

Closing the Gap: The Politics of Property Rights in Kenya*

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Abstract

In many cases of state-led land reform, governments allocate land but withhold formal property rights from recipients. When do leaders grant property rights to landholders? We argue that land rights are often an irreversible distributive good that leaders conservatively and selectively relinquish in an attempt to build popular support. Using micro-level data from Kenya – where successive governments have distributed nearly 10% of the country’s arable land – we find that leaders under electoral regimes are more willing to formalize rights than those under autocratic regimes, and further, that the logic of land formalization changes with regime type. Whereas autocrats prioritize land formalization among core supporters, elites facing elections prioritize pivotal swing voters. The paper demonstrates how property rights are not only a function of a state’s capacity, but leaders’ political incentives.

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1 Introduction

Over the last century, more than one-third of countries have embarked on state-led land reform (Albertus 2015). Leaders justify these reforms – redistributing land from large landowners to smallholder farmers – as a way to alleviate poverty and spur economic growth (Lipton 2009). These reforms, and the arguments behind them, presume that land rights accompany the distribution of land. Yet as recent studies observe, there are many cases where the state distributes land but fails to provide accompanying land rights (de Janvry et al. 2014), creating a “property rights gap” (Albertus 2019). That is, property rights are incomplete because beneficiaries lack the “full rights to extract, manage, transfer, and alienate [land]” (Ostrom 1990). If complete property rights improve efficient land use and economic growth (Feder & Feeny 1991, Goldstein & Udry 2008), why do leaders withhold such rights? And under what conditions do leaders who withheld such rights decide to grant them?

Existing research offers several potential explanations, including insufficient state capacity to formalize land claims (Herbst 2000, Joireman 2007, Toulmin 2008). More recently, scholars have examined the role of regime type in shaping the incentives and capacity of political leaders to formalize rights. Some studies suggest that authoritarian regimes are more likely to withhold tenure rights as a means of establishing and maintaining control over supporters (Albertus et al. 2018, Albertus 2019). Others focus on how a higher number of veto players, typically under more democratic regimes, can slow or undercut reforms (Boone et al. 2019).

While state capacity and regime type help account for broad cross-national patterns in land formalization, these explanations are less useful in explaining important sub-national variation. We build on past research to examine land formalization both across and, especially, within autocratic and competitive multi-party “electoral regimes.” Doing so provides insight into how leaders weigh the political costs and benefits of land formalization in different environments, and how these elite logics affect prospects for land formalization among different allottees.

Our theory is premised on the clientelistic nature of land rights; that like other goods, leaders will distribute land with different features to different groups (Diaz-Cayeros et al. 2016). Specifically, our theory builds on two salient features of land rights. First, a property rights gap enmeshes tenants in clientelism: without secure land rights, tenants have strong incentives to support the current leader for fear of losing their land should he exit office. Second, the distribution of land rights is largely irreversible, and thus, registration is often a one-shot exchange. Taken together, leaders are inclined to maintain weak or informal property rights in order to maintain clientelistic ties (Boone 2014, de Janvry et al. 2014, Larreguy et al. 2018). And since land formalization is usually irrevocable,¹ leaders relinquish rights strategically, provisioning them conservatively and selectively: though the distribution of land rights may temporarily boost the leader's support among recipients, he cedes a key tool by which to coerce support in the future.

We thus expect leaders to formalize land claims only when the short-term political benefits of doing so outweigh the long-run costs of breaking patron-client bonds. We expect regime type to condition these calculations. Leaders facing competitive elections have a greater incentive to use land formalization to solidify electoral support compared to their authoritarian counterparts, prioritizing short-run political survival over a loyal support base in the long-run. Therefore, we expect higher overall rates of land formalization in electoral than autocratic regimes.

We also expect regime type to affect the types of allottees that leaders prioritize, based on how pivotal a group is to political survival. When autocrats formalize land, they are likely to prioritize core supporters whose support is often sufficient for regime stability. Under electoral regimes, however, leaders facing competitive elections must expand their support beyond core voters to win or maintain power. Hence, leaders facing competitive elections will prioritize the rights land rights of swing voters – a durable distributive good that they cannot easily renege on in the future (Albertus 2013).

¹Even in contexts where land rights are reversible (i.e., through coercion), the allocation of rights makes their forfeiture by leaders or the state more difficult in the future.

We evaluate these arguments by examining land formalization across Kenyan settlement schemes: state-controlled land sub-divided into individual parcels, primarily for smallholder farming. These schemes cover 1.2 million hectares of land, totaling nearly 8% of Kenya's arable land (Dyzenhaus 2020). Since Kenya's colonial rule under the British, the central state has played a significant role in the allocation of land rights, enabling political leaders to allocate land rights to build support, while withholding or revoking land rights from opponents (Onoma 2009, Boone 2014). Kenya thus provides an important case to examine the process and patterns of land formalization within a highly centralized system where land has long-served as a powerful patronage good.

We combine micro-level data on settlement schemes with localized census data and election results to create a time-series dataset of when and where the state formalizes land. Two main findings emerge, which align with our expectations. First, our analyses indicate that electoral regimes are more likely to formalize rights than authoritarian regimes. Second, we find that the logic of land formalization changes alongside the change in regime type: whereas autocrats prioritize co-ethnics, considered the most loyal supporters of each president, leaders under electoral regimes prioritize swing voters.

Several additional analyses lend support to our broader theoretical framework about land as an important clientelistic good. Kenyan leaders have used land registration to build short-term support during moments of political uncertainty and short time horizons. In these moments, leaders were most willing to relinquish long-term clientelistic control for short-term political gain. Specifically, we see registration rates temporarily increasing in the wake of the country's sole coup attempt and in the immediate run-up to presidential elections (in comparison to the electoral era as a whole). Other analyses rule out several alternative explanations, including the role of state capacity, land value, and political intermediaries.

This paper makes three main contributions. First, we contribute to literature on the politicization of state capacity. By treating property rights as a distributive good, we highlight leaders' political incentives in strategically limiting or undermining state capacity (Holland 2017, Surya-

narayan 2019). Leaders may be unwilling to allow the state to operate at its potential capacity if doing so undermines the ways that they maintain political support (Onoma 2009, Hassan 2020). Evaluations of state capacity must therefore consider the political factors that affect leaders' incentives to increase or decrease capacity in a particular area. Relatedly, this politicization of state capacity helps explain why land formalization has not always resulted in higher rural incomes or agricultural yields. Even when external donors push leaders to formalize land rights, they may lose control over the timing of formalization, but maintain control over whose rights to formalize. This allows leaders to distribute rights in a way that helps secure their political futures while still abiding by broad donor guidelines for land formalization.

Second, though land rights are distinct in their material and symbolic importance, we situate their distribution in a broader debate about distributive goods. Specifically, the irrevocability of land rights makes this resource comparable to goods such as tenured civil service jobs, the construction of infrastructure projects, and the creation of new administrative units. More broadly, our findings lend support to research demonstrating that leaders distribute bundles of goods, playing a mixed strategy meant to entice both core and swing voters (Diaz-Cayeros et al. 2016, Kramon & Posner 2013).

