



## Wealth-destroying private property rights

Peter T. Leeson, Colin Harris\*

Department of Economics, George Mason University, MS 3G4, Fairfax, VA 22030, United States



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### ABSTRACT

According to conventional wisdom, privatizing the commons will create wealth. Yet in cases found throughout the developing world, privatizing the commons has destroyed wealth. To explain this phenomenon, we develop a theory of wealth-destroying private property rights. Privatization's effect on social wealth depends on whether privatizing an asset confers net gains or imposes net losses on society. The decision to privatize, however, depends on whether privatizing an asset confers net gains or imposes net losses on property decision makers. When decision makers are residual claimants, these effects move in tandem; privatization occurs only if it creates social wealth. When decision makers are not residual claimants, these effects may diverge; privatization occurs if it benefits decision makers personally even if privatization destroys social wealth. We apply our theory to understand wealth-destroying land privatization in Kajiado, Kenya.

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### 1. Introduction

Every political economist knows that private property rights create wealth. Private property internalizes externalities, incentivizes optimal resource use, and enables markets that coordinate value-adding economic activity through the price system (Hayek, 1945; Mises, 1949; Demsetz, 1967). Which raises a question: Why has privatizing the commons in some places not created wealth but destroyed it?

From Ghana to Afghanistan, Kenya to Madagascar, Rwanda to Uganda, Cambodia, and Peru, the creation of private land rights has led to questionable economic benefits at best and economic losses at worst (see, for instance, Attwood, 1990; Baxter and Hogg, 1990; Place and Hazell, 1993; Migot-Adholla, Place, & Oluoch-Kosura, 1994; Hunt, 2004; Bassett, Blanc-Pamard, & Boutrais, 2007; Jacoby and Minten, 2007; Kerekes and Williamson, 2010; Loehr, 2012; Murtazashvili and Murtazashvili, 2015). To explain this phenomenon, we develop a theory of wealth-destroying private property rights.

Our theory is simple: Privatization's effect on social wealth depends on whether privatizing an asset confers net gains or imposes net losses on society. The decision to privatize, however, depends on whether privatizing an asset confers net gains or imposes net losses on property decision makers. When decision makers are residual claimants, these effects move in tandem; privatization occurs only if it creates social wealth. When decision makers are not residual claimants, these effects may diverge;

privatization occurs if it benefits decision makers personally even if privatization destroys social wealth.<sup>1</sup>

We apply this logic to understand land privatization among the Maasai of Kajiado, Kenya, for whom creating private property rights destroyed rather than created wealth. We find that wealth-destroying private land rights in Kajiado were created by property decision makers who were not residual claimants and whom land privatization benefited personally.

We develop our theory with an eye to analyzing the specific case of Kajiado, and varying particulars of other cases of state-led land privatization counsel care in extrapolating from the former to the latter. At the same time, the central reasoning our theory offers and the privatization situation that Kajiado presents are quite general. We therefore hope that others will find our framework useful for extension and application to other cases of wealth-destroying privatization in the developing world.

Our paper is most closely connected to the literature that examines the state's ability to improve economic outcomes by designing property regimes.<sup>2</sup> Traditionally, this literature considers the

<sup>1</sup> On the importance of residual claimant status to the wealth-producing capacity of governance arrangements, see Leeson (2011) and Salter (2015).

<sup>2</sup> Our paper is also connected to the literature on self-governance, which considers privately created property regimes. Demsetz (1967), for example, studies the emergence of private property rights among forest-animal hunters in eighteenth-century Quebec. Anderson and Hill (1975, 2004) study the private emergence property rights in the American West. Benson (1989a) does so in the context of preliterate societies, and Benson (1989b) and Kerekes and Williamson (2012) do so in the context of medieval Europe. Leeson (2007a, 2007b, 2009) examines privately created property regimes among the Caribbean pirates, in precolonial Africa, and along the historical Anglo-Scottish border. Most recently, Skarbek (2014) considers the private creation of property rights in prison gangs.

\* Corresponding author at: George Mason University, Economics, 4400 University Drive, 3G4, Buchanan Hall, 1st Floor, MSN 3G4, Fairfax, VA 22030, United States.  
E-mail address: [charri25@gmu.edu](mailto:charri25@gmu.edu) (C. Harris).

difficulties of improving economic outcomes through state-created common property (see, for instance, [Mises, 1920, 1949](#); [Hayek, 1945](#); [Boettke, 1990, 1993, 2001](#); [Kornai, 1992](#)). A different strand, however, considers the difficulties of improving economic outcomes through state-created private property (see, for instance, [Anderson and Hill, 1983, 1990](#); [McChesney, 1990, 2003](#); [Easterly, 2008](#); [Murtazashvili and Murtazashvili, 2015, 2016a, 2016b](#)).<sup>3</sup>

Empirically, this research finds that the conventionally predicted economic effects of state-led privatization do not manifest universally. Recent field work conducted by [Murtazashvili and Murtazashvili \(2015, 2016a, 2016b\)](#), for instance, suggests that state land-titling efforts in Afghanistan have not improved welfare. Theoretically, this research identifies the causes for such failure. [Anderson and Hill \(1983\)](#), for instance, demonstrate how costly rent-seeking may dissipate new wealth promised by state-led privatization, leaving society no richer than it was to start. Our analysis contributes to this literature by demonstrating how, even when rent-seeking is costless, state-led privatization may destroy existing wealth, leaving society poorer than it was to start.

