1,924.588	-1,927.080	-1,988.488
Akaike Inf. Crit.	3,873.176	3,878.161	3,996.977
Bayesian Inf. Crit.	3,948.224	3,953.209	

*Note:*

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

Logistic Regressions. All models include Sector Fixed Effects. Models 1 and 2 include Random Intercepts at the District and Bloc Level. Model 3 clusters Standard Errors at the District Level. Model 1 employs a broad categorization of Public Sector Employment (ISIC Rev. 4 Code 84). Models 2 and 3 operationalize Public Sector Employment in terms of administration and business regulation (ISIC Rev. 4 Code 841).

Table 5: Regime Support and MSE Formality (2)

	<i>DV: Is your firm formal? (1 = Yes)</i>	
	Registered (1)	Licensed (2)
<b>Public Sector Share of Labor Force (ISIC Rev.4 Code 841)</b>	-4.280** (2.010)	-2.832 (2.089)
<b>MSEs Per Capita (Logged)</b>	0.248* (0.137)	0.186 (0.145)
Primary Earner (1 = Yes)	0.475*** (0.115)	0.376*** (0.115)
Education (1 - 6)	0.274*** (0.037)	0.316*** (0.038)
Years of Operation (Decades)	0.448*** (0.056)	0.480*** (0.057)
Full Time Employees	0.385*** (0.055)	0.331*** (0.053)
Urban (1 = Yes)	0.261 (0.265)	0.188 (0.277)
Constant	1.063* (0.632)	0.747 (0.666)
Observations	3,843	3,843
Log Likelihood	-1,766.705	-1,750.580
Akaike Inf. Crit.	3,557.409	3,525.161
Bayesian Inf. Crit.	3,632.457	3,600.209

*Note:*

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

Logistic Regression. All models employ Random Effects intercepts at the District and Block level, and Sector Fixed Effects.

Table 6: Public Sector Employment and Incentives to Register

<i>DV: I have no incentive to register (1 = Yes)</i>	
<b>Public Sector Share of Labor Force (ISIC Rev.4 Code 841)</b>	4.343* (2.396)
<b>MSEs Per Capita (Logged)</b>	0.111 (0.160)
Primary Earner (1 = Yes)	-0.038 (0.225)
Education (1 - 6)	-0.152** (0.072)
Years of Operation (Decades)	0.472*** (0.100)
Full Time Employees	0.058 (0.109)
Urban (1 = Yes)	-0.089 (0.304)
Constant	-0.980 (0.668)
Observations	761
Log Likelihood	-438.532
Akaike Inf. Crit.	899.064
Bayesian Inf. Crit.	950.045

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
 Logistic Regression. Only unregistered survey respondents. Sector Fixed Effects. Random Effects intercepts at the Block level.

Table 7: Public Sector Employment and Reported Bribery

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*DV: Have you ever been asked to pay a bribe? (1 = Yes)*

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<b>Public Sector Share of Labor Force (Isic Rev. 4 Code 841)</b>	-3.795* (2.299)
<b>MSEs Per Capita (Logged)</b>	0.128 (0.155)
Primary Earner (1 = Yes)	0.258* (0.153)
Education (1 - 6)	0.098** (0.044)
Years of Operation (Decades)	-0.069 (0.059)
Full Time Employees	0.060 (0.043)
Urban (1 = Yes)	0.103 (0.260)
Constant	-1.946*** (0.733)
<hr/>	
Observations	3,540
Log Likelihood	-1,311.429
Akaike Inf. Crit.	2,646.858
Bayesian Inf. Crit.	2,720.920

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*Note:*

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

Logistic Regression. Sector Fixed Effects. Random Effects intercepts at the District and Block level.

Table 8: District Rates of Firm Informality and Public Sector Employment (ISIC 841)