Third, our focus on variation across regime type contributes to research showing that electoral regimes are more responsive to the needs of their citizens than autocratic regimes. Many studies find that elites facing competitive elections are likely to distribute goods and services more widely and equitably than their authoritarian counterparts (e.g., Bueno de Mesquita et al. 2003). We build on this work to show that the recipients of state resources, including in the agricultural sector, change alongside regime type. Autocrats still face incentives to provide some resources to citizens, but prioritize different groups than elected leaders (Bates 1981, Kasara 2007, Thomson 2019).

2 Closing the Property Rights Gap

This paper examines the conditions under which a state moves to formalize land, facilitating the closure of the property rights gap.² We focus on land formalization in contexts where the state has allocated land to free-holder farmers within a larger agricultural space (e.g., an administrative region or former plantation) without providing allottees with full, alienable property rights to their individual parcel within that larger space. Hence, it is the state that retains property rights over this land. Existing literature points to the role of state capacity and regime type in shaping the persistence of this property rights gap.

First, the opening – and subsequent closing – of a property rights gap may be due to state capacity. Before citizens can obtain title for their land, the state must carry out numerous bureaucratic tasks such as delineating property boundaries, creating cadastrals and land registers, and adjudicating boundary disputes. These tasks require sustained capacity across different arms of the state, capacity that many African countries lack (D’Arcy & Nistoskaya 2017, Joreiman 2007, Toulmin 2008). Further, and among African countries in particular, the state may not have the capacity to “disrupt” the strength of customary institutions that are considered custodians over land (Herbst 2000).

Recent literature, however, suggests that state capacity is often a political choice: that even relatively weak states can effectively perform core governance tasks if leaders benefit from doing so. In contexts of relatively weak capacity, for example, leaders can change bureaucratic management practices to improve or deliberately decrease government effectiveness (Hassan 2020) or choose not to enforce certain rules or regulations (Holland 2017). Leaders may thus keep property rights institutions weak and dysfunctional where they perceive incentives to do so (Onoma 2009). Thus,

²We use the terms “registration” and “formalization” interchangeably to refer to the process through which the state codifies land rights (Putzel et al. 2015). We recognize that the registration/formalization of land may not result in property rights that are societally legitimate or effectively enforced. However, we treat land rights as irrevocable for at least two reasons. First, the distribution of land rights still greatly increases the costs of revoking formalization such that the nature of this good is categorically different from resources that are more easily withdrawn. Second, and within our empirical context, farmers largely perceive land rights as irrevocable.

while a state's capacity may give us a ceiling as to what the state can accomplish (Williams 2020), we must account for variation in leaders' decisions to extend state capacity in some domains but not others. Indeed, Albertus (2019) argues that a state that has the capacity to expropriate and allocate land also has the capacity to dole out the associated property rights. In sum, while we expect state capacity to play a role in the closing of the property rights gap, it cannot fully account for the decisions of political actors.

Second, recent work suggests that a property rights gap is more likely to emerge and endure under autocracies. Autocrats often distribute resources that enmesh recipients in relationships of dependence (Albertus et al. 2018). Distributing land without property rights leaves allottees without formal land security, and ensuring their dependence on political leaders for tenure security. Hence, because these allottees expect regime elites to prioritize the rights of loyal clients, they are more likely to support the regime. But land reform – with or without rights – is also a highly contentious and disruptive process, creating new winners and losers (Boone et al. 2020). As such, under electoral regimes, the greater number of elites with veto power may stall land registration (Boone et al. 2019) but may also make the allocation of tenure rights a viable alternative to more disruptive forms of reform, such as land redistribution (Albertus 2019).

We build on past research to develop a theory of land formalization across and within autocratic and electoral regimes. Our theory assumes that autocrats need less popular support than their elected counterparts. Instead, autocrats' main survival imperative is to maintain some level of popular support and legitimacy that minimizes the risk of unrest or rebellion both from the public and from rival elites. Further, we expect leaders facing elections to have shorter time horizons than autocrats of consolidated regimes. A continuous cycle of competitive elections means that leaders' political survival only goes as far as the next election.

Our theory also takes into account two salient features of land rights. First, we build on Catherine Boone's (2014) observation that land rights constitute a political relationship: between citizens making claims to land, and the state, which has the power to allocate, enforce, and revoke rights

from citizens (Klaus 2020a). Where citizens lack secure tenure rights, a clientelistic relationship between the state and citizens (i.e., tenants) often prevails (Albertus et al. 2018, Boone 2014, de Janvry et al. 2014, Larreguy et al. 2018). Second, the distribution of land rights tends to be a one-shot and irreversible exchange: once the state assigns rights, they are difficult to revoke.

With these observations in mind, we make predictions about when – and for which citizens – the property gap is likely to close. First, we expect that a property rights gap is more likely to emerge and endure under autocratic regimes. While all leaders may prefer a land insecure peasantry to maintain clientelistic bonds, leaders facing elections need to quickly and continuously consolidate electoral support. Competitive elections thus give tenant farmers more leverage to demand land rights. Second, we expect that in the few instances where autocrats do assign tenure rights, it will be among their core supporters. This is partly because it is cheaper for an autocrat to maintain support among a core group rather than win over new supporters. Having a large base of core supporters also mitigates threats from rival elites or the broader public.

Though outside the scope of our theory and empirics, the ease with which autocrats maintain core support is often due to the higher level of resources that this group receives relative to other groups. Across much of Africa, for instance, a leader tends to draw his core support from co-ethnics. These co-ethnics often benefit from higher levels of social services, infrastructure, and civil service jobs (e.g., Burgess et al. 2015, Kramon & Posner 2016, Brierley 2020). Importantly, this skewed distribution of resources means that these supporters may remain in a clientelistic relationship with the autocrat even after obtaining land rights. Indeed, the distribution of land rights may break a particularly strong patron-client bond. But autocrats can use the selective distribution of goods, such as subsidized farm inputs (Bates 1989) or agricultural taxes (Kasara 2007) to continue enmeshing farmers in relationships of dependence. Thus, core supporters are liable to maintain their loyalty after land formalization either due to genuine support for the autocrat or because of other clientelistic bonds.

Our third expectation concerns the recipients of land rights under electoral regimes. When

faced with competitive elections, a leader’s need to expand his support base should affect not only the level of land rights (as we describe above), but the recipient group as well. Specifically, where a leader cannot rely on core voters alone, he must also gain the support of swing voters. This pivotal status gives swing voters leverage to demand valuable distributive goods, including land formalization. Hence, leaders should be inclined to respond to such demands under electoral regimes, both as a way to counter opponent’s promises to formalize land, and to signal the credibility of their commitment to swing voters.