## 2. A theory of wealth-destroying private property rights

Private property rights offer society potential benefits. Relative to common property, such rights tend to prevent resource overuse, provide stronger incentives for investment, and direct productive economic activity via market prices. In a pastoralist society, for example, private land rights may prevent overgrazing, promote investment in land improvements, and facilitate alternative uses for land, such as agricultural cultivation, when they are more valuable. Additionally, legal titles that grant private land rights may provide stronger tenure security and protect against encroachment.

These benefits, however, are not free. Private property rights also impose costs on society. Relative to common property, such rights tend to require more resources to define and enforce ([Anderson and Hill, 1975](#); [Field, 1989](#); [Lueck, 2002](#)). In certain environments, private property rights are also more expensive to use. In a pastoralist society that inhabits an arid or semi-arid region, for example, it is often cheaper to realize scale economies when land is held in common than through costly market transactions under private property ([Onchoke, 1986](#); [Coleman and Mwangi, 2015](#); see also, [Dahlman, 1980](#); [Ellickson, 1993](#); [Platteau, 2000](#)). Similarly, in such a society, common land holdings may insure individuals against drought risk more cheaply than arranging insurance through markets when land is owned privately ([Kabubo-Mariara, 2005](#); [Coleman and Mwangi, 2015](#)).

Like all choices, the choice between property regimes therefore involves tradeoffs. A property regime's effect on social wealth—depends on how it negotiates these tradeoffs. When the social benefits of private property in some asset exceeds the social costs, creating private property rights in that asset creates social wealth. When the opposite is true, doing so destroys social wealth.

While the consequences for social wealth of privatizing an asset currently found in the commons depends on whether the asset's privatization confers net gains or imposes net losses on society, the decision to privatize the asset depends on whether its privatization confers net gains or imposes net losses on the people who have authority to make property decisions relating to it—the property decision makers ([Riker and Sened, 1991](#)). If privatizing the

asset would increase property decision makers' personal wealth relative to leaving the asset in the commons, they will privatize it, and vice versa.

Crucially, privatization's effect on the personal wealth of property decision makers may but need not vary positively with privatization's effect on social wealth. The relationship between these effects depends on whether property decision makers are residual claimants. A residual claimant is a decision maker with a personal claim to net changes in the aggregate money value of an organization's assets—to changes in organizational wealth, positive or negative—reflecting changes in the productivity of the organization's assets minus the cost of producing productivity changes. In the context of societal decision makers, such as property decision makers, a residual claimant is thus a decision maker with a personal claim to net changes in the aggregate money value of a community's assets—to changes in social wealth, positive or negative—reflecting changes in the productivity of the community's assets minus the cost of producing those productivity changes.

When property decision makers are residual claimants, the effect that privatizing an asset has on their personal wealth moves in tandem with the effect it has on social wealth. To see this, consider a hypothetical society of pastoralists where land is held in common but other property, such as livestock, is owned privately, and where land decisions are made by a traditional council of elders whose members collect incomes from the productive activities of the pastoralists in their community. In this situation, the council members manage the community's land and in return receive a share of the community's aggregate income generated from the pastoralists' productive activities, which combine land with their other assets. Council members' personal wealth thus varies positively with social wealth; council members are residual claimants. This hypothetical scenario is similar to that in which the Maasai operated historically. In their communities, livestock was owned privately, land was held in common, and a “council of elders...manage[d] the affairs of the area as if they ‘owned’ the land” ([Rutten, 1992: 271](#)). Council members' personal wealth thus depended partly on how their land decisions affected the community's wealth.

Suppose that for a minority of the pastoralists in the community, the costs of private land rights would exceed the benefits. For example, overgrazing imposes a cost on them, but their cost of fencing parcels—the technology available for enforcing exclusive claims—is higher still. For the majority of pastoralists, however, the benefits of private land rights would exceed the costs. For instance, these pastoralists may be more productive, so the cost that overgrazing imposes on them is higher than for the others and higher than the cost of fencing parcels.

What will the property decision makers—here, council members—do? They will privatize land if the net benefit of private land rights for the latter pastoralists, privatization's beneficiaries, exceeds the net cost of private land rights for the former pastoralists, privatization's losers, and leave land in the commons if the reverse is true. In the former case, privatization would increase social wealth and thus increase the personal wealth of the council members. In the latter case, privatization would decrease social wealth and thus decrease the personal wealth of the council members.