District	Gov	MSEs Surveyed	MSE Pop (Estimate)	Informal (%) (Estimate)	Public Sector Share of Labor Force (ISIC Rev.4 Code 841)	Jordanian Residents (000s, 2010)
Al-Jami'ah	Amman	3	218	100	5.5	367.6
Jizah	Amman	4	89	41	11.2	51.6
Quesmeh	Amman	299	6677	14	2.1	336.8
Muaqqar	Amman	2	120	50	13.1	52.6
Sahab	Amman	43	1012	16	22.1	42.7
Amman-Qasabah	Amman	314	8936	13	6.4	628.9
Marka	Amman	298	10213	17	5	581.9
Na'our	Amman	120	356	25	6.7	63.4
Quairah	Aqaba	212	348	50	16.3	10.7
Aqaba	Aqaba	79	169	35	18.9	115
Aghwar-Shamaliyah	Irbid	33	975	32	8.4	127.8
Ramtha	Irbid	58	1645	36	9.2	129.1
Taybeh	Irbid	6	274	76	9.1	16.7
Koorah	Irbid	49	1866	18	6.3	87.3
Mazar-Shamalia	Irbid	20	652	11	8.6	43.9
Wastiyyah	Irbid	2	60	17	8	38.5
Bani Obeid	Irbid	76	2172	37	12.8	102.5
Bani-Kenanah	Irbid	12	400	42	9.6	58.8
Irbid-Qasabah	Irbid	331	9806	22	7.3	493.4
Aghwar-Janoobiyah	Karak	74	399	29	21.6	40.1
Qasr	Karak	72	454	26	9	16.1
Qatraneh	Karak	14	69	19	12.5	11.4
Mazar-Janoobee	Karak	264	1424	31	14.7	86
Ayy-Qasabah	Karak	10	48	16	4.6	13.2
Faqo'e	Karak	21	106	41	13.3	10.7
Al Karak	Karak	312	1901	16	17.1	69.4
Hessa	Tafiela	42	109	44	33.5	28.6
Bsaira	Tafiela	128	327	34	16.7	5.7
Tafileh	Tafiela	516	1214	34	14.7	62.6
Russeifa	Zarqa	88	4981	27	4.4	295.6
Hashemiyah	Zarqa	17	760	36	15.5	56.4
Zarqa-Qasabeh	Zarqa	324	7924	16	8.5	489.7