We note that formalizing the land rights of swing voters does not guarantee their electoral support. Indeed, allocating rights breaks the patron-client bond between leader and voter, weakening the leader’s ability to coerce support. Yet in contexts of competitive elections and unmonitored clientelism, leaders may nonetheless gamble on swing voters, trading long-run political control for potential short-run electoral benefits, even if they cannot ensure the support of these voters (Diaz-Cayeros et al. 2016, Hicken & Nathan 2020).³ This is especially likely when pivotal swing voters demand goods from which leaders cannot renege (Albertus 2013).

3 The Case

3.1 Kenyan Settlement Schemes

Land has occupied a central role in Kenyan politics since it became a settler colony under the British. During colonization, the colonial state allocated large tracts of Kenya’s most fertile lands to European settlers. By the 1950s, grievances over land among indigenous Kenyans culminated in the *Mau Mau* uprising, pitting insurgents fighting for “land and freedom” against the colonial state and (indigenous Kenyan) loyalists. The war helped bring about the end of colonial rule, and the departure of many European settlers, while placing land at the center of national politics.

As a way to address chronic landlessness – and the instability that such landlessness provoked

³See Kramon (2017) for evidence of this in Kenya.

– the newly independent Kenyan government purchased large tracts of the country’s most arable land from departing Europeans with the aim of resettling Kenyans displaced by settler rule. We focus our analysis on *settlement schemes*, one of the main features of this resettlement program. Settlement schemes are land that the state purchases from landowners and subdivides into plots for farming or residential purposes. The state created many of the early schemes from land sold by departing European settlers. The state continues to purchase large farms from wealthy landowners, while also excising formerly protected public lands to create new schemes (Government of Kenya 2004, Mojaria 2017). As of 2013, successive Kenyan governments have settled approximately 279,000 households across 494 settlement schemes, encompassing 1.2 million hectares of land.

Importantly, the allocation (or “allotment”) of an individual parcel within a given settlement scheme to a free-holder farmer does not entail secure property rights (e.g., a title deed). Instead, allottees sign and receive an “occupation license” or “allotment letter” that acknowledges that they were granted the land by the government but simultaneously entraps allottees in a dependent relationship with the state: the license lays out a number of conditions (e.g., prohibition of selling or transferring the parcel, payment of local taxes and fees) that, if violated, allows the government to repossess the parcel. In the absence of a title deed, settlement scheme parcels remain as government land, allowing the state to act in the capacity of *de facto* landlord to allottees (Boone 2014).

It is only after the state *registers* a scheme that allottees within that scheme can begin the process of applying for a title deed, and thus, alienable rights to their parcel. At first glance, scheme registration seems to be a straightforward bureaucratic exercise in state capacity. For a scheme to be registered, the state must survey the land, demarcate individual plots, construct local public goods (e.g., roads, water points) for residents, and clear public spaces. Once a scheme is registered, any free-holder farmer within that particular scheme who has paid off outstanding loans and fees on her land can apply for a title deed for her individual plot.⁴

⁴The Appendix provides qualitative evidence on allottees’ high demand for secure rights.

3.2 Kenyan Presidential Politics

During each of Kenya's first three presidencies, spanning autocratic and electoral regimes, the Office of the President has leveraged significant control over settlement schemes. Our analysis begins with Kenya's first leader, Jomo Kenyatta (1963-78), a member of the Kikuyu ethnic group. He transitioned Kenya from a multi-party electoral regime at independence to a single-party autocracy by 1969. He was succeeded by Daniel arap Moi (1978-2002), a member of the Kalenjin ethnic group. Moi's autocracy was not as stable and consolidated as Kenyatta's – he faced a coup attempt in 1982 and was forced to pave the way for competitive multi-party elections in 1991. Mwai Kibaki (2002-13), a Kikuyu, gained power through competitive elections in 2002.

Understanding the slate of candidates during each election is important for classifying each incumbent's core and swing voters.⁵ Kenya has high levels of ethnic voting, with each major presidential candidate's co-ethnics supporting him at rates of around 90% (Horowitz 2019). Rates of support among ethnic groups incorporated into a presidential candidate's broader electoral coalition are also exceedingly high. As such, elections have traditionally been fought among the country's swing voters – members of ethnic groups not clearly represented by presidential contenders or their perceived alliances. Contestation over swing voters is especially fierce because no ethnic group in Kenya comprises more than around 20% of the population and hence, successful presidential candidates must win a significant portion of the country's swing voters.

Electoral alliances, and the classification of swing groups, have changed with each election. President Moi's two re-election campaigns saw strong opponents from the Kikuyu and Luo ethnic groups. In 1992, the combined vote share of Moi's main challengers topped 60%; in 1997, his two most formidable challengers, again from the Kikuyu and Luo, collectively amassed more votes than Moi himself. Moi did not run in 2002, but Kikuyu and Luo elites united in an alliance behind Kibaki successfully defeating Moi's anointed successor who drew support largely from the Kalenjin. In his 2007 re-election campaign, Kibaki ran against a Luo-Kalenjin alliance.

⁵Kenyatta did not face a presidential election during his brief electoral regime.

4 The Politics of Land Registration

Kenya's highly centralized registration process has allowed political elites to operate with nearly unmediated ability to intervene directly in the opening and closing of the country's property rights gap, even when and where the state fell short in capacity (Boone 2014). Hence, while district-level staff play the largest administrative role in land registration, the Office of the President has wielded near complete control over the registration of settlement schemes.

Our reading of the historical record suggests variation in the clientelistic relationship between presidents and residents living in unregistered schemes during Kenya's autocratic versus electoral eras. During the autocratic era, archival material shows how scheme residents adopted a highly deferential strategy for demanding rights, "pleading" and "begging" for their president's generosity in attending to requests for registration. This language underscores the clientelistic relationship between land-insecure farmers and the state, rather than the rational-legal obligation to provide property rights. For instance, scheme leaders "hop[ed] to have President Kenyatta" visit their unregistered scheme; "Perhaps he would agree to return to see the progress farmers are making" in an attempt to prod bureaucrats to speed-up different elements of the registration process.⁶ We also see this deferential language in a letter in which a settlement scheme chairman stressed the loyalty of scheme residents to President Moi and his infamous *Nyayo* governing philosophy during the autocratic era:

All the 1,600 [scheme] members are true Nyayo followers and being farmers are committed to intensifying production in the beef industry in order to improve the economy of our country . . . The members have resolved to pay a good-will visit to our Beloved President this year at a time that is convenient to him.⁷

This chairman writes another letter to his MP, requesting that the MP "take this appeal to His Excellency the President so that our welfare and that of our children may be enhanced towards

⁶August 1969 Report on Ngerenyi Settlement Scheme, 10/10/1969, ADL/9/4, Coast Provincial Archives.