Now consider the situation when property decision makers are not residual claimants. Suppose, for example, that state fiat transfers land decision authority to government officials in the country in which our society of pastoralists is located. Like most government officials, these officials do not have personal claims to tax revenues, and the potential indirect benefits of tax revenues that might accrue them personally, such as an expansion of the government's general budget, are negligible. Officials' personal wealth thus does not depend on social wealth; officials are not residual claimants.

<sup>3</sup> See also, [Bromley \(1989, 2009\)](#); [Heller \(1998\)](#); [Herbst \(2000\)](#); [Platteau \(2000\)](#); [Arrunada \(2012\)](#); [Bromley and Anderson \(2012\)](#). A related literature emphasizes the importance of distributional conflicts and power relations in generating or preserving “inefficient” property institutions. See, for instance, [Libecap \(1989\)](#), [Knight \(1992\)](#), and [Platteau \(1996\)](#).

What now will the property decision makers—here, government officials—do? Since the officials are not residual claimants and thus do not have a strong interest in the effect of land privatization on social wealth, it is tempting to conclude that they will be indifferent to privatizing the pastoralists' land. But that conclusion would be mistaken, for land privatization—wealth creating and destroying alike—presents administering officials a new, potentially lucrative source of rents to which they do have personal claims: payments by pastoralists, and perhaps others, in exchange for choice parcel allocations. Bribes paid to officials, for example, are pocketed by officials and benefit them directly. Further, land privatization may personally benefit administering officials indirectly, for example by expanding the budgets of the government agencies that oversee land privatization, for which such officials work. The officials are therefore likely to privatize—whether land privatization is wealth creating or wealth destroying. Note that this is true whether officials are aware of the social costs and benefits of their privatization decision or not. Since the officials are not residual claimants, their decision depends on, and requires knowledge of, only their personal costs and benefits of creating private land rights.

When land privatization by the officials creates social wealth, at least part of the wealth created will be dissipated if the rent-seeking activity of the pastoralists in competition for choice parcels uses resources. If rent-seeking activity uses enough resources, all of the wealth created will be dissipated, leaving the pastoralists no better off than they were before privatization. When land privatization by the officials destroys social wealth, the pastoralists are left worse off than they were before privatization even if rent-seeking uses no resources at all. If rent-seeking does use resources, which it must if it goes beyond simple bribes, the destructive effect of privatization is compounded: the costly process of creating wealth-destroying private land rights destroys more wealth still.

The prospect for wealth-destroying privatization described here is not in general diminished by the state consulting the pastoralists in question, for instance by putting land privatization up to a pastoralist vote.<sup>4</sup> This changes the identity of the property decision makers, who become the voters, but it does not make the new decision makers residual claimants. A pastoralist will vote for the land regime that benefits him personally; he does not internalize the resulting regime's effect on social wealth. Thus, if the majority of pastoralists benefit from land privatization, majority voting will result in land privatization even if privatization destroys social wealth.

### 3. The case of the Maasai in Kajiado, Kenya

We apply our theory of wealth-destroying private property rights to understand the effect of land privatization among the Maasai of Kajiado, Kenya. Once a prominent tribe of nomadic herders found throughout Kenya, in the early twentieth century, European colonizers relegated many of the Maasai to the southern part of the country that borders Tanzania—Kajiado and Narok—where they remain (Mwangi, 2007a).

#### 3.1. Maasai land rights before and after colonization

For most of their history, the Maasai practiced mobile pastoralism under a property regime in which livestock and other property

was owned privately but land was held in common. The climate the Maasai inhabited, then and now, was arid or semi-arid. In Kajiado, for example, 94 percent of the land area is classified as such, characterized by low, variable rainfall and infertile soil (Rutten, 1992; Kabubo-Mariara, 2003). To raise livestock in this environment, the Maasai used a simple but effective herding strategy: they grazed animals over large-scale ranges that contained both high- and low-potential pastures, rotating from the former during the dry season to the latter during the wet season.

Politically, the Maasai were divided into twelve sections, or tribes (Mwangi, 2006, 2007a). A section consisted of several localities; a locality, of several neighborhoods, camps, and households (Rutten, 1992; Mwangi, 2007a). Each section had its own well-defined territory, whose boundaries were protected by community members—warrior age-sets from the section's localities—and its own governance institutions, provided at the top by councils of elders, who also attended to inter-sectional disagreements (Hedlund, 1979; Rutten, 1992).

Most of the Maasai's governance needs, however, were found and fulfilled locally (Mwangi, 2007a). Each locality, for example, had its own age-set group and council of elders, which attended to local disagreements. The local council of elders also facilitated the management of locality resources, in particular the grazing schedule, deciding which pastures would be reserved for the dry season and when they could be used (Mwangi, 2006, 2007a).

