

# Land and Legibility: When Do Citizens Expect Secure Property Rights in Weak States?

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**L**egibility and political authority are often conflated in debates over formalization processes, including land titling. This can lead to a fundamental misunderstanding of what it is that citizens anticipate would strengthen their property rights. This study examines the effects of legibility on citizens' evaluations of property rights in Malawi, a country with limited but increasing land titling. We argue that legibility is a strategic resource for citizens, which has value in itself. To disentangle the effects of legibility and authority on tenure security, we employ a survey experiment. Our findings show that respondents perceived land with written property rights to be more secure and more desirable regardless of whether a state or customary authority granted these land rights. In contrast to scholarship that examines legibility as a technology of state control, this research suggests that legibility can help citizens advance their interests.

**T**he desirability of state land titling has been the subject of heated debates in weak states grappling with legacies of conflict and colonization (Boone 2019; Migot-Adholla et al. 1991; Murtazashvili and Murtazashvili 2015; Toulmin and Quan 2000). Only 30% of the world's population holds state titles to their land, according to 2019 estimates (Tuck and Zakout 2019), whereas the vast majority rely instead on customary authorities and nonstate brokers for their property rights.<sup>1</sup> Proponents of state land titling argue that replacing such informal or customary property rights with individual titles will increase credit access, investment, and productivity by boosting tenure security (de Soto 2000; Feder and Nishio 1998). Indeed, secure property rights are essential to long-term

economic development (Acemoglu, Johnson, and Robinson 2001; North and Thomas 1973). However, others question whether titling will affect property rights security in contexts with weak state capacity.<sup>2</sup> Thus for fragile states, land titling has been described as “premature load bearing” for the state (Andrews, Pritchett, and Woolcock 2002, 57). More generally, if citizens anticipate that the state will not effectively administer their systems of formal property rights, because their registries are outdated or their enforcement is biased, titles should be less desirable. Critical questions remain about how citizens evaluate different types of property rights, particularly in contexts characterized by strong customary land tenure and weak state capacity.

Existing contributions to this debate generally compare written property rights governed by state authority (land titles)<sup>3</sup> with oral, unwritten property rights governed by a customary authority (customary rights).<sup>4</sup> This approach conflates the authority enforcing land rights and the legibility of those rights. Legibility, or the visibility of land rights to those both outside of and within one's own community,<sup>5</sup> may be a valuable attribute of property rights on its own, independent of the authority governing these rights. The danger of conflating these attributes of land rights is not merely academic: it can lead to a fundamental misunderstanding of what it is that citizens anticipate would strengthen

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<sup>1</sup> Customary authorities play an important role in allocating and ensuring property rights across the world. For examples, see Elsana (2015) on Australia; Sirait et al. (1994) on Canada; Elsana (2015) on Egypt, Israel, Jordan, and elsewhere in the Middle East; Adra (2011), Gaston and Dang (2015), Khalid, Nyborg, and Khattak (2015), and Murtazashvili and Murtazashvili (2016b) on Afghanistan and Pakistan; Sirait et al. (1994), and Charan, Kaur, and Singh (2017) on Indonesia, Fiji, and other Pacific islands; Herlihy and Tappan (2019) on Latin America; and Boone (2014), and Baldwin (2016) on Africa.

<sup>2</sup> For examples, see Jacoby and Minten (2007), Sjaastad and Cousins (2009), Murtazashvili and Murtazashvili (2015), Platteau (2000).

<sup>3</sup> Note that, in conformity with prevailing approaches, we define land titles in this article as statutory property rights documents. Alternative and informal land rights documents created by private actors or chiefs do not fit this definition of land titles.

<sup>4</sup> For comprehensive reviews, see Lawry et al. (2017) and Higgins et al. (2018).

<sup>5</sup> Our definition of legibility builds upon the foundational work of Scott (1998).

their property rights. When citizens value land titles, is it because they reflect assurance from the state or because they are a legible recognition of their property rights?

This article examines individuals' property rights preferences in Malawi. Malawi is a country where land titling is actively promoted and debated (Ng'ong'ola 1982; Peters and Kambewa 2007) but also one in which citizens are skeptical of the state. Among citizens surveyed by the Afrobarometer (2016), trust in members of parliament and the president hovered at 37% and 36%, respectively, in striking contrast to the 67% who reported trusting customary authorities. This gap in trust between state and customary authorities raises doubt about the efficacy of titling in weak state contexts. Understanding what informs citizens' perceptions of property rights security has particularly high salience in Malawi, where the majority of the population relies on agriculture for their livelihoods.

We employ a survey experiment to disentangle how authority and legibility shape Malawian perceptions about land security. The experiment was embedded in a phone survey of 4,893 adult Malawians fielded from August to October 2020 in nearly every district of Malawi. We presented participants with a description of a plot of land in which the buyer, community, and titling characteristics vary and then asked them to evaluate the desirability and security of land tenure. These are meaningful outcomes of interest because they shape actual investment behaviors. Moreover, employing the experimental design allows us to overcome vexing endogeneity problems in observationally based studies of property rights; in short, the types of people who possess land titles may be systematically different from those with customary rights as a result of historical and political processes (Galiani and Scharrotsky 2010; Jacoby and Minten 2007). It also allows us to separate the effects of written documents from the types of authorities granting them and to gauge the influence of other variables that have been shown to affect tenure security including gender, marital status, ethnicity, and social relationships within the community.

Our findings show that legibility matters even if it is generated by documents that are outside of the state's direct authority. Respondents evaluated land with written property rights to be more desirable and less prone to tenure threats or successful expropriations than land lacking explicit mention of documents. We find no evidence of an interaction between authority and written documents: written rights matter *regardless of the authority granting them*. Furthermore, we find some evidence that respondents perceived documents to be particularly important for women and for land in communities where people are less inclined to help each other. In addition, although respondents with both high and low education perceived written documents to increase tenure security, the effect was notably stronger for high-education respondents. By contrast, the age, gender, and land ownership status of the respondent did not influence the effect of written rights on perceptions of land security: legible rights were equally security-enhancing across these demographics.

This research reveals that legibility can be a resource for citizens, which has implications beyond land rights. Scholars have examined legibility as a technology of state control and state building, suggesting that citizens resist legibility in order to avoid an extractive state (Brambor et al. 2020; Lee and Zhang 2017; Scott 1998). However, by showing that citizens value legibility regardless of whether written rights are issued by state or customary authorities, we highlight the implications of written rights that are distinct from the costs and benefits of incorporation into the state. Our findings indicate that we need far more research into the benefits of legibility for citizens in addition to the trade-offs of becoming legible. Moreover, these findings also have clear implications for policy debates on land titling. They draw attention to the potential for other forms of written documents that are not "titles" to make people feel more confident in their ability to invest in and maintain access to their land.

## LEGIBILITY AS A STRATEGIC RESOURCE

If there is any consensus among scholars studying property rights, it is that the value and appropriateness of land titling varies across contexts and among actors within any given community (Atwood 1990; Deininger and Feder 2009; Fenske 2011; Platteau 2000; Sjaastad and Cousins 2009). Scholars have demonstrated that titling is costly relative to any discernible benefits for investments (Jacoby and Minten 2007). Others show that titling may be particularly valuable to individuals who are disadvantaged within their local customary institution. For example, Ali, Deininger, and Goldstein (2014) find that women-headed households in Rwanda increased their agricultural investments after receiving land titles, suggesting the title led to a meaningful increase in tenure security. Similarly, in rural Senegal and Zambia, Honig (2022a) argues that titles are less desirable to individuals with higher status within customary institutions. On the other hand, scholars have also described how more vulnerable groups including women, youth, and migrants often rely on complex systems of secondary rights within customary property rights regimes that land titling does not accommodate well (Meinzen-Dick and Mwangi 2009). Finally, community context also matters for how citizens evaluate the value of land titling. In urban Tanzania, Collin (2020) finds that living in an ethnically homogeneous area dampens demand for state titles because thick social ties increase community members' tenure security. As Boone (2019) details, there are a variety of trade-offs that determine the desirability of different forms of property rights.