⁷Chairman Nguu Ranch to District Commissioner Machakos, 3/7/1989, BB/11/108, Kenya National Archives.

better standards of living which is truly in line with the NYAYO Philosophy.”⁸ In still another instance, residents use a similar language of loyalty and deference: “[we are] grateful to have this opportunity to let you know the warmth of our hearts in welcoming you and your team.”⁹ Indeed, one letter requesting registration ends: “Thank you in advance. We beg to remain.”¹⁰ The language in each case underscores both the desire for land security, and the language of fealty that residents must employ to leverage support for their cause.

Qualitative evidence from the multi-party era suggests that residents of unregistered schemes continue to ask for land formalization from their president. Archival records and newspaper articles suggest that presidents facing elections have tended to be pro-active with regards to land registration, especially among swing voters. Take the example of Sabharwal Scheme in Kwale District, where residents were not co-ethnic with President Moi or his main challengers. The District Surveyor asked for funds because he “hope[d] to finish [surveying the scheme] within 31 days”, just three weeks before the 1997 election.¹¹ Records indicate that he received the funds and successfully surveyed the scheme, and Sabharwal was officially registered soon after. Similarly, during Kenya’s autocratic era, Lamu’s District Surveyor “reported that title mapping work was nearing completion and he would therefore require office accommodation to finalise the work” for a particular scheme.¹² Yet the scheme was not formally registered until after elections began. These records suggest that while the Office of the President had the capacity to push through registration, leaders only felt the need to register schemes when their political future was uncertain.

Though outside the time period of our quantitative analysis, newspaper records document a similar effort by President Uhuru Kenyatta (2013 -) to close the property rights gap in the run-up to his 2017 re-election in perceived swing schemes – those whose majority ethnic group was

⁸Chairman Nguu Ranch to Hon. Joseph Mulu Mutisya, 12/6/1988, BB/11/108, Kenya National Archives.

⁹Shimba Hills Settlement Scheme to Minister for Lands, 9/1/1969, CC/12/21, Kenya National Archives. In Swahili.

¹⁰Shimba Hills Settlement Scheme to PC Coast, 9/1/1969, CC/12/21, Kenya National Archives.

¹¹Kwale District Surveyor to Kwale District Land Adjudication & Settlement Officer, 11/11/1997, ADL/9/18, Coast Provincial Archives.

¹²Witu Settlement Scheme Planning Meeting Minutes, 4/26/1991, ADL/9/6, Coast Provincial Archives.

unaffiliated with both his and his opponent’s ethnic alliances. Kenyatta “handed out goodies to western Kenya residents as he intensified his campaign in the region ahead of next year’s General Election ... [including issuing] title deeds to squatters at the Chebyuk Settlement Scheme,”¹³ he “doled goodies to locals ... [including] waiv[ing] land charges for a settlement scheme,”¹⁴ and launched a land survey “in a move aimed at ensuring that residents are issued with title deeds”¹⁵. And indeed, experimental evidence in the run-up to this election finds that those who received property rights were more trusting of the state (Klaus 2020b). Taken together, existing evidence points both to the clientelistic dynamic shaping scheme registration, and with multi-party elections, the importance in registering swing schemes.

5 Land Registration in Kenya

5.1 Data and Analyses

Our aim is to explain how, once households are settled within a given scheme, elites make decisions about which schemes to register – thus opening the pathway for individual allottees to close the property rights gap.¹⁶ To do so, we obtained the full list of Kenya’s 494 settlement schemes as of 2013 from the Ministry of Lands. Importantly, the list gives a scheme’s year of allocation and registration status, and its year of registration if registered. Figure 1 illustrates the spatial patterns of land registration across schemes under Kenyatta, Moi, and Kibaki, respectively. Figure 2 indicates the cumulative hectares allocated by a given year, with dots indicating the cumulative hectares registered by that year. Solid vertical lines distinguish between each presidential regime. Dashed lines represent changes in regime type. We shade presidential election years in red. Registration rates under Kenya’s electoral years were nearly 33% higher than rates under the country’s

¹³“Uhuru Hands out Goodies in Western,” Dave Opiyo and Raphael Wanjala, *The Daily Nation*, 12/15/2016

¹⁴“Joho Leads ODM Team in Lamu Hunt for Votes,” *The Daily Nation*, 3/18/2017.

¹⁵“Land Survey Launched in Drive to Issue 800 with Title Deeds”, Kalume Kazungu, *The Daily Nation*, 3/10/2016.

¹⁶The closure of the property rights gap does not occur until an individual obtains a title deed – an action that cannot occur without the government registering the land.

autocratic years, demonstrating that closures of the property right gap were concentrated in the electoral era.¹⁷

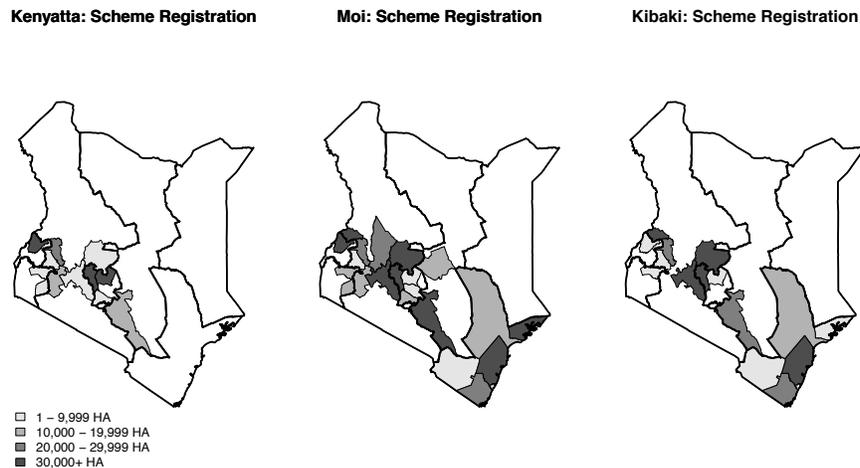


Figure 1: Property Rights Gap Over Space. These maps give the hectares registered under each of Kenya's first three presidents by district.

Our outcome of interest is the likelihood of registration. To examine this likelihood, we create a time-series dataset at the scheme-year level: a scheme enters the dataset the year it was allocated and exits the dataset the year it is registered. We estimate effects using Cox-Proportional Hazards models.

We merge our time-series dataset with variables relevant to our theory.¹⁸ We examine the effect of regime type by including an indicator variable for years in which the country is an electoral regime. Given the close connection between ethnic identity and political partisanship in Kenya, we use the ethnic composition of schemes as a proxy for allottees' level of support for a president. For this measure, we would ideally collect the ethnicity of each scheme recipient. But given the politicized nature of land and ethnic identity, much of this information is withheld from researchers. Instead, we use the ethnic composition of the local-level administrative jurisdictions in

¹⁷6% of schemes in any given year were registered under autocratic rule, and 9% during electoral rule.

¹⁸See the Appendix for summary statistics.