Across Maasai sections, land use was exclusive. Grazing pastures in a section other than that of which one was a member required consent. However, in light of commonly felt, environmentally imposed land needs—particularly in times of drought—inter-sectional grazing permission was almost always granted, and amicable inter-sectional relations that facilitated inter-sectional land sharing were typical, fostered through shared rituals (Rutten, 1992; Mwangi, 2006).<sup>5</sup> Within a Maasai section, land use was not exclusive even in theory. Here, section members, no matter their locality, were free to graze their herds as they pleased, respecting only elder-established limitations on pastures reserved for grazing in the dry season (Rutten, 1992).

The precolonial Maasai's communal land regime reflected a wealth-preserving institutional response to the environmental conditions they faced (Coldham, 1979; Fratkin, 1994; Blewett, 1995; Kabubo-Mariara, 2003; see also, Ensminger, 1997).<sup>6</sup> This regime entailed the usual tradeoffs of common property, most significantly in the pastoralists' context, overgrazing. But for the Maasai, that social cost was more than compensated for by the social benefits of common land tenure.

For example, common land rights offered the Maasai inexpensive social insurance, indispensable in their climate for cheaply reducing shared environmental risks (Kabubo-Mariara, 2005; Sundstrom, Tynon, & Western, 2012; Coleman and Mwangi, 2015; see also, McCloskey, 1991; Nugent and Sanchez, 1993). Pastoralists in one locality who suffered drought could move freely within and between sections in search of useable pasture that was not affected, avoiding their herds' devastation.

The Maasai's communal land regime also minimized resource expenditures required to define and enforce exclusive claims to land—a substantial savings in their environment. In 1990, the estimated cost of fencing just 40 ha of land in Kajiado was approximately Ksh. 150,000—about nine times the average annual income of an unskilled Kenyan laborer (Rutten, 1992: 362, 300).

<sup>4</sup> There are two exceptional cases in which putting land privatization to a vote may prevent wealth-destroying privatization. If the voting rule used requires unanimous consent for land to be privatized, the presence of even a single pastoralist who loses from private land rights will prevent privatization, including when it would destroy social wealth. Second, if vote buying is permitted, bargaining between pastoralists is inexpensive, and vote contracts can be enforced, vote trading will prevent land privatization when it would destroy social wealth. We are not aware of any state-led land privatization votes that have exhibited these features, and it is difficult to imagine them being used.

<sup>5</sup> Moreover, while most Maasai resided in the same locality and thus remained members of the same section for extended periods, it was possible for a member of one section to join another by participating regularly in the age-set activities of a locality in that section (Rutten, 1992; Mwangi, 2007a).

<sup>6</sup> On the suitability of communal property arrangements under other conditions, see, for instance, Netting (1976), Ostrom (1990), and Seabright (1993).

In precolonial Kenya, the cost of fencing land was undoubtedly higher still.

Equally important, the Maasai's communal land regime economized on transaction costs. Common land tenure offered pastoralists low-cost opportunities for joint production and investment. Moreover, it facilitated resource mobility in a region where large-scale ranges and rotational grazing are required for sustainable livestock production (Kabubo-Mariara, 2005; Borwein, 2013; see also, Mearns, 1996; Banks, 2003; Hobbs et al., 2008).

The Maasai's European colonizers, however, saw their land regime differently. In 1895, the British established the East Africa Protectorate over the territory that would become Kenya. They concluded that the pastoralists' communal land tenure was an unnecessary impediment to developing the region economically. Pastures reserved for the dry season, for instance, were seen as wasted capacity; large stocks of cattle, as wasteful sources of land degradation (Blewett, 1995; Kieyah, 2007).

To remedy such "inefficiencies," the British deployed a simple solution: land privatization (Kieyah, 2007; Mwangi, 2007a). In practice, this typically meant giving colonizers private rights to the land inhabited by the Maasai, redistributing the most productive areas to settlers. Most of the land that remained in Maasai possession after these colonial "reallocations" was located in Kajiado (and Narok), where the pastoralists consequently ended up (Blewett, 1995).

In their smaller, less productive domain, the Maasai continued to hold land in common, albeit at higher cost, since grazing livestock on less abundant and fertile land meant more severe overgrazing. After becoming independent of Britain in 1963, the government of Kenya would use this situation to motivate new privatization efforts: the privatization of the Maasai's common land holdings in Kajiado.

To that end, in 1968, the government of Kenya promulgated the Land Adjudication Act, which created from those holdings private titles to individual and group ranches, the latter owned corporately. Supplementary legislation, the Land (Group Representatives) Act, created a legal framework for group ranch administration (Mwangi, 2006, 2007a).<sup>7</sup> Financial support for the government's land privatization program was provided largely by the World Bank and other international development organizations, directed through the Kenya Livestock Development Project, which aimed to, for instance, increase Maasai investment via land-title collateralization and to commercialize the Maasai livestock industry by creating a market in land.