Thus, while it is clear that neither customary land rights nor state land titles are a one-size-fits-all solution to tenure security, less is understood about the characteristics that shape evaluations of the efficacy of different property rights beyond the authority systems in which they are embedded. In particular, variations in the legibility of rights have been overlooked and understudied within the debates over land titling. Examining the potential effects of the visibility of land rights

bridges the literatures on property rights and state building, contributing to increased understandings of what citizens value about different types of rights. This is particularly important in contexts in which tenure systems are unsettled and multiple property rights institutions could potentially regulate land access.

Political scientists have typically understood legibility as a tool of state building. Scott (1998) describes how states make their populations legible in order to exert power over them. In his framework, states build their capacity to implement their own agendas by creating standardized systems of measure, population censuses, and, importantly, land titles. Research by Lee and Zhang (2017) and Brambor et al. (2020) highlights legibility as an indicator of the state's ability to collect information about populations and citizens in the territory; the development and quality of censuses are thus measures of state capacity. D'Arcy and Nistotsaya (2017) focus further on land, using cadastral land registries to measure state strength.

Existing approaches suggest that legibility is costly to citizens because it increases the state's power in their lives. Much of the scholarship on legibility highlights how it weakens citizens by enhancing the state's ability to control them, including by extracting revenue through taxation. For example, Doshay (2021) argues that legibility weakens civil society's ability to challenge the state, and Belge (2016) suggests that it makes minority groups more vulnerable to targeted state violence. Rossi and Argenton (2021) rely on the concept of legibility to describe why the historical expansion of private property rights should not be seen as a constraint on the state but rather as an expression of state power over individuals. Being legible to the state has economic implications for citizens as well: Côte and Korf (2018) describes how the state seeks to increase its documentation of the gold mining sector in Burkina Faso, whereas small-scale miners evade becoming legible and therefore regulated by state authority.

Yet there is also evidence that "being seen by the state"<sup>6</sup> can empower citizens. First, it does so by increasing their ability to make claims on the state (Harbers 2020; Huezco and Orobio 2021). Second, it may support citizens' abilities to express their subnational identities: McMurry (2021) shows that the increased legibility that results from collective land titles in the Philippines prompted higher self-recognition of membership in Indigenous groups in addition to increasing their compliance with state policies.

In the domain of individual land titling specifically, citizens whose rights are legible to the state may experience costs in the form of the state's strengthened capacity to tax them, along with the benefits of having their rights be visible in state courts and institutions (such as banks) that prioritize formal rights. The costs and benefits to citizens of increasing the state's knowledge of their land rights are particularly clear in Sánchez-Talanquer (2020)'s depiction of titling processes in Colombia. He argues that citizen enthusiasm for

legibility was conditional on expected tax burdens, perceived legal benefits, and fear of tenure security threats from state and nonstate actors.

The existing approaches have explored outcomes of legibility that result from individuals becoming known to the state; yet, in doing so, they reveal that legibility is important because it imparts information to other interested parties. As a result, we speculate that legibility may also have value for citizens, apart from their interactions with the state. Disentangling legibility and state authority is particularly important in places where actors outside of the state have prominent roles in enforcing land rights. This may include community leaders, nongovernmental organizations, nonstate or private security providers, and chiefs (Boone 2014; Joireman 2011; Murtazashvili and Murtazashvili 2016b; Onoma 2009). In short, "real property rights are inevitably local; right means what the claimant can make it mean, with or without the state's help," as Herring (2002, 288) describes in reference to rural India.

By making citizens' land rights visible to others, legibility is a source of tangible evidence that actors can then use to bolster their claims. Research on institutional innovations in land tenure documents in West Africa supports this intuition. Alhassan (2009) found that farmers in Western Ghana had created their own receipts for land rental agreements because they introduced greater transparency into their land transactions. He explains that tenant farmers were "keen on having some form of documentation to enhance their security of tenure since many oral contracts are daily being abrogated by land owners" (Alhassan 2009, 108). Mathieu, Zongo, and Paré (2002) describe the creation of written land rights documents in Burkina Faso as a means of making land rights visible. Even handwritten notes can provide "validation" (Mathieu, Zongo, and Paré 2002, 109).

Legibility thus may have benefits independent of state enforcement. The "little receipts" created by farmers in Burkina Faso are not intended as evidence for state courts or administrators; they are used as proof to prevent other community members from renegeing on otherwise oral land rights (Mathieu, Zongo, and Paré 2002). Koné and Chauveau (1998) find a similar practice in Côte d'Ivoire, where non-Indigenous farmers described informal land documents as a basis for negotiation with Indigenous farmers. In Ghana, too, written receipts have value because they create a foundation for conflict resolution within the community (Alhassan 2009). Research on local innovations in documented land rights shows that whether the state recognizes these papers is not the sole determinant of whether citizens find them valuable (Alhassan 2009; Delville 2002; Honig 2022b; Koné and Chauveau 1998; Mathieu, Zongo, and Paré 2002).

In addition to being a tangible piece of evidence, legibility may indicate a more advanced stage in the process of establishing land rights. If a claim is written, it is likely that the boundaries of these rights have already been debated among community members or local authorities. Oral land rights may also be well

<sup>6</sup> In reference to the title of Scott (1998)'s foundational book.

established, particularly those that are long-standing or inherited. Nevertheless, citizens may value legibility as a signal that a clear discussion of the boundaries or terms of the rights occurred. This is consistent with the findings of Firmin-Sellers and Sellers (1999), that farmers in Cameroon used the government's land titling program to gain boundary markers on their land, without completing the titling process. Although the boundary markers had no legal import, the authors conclude that the process of placing the boundaries was sufficient for increasing tenure security. As a result, the program was considered a "failure" because farmers opted not to pursue titling but an "unexpected success" to farmers who gained boundary markers that increased the visibility of their rights (Firmin-Sellers and Sellers 1999).

Legibility is not a guarantee of secure rights: it is a resource that citizens can use to support their land claims in a variety of different forums. Written rights serve as evidence that can be leveraged against the state, customary authorities, neighbors within the community, family members, and others. Documents provide a tool for individuals to establish a claim, even though state or local actors may disregard them as illegitimate. In this way, legibility may function as one of many adaptive strategies or mechanisms employed by citizens to strengthen their rights, just as investing in multiple social networks (Berry 1993) and planting tree crops are in some contexts (Brasselle, Gaspart, and Platteau 2002; Place and Otsuka 2002).

We thus argue that legibility is a strategic resource for citizens, *which has value in itself*. To test this argument, we focus on respondents' perceptions of the tenure security and the desirability of land with different property rights characteristics. The multiple ways of conceptualizing and measuring tenure security have significant implications for the conclusions scholars draw (Simbizi, Bennett, and Zevenbergen 2014; van Gelder 2010). We opt to define and operationalize tenure security as the perception that a particular parcel of land will not be expropriated. Subjective evaluations of the ability to continuously use land without the threat of expropriation are themselves consequential for economic development, as individuals can more confidently invest in their land if they believe their land rights to be secure (Goldstein and Udry 2008).