Figure 6: Informality in Amman Governorate

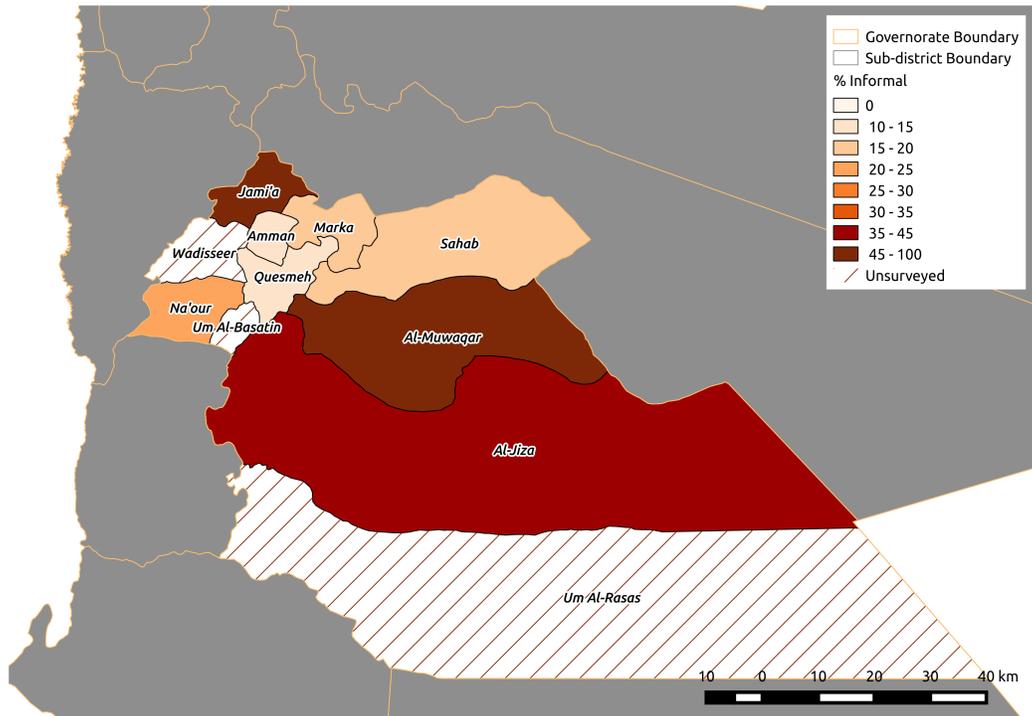


Figure 7: Public Sector Employment (ISIC 841) in Amman Governorate

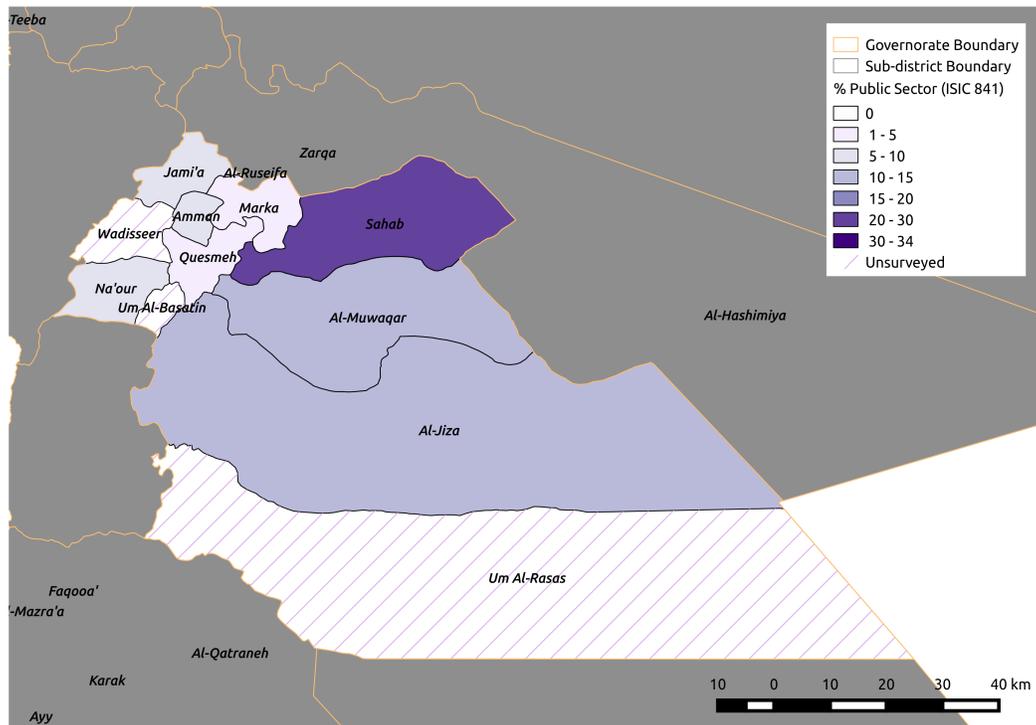


Figure 8: Informality in Tafieleh Governorate

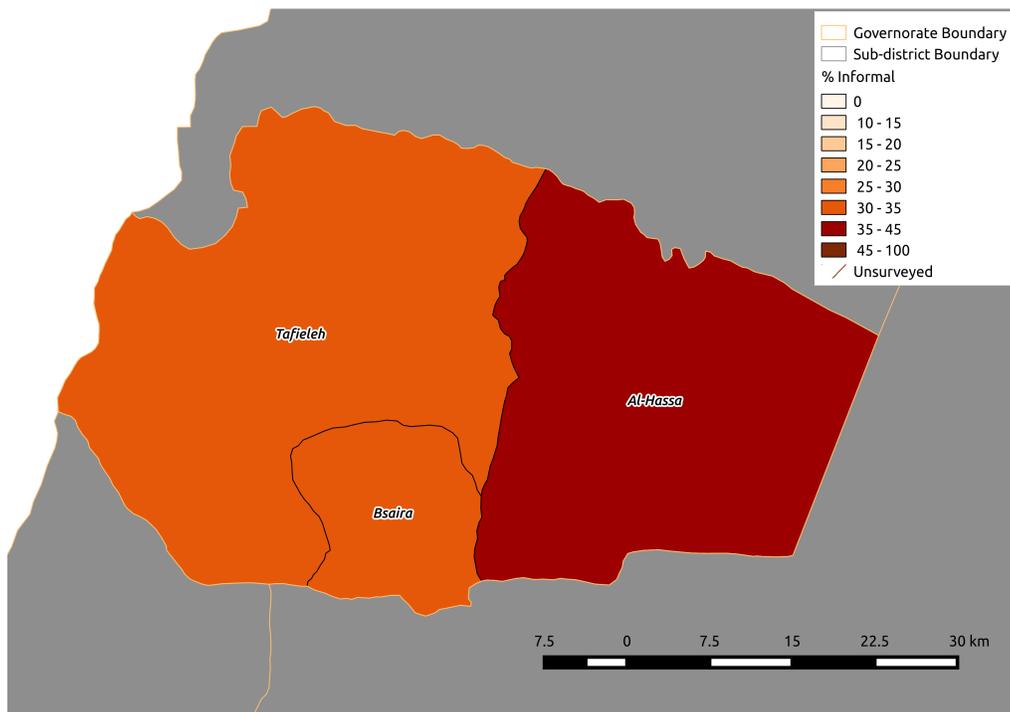
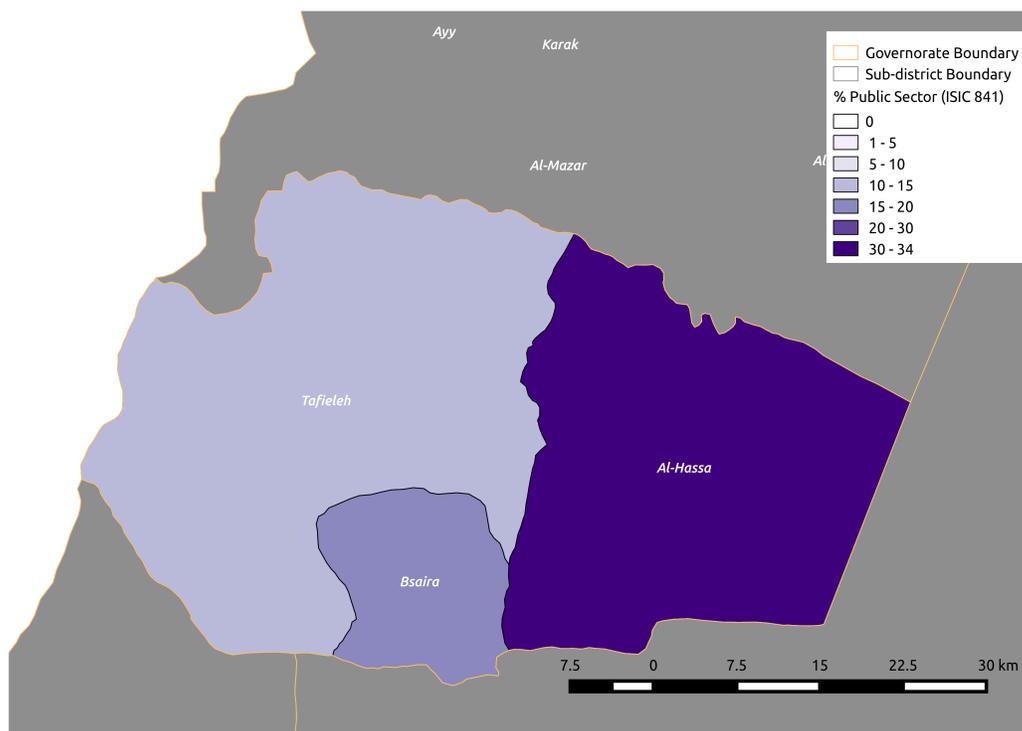


Figure 9: Public Sector Employment (ISIC 841) in Tafieleh Governorate



## Appendix II

Table 9: Population of Fixed Store Interviews

	<b>Formal</b>				<b>Informal</b>				<b>Total</b>
	Manufacturing	Retail	Other	Total	Manufacturing	Retail	Other	Total	
Na'our	1	5	2	8	0	2	1	3	11
Quesmeh	4	10	4	18	1	1	0	2	20
Tafileh	2	12	4	18	1	6	2	9	27
Hessa	0	2	1	3	0	1	0	1	4