Land privatization, initially at the group ranch level, then at the level of individuals, proceeded apace. By 1980, roughly three-quarters of the land in Kajiado had been privatized in the form of 52 private group ranches. Not long after, those ranches began to be subdivided—their groups dissolved and land broken up to create private individual land titles. By 1990, approximately 80 percent of Kajiado's group ranches had entered the process of subdivision (Rutten, 1998). And as of 2006, all but five of the original 52 had completed or were in the midst of completing individual land privatization (Mwangi and Ostrom, 2009).

### 3.2. *The economic effect of land privatization in Kajiado*

Given the extent of land privatization in Kajiado, one might expect significant economic improvement for the Maasai to have followed. But then one would be disappointed—and surprised—for what followed instead was economic decay. "[I]ncome levels

for the Maasai pastoralists have not improved since land tenure was formalized; on the contrary, per capita income levels are in a downward trend in the longer term" (Rutten, 2008: 109).

On the one hand, the social benefits that land privatization were supposed to generate for the Maasai proved modest at best. Collateralization-enabled investment, for example, turned out to be all but non-existent. According to a study of more than 750 Maasai who received private individual land titles post-subdivision, only 2.2 percent had or intended to use their title as collateral for a loan (Rutten, 1992: 394).<sup>8</sup> Among the members of one former group ranch (Empuyiankat), not a single person mortgaged his land. And in the former group ranch whose members exhibited the highest rate of mortgaging (Olkinos), only six percent applied for a loan (Rutten, 1992: 392). Similarly, the vibrant Maasai land market expected to result from creating private individual land titles turned out to be not-so vibrant. According to same study, only 15.2 percent of former group ranch members had even applied to sell a portion of their land (Rutten, 1992: 386).

On the other hand, the social costs of land privatization for the Maasai proved substantial. Most significantly, under private individuals land rights, livestock production—historically the Maasai's chief source of income—declined precipitously. According to a survey conducted in the southeast region of Kajiado, between 1977 and 1996 the average pastoralist's cattle holdings fell 60 percent; his sheep and goat holdings, 90 percent (Campbell, Gichochi, Mwangi, & Chege, 2000; see also, Rutten, 2008; BurnSilver, 2016). The reason: in the Maasai's environment, producing livestock under private land rights is considerably more expensive than doing so under common land tenure.

Successful herding in the arid and semi-arid climate that Kajiado's pastoralists confront requires large-scale ranges that permit rotational grazing between wet- and dry-season pastures. According to the Kajiado Ministry of Livestock Development, the minimum land area, or ranch size, required for viable household livestock production here is 800 ha; less than 200 ha is unviable for even subsistence production (Rutten, 1992).

Data are available on the size of private individual land parcels created from 32 former group ranches in Kajiado that subdivided or were in the process of doing so as of 1990 (Rutten, 1992: 280–282; see also, Kimani and Pickard, 1998; BurnSilver and Mwangi, 2007; Mwangi, 2007a; Rutten, 2008). In every case, the average parcel created was dramatically smaller than the minimum size required for viable livestock production, ranging from a maximum of 298 ha (Poka) to a minimum of 21 ha (Olchoro-Onyori). Indeed, if every former group ranch in Kajiado were subdivided equally, none would have an average land size of 800 ha, and only two would have an average size above 200 ha (Rutten, 1992: 297). These data imply that land privatization in Kajiado, at least at the individual level, where it was ultimately carried out, was and is incompatible with viable livestock production.

There are two ways for the Maasai to cope with this situation: combine a sufficient number of individual land parcels to reach the minimum size required for viable livestock production or turn to alternative economic activities. Both strategies have been attempted by some Maasai, but both are problematic.

Maasai family members and friends have pursued land re-aggregation where they can (BurnSilver and Mwangi, 2007; Mwangi, 2007a; Coleman and Mwangi, 2015). And if carried far enough, such re-aggregation could, at least in principle, "undo" the scale-obstacle to viable pastoralism created by carving what were once common land holdings into private individual parcels. Re-aggregation, however, is costly. It requires negotiation with a

<sup>7</sup> Group ranches were presented as a compromise between the need for private land rights to promote economic development, on the one hand, and the need for large-scale ranges and mobile herds for livestock production in arid and semi-arid regions, on the other (Rutten, 1992).

<sup>8</sup> This study covers 757 individuals from the former Olkinos, Emboloi, Empuyiankat, Kitengela, and Poka group ranches, which subdivided between 1986 and 1989.

potentially large number of individual land owners, likely far exceeding one's family members and friends—an important social cost of private land rights. Moreover, Maasai trust in traditional elder leaders—the people in perhaps the best position to forge agreements between private individual landowners—has been weakened by state-led privatization, which shifted authority away from elder leaders to governmental administrators (Mwangi, 2007b, 2010).