An additional feature of our study, detailed further in the design section, is that we focus on perceptions of a hypothetical buyer's tenure security rather than respondent perceptions of their own tenure security. This allows us to vary the characteristics of potential buyers in addition to the characteristics of the land itself. It also captures the inherently relational nature of property rights as constructs of social and political relationships (e.g., Bates 1989; Berry 1993). Secure land rights are not solely an interaction between an enforcing authority and an individual; other community members affect property claims by upholding or challenging them. The perspectives of others are therefore constitutive of one's tenure security on the ground. Examining citizens' perceptions about *other citizens'*

tenure security thus reflects the social-embeddedness of property rights. Particularly in contexts where the equitable and effective enforcement of property rights by land authorities cannot be assumed, perceptions about other citizens' security represent the value of different types of rights in practice.

In the research that follows, we gauge whether citizens anticipate that a potential land buyer's rights would be threatened with an attempted expropriation and their perceptions of the likelihood of a successful expropriation of land. In addition, we examine whether they would advise the land purchase, which represents a broader evaluation of the desirability of land with different property rights attributes. This recommendation outcome captures a set of costs and benefits that respondents might consider beyond tenure security, such as tax burdens, access to credit, and being known to authorities. The first two hypotheses were preregistered.<sup>7</sup> The third was not preregistered, but it represents prevailing beliefs about when written rights are most likely to matter.

Our core expectation is that legibility will increase perceived security and desirability of land, such that

**Hypothesis 1** *Respondents will perceive land described as having written documents to be more secure than land lacking explicit mention of documents.*<sup>8</sup>

**Hypothesis 2** *Respondents will perceive land described as having written documents to be more desirable than land lacking explicit mention of documents.*<sup>9</sup>

In addition, we evaluate the conventional wisdom that citizens will prefer statutory land titles to land documents granted by customary authorities. This approach would anticipate an *interaction* between authority and written documents wherein written documents will only shape perceptions of security and land value when issued by state authorities (not customary ones).

**Hypothesis 3** *The influence of written documents on perceptions of security and value is conditional on permission coming from the state, not chiefs.*

We further explore the extent to which citizens' preferences for written documents generalize across different community contexts and purchaser characteristics (gender, marital status). We consider communities where people commonly help each other versus those where they do not. Drawing on research that highlights the importance of reciprocity (or, more generally, bonding social capital) for community safety, welfare, and resilience in Africa (MacLean 2010) and elsewhere (Behera 2021; Collins and Guidry 2018;

<sup>7</sup> The preanalysis plan registered with EGAP has registration number 20191104AA.

<sup>8</sup> This was preregistered as, "On average, respondents should be more likely to anticipate secure tenure for a buyer with land that has written property rights."

<sup>9</sup> This was preregistered as, "On average, respondents should be more likely to recommend that the buyer purchase land that has written property rights."

Kennedy et al. 1998; Uekusa, Matthewman, and Lorenz 2022; Wood, Boruff, and Smith 2013), we expect that respondents view property rights in such areas as more secure.<sup>10</sup> If legibility enhances individuals' senses of security, written documents may be less salient in communities where neighbors help each other.<sup>11</sup> We also consider communities in which the purchaser is a member of the majority ethnic group versus those in which they are not, building upon the findings of Collin (2020) that coethnicity affects demand for titles.<sup>12</sup> Furthermore, we explore the interaction of these community characteristics (i.e., whether communities help each other and are majority coethnic) and documents as well as the interaction of written property documents and respondent characteristics: their experience with land ownership, their gender, education, and rural or urban residency.<sup>13</sup>

## PROPERTY RIGHTS INSTITUTIONS IN MALAWI

Malawi is an important case for investigating the value of legibility in property rights because it represents a context in which tenure security has high stakes for citizens but the state's ability to protect land rights is limited. The vast majority of Malawi's citizens depend on consistent access to fertile land for their livelihoods. Eighty-five percent of the country's population is engaged in agriculture (National Statistical Office 2012). Moreover, most are smallholder farmers who rely exclusively on family labor (National Statistical Office 2012). As Malawi is a small country with one of the highest population densities in Africa, good land is scarce, and competition for access to it is high. In 2011, the average agricultural plot size ranged from 2.4 acres (less than 1 ha) in the South to 1.0 acre in the North (National Statistical Office 2012).

Malawians rely on a mix of property rights institutions to secure their land access. The Government of Malawi formally designates land as customary, private, or public. Customary land represents the largest

category of land, and unwritten customary property rights are the most common form of land tenure in the country. Most smallholder farmers live on customary land, which covers an estimated 69% of the territory (Matchaya 2009). On customary land, chiefs govern land rights. The local authorities known as "chiefs" include village heads, group village heads, and official customary authorities ("Traditional Authorities"). Malawi's customary authorities have formal jurisdiction over citizens and land within bounded domains mapped by the colonial state and adopted by the government. However, in practice, village heads, the lowest level of the chiefly hierarchy, govern the customary land rights of residents in their communities.<sup>14</sup> Some community members may have greater status based on characteristics such as being perceived as local, migration history, and lineage ties with village founders or customary leaders. However a chief's land authority implicates all customary land users in the village and is not limited to certain ethnic groups.

Customary land rights are complex systems of locally embedded land tenure norms, which are, by definition, not directly governed by state authority.<sup>15</sup> Unlike individualized land titles, customary rights often accommodate secondary land claims, such as shared access to water sources or grazing rights after a farmer's harvest. Yet they also feature clearly defined, primary land owners. The majority (79%) of Malawi's customary landowners access their land through inheritance (National Statistical Office 2012). In addition, 3% of customary landowners access their land through purchases, and 9% do so through unpaid allocations from chiefs. Although chiefs have the authority to allocate or expropriate and reallocate customary land, many communities feature very strong systems of lineage-based customary property rights, with chiefs primarily overseeing the land in communal areas and protecting the lineage-based property rights. However, there is heterogeneity in the chiefs' governance of customary rights; for example, Peters and Kambewa (2007, 456) suggest that the availability of land in different regions of Malawi affects whether chiefs serve as "allocators" of land or "arbiters" of inherited customary property rights. Furthermore, although customary property rights can be quite strong, scholars have identified substantial variation in tenure security based on indigeneity, gender, matrilineal or patrilineal inheritance structures, and duration within a community, among other characteristics (Matchaya 2009; Place and Otsuka 2001; Takane 2008).

<sup>10</sup> We treat whether or not "most people help each other" in the community as a signal of community social capital, also known as "bonding capital." Social capital, more generally, is defined in part as the social ties, values, and norms that lead individuals to help each other (Aldrich 2010; Coleman 1998; Hawkins and Maurer 2010; Putnam 2000), and scholars (Chen et al. 2008; Onyx and Bullen 2000; Wu 2021) and policy makers (Harper 2002; U.S. Senate 2018) frequently include the extent to which neighbors help each other as part of measures of community social capital.

<sup>11</sup> The preregistered hypotheses were "On average, respondents will be more likely to view a property as secure for a buyer within areas in which most people help each other, and on average, respondents should be more likely to view a property as secure for a buyer within areas in which most people help each other." Importantly, the interaction was not preregistered. However, we analyze it and note that it is in line with the theory presented here.

<sup>12</sup> Horowitz and Klaus (2020)'s finding that Kalenjin who have experienced land eviction are more likely to respond to coethnic candidates' appeals over land grievances similarly suggests that individuals view coethnics as a source of increased land security.

<sup>13</sup> These explorations were not preregistered.