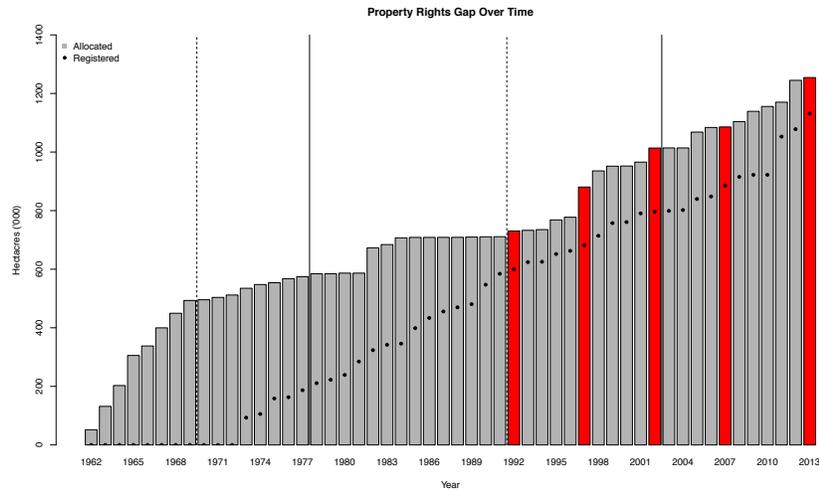


Figure 2: Property Rights Gap Over Time. This figure displays Kenya’s property rights gap over time. The bars give the hectares of allocated settlement scheme land by that year. The dots give the hectares of registered settlement scheme land. The dashed lines demarcate between regime types; the solid lines demarcate between presidencies. Presidential election years shaded in red.

which schemes were located during the 1962 and 1989 censuses (the only censuses that release complete local-level ethnicity data).¹⁹ We geo-reference 486 (98%) schemes to the location level, the lowest administrative unit in the 1962 census, and to the sub-location in the 1989 census: one tier below the location and the lowest administrative tier in the Kenyan state.²⁰

Use of these census data relies on a few assumptions that we attempt to validate. First, we assume that the ethnic composition of a scheme is similar to the lower-level administrative unit containing the scheme. We validate this assumption by collecting the names of scheme residents from archival documents and the Ministry of Lands across 53 schemes (11% of our sample). Because surnames in Kenya closely correlate with ethnic identity, a Kenyan research assistant was able to identify the ethnicity of each allottee. In the Appendix, we show that the ethnic composition of these schemes is highly correlated with the ethnic composition of the scheme’s corresponding

¹⁹Models that estimate registration in the pre-1989 era use 1962 census data. Models estimating registration after 1989 use the 1989 census data.

²⁰The average sub-location had less than 6,700 residents by 1989. The average settlement scheme has around 570 individual plots.

sub-location (0.77). This correlation is likely because administrative units were drawn around schemes (Boone 2014).

Second, we evaluate the extent to which migration altered the accuracy of our ethnicity measures over time. Despite documented migration in and out of schemes, we are less concerned with the resulting changes in the *overall* ethnic composition of each scheme. As described above, occupation licenses prohibited the selling or transfer of land. Further, our reading of archival records indicates that where administrators allowed land sales or transfers, it was to co-ethnics of the initial allottee, ensuring that the ethnic composition of the scheme remained relatively intact. Nonetheless, we validate this assumption systematically by comparing our 1989 measure of ethnic composition with census data from 2009. We find that the ethnic majority of nearly 91% geolocated schemes had the same ethnic majority in 1989 and 2009 (Appendix). The high degree of overlap in schemes' majority ethnic group over time thus suggests a high degree of stability in schemes' overall ethnic composition.

We measure the presence of swing voters under electoral regimes in two ways. First, we include the president's lagged vote share for the constituency in which the scheme is located – a measure of support for the incumbent president.²¹ Given the high levels of support that a president receives from co-ethnics, we interact this term with the percentage of scheme residents who were co-ethnics of the president. The negative value of this term thus captures the level of non-co-ethnic voter support that broke for the president in the previous election.

Second, we use census data to determine the percentage of scheme residents from swing ethnic groups, which we base on the alignment of different ethnic groups in a given presidential election. As discussed above, each election in our sample featured a strong candidate and challengers only from Kenya's three most politically-relevant ethnic groups: the Kalenjin, Kikuyu, and Luo. With Kenya's high levels of ethnic voting, no incumbent could reasonably expect to change the level of support among voters from these three groups. Instead, candidates focused their attention on

²¹The constituency level was the lowest level at which election results for our time period were released.

swing voters not represented by either a challenger or his running mate (Horowitz 2019). We thus code all groups other than these three as swing.²²

The models also include relevant control variables. Two variables evaluate the role of intermediary elites, and specifically, whether the Minister of Lands or area MP was a co-ethnic with the majority of scheme residents in a particular year. As a measure of state capacity, we use data from Burgess et al. (2015) to incorporate yearly expenditures on roads in a settlement scheme's containing district. We also include scheme-level measures that approximate the difficulty of registration: the size of each settlement scheme in hectares and number of settlers (both logged). Further, we include a scheme's level of ethnic heterogeneity by creating a Herfindahl index from the respective census. Where appropriate, models also control for a scheme's age.

5.2 Analyses and Results

Table I examines the role of regime type. Our main variable of interest in Column 1 is an indicator for years in which the country was under electoral rule. We interact this indicator with the percentage of scheme residents who are co-ethnic with the current president in Column 2. Columns 3-4 replicate Columns 1-2 after restricting analysis to Moi's tenure which spanned autocratic (1978-91), and electoral (1991-2002) regimes. Doing so allows us to observe whether there was a switch in the logic of registration across regime type (while holding president constant).²³ As an added test, we split the full sample by regime type and examine the percentage of scheme residents who were co-ethnics of the sitting president, both under autocracy (Column 5) or multi-partyism (Column 6).

Taken together, the results from Table I comport with our theory. The positive significant result on multi-partyism in Columns 1-4 suggests that registration rates vary systematically across regime type, with higher likelihoods of registration during electoral regimes: without electoral

²²Our results are substantively similar if we only code core groups as those with a viable presidential candidate in a specific election.

²³We cannot run this analysis for Kenyatta as there were not enough schemes registered during his electoral years.