Engaging in alternative economic activity is equally problematic.<sup>9</sup> Given the low education level of most Maasai, which largely precludes other forms of employment, the most popular economic alternative is crop cultivation.<sup>10</sup> However, the same climactic conditions in Kajiado that require large-scale ranges for successful herding render crop cultivation “unlikely to provide a secure source of livelihood” in drier regions. “Crop failures are common in Kajiado,” and cultivation is “more risky than nomadic livestock production”—the reason the Maasai have long produced livestock instead (Kimani and Pickard, 1998: 208).<sup>11</sup> Thus, “there is little indication that [Maasai households] poor in animals can end up categorised as wealthy based on the ability of other activities,” such as crop cultivation, “to fill the productive gap” (BurnSilver, 2016: 25).

The creation of private land rights in Kajiado has destroyed significant social wealth.<sup>12</sup> In the early twentieth century, the Kenyan Land Commission considered the Maasai one of the wealthiest tribes in East Africa (Rutten, 1992: 25). In contrast, as of 2004, average income among these pastoralists was only 65 percent of average income in Kenya (Ndemo, 2007: 89).<sup>13</sup> Where data are available for comparison, households in subdivided group ranches have fared less well economically than households in non-subdivided ranches. In the Loitokitok Division of Kajiado, for instance, household income is lower in the subdivided ranch (Rombo) than in the nearby ranch that was not subdivided (Imbirikani) (Dorothy, 2004: 44).<sup>14</sup>

<sup>9</sup> But necessary: according to Rutten's (2008: 108) field work, for example, which considers the former Olkinos and Meto group ranches, conducted in 2000, between 73 and 87 percent of Maasai households surveyed can no longer depend solely on pastoralism for a living. See also, Mwangi (2006), Thornton et al. (2006), and Thornton et al. (2007).

<sup>10</sup> On the low level of education among the Maasai, see Ndemo (2007). Among the members of the former Meto group ranch, for example, nearly 73 percent of those surveyed reported a source of income outside of livestock production. Among these, approximately 79 percent pursued subsistence farming, and eight percent engaged in wage employment (BurnSilver and Mwangi, 2007: 14).

<sup>11</sup> Compared to Kajiado, the land in Narok is significantly better suited to sedentary agricultural production (Rutten, 1992: 77).

<sup>12</sup> Although the creation of private land rights destroyed wealth in Kajiado—the society we consider—it is possible that it could have been net beneficial for Kenya as a whole. If so, however, this would be a “happy coincidence,” since, as we discuss below, the property decision makers who privatized land in Kajiado were not residual claimants and thus did not have any more interest in the effect of land privatization on wealth in Kenya as a whole than they had in its effect on wealth in Kajiado.

<sup>13</sup> Of course, other factors also negatively affect wealth in Kajiado. The effects of some of these factors, such as droughts and environmental conditions, are exacerbated by private land rights. Similarly, subdivision negatively affects wildlife tourism, a significant source of income in the region (see, for instance, Campbell et al., 2000; Mwangi and Ostrom, 2009).

<sup>14</sup> In a pair of studies, Lesorogol (2008a, 2008b) compares income between subdivided and non-subdivided group ranches in Kenya's Samburu District—also a semi-arid region whose inhabitants rely primarily on pastoralism. In the first of these studies, Lesorogol (2008a: 165) finds higher per capita income in the subdivided group ranch but higher household income in the non-subdivided group ranch. However, “Care must be taken in interpreting these data,” she notes, as they were collected after a major drought that affected the non-subdivided group ranch more severely (Lesorogol, 2008a: 153–154). Lesorogol (2008a: 197) concludes that “The privatization of land... fits neither the optimistic scenario of property rights theorists nor the gloomy forecasts of those who favor communal ownership in pastoral areas.” In the second study, Lesorogol (2008b) follows up the first using data collected five years after the drought. Here, she finds that both per capita and household income are higher in the non-subdivided group ranch (Lesorogol, 2008b: 325). However, this too should be interpreted with caution, as the difference of the means was not significant.

#### 4. Evaluating the theory of wealth-destroying private property rights

Our theory of wealth-destroying private property rights implies that when the privatization of some asset destroys wealth rather than creates it, the private property rights in question will (1) be the creation of property decision makers who are not residual claimants and (2) be created by those decision makers despite the fact that the social costs of privatization exceed the social benefits because privatization benefits the decision makers personally. Below we evaluate these implications empirically using the case of land privatization in Kajiado.

##### 4.1. Property decision makers are not residual claimants

Post-independence privatization of land in Kajiado proceeded in two main phases: the creation of private, corporately owned group ranches and, from those, the subsequent creation of private, individually owned ranches. To accomplish the former, government relied mostly on privatization by fiat. The property decision makers primarily responsible for creating private group-ranch land rights were non-Maasai political officials. To accomplish the latter, government relied mostly on empowering public bodies. The property decision makers primarily responsible for creating private individual-ranch land rights were a subset of the Maasai in their capacity as voters. Consistent with our theory, property decision makers in both cases were not residual claimants.