<sup>14</sup> Malawi's Customary Land Act of 2016 mandated that village committees govern customary land tenure. However, this was not widely implemented. See Tchale (2014).

<sup>15</sup> See the government's definition: "customary tenure is the right to own, use or dispose of land rights not based on documentary evidence guaranteed by government statute, but based on customary laws and on the fact that they are recognized as legitimate by the community, enforced in the customary courts, or even merely by social pressure and normally not recorded in writing" (Malawi Ministry of Lands and Housing 2001).

The remaining land in Malawi is governed by the state's direct authority. Public land (such as schools) and private land encompass a smaller, but growing, proportion of Malawi's territory. Private land is land that has been formally titled<sup>16</sup> and registered in the state's systems of property rights. This includes commercial farms known as "estates" as well as smaller plots for smallholder farmers and urbanites. Customary landowners may initiate the process of titling their land, which converts it to private land. Citizens seeking titles must pay administrative fees and gain approval from the local chief and district commissioner. Furthermore, titled land may be subject to taxation, although the implementation of property tax collection in Malawi is limited (Jere 2012). Given the costs of titling, it remains relatively rare. Only 8% of the 6,754 landowners sampled by the Local Governance Performance Index (LGPI) survey in 2019 had statutory titles for their land (Lust et al. 2020b).<sup>17</sup>

Malawi's legal code recognizes citizens as possessing either titles governed by state authority or customary rights protected by a customary authority. However, some citizens and communities have developed alternative forms of property rights. Customary property rights are generally unwritten or orally communicated. In the government's own words, they are defined as "not based on documentary evidence guaranteed by government statute" (Malawi Ministry of Lands and Housing 2001). Yet, in some cases, citizens have acquired written customary rights. These written customary rights may be as simple as a headman's notebook that describes relevant information about the land and its owner. Chome and McCall (2005, 464) suggest that "informal registration" differs from formal title because title signifies "the independence of the individual from others," whereas the village head's registry signifies engagement with the local community institutions. Informal registration is quite common in Malawi: in a survey of 360 households in 6 districts in 2016, among the 65 households who reported having "registered" land rights, 69% had registered them with the village head, 17% with the government, and 14% with both types of authorities (Dulani, Lust, and Swila 2016).

Researchers have also described written customary rights in Malawi in the form of letters or notes that acknowledge the transfer of land rights, which are signed by customary authorities (Chinigò 2015; Holden, Kaarhus, and Lunduka 2006; Takane 2008). In these cases, citizens initiated the process of creating legible land rights documents, and customary authorities witnessed or "authorized" the agreements enshrined in the documents (Takane 2008, 25). Holden, Kaarhus, and Lunduka (2006)'s study suggests that chiefs may receive direct payments for authorizing

these documents. Beyond these material incentives for participating in the development of legible but nonstatutory land rights, chiefs may support such initiatives because the expansion of state titling encroaches on their authority over land and its users. This power prerogative parallels the dynamics around the expansion of informal land documents in neighboring Zambia, where chiefs have offered land papers as a means of slowing demand for land titles, therefore retaining control over land rights in their zones (Honig 2022b).

Written property rights that are independent of the state's authority are widespread in Malawi. In the 2019 LGPI survey, 9% of the landowners in the sample ( $n = 6,205$ ) reported possessing land documents allocated by a chief (Lust et al. 2020b).<sup>18</sup> Although this sample was not nationally representative, the results suggest that these documents are present within communities in both the greater Lilongwe area and the more peripheral regions bordering Zambia. Furthermore, they indicate that it is not only elites, ethnic insiders, or wealthy residents who have acquired written representations of customary land rights. Among respondents with written rights from a chief, 6% reported being related to a customary authority, compared with 13% without any land papers and 10% with state titles. Similarly, the percentage of respondents who were members of the ethnic majority group in the sampled locality are roughly similar across landowners with written rights from a chief, no papers, and state titles: 62, 71, and 60%, respectively. In addition, the majority of respondents with written rights from a chief report being low income (74%). Summary statistics on these three groups within the 2019 LGPI survey are reported in Online Appendix Table A1. Of particular note, respondents with written documents allocated by chiefs were more likely than those without papers to be located within proximity to townships in the sample, which is consistent with classic theories of property rights innovations induced by land scarcity and demand (Platteau 1996).

In this context of mixed property rights and high land scarcity, citizens may struggle with multiple threats to their tenure security. Conflict within families and communities over land is common. Respondents in the 2019 LGPI survey were most concerned about land tenure threats from family members (46%), followed by chiefs (21%). In the nationally representative 2016 LGPI survey, the most common source of disputes within the community was land, with 31% reporting that this was the most frequent in their community. Furthermore, among those who had themselves been part of a dispute in the previous 12 months, 13% of those disputes were over land.<sup>19</sup>

Rural citizens in Malawi overwhelmingly turn to chiefs to help secure their land rights when they are subject to disputes. In part this is due to their accessibility: chiefs are present in every community on

<sup>16</sup> For agricultural users, these titles are 21- or 99-year leases.

<sup>17</sup> This survey sampled households within 50 km of Lilongwe and within 100 km of the Zambia border. The sample is not nationally representative. See the Online Appendix B.3 for sample details. Individuals with state titles are households who reported they had land documents provided by the local council or government agent.

<sup>18</sup> This includes households who reported they had land documents provided by a customary authority or a village head.

<sup>19</sup> See Online Appendix B.4 for sample details.

customary land and have a role in multiple domains of everyday life (Chiweza 2007; Eggen 2011). However, some prefer to turn to chiefs over local statutory conflict resolution forums or authorities for other reasons. For example, Chinsinga (2006) concludes that community members see chiefs as more legitimate than elected councilors or members of parliament because they are embedded within communities and are more responsive to them. Accordingly, in the nationally representative 2016 LGPI survey, 62% reported that they had opted to engage with the village headman to resolve their land disputes (Lust et al. 2016).

The issue of how to secure land tenure is thus highly salient in Malawi. Although its high population density heightens competition over agricultural land, many of the issues that Malawians face in evaluating different forms of property rights are similar to those faced in countries with both state and customary land rights. In these countries, customary property rights can be very strong, but they are not universally so. In Malawi, as in most African countries, land titles are accessible,<sup>20</sup> but they may be costly or inefficient for increasing tenure security (Atwood 1990; Banda 2011). Furthermore, given that farmers, governments, and policy makers alike are concerned with tools to improve tenure security in Malawi, it is an ideal setting for examining how citizens evaluate legibility and authority as they relate to property rights.

## RESEARCH DESIGN

The challenge of studying the effects of legibility in property rights is that written property rights are often conflated with state authority. To identify whether legibility has an effect that is independent of the type of authority granting these rights,<sup>21</sup> we employ a single-profile conjoint experiment (Hainmueller, Hopkins, and Yamamoto 2014). This survey experiment was embedded in phone surveys given to 4,893 Malawians and fielded from August 21, 2020, through October 7, 2020. The survey was administered to respondents from 28 out of 29 districts, covering all regions of Malawi (Lust et al. 2020a).<sup>22</sup> The sample offers a

breadth of coverage by incorporating Malawians from rural and urban areas of the country (see Figure 1 for a sample map). As indicated in Table 1, the sample somewhat overrepresented women (56%), however, and is limited to Malawians who have access to a phone.<sup>23</sup> The sample thus may be more connected, more urban, and wealthier than the average citizen. Indeed, although generally very economically insecure (over half of our respondents reported that they had “great difficulty” covering their basic needs), our sample is somewhat more educated on average than the more representative sample of the 2016 LGPI survey (14% of our sample had completed secondary education versus only 5% of the 2016 LGPI sample).