Table 10: Re-sampled Qualitative Firm Interviews

	Reference Code	Pseudonym	LENS Survey Status	Actual Status	Company Description	Date of Interview	Time (in minutes)
1	001N	Abed	Informal	Informal	Car parts store	11/06/2017	34.00
2	002N	Bader	Formal	Formal	Super Market	11/06/2017	46.00
3	003Q	Daud	Formal	Formal	Carpentry	11/06/2017	37.00
4	005N	Fahmi	Formal	Formal	Dessert Shop	14/11/2017	37.00
5	006N	Ghassan	Informal	Formal	Hairdresser	14/11/2017	39.00
6	007N	Hadi	Formal	Formal	Hairdresser	14/11/2017	33.00
7	008N	Imad	Formal	Formal	Footwear store	15/11/2017	31.00
8	009N	Jalal	Formal	Formal	Mini Market	15/11/2017	33.00
9	0010N	Karim	Informal	Formal	Super Market	15/11/2017	52.00
10	0011N	Latif	Formal	Formal	Super Market	15/11/2017	43.00
11	0012N	Marwan	Formal	Formal	Book shop	15/11/2017	45.00
12	0013N	Nabil	Formal	Formal	Hardware Store	15/11/2017	71.00
13	0014N	Omar	Formal	Formal	Super Market	15/11/2017	41.00
14	0015N	Qasim	Formal	Formal	Coffee Shop	15/11/2017	47.00
15	0016Q	Rabih	Formal	Formal	Butchery	16/11/2017	41.00
16	0017Q	Saad	Formal	Formal	Home Improvement Store	16/11/2017	42.00
17	0018Q	Taher	Formal	Formal	Auto Repair Store	16/11/2017	51.00
18	0019Q	Uday	Formal	Formal	Tailor Store	16/11/2017	43.00
19	0020Q	Wael	Formal	Formal	Home Improvement Store	17/11/2017	39.00
20	0021Q	Yahya	Formal	Formal	Dry clean	17/11/2017	39.00
21	0022Q	Zaid	Formal	Formal	Company	17/11/2017	39.00
22	0023Q	Adnan	Formal	Formal	Granite workshop	17/11/2017	44.00
23	0024Q	Bilal	Formal	Formal	Company	17/11/2017	41.00
24	0025Q	Fuad	Formal	Formal	Company	17/11/2017	43.00
25	0026Q	Harun	Formal	Formal	Jewellery store	17/11/2017	56.00
26	0027Q	Ibrahim	Formal	Formal	Book shop / Stationary	18/11/2017	49.00
27	0028Q	Jawad	Formal	Formal	Auto Repair Store	18/11/2017	39.00
28	0029Q	Khalil	Formal	Informal	Welding Shop	18/11/2017	33.00
29	0030Q	Luay	Formal	Formal	Dessert Shop	18/11/2017	41.00
30	0031Q	Mahmud	Formal	Formal	Auto Repair Store	18/11/2017	41.00
31	0032Q	Nassim	Formal	Formal	Restaurant	18/11/2017	46.00
32	0033Q	Osman	Informal	Informal	Carpentry	18/11/2017	45.00
33	0034T	Qusay	Formal	Formal	Home Improvement	20/11/2017	32.00
34	0035H	Ramzi	Informal	Informal	Super Market	20/11/2017	41.00
35	0036T	Shakir	Formal	Formal	Animal Supplies Store	21/11/2017	43.00
36	0037T	Talal	Formal	Formal	Hairdresser	21/11/2017	39.00
37	0038T	Wasfi	Formal	Formal	Welding Shop	21/11/2017	40.00
38	0039T	Yusuf	Formal	Formal	Air Conditioners	21/11/2017	44.00
39	0040T	Zaki	Formal	Formal	Hairdresser	23/11/2017	38.00
40	0041T	Ashraf	Formal	Informal	Grocery Store	23/11/2017	35.00
41	0042T	Bashir	Formal	Formal	Company	23/11/2017	37.00
42	0043H	Ezzeldeen	Formal	Formal	Butchery	25/11/2017	46.00
43	0044T	Fayez	Formal	Formal	Accessories	25/11/2017	46.00
44	0045T	Hatem	Formal	Formal	Super Market	25/11/2017	39.00
45	0046T	Ihab	Informal	Informal	Coffee Shop	25/11/2017	43.00
46	0047T	Jasem	Formal	Formal	Vegetable shop	25/11/2017	39.00
47	0048T	Khalid	Informal	Formal	Shop	25/11/2017	52.00
48	0049T	Labib	Informal	Informal	Cell Phone Shop	25/11/2017	45.00
49	0050T	Mahir	Formal	Formal	Cell Phone Shop	25/11/2017	46.00
50	0051T	Nasir	Formal	Formal	Footwear store	25/11/2017	42.00
51	0052T	Qutb	Informal	Formal	Tailor Store	25/11/2017	39.00
52	0053T	Raed	Formal	Formal	Library	25/11/2017	43.00
53	0054T	Sami	Informal	Formal	Clothes Shop	26/11/2017	40.00
54	0055T	Tariq	Formal	Formal	Home improvement	26/11/2017	41.00
55	0056T	Walid	Formal	Formal	Restaurant	26/11/2017	50.00
56	0057T	Yunus	Informal	Informal	Car Wash	26/11/2017	45.00
57	0058T	Zaher	Formal	Formal	Cell Phone Shop	26/11/2017	46.00
58	0059T	Abdullah	Informal	Formal	Vegetable shop	26/11/2017	39.00
59	0060T	Burhan	Formal	Formal	Restaurant	27/11/2017	39.00
60	0061T	Faisal	Informal	Formal	Coffee Shop	27/11/2017	46.00
61	0062T	Hisham	Formal	Formal	Water Station	27/11/2017	46.00
62	0063H	Isa	Formal	Formal	Restaurant	12/05/2017	35.00
63	0064H	Jad	Formal	Formal	Super Market	12/05/2017	37.00

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