To create private group ranches in Kajiado, government officials demarcated property boundaries in the district, which defined a “group ranch,” and then invited the Maasai who resided within its boundaries (and sometimes others) to apply for registration as group ranch members. Once registered, these Maasai became corporate owners of the ranch.

The property decision makers who created these private land rights consisted predominantly of legislators and ministerial bureaucrats in Nairobi. Chiefly, they included the members of the Parliament of Kenya, who (with assistance from international organizations) engineered and enacted the Land Adjudication and Land (Group Representatives) Acts, which decreed the privatization of land in Kajiado; the bureaucrats at the Range Management Division of the Kenyan government's Ministry of Agriculture (assisted by the United Nations Development Programme's Food and Agriculture Division), who designed the development plans for private group ranches; and the bureaucrats at the Department of Land Adjudication and the Registrar of Group Representatives in the Kenyan government's Ministry of Lands and Settlements, who oversaw the demarcation of private group ranch boundaries and the registration of group ranch members through demarcation and adjudication committees and later crafted the legal procedures for subdivision (see Rutten, 1992; Mwangi, 2007b).

None of these property decision makers were in a position to internalize the net social losses generated by privatizing Maasai land rights. The closest thing that parliamentarian legislators and ministerial bureaucrats had to residual claims was the likely modest change in tax revenues the might result from creating private land rights—tax revenues that did not accrue to legislators and bureaucrats personally.

The absence of residual claims among these decision makers is underscored by the maladroit features of the private property rights they created. Legislators and bureaucrats not only pursued land privatization without concern for its effect on social wealth; they privatized land without concern for even the workability of the private group ranches they created.

Bureaucrats, for example, demarcated group ranch boundaries primarily on the basis of terrain features rather than on the boundaries historically recognized by the Maasai as belonging to differ-

ent sections (Coldham, 1979; Kieyah, 2007). Similarly, they paid scant attention to whether the private group ranches they created were ecologically and economically sound. More than half of the private group ranches that bureaucrats created in the first phase of the Kenya Livestock Development Project, for instance, did not even contain both wet- and dry-season pastures (Kimani and Pickard, 1998).

The parliamentarians who legislated land privatization displayed equal indifference in creating sustainable private group ranches.<sup>15</sup> Under the legal framework of the Land (Group Representatives) Act, for instance, each member of a group ranch was entitled to an equal share of the land owned corporately by the ranch (Galaty, 1994). This presented a predictable problem: when a group's membership grew, for example as a result of members having children or from other new registrations, the shares of existing group members shrank.<sup>16</sup> The effect was to encourage subdivision, not because private individual ranches would be more productive—in fact, they would be less so—but because by subdividing, existing members could prevent further dilution of their shares.

The property decision makers who subsequently created private land rights for individual ranches in Kajiado were predominantly a subset of the Maasai pastoralists themselves, as voters. In the early 1980s, Kenyan president Daniel arap Moi began encouraging group ranch subdivision. By the late 1980s, local political leaders in Kajiado resolved to do just that, some of them interpreting, or at least pretending to interpret, Moi's statements as a Presidential Directive, hence individual land privatization as mandatory.<sup>17</sup> The same interpretation would later be leveraged by some Maasai elites who favored the creation of private individual land titles to cajole support for subdivision from their fellow group ranch members (Mwangi, 2005).

To create those titles, the Land (Group Representatives) Act put subdivision to a vote at the annual general meeting of each group's registered members.<sup>18</sup> Under the act, subdivision needed the assent of only 60 percent of a quorum, consisting of 60 percent of a group's members (Government of Kenya, 1968). The creation of private individual land rights was therefore possible with the approval of as little as 36 percent of the pastoralists affected. A vote that secured the required approval triggered individual-level privatization for all registered members, each promised title to an equal-sized parcel of the former group ranch. A group ranch committee—whose establishment was also mandated by the Land (Group Representatives) Act and which oversaw the ranch's management before subdivision—exercised authority to allocate private individual titles during the subdivision process.

In their capacity as property decision makers, the pastoralists who supported the creation of private individual land rights were not residual claimants. As voters, these Maasai could not internalize the net costs borne by their fellow group ranch members, whom subdivision harmed—members who may have even constituted a majority, since the law empowered subdivision supported by only a minority of the group's members.

#### 4.2. Property decision makers benefit personally from privatization

Consistent with our theory, both sets of property decision makers who created wealth-destroying private land rights in Kajiado—politicians and bureaucrats, and the Maasai who voted for group ranch subdivision—benefited from land privatization personally.