The experiment presented each respondent with a hypothetical vignette describing a potential purchaser of a hectare of land. Although purchasing land is not the predominant mode of land access in Malawi, informal markets for rental and purchase are not uncommon in the land-scarce country. For example, in the 2019 LGPI sample, 15% reported acquiring their land through a sale, compared with 69% who accessed land through inheritance and 12% who reported accessing land from an allocation by a chief. A land buyer would not be nonsensical in this context, nor would it only cue an urbanite, migrant, or foreigner.<sup>24</sup> Land purchasing is practiced by a broad set of Malawians, although it does suggest access to financial resources and therefore indicates, at minimum, that the buyer produces cash crops or has remittances from an employed family member. Despite the limitations of introducing a hypothetical “buyer,” it increases the comparability of respondents’ evaluations of a potential land user.

The vignette varied attributes of the purchaser (gender, marital status), the authority granting permission for the purchase (a chief or the Ministry of Lands), whether there would be written documents substantiating the purchase, and attributes of the local community (majority coethnic/not coethnic with the buyer; a place where most people help/do not help each other).<sup>25</sup> In all instances, the potential land purchaser

<sup>20</sup> For example, in the 2019 LGPI survey, 72% ( $n = 133$ ) of individuals who attempted to acquire a state title in the previous 12 months said they were successful. An additional 9% ( $n = 17$ ) said their requests were still in progress. The two most common reasons why respondents did not seek a title were lack of information 28% ( $n = 1,736$ ) and lack of interest 24% ( $n = 1,482$ ).

<sup>21</sup> In all versions of the experiment, some authority, either chief or state, is specified. This design does not enable insight into the broader question of whether legibility matters to citizens *independent of any authority at all*. This broader question is of theoretical interest, but our respondents typically live in communities with some form of authority. We focus on the two that are most common and most featured in discussions of land in Africa.

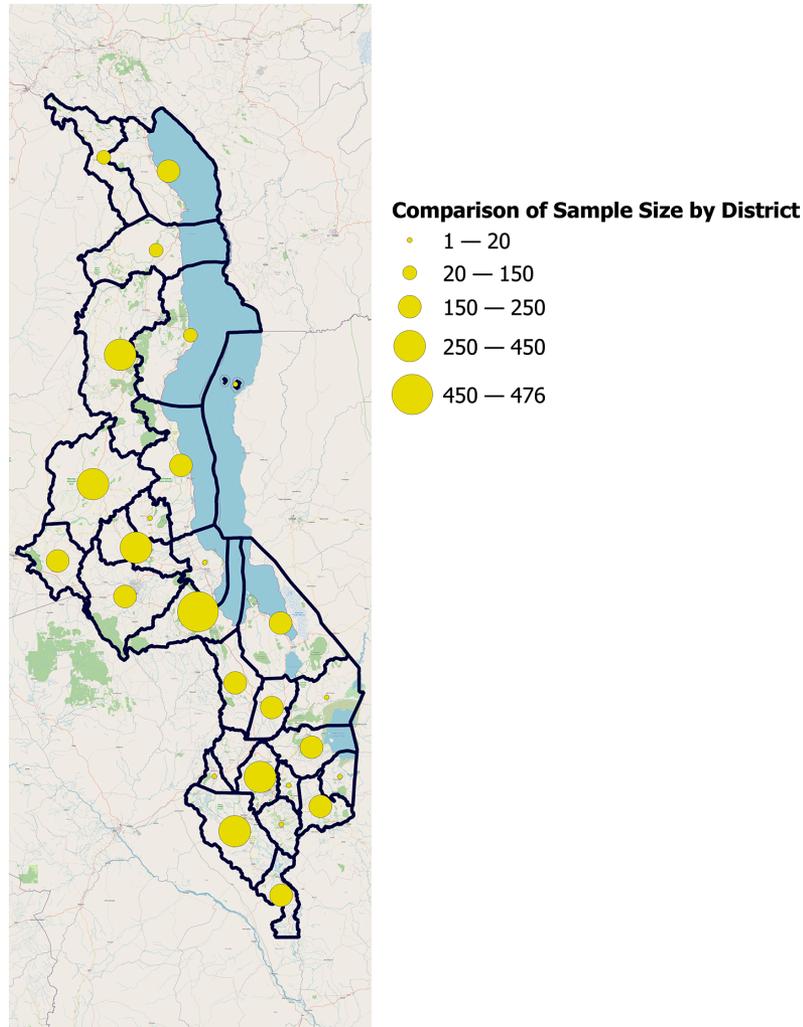
<sup>22</sup> The survey’s content primarily focused on COVID-19. The sampling frame consisted of phone numbers obtained in the Local Governance Performance Index (LGPI) 2019 survey (Lust et al. 2020b) and LGPI 2016 survey (Lust et al. 2016). See Appendix B for more details.

<sup>23</sup> Only 52% of Malawians own a mobile phone (Malawi 2018 Census). However, the sampling frame for the survey included individuals who have access to a phone but did not require phone ownership.

<sup>24</sup> See Online Appendix Table A2 for summary statistics on land buyers in the 2019 LGPI sample. In the sample, 47% of land buyers live farther than 10 km from a district capital, 43% have migrated in the past 10 years, and 69% report being “considered local.” The self-reported incomes of land buyers in the sample were high (13%), middle (18%), and low (70%). In addition, woman land buyers are not uncommon: 20% were (single) woman-headed households, 14% were (single) man-headed households, and 67% were married/cohabitating households.

<sup>25</sup> Given the research on matrilineality, patrilineality, and gender described earlier, marital status and gender are salient characteristics that could influence evaluations of tenure security. This is similarly the case of coethnicity and community cooperation. Although these results are reported throughout, these characteristics are not the focus of this paper.

**FIGURE 1. Distribution of Sample across Districts**



is described as 35 years old and the same ethnicity as the respondent, and the area in which the land is located is described as rural.

**TABLE 1. Respondent Demographics**

Attribute	Percentage
<b>Women</b>	56
<b>Men</b>	44
<b>Respondent wealth</b>	
<i>Great difficulties</i>	53
<i>Difficulties</i>	38
<i>Cover needs</i>	7
<i>Can save</i>	2
<b>Education</b>	
<i>No primary</i>	8
<i>Some primary</i>	45
<i>Complete primary</i>	11
<i>Some secondary</i>	22
<i>Completed secondary</i>	11
<i>Postsecondary</i>	3
<b>Total Survey Respondents</b>	4,893

The legibility treatment randomized a statement that written documents would be provided and a blank control condition containing no information at all about documents. The written documents treatment should therefore be thought of as a reassurance about written documents. Respondents receiving the blank statements might have brought their own pre-conceptions about the likelihood of documents into the experiment. If so, they likely would have assumed that rights issued by the state authority (the Ministry of Lands) would be written, whereas rights issued by the customary authority (the Chief) would not. To the extent that this happened, it should attenuate any effects of written documents. Treatment effects for documentation should thus be interpreted as lower bound estimates.