Table 1: Land Registration Across Regime Type

	1	2	3	4	5	6
	Full Sample		Moi Presidency		Autocratic Era	Electoral Era
Multi-Party Era	0.21 [†] (0.12)	0.55*** (0.15)	0.35* (0.16)	0.61** (0.19)		
% Co-ethnic w/ President		0.53* (0.24)		0.02 (0.36)	0.50* (0.24)	-0.56 [†] (0.31)
Multi-Party Era * % Co-ethnic w/ President		-1.84*** (0.45)		-1.47* (0.69)		
Land Minister Co-ethnic	-0.85*** (0.15)	-0.83*** (0.15)	-0.77 [†] (0.43)	-0.88* (0.43)	-0.74*** (0.19)	0.38 (0.29)
Co-ethnic MP	0.20 (0.15)	0.24 (0.15)	0.28 (0.19)	0.30 (0.19)	0.38 [†] (0.22)	0.16 (0.23)
Road Expenditure	0.02* (0.01)	0.03* (0.01)	0.05* (0.02)	0.05** (0.02)	0.09** (0.03)	0.02 (0.01)
Scheme Size, HA logged	0.12* (0.05)	0.12** (0.05)	0.22** (0.08)	0.22** (0.07)	0.26** (0.09)	0.18*** (0.05)
No. of Settlers, logged	0.01 (0.06)	-0.01 (0.06)	-0.12 (0.08)	-0.15 [†] (0.08)	-0.13 (0.09)	-0.12 (0.08)
ELF	0.44* (0.22)	0.52* (0.22)	0.22 (0.29)	0.27 (0.29)	0.55 [†] (0.32)	0.92* (0.37)
Scheme Age	-0.03 [†] (0.02)	-0.03 (0.02)	-0.03 (0.03)	-0.03 (0.03)		-0.11*** (0.03)
Num. obs.	5861	5861	2698	2698	3526	1890

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$. Cox-proportional hazard models of scheme registration across regime type. Columns 1-2 examine the full time sample. Columns 3-4 examine Moi's presidency. Column 5 examines the autocratic era alone, and Column 6 the electoral era. Variable descriptions in text.

accountability mechanisms, autocrats could stymie registration, breaking clientelistic bonds only sparingly. In line with our second expectation, our results demonstrate that Kenya's autocratic leaders limited formalization to core supporters: allottees whose support was crucial, but equally, whose support would endure despite changes in land registration. Specifically, under autocracy, co-ethnic schemes were more likely to be registered (Columns 2 and 5), while during the period of multi-party elections, co-ethnic schemes were less likely to be registered than those whose ethnic majority differed from the president's – individuals we characterize as swing voters (Columns 4 and 6).

Figure 3 simulates the results from Columns 5-6. The left (right) side of the figure examines the autocratic (electoral) era using results from Column 5 (6). We simulate expected registration rates in a given year for schemes in which 90% (red hash) or 10% of allottees (blue solid) are a presi-

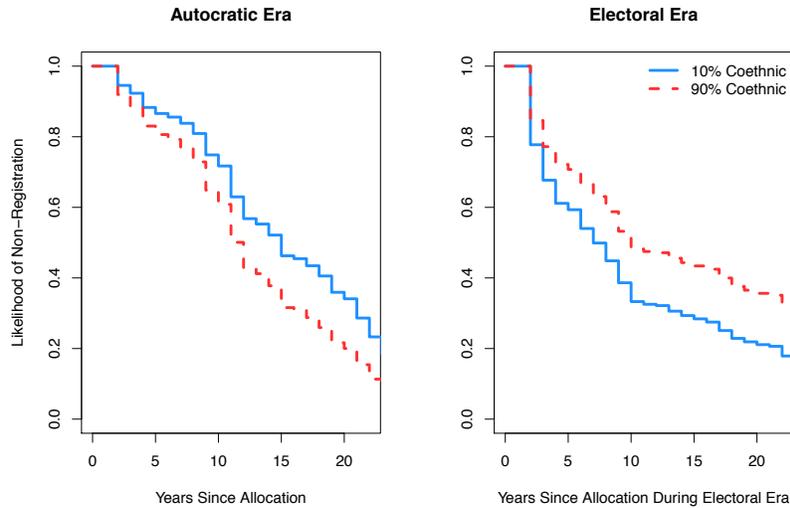


Figure 3: Survival Plots of Scheme Registration by Regime Type. This figure displays results from simulated survival times from Columns 5 (left) and 6 (right) of Table 3. The left (right) side gives scheme survival times during the autocratic (electoral) era. The red hashed (blue solid) line simulates results for schemes in which 90% (10%) of scheme allottees are a president’s co-ethnics.

dent’s co-ethnics.²⁴ These simulations suggest that under autocracy, the likelihood of registration was 50% for a co-ethnic scheme 10 years after its allocation, while only 37% for a non-co-ethnic scheme. This result flips under electoral rule: co-ethnic schemes had a 53% likelihood of registration 10 years after allocation, while non-co-ethnic schemes had a 68% likelihood.

Table 2 examines registration during Kenya’s electoral era. Columns 1-4 examine whether electoral competition – and the need to win pivotal swing voters – helps explain patterns of land formalization. We measure electoral competition using the president’s lagged vote share (Column 1).²⁵ Columns 2-3 interact this term with the percentage of scheme residents who are co-ethnic with the sitting president. Column 4 adds the percent of scheme residents from swing ethnic groups.²⁶

²⁴We hold continuous variables to their mean and indicator variables to 0. The simulation for the electoral era normalizes the start year to 1991 to ease interpretation. We standardize registration to years since the scheme’s initial allotment.

²⁵We restrict analysis to after the first multi-party elections in 1992.

²⁶In the Appendix, we interact lagged vote share with the percentage of scheme residents who are co-ethnic with the current president. This interaction term is not significant, suggesting that registration in schemes with high levels of lagged vote share is not driven by the co-ethnicity of these schemes with the president.

Columns 5-6 examine the short-run time horizons of presidents facing elections. Column 5 adds an indicator variable for the two years immediately preceding each president’s re-election campaign. Column 6 interacts this variable with the percentage of scheme residents from swing ethnic groups. Column 5 thus evaluates the overall drive to increase registration in the run-up to elections, and Column 6 indicates whether registration in these periods was concentrated among pivotal groups.

Table 2: Land Registration During Electoral Era

	1	2	3	4	5	6
	Electoral Era	Moi	Kibaki	Electoral Era		
% Non-Co-ethnic w/ President	0.71 [†] (0.40)	-0.55 (2.15)	6.10** (2.35)			
President’s Lagged Voteshare	1.00* (0.44)	1.05 (0.96)	0.34 (0.72)			
% Non-Co-ethnic w/ President * President’s Lagged Voteshare		0.58 (2.72)	-5.80* (2.85)			
% Swing Ethnic Group				0.39 [†] (0.24)		-0.13 (0.33)
Election Run-Up					0.50** (0.16)	-0.08 (0.32)
% Swing Ethnic Group * Election Run-Up						0.91* (0.43)
Land Minister Co-ethnic	0.67* (0.32)	0.30 (0.63)	1.68** (0.52)	0.31 (0.29)	0.25 (0.29)	0.19 (0.29)
Co-ethnic MP	0.11 (0.31)	-0.06 (0.54)	0.27 (0.42)	0.12 (0.23)	0.15 (0.23)	0.11 (0.23)
Road Expenditure	0.01 (0.02)	-0.01 (0.03)	0.01 (0.02)	0.02 (0.01)	0.01 (0.01)	0.02 (0.01)
Scheme Size, HA logged	0.19** (0.07)	0.22 [†] (0.11)	0.16 [†] (0.09)	0.19*** (0.05)	0.18** (0.06)	0.18*** (0.06)
No. of Settlers, logged	-0.15 (0.11)	-0.16 (0.18)	-0.15 (0.15)	-0.12 (0.08)	-0.10 (0.08)	-0.13 (0.08)
ELF	1.22* (0.50)	0.43 (0.87)	1.82** (0.68)	0.87* (0.38)	0.83* (0.38)	0.86* (0.38)
Scheme Age	-0.08* (0.04)	-0.11* (0.05)	0.12 (0.25)	-0.10*** (0.03)	-0.11*** (0.03)	-0.10*** (0.03)
Num. obs.	1280	522	758	1890	1890	1890

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$. Cox-proportional hazard models of scheme registration during electoral era. Column 1 begins analysis in 1993 (to incorporate 1992 election results). Column 2 examines Moi’s presidency from 1993. Column 3 examines Kibaki’s presidency. Columns 4-6 examine the full electoral era. Variable descriptions in text.