Table 2 presents the attributes and their levels. Below Table 2 is the full text of the experimental script. Because the experiment was read to respondents over the phone as a vignette rather than presented on a screen as a list—an implementation decision necessitated by COVID-19 restrictions, literacy levels, and

**TABLE 2. Experimental Attributes**

Attribute	Levels
Gender	Man Woman
Marital status	Married Single
Permission from	Chief
Documents	Ministry of Lands And will be given written documents Blank
Local demographics	Majority coethnic with buyer Majority are not coethnic with buyer
Help each other	Most people help each other Most people do not help each other

**TABLE 3. Posttreatment Questions**

Question	Response Options
Do you think it is likely or not likely that someone might try to take this land from the person if he/she bought it?	Likely Not likely Don't know/refuse to answer
If someone did attempt to take the land, do you think it is likely or not likely that they would succeed?	Likely Not likely Don't know/refuse to answer
Would you recommend that he/she buy the land?	Likely Not likely Don't know/refuse to answer

screen access in rural Malawi—attribute order was fixed rather than randomized.<sup>26</sup> Fixed attribute order could introduce survey order effects, although the direction of bias is unclear. The first attribute might receive more attention from respondents than later ones; alternatively, the last attribute might reside longer in respondent memory. In the case of this experiment, the two primary attributes—authority and documentation—occur directly after each other in the middle of the vignette, preceded and followed by other attributes. Although some bias might be introduced by authority coming before documents, we believe effects would be relatively small and unlikely to account for the difference across them.

*Vignette: I'd like to ask you what advice you might give someone considering buying land in rural areas like yours. Imagine that a 35-year old [married/single] [respondent's ethnic group] [man/woman] is considering buying a hectare of land. Here's a little bit of information about the land the [man/woman] can buy: [he/she] would be given permission to live on the land from the [Chief/Ministry] [and will be given written documents/blank]. The land is in an area where most people [are/are not] [respondent's ethnic group], and where most people [help/do not help] each other in times of need.*

After reading the scenario to respondents, we asked them to evaluate the likelihood that someone might try to take the land from the described purchaser and the likelihood of this land expropriation succeeding if attempted. We then asked whether they would recommend the land purchase. Responses to these questions constitute our dependent variables of interest. The posttreatment questions can be found in Table 3.

## RESULTS

Averaged across experimental conditions, around 13% of our respondents anticipated that others would try to take the land, 11% predicted that a land expropriation would be successful if attempted, and 79% recommended the purchase. Our hypothetical scenario thus effectively elicited variation in perceptions of land security and attractiveness. Moreover, the distributions of responses constituting our dependent variables are consistent with the portrait painted in the previous section of Malawi as a place where people have some degree of concern about whether rights will be respected.

We use ordinary least squares (OLS) to estimate the effects of each of our experimental attributes on all three outcomes.<sup>27</sup> Hainmueller, Hopkins, and Yamamoto (2014) have shown OLS to be a consistent estimator of average marginal component effects in conjoint analyses (see Table 4). Following the advice of Leeper, Hobolt, and Tilley (2020), we provide marginal means in Figure 2.

Consistent with Hypotheses 1 and 2, respondents view written documents as enhancing the security and value of property. When we specify that written documents will accompany the land purchase, respondents were close to 5 percentage points ( $p < 0.001$ ) less likely to think others would try to take the land after the purchase (dropping from around 0.15 to a 0.10 expectation of an expropriation attempt, or a reduction of nearly one-third). The written document treatment likewise decreases the perception of a successful land expropriation by 4 percentage points ( $p < 0.001$ ), from around 0.13 without documents to 0.09 with them, again a substantively large effect. It also increases by 3 percentage points ( $p < 0.01$ ) the likelihood of recommending the purchase. We thus find strong support for Hypotheses 1 and 2.

The results provide limited support for the conventional wisdom that property rights recognized by state

<sup>26</sup> Randomizing attribute order in vignettes is difficult to do without introducing design effects.

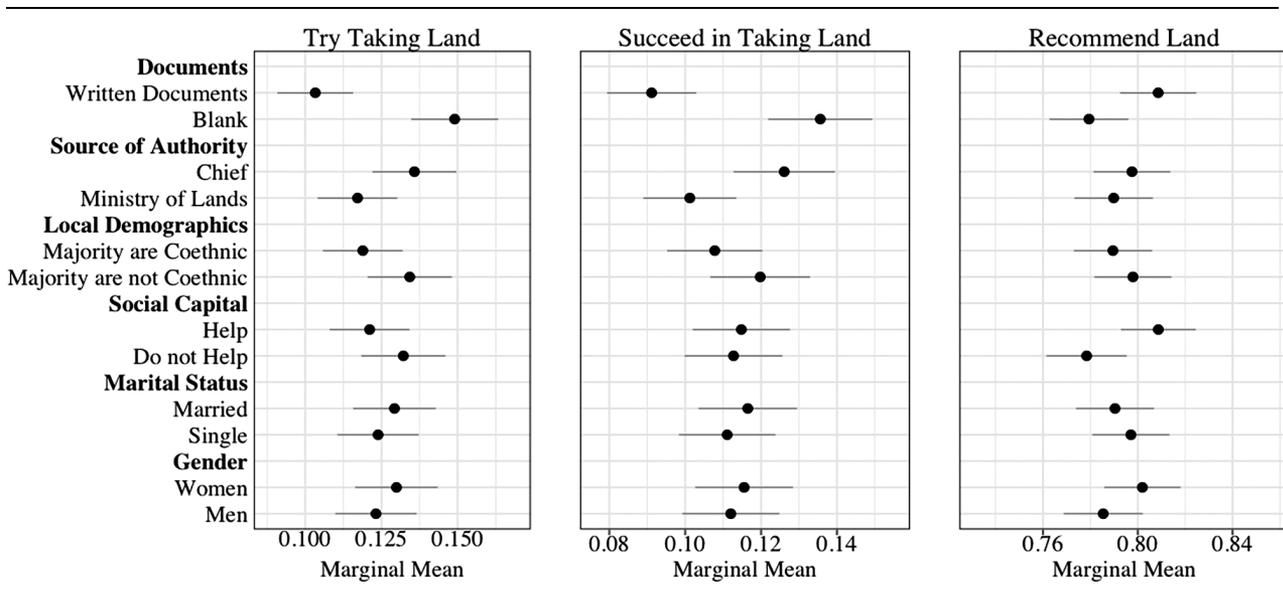
<sup>27</sup> Replication materials for this study are available at the APSR dataverse (Ferree et al. 2022).

**TABLE 4. Average Marginal Component Effects—Full Sample**

	(1)	(2)	(3)
	Try to take land	Succeed to take land	Would recommend
Written documents	-0.0447*** (0.00957)	-0.0432*** (0.00916)	0.0294* (0.0118)
Chief	0.0154 (0.00955)	0.0239** (0.00914)	0.0110 (0.0118)
Majority are coethnic	-0.0171 (0.00956)	-0.0139 (0.00916)	-0.00911 (0.0118)
Help	-0.0120 (0.00960)	0.000766 (0.00918)	0.0294* (0.0118)
Married	0.00710 (0.00958)	0.00793 (0.00916)	-0.00601 (0.0118)
Woman	0.00694 (0.00957)	0.00359 (0.00916)	0.00897 (0.0118)
Constant	0.148*** (0.0132)	0.123*** (0.0125)	0.755*** (0.0163)
Observations	4,799	4,793	4,814

Note: Standard errors in parentheses. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**FIGURE 2. Marginal Means**



Note: Full results are reported in Online Appendix Table 14.

authorities are more secure than customary rights. Respondents did not view attempts to take land as more likely when chiefs versus the Ministry of Lands granted permission, but they were 3 percentage points ( $p < 0.01$ ) more likely to think land grabs would be successful if attempted. They were no more or less likely to recommend land purchase when chiefs provide written documents than when the state does. One might anticipate that the potential costs of possessing titled land, such as taxation, or the benefits, such as access to credit in banks, would make state-titled land less or more desirable than an informal paper from a chief.

Instead, tax collection and credit access may both be so low in this context that respondents do not perceive a difference in these potential costs and benefits of state titles.

We find no evidence that the purchaser's gender or marital status shaped perceptions of land security or desirability, which is somewhat surprising given the robust literature on the role of gender and land security. However, the scholarship on tenure insecurity for women often focuses on inherited land rights. Instead, we have clearly indicated that the individual whose rights are being evaluated is a land buyer, which

suggests greater access to resources. The results for both gender and marital status might differ with different modes of land access.

To evaluate whether preferences for written documents are conditional on the type of authority granting the land rights (Hypothesis 3), we estimate average component interaction effects (Hainmueller, Hopkins, and Yamamoto 2014) for written documents and all other experimentally manipulated attributes.<sup>28</sup> Table 5 shows all attribute interactions estimated together in one model; the results are similar if we estimate interactions one at a time (see Tables A4–A9 in the online appendix).

We find no evidence of an interaction effect between written documents and the nature of the authority granting land rights (Hypothesis 3). Respondents viewed land as more secure and valuable with documents from *both chiefs and state authorities*. We also find no interaction effects between documents and ethnic majority status or respondent marital status. We do find significant interaction effects between documentation and community social structure (neighbors help each other; estimated  $p < 0.05$ ). In communities where neighbors do not help each other, the effect of written documents on perceptions of attempted and

successful expropriations is 5 and 4 percentage points larger than in communities where neighbors do help each other. The results are similar for recommending purchase. Documents thus seem to matter most in communities that have low social capital. This is consistent with our argument that legibility is a resource for citizens; in communities where respondents anticipate that the buyers might face greater challenges to their tenure security, the written documents' signal has a larger effect.

We also find an interaction between gender and documents for perceptions of successful land grabs. The effect of written documents was 4 percentage points larger for women versus men purchasers ( $p < 0.05$ ). These results suggest respondents view property as most needing written documentation when purchasers come from less-empowered groups.

We next consider whether the effects of written documents depend on characteristics of the respondent.<sup>29</sup> As illustrated by the marginal means in Figure 3, we find a significant interaction between respondent education level and written documents ( $p < 0.05$ ) for both of our outcomes that measure perceptions of land security. Respondents with at least some secondary education (triangles) were

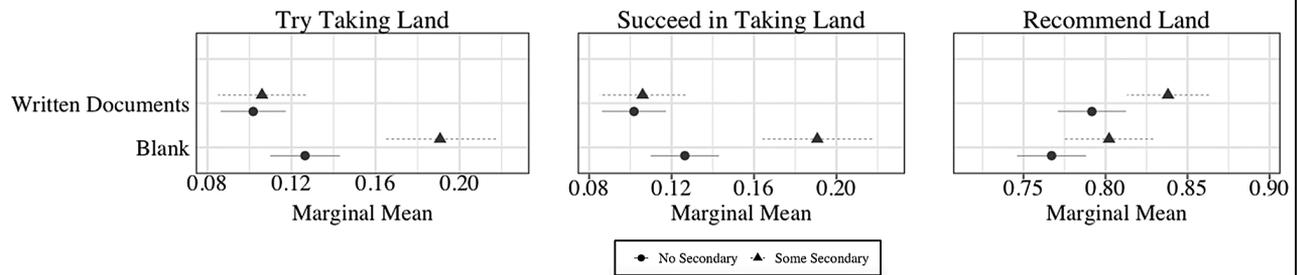
**TABLE 5. Average Marginal Component Interaction Effects**

	(1)	(2)	(3)
	Try to take land	Succeed to take land	Would recommend
Married	0.0181 (0.0143)	0.0208 (0.0138)	-0.00954 (0.0170)
Written documents	-0.0420 (0.0241)	-0.0208 (0.0229)	0.0587 (0.0300)
Married × Written documents	-0.0231 (0.0191)	-0.0277 (0.0182)	0.00808 (0.0236)
Woman	0.0165 (0.0143)	0.0240 (0.0138)	-0.00582 (0.0169)
Woman × Written documents	-0.0203 (0.0191)	-0.0426* (0.0182)	0.0305 (0.0236)
Majority are coethnic	-0.0186 (0.0143)	-0.0139 (0.0138)	0.00408 (0.0169)
Majority are coethnic × Written documents	0.00338 (0.0190)	0.000583 (0.0182)	-0.0269 (0.0236)
Help	-0.0364* (0.0144)	-0.0194 (0.0139)	0.0553** (0.0170)
Help × Written documents	0.0499** (0.0191)	0.0411* (0.0183)	-0.0526* (0.0236)
Chief	0.0229 (0.0143)	0.0318* (0.0138)	0.0198 (0.0170)
Chief × Written documents	-0.0156 (0.0190)	-0.0162 (0.0182)	-0.0171 (0.0236)
Constant	0.147*** (0.0183)	0.113*** (0.0173)	0.739*** (0.0219)
Observations	4,799	4,793	4,814

Note: Standard errors in parentheses. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

<sup>28</sup> These were not prespecified.

<sup>29</sup> These analyses were not preregistered.

**FIGURE 3. Marginal Means and Respondent Education**

Note: Full results are reported in Online Appendix Table 15.

10 percentage points less likely (a drop from around 0.20 to around 0.10) to expect the hypothetical buyer's land rights would be threatened when written documents were provided versus when they were not; by comparison, the response of those with less education (circles) to the written document treatment was smaller (a 3-percentage-point drop). Similar results hold for perceptions of the success of the land expropriation attempt. Education levels did not shape reactions to the third outcome, recommending land. See full results in Table A10 in the online appendix.

We can think of several plausible mechanisms underlying the education results. If education is a proxy for literacy, they might suggest that documentation primarily reassures those who can read and that documentation is not merely about the symbolism of having a piece of paper but also of knowing what the words on the paper mean. A second possibility is that those who value written documents are also those who value education, so the effect is more about the valuing of a document with words than the ability to read them. A third explanation is that education increases familiarity with the statutory system and modern notions of "appropriate" land ownership. Finally, education may decrease the likelihood that the respondent is a subsistence farmer dependent on customary rights to secure land. Although the effect of education could have multiple pathways, these results show that (1) even low-education respondents value written documents and (2) education significantly increases this effect.

Other respondent characteristics do not seem to condition evaluations of written property rights. We do not find significant interaction effects for respondent age (see Table A11 in the online appendix) or respondent gender (see Table A5 in the online appendix). Respondents perceived written rights to be more desirable regardless of whether they were young or old or men or women. Furthermore, whether respondents owned land or not also did not influence their evaluations of written rights (see online appendix Table A13).<sup>30</sup>

A potential limitation of experimental designs like ours is the assumption of uniform distributions of

attribute levels. If attributes are not in reality distributed uniformly, this can create unrealistic joint distributions of features and potentially compromise external validity, particularly when there are interactions between attributes (de la Cuesta, Egami, and Imai 2021). These issues are not major concerns for this particular experiment. The attributes and levels we employ represent real-world variations observed in Malawi, and all potential profiles in the experiment are plausible in this context. Moreover, as Table 5 makes clear, we uncover very few interactions between our primary attribute of interest, written documents, and other attributes in the experiment. The major exception to this is the "neighbors help each other" attribute, which significantly interacts with the written document attribute across all three outcomes. Fortunately, the uniformity assumption seems realistic in this particular case.<sup>31</sup>

In summary, we find strong evidence that Malawians view documentation as enhancing the security and attractiveness of land *and that these beliefs hold across a number of contexts*. We find only a few exceptions to the consistency of these preferences: the preference for land documents seems to be most common among more educated Malawians and to be more likely when the purchaser described is a woman or the land is in an area with less-helpful neighbors.