Table 2 indicates that during periods of electoral competition, leaders formalize land in response to their short-run political survival incentives and among pivotal groups. Columns 1-3 provide some support for our expectation that schemes comprised of pivotal voters could expect

higher likelihoods of registration. The positive result on lagged vote share in Column 1 and the negative result on the interaction between lagged vote share and percent non-co-ethnic with the president in Column 3 suggest that pivotal voters that showed a willingness to support the president were likely to receive registration. Column 4 further validates this idea, showing that schemes inhabited by swing groups were more likely to receive registration. Table 2 also shows that presidents facing elections were more likely to register schemes in the run-up to a re-election campaign (Column 5), and especially for schemes inhabited by swing groups (Column 6). These findings are thus in-line with our theoretical prior that leaders facing elections distribute land rights for short-term political gain.

6 Supplemental Analyses

6.1 Empirical Extensions of Theory

Our theoretical framework lends itself to other observable implications that we examine empirically. We begin by examining the distribution of land rights under Kenya's autocratic leaders in their attempts to shore up core support in critical areas and during critical moments. These tests show conditions under which autocrats face incentives to register land – when they face moments of weakness that make their base pivotal, and force their hand. First, we examine Kenyatta's distribution of land rights in the aftermath of the *Mau Mau* civil war – which pitted the colonial state (and Kenyan loyalists) against Kikuyu insurgents (Branch 2009). Jomo Kenyatta's support for *Mau Mau* was ambiguous during the conflict, but upon independence, he distanced himself from the *Mau Mau* movement, pursuing policies aimed at quelling future dissent.

With respect to scheme registration, it's possible that Kenyatta focused registration in former *Mau Mau* zones – areas prone to future unrest. We thus examine scheme registration in areas that experienced *Mau Mau* violence. We use data from Eynde et al. (2018) on paramilitary officers

who were key colonial combatants during the uprising to proxy for the location and intensity of the war.²⁷ The data includes a snapshot of officers in 1957 and lists the administrative division (one administrative tier lower than a district) in which each officer was stationed. Our main assumption is that officers were posted where violence was heaviest.

Column 1 of Table 3 includes this count variable, and Column 2 interacts it with the percentage of scheme residents that were Kenyatta's co-ethnics. Our results suggest that Kenyatta was more likely to register schemes in previously volatile areas, as measured by the high presence of security officers (Column 1), and that this result is largely driven by Kikuyu schemes (Column 2). These findings are in-line with our theoretical framework: that autocratic leaders distribute land rights to their core to consolidate support. In this case, and as shown by past research (Branch 2009, Dyzenhaus 2020), Kenyatta registered schemes in areas that had high levels of *Mau Mau* violence to build support among intra-ethnic non-supporters and to reward loyalists who were allied with the regime from the onset.

Second, we examine scheme registration given Moi's need to consolidate popular support. The beginning of Moi's autocracy was precarious as he faced significant elite and popular discontent.²⁸ Rival elites launched a coup against him in 1982. The coup almost succeeded, in part, because of an outpouring of popular support for the coup plotters and an unwillingness of other elites to take decisive action for Moi during those crucial hours. We thus examine if Moi used scheme registration to shore up popular support in the aftermath of the coup. We find that registration rates in the year after the coup were significantly higher than during other parts of his presidency (Column 3). Further, registration was concentrated among his co-ethnics (Column 4), suggesting that Moi used registration to consolidate support among his base.

Separately, we also examine land registration to core supporters under the electoral era. While

²⁷Eynde et al. (2018) collect data from the *Kenya Police Service Registers* on Kenya's colonial police force.

²⁸Moi faced elite opposition from Kikuyu and Luo elites who had been empowered under Kenyatta and did not want to see a transfer of power to Moi. Further, Moi did not have consolidated co-ethnic support because many Kalenjin did not believe he used his elite status under Kenyatta to secure sufficient resources for his co-ethnics.

core voters as a whole were less pivotal to each election than swing voters, some core voters living outside core areas were electorally important for other reasons. Here we refer to Kalenjin and Kikuyu households living outside their group’s “traditional homeland.” These households, described as “migrants” and seen as ethnic outsiders, can help presidential and parliamentary candidates establish an electoral foothold in swing areas (Kasara 2016). These communities, however, have also occupied a precarious and contentious space in Kenyan politics. With politicians framing these groups as “invaders” who threaten the land and political power of “locals,” ethnic outsiders have also been more vulnerable to election-time violence (Boone 2014, Klaus 2020a).

We thus evaluate whether scheme registration served as a *de facto* redistricting tool, whereby presidents secured the land rights of migrant co-ethnics to solidify electoral support in swing (i.e. non-core) areas, thereby turning opposition zones into electorally competitive zones for a president and his coalition. Columns 5-6 include a measure of whether the ethnic majority of a scheme changed between the 1962 and 1989 censuses. Where the majority changed, we code these as “ethnic outsider” schemes: those where residents are not considered indigenous to the area. We interact this variable with the percentage of scheme residents who are co-ethnic with the current president. We restrict analysis to periods after election violence, as these are moments when the land rights of “outsiders” is most precarious. We find positive results in the post-violence period during Moi (Column 5) and Kibaki’s (Column 6) tenure, suggesting that presidents used land registration as a way to maintain their credibility as good patrons while establishing permanent bases of support outside their core areas.²⁹

²⁹We substantiate these violence results in the Appendix. We show that the registration of “outsider schemes” following the 2007 election was not confined to schemes that experienced actual violence (there is no systematic, local-level violence data during Moi’s presidency). That is, violence-affected schemes, including Kikuyu-majority schemes, were no more or less likely to be registered than others.