## DISCUSSION AND CONCLUSIONS

As the utility of statutory land titling varies considerably across and within communities, it is important to think more critically about how individuals evaluate different attributes of property rights institutions. We have argued here that written land rights may have value independent of the authority granting them. We find strong support for this argument. Respondents revealed that they perceive land as less likely to be threatened and successfully expropriated when the

<sup>30</sup> Data for land ownership drew from a previous survey wave, resulting in a smaller sample size ( $n = 3,928$ ).

<sup>31</sup> As demonstrated in Table A3 in the online appendix, slightly more than half of rural Malawians polled in the 2016 LGPI survey indicated that neighbors in their community helped each other once a month or less, whereas a bit less than half indicated that neighbors helped each other daily or weekly.

owner holds written documentation. Respondents were also more likely to recommend the purchase of land with written rights. These positive evaluations of written property rights were not conditional on whether a customary or state authority granted the land rights; the respondents indicated that they valued legibility in property rights derived from either land authority.

We also find that legibility is an even stronger tool under certain conditions. Respondents did not perceive women's land claims to be overall less secure, but the significant interaction between gender and written rights reveals that the Malawians in the sample perceived legibility as a particularly valuable bulwark against land expropriations for women land users. The effect of written rights was also stronger when respondents were prompted to think of communities where most people do not help each other versus communities where they do, which suggests that community social capital moderates the relationship between documents and perceived land security. We furthermore find that education influences how citizens evaluate the security of written rights. Individuals with higher levels of education perceived written rights to be particularly valuable. This indicates that the ways in which citizens use written rights to support their land claims should reflect differences among communities as well as individuals' resource bases and social statuses.

These findings are the first to our knowledge to test experimentally a core implication of recent observational studies on property rights: that citizens may value legibility independent of whether the documentation is issued by a nonstate or state authority. Observational studies of local innovations in property rights documents had already demonstrated processes of expanding legibility outside of state authority, suggesting demand for legibility exists among land users in multiple different weak state contexts. Our survey data on the prevalence of papers provided by customary authorities in Malawi similarly found that regular citizens have adopted these informal documents as one means of reinforcing their land claims. This parallels the expansion of legibility in property rights, while retaining local authority structures, described by Hajj (2016) in Palestinian refugee camps, Gaston and Dang (2015, 4) in zones of high land disputes in Afghanistan, and Koné and Chauveau (1998) in cocoa-producing areas of West Africa. Our experimental findings are consistent with these findings and lend credence to studies advocating for community-based land registration such as those described by Murtazashvili and Murtazashvili (2016a; 2021) in Afghanistan. Furthermore, this research both (observationally) illustrates a process of innovation in property rights within customary institutions and (experimentally) accounts for why it occurs: demand for legibility.

Within the domain of land and property rights, these results thus highlight the importance of decoupling legibility and state authority to understand the political consequences of each. For example, although state authorities provided citizens with new access to land in the reforms described by Albertus (2021) in Latin

America, these rights did not translate into developmental successes because they lacked legibility; without written recognition of their land claims—even those directly derived from state authority—citizens could not fully exercise their property rights. Thus, conceptualizing legibility as a tool for citizens to advocate for their claims also reveals why state elites would allocate resource access without documents. Furthermore, studies of land conflict have explained how variations in state titling and the types of land authorities shape the occurrence of violence (Boone 2014; Klaus 2020). Our findings suggest that an important step forward in understanding land conflict is to consider not only the authorities governing land rights but also the opportunities citizens have to make these rights visible in different forums.

Our research raises new questions about the value of legibility to citizens and the limitations of narrowly examining legibility as a mechanism of state control. Political scientists have advanced our understanding about the benefits of legibility for the state (Brambor et al. 2020; D'Arcy and Nistotskaya 2017; Lee and Zhang 2017; Scott 1998). Yet less is understood about when and why visibility is valued by citizens. For scholars of state building, the variation in demand for legibility from citizens is important because it affects the expansion of state authority, as Bowles (2021) highlights through his research on identification cards in Tanzania. Furthermore, this study has compared the effects of written documents from two different types of authorities to illustrate that legibility is not of value vis-à-vis the state alone. Our findings open up the possibility that written rights are valuable because they can be used in multiple forums and enforced by many different types of actors.

Therefore, future research should investigate a broader set of legibility mechanisms, including both horizontal and vertical processes of enforcement. Several critical questions can advance our understandings of legibility: In which circumstances do citizens want their rights or personal information to be made visible? What are the advantages and disadvantages of legibility for citizens within the modern state? More generally, where do citizens turn for alternatives to the state's legibility processes? Researchers should consider these issues in relation to documentation related to marriage equality, citizenship papers, financial documentation, biometric identification cards, etc. The relationships between authority and legibility are unquestionably important, but only by conceptually separating them can we understand the political implications of legibility for citizens.

Finally, this research sheds light on an important policy issue: land titling. Land titling has been actively promoted as a critical development intervention globally—for examples from Southeast Asia, East Asia, the former Soviet Union, and Latin America, see Deere and León (2001), Bruce (2006), Hutchison (2008), and Lawry et al. (2017). In Africa, land registration has been a priority for donors and governments alike (e.g., Byamugisha 2013). Although nearly every African country has policies that allow citizens to adopt

titles to replace their customary property rights, land titling rates are overall very low (Honig 2022a). Our findings show that citizens in Malawi prize legibility in property rights, which suggests that the lack of uptake of land titles does not necessarily mean there is a lack of interest in written land documents. Instead, it highlights the other barriers that lead to disinterest or resistance to titling—for example, highly individualized land titles that are subject to state taxes and require enforcement from a state that may or may not be trusted.

By revealing that written documents are powerful, we draw attention to an important caveat to the security-promoting potential of legibility. Legibility is a tool that can be wielded to reinforce the claims of the person whose name is written in the document. The rights of claimants that are excluded from a document will be weakened relative to those who are included. Therefore, the designers of policies to make rights legible must pay careful attention to whose rights and what types of rights (in the proverbial “bundle of rights”) may be systematically excluded. With this caveat in mind, these findings provide support for the recent wave of initiatives designed to make complex customary land tenure relations more legible, including creative innovations such as customary land tenure certificates and community mapping projects. We thus echo Banda’s conclusions that governments should embrace innovative ways of recording land rights because they incorporate “a semblance of formality” while allowing actors to retain the unique systems of ownership within customary tenure regimes (Banda 2011, 334). One of the most important components of such innovations is their ability to make rights visible in different forums. Legibility itself has value.

## SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit <http://doi.org/10.1017/S0003055422000417>.

## DATA AVAILABILITY STATEMENT

Research documentation, replication materials, and data that support the findings of this study are openly available at the American Political Science Review Dataverse: <https://doi.org/10.7910/DVN/M9LGXX>.

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## CONFLICT OF INTEREST

The authors declare no ethical issues or conflicts of interest in this research.

## ETHICAL STANDARDS

The authors affirm that this article adheres to the APSA’s Principles and Guidance on Human Subject Research and declare the human subjects research in this article was reviewed and approved by the University of Malawi Institutional Review Board (certificate number P.05/20/17). In addition, this research followed the Swedish Data Services regulations and guidelines for research ethics. For further information, see online appendix B.5.

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