Table 3: Land Registration: Additional Analyses

	1		2		3		4		5		6	
	Kenyatta		Moi		Autocratic Era		Moi		Electoral Era		Kibaki	
											Post 2007	
Paramilitary Officers	0.06***	-0.20 [†]										
	(0.01)	(0.12)										
% Co-ethnic w/ President		-0.17			-0.70				-1.38*			-0.51
		(0.51)			(0.56)				(0.63)			(0.74)
% Co-ethnic w/ President * Paramilitary Officers		0.30*										
		(0.14)										
Immediate Post-Coup			0.55*	0.11								
			(0.24)	(0.32)								
% Co-ethnic w/ President * Immediate Post-Coup				2.07*								
				(0.88)								
“Outsider” Scheme									-1.42**			0.33
									(0.53)			(0.55)
% Co-ethnic w/ President * “Outsider” Scheme									3.92***			3.63*
									(1.14)			(1.83)
Land Minister Co-ethnic	-0.26	-0.01	-16.12	-15.68					-0.16			1.49**
	(0.63)	(0.66)	(1205.08)	(1032.81)					(0.48)			(0.54)
Co-ethnic MP	-0.75	-0.60	0.45 [†]	0.43 [†]					-0.23			-0.38
	(0.51)	(0.54)	(0.25)	(0.25)					(0.36)			(0.48)
Road Expenditure	0.26 [†]	0.33*	0.09**	0.08*					0.02			-0.01
	(0.14)	(0.16)	(0.03)	(0.03)					(0.02)			(0.04)
Scheme Size, HA logged	0.02	0.00	0.18 [†]	0.18 [†]					0.27**			0.16
	(0.15)	(0.15)	(0.10)	(0.10)					(0.10)			(0.11)
No. of Settlers, logged	0.07	0.13	-0.11	-0.11					-0.25*			0.03
	(0.19)	(0.20)	(0.11)	(0.11)					(0.12)			(0.17)
ELF	-0.54	-0.38	0.65	0.73 [†]					-0.18			0.74
	(0.69)	(0.75)	(0.40)	(0.41)					(0.63)			(0.75)
Scheme Age			10.38	10.67					-0.14***			-0.02
			(238.76)	(211.14)					(0.04)			(0.18)
Num. obs.	1690	1690	1836	1836					862			566

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; [†] $p < 0.1$. Cox-proportional hazard models of scheme registration. Columns 1-2 examine Kenyatta’s presidency. Columns 3-4 examine Moi’s autocratic years. Column 5 examines Moi’s electoral years (which were all marred by land-related violence). Column 6 restricts analysis to the post-2007 period, the years of Kibaki’s presidency after electoral violence. Variable descriptions in text.

6.2 Refuting Alternative Arguments

The Appendix reports results from additional analyses that aim to rule out alternative arguments. Notably, we attempt to alleviate concerns that the logic of scheme registration is endogenous to the logic of scheme creation (or allotment). We run supplemental analyses where we restrict analysis to schemes that were created under a previous president, and thus, where the current president could not affect the creation of schemes nor their ethnic composition. We examine registration under Moi after restricting analysis to only those schemes created under Kenyatta, and we examine

registration under Kibaki after restricting analysis to schemes created under either Kenyatta or Moi. The results from these robustness tests do not substantively alter the results presented above.

In addition, we address a potential concern that the drop in registration rates for core supporters during the electoral era was due to the single-shot nature of land registration and a lower supply of co-ethnic schemes to register. If, for instance, Moi had registered all of his co-ethnic schemes during his autocratic reign, then mechanically, he could not use registration to reward co-ethnics during electoral rule. Similarly, if Kenyatta had registered all of his co-ethnic schemes then Kibaki would not be able to use this as a distributive goodie to reward his co-ethnics. We rule out this alternative argument by showing that the percentage of unregistered co-ethnic schemes did not change substantively before and after the start of multi-party elections. Instead, the imperative of re-election required Moi and Kibaki to alter for whom they formalized land rights.

We also re-estimate our main analyses using alternative specifications and adding additional controls. We evaluate whether scheme registration is more likely over time by running OLS regressions with linear time trends. We also re-run our main analyses after including a measure of agricultural productivity (to alleviate concerns that land value affected the creation or registration of schemes), a proxy for bureaucratic state capacity, and each scheme's distance to its district capital. The results for nearly all of the main regressions hold.

Finally, we briefly evaluate other measures of land formalization. Our measure – scheme registration – examines the conditions under which the state begins to close the property rights gap. But closing the property rights gap also involves bottom-up processes, and allottees on registered schemes may still remain without title deeds.³⁰ While complete titling data at the individual-level is difficult to obtain in Kenya, we were able to obtain the complete list of allottees for nine settlement schemes. We show that titling rates across these schemes seem to converge at 100%

³⁰The literature on title deed acquisition focuses mostly on the individual-level incentives and capacities to acquire a title deed, such as high costs (Boone et al., 2020), farmer income (Alston et al. 1999, Balan et al. 2019), social status and power relations (Boone et al., 2020, Honig 2017, Harris & Honig 2020), or one's elected representatives (Brulè Forthcoming).

– as time progresses, more individuals obtain their title deed, with title deed acquisition nearly complete among the sample’s first registered schemes. This suggests that, in the long-run, the main impediment to closing the property rights gap is less individual incentives and capacities, and moreso the state’s willingness to distribute land rights.

7 Conclusion

This paper engages with an enduring political economy puzzle: if the provision of property rights raises incomes and improves farm efficiency, when and why do elites withhold tenure rights from landholders? This article has aimed to identify the both the conditions under which leaders formalize rights, as well as the claimants who are most likely to benefit from such rights.

Drawing on land registration data across Kenyan settlement schemes, we show that autocratic leaders are more likely to withhold land rights, while elected leaders are more likely to grant such rights, especially when doing so improves their chances of electoral survival. We also examined registration sub-nationally, focusing specifically on the groups of citizens most likely to benefit from land formalization within each regime type. Across both autocratic and electoral regimes, we argued that leaders prioritize pivotal supporters. Yet because perceptions of political threat vary between regime type, views about which group is pivotal – to regime survival or electoral victory – also changes. Whereas autocratic leaders prioritize their core supporters, whose strong support is often sufficient to maintain popular legitimacy under autocracy, elected leaders prioritize swing voters who can help ensure their electoral victory.

Broadly, by examining the timing and patterns of land rights formalization, we explain how and why the logic of distribution changes between autocratic and electoral regimes, contributing to larger debates about how regime type effects distributive practices, and under electoral regimes, whether parties are more likely to distribute benefits to core (e.g., Nichter 2008) or swing voters (e.g., Stokes 2005).

More so, however, we suggest that in contrast to the building of roads, schools, or health clinics, the distribution (i.e., formalization) of land rights represents a very particular type of clientelistic good. First, in addition to serving as a source of wealth accumulation, land also has symbolic importance, imbuing land holders with a sense of identity and belonging. This makes the distribution of land (rights) both a potentially more powerful distributive good, as well as a more contentious one. Second, the selective distribution of land rights is a way to alter the demography of a political space, providing leaders with a de facto redistricting tool. And third, and most importantly, because the provision of land rights is generally irrevocable, doing so requires elites to relinquish a degree of social and political control in exchange for some other, often more short-term electoral advantage.

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