The politicians who legislated land privatization benefited personally through new opportunities for graft, which the creation of private land rights made possible. “Moi's pronouncements on land,” for example, “were made alongside an increasing tendency to use it as a patronage resource” (Kanyinga, 2000: 52). In fact, already in 1963, five years before government officially undertook land privatization in the region, two candidates in Kenya's general parliamentary election “rewarded their supporters by granting them title deeds” (Rutten, 1992: 267).

This pattern would continue throughout the era of land privatization, often illegally. “[I]llegal allocations of public land,” for example, “escalated significantly before or soon after the multiparty general elections of 1992, 1997 and 2002” (Manji, 2012: 470). Even President Moi got in on the act: more than 400 plots of land in Kajiado were allocated to individuals at his request (Mwangi, 2006: 172).

Local politicians benefited similarly from the creation of private land rights. Many of the first private individual ranches doled out in Kajiado, for example, were distributed by Kajiado County Council members to reward their supporters (Rutten, 1992). Other local politicians benefited personally from land privatization directly, securing private land titles for themselves. With the help of the Kajiado County Council, one of the parliamentary candidates mentioned above, for instance, acquired 15,000 ha for himself (Rutten, 1992: 267). In collusion with businessmen, a group of local politicians managed to carve out more than 1,000 ha of the Ewaso Kedong group ranch for themselves. Similarly, one-sixth of the land carved out of the Rombo group ranch to create private individual land titles was generously allocated to the sons and supporters of local politicians (Mwangi, 2006: 172).

The personal benefits that privatization-administering bureaucrats reaped through the creation of private land rights in Kajiado were also direct. “The list of illegal registrants” added to group ranches commonly “included relatives of the Minister of Lands, the Director of Lands, and many other public servants in the Ministry of Lands and the County Council” (Galaty, 1994: 114; see also, Galaty, 1992).<sup>19</sup> In the Kiboko group ranch, for example, 32 non-members were added at the request of the Minister for Local Government to the Minister of Lands (Rutten, 1992: 306). Creating private individual titles from the Loodariak group ranch entailed distributing more than 20,000 ha to 362 non-ranch members—among them, “the political elite including ministers” (Rutten, 2008: 113). In the Mosiro group ranch, private land titles were issued to over 450 non-members, again including ministry members and government officials (Galaty, 1992: 29). And in the Elang'ata Wuas group ranch, the area chief—a bureaucrat at the Purka Land Control Board—allocated himself about 12 percent of the group ranch's land, totaling more than 700 ha (Rutten, 1992: 307).

Legally, each registered member of a group ranch that was subdivided to create individual private land titles was entitled to an equal share of its land. In practice, however, land allocations were rarely equal: group-ranch committee members allocated much larger parcels to themselves.<sup>20</sup> Indeed, among the five subdivided

<sup>15</sup> Nyamu and Kameri-Mbote (2013) suggest that land reform was primarily structured to encourage individual ownership and sedentary cultivation, reflecting the agricultural bias of elites in the region.

<sup>16</sup> According to the Land (Group Representatives) Act, members may be added to the group register by agreement of two-thirds of the group ranch committee. In practice, however, “this has often been done with the signature of one or two of the committee members, namely the chairman and secretary, and there are many cases in which the district commissioner, the district officer, or the director of lands in the ministry of lands and settlements, add names with neither the agreement nor the knowledge of the local committee” (Galaty, 1994: 113).

<sup>17</sup> Some authors have suggested that land privatization was in fact a Presidential Directive (Asiema and Situma, 1994; Wily and Mbaya, 2001; Kibugi, 2009; see also, Markakis, 1999; Kanyinga, 2000).

<sup>18</sup> For a detailed discussion of the legal procedures used to subdivide group ranches, see Rutten (1992) and Mwangi (2007b).

<sup>19</sup> The largest benefit from being illegally registered manifested if a ranch voted to subdivide, in which case individual private titles were issued. Thus, people with the influence and ability to illegally add others to registers—national and local politicians, bureaucrats, group ranch committee members, and Maasai elites—had a strong incentive to convince group ranch members that subdivision was in their interest when subdivision was put to a vote.

<sup>20</sup> The exception to this rule is the former Poka group ranch, where subdivision yielded roughly equal-sized allocations (Kimani and Pickard, 1998).

group ranches considered in Section 3 for which data are available, the average private individual parcel allocated to a member of a group ranch committee was nearly twice as large as that allocated to an ordinary group ranch member (Rutten, 1992: 370; Mwangi, 2007a: 133).

Another important source of direct personal benefits for privatization administrators—most notably, the members of group ranch committees—was bribes. Typically, pastoralists paid their bribes in the form of livestock. In other cases, however, committee members suggested to group ranch members who hoped for better allocations that their cause might be aided if they provided committee members with “entertainment” (Mwangi, 2007b).

Privatizing bureaucrats also benefited indirectly, through a dramatic expansion of their departments’ resources (often provided by international organizations) for the purpose of creating private land rights. Between 1985/86 and 1988/89, for instance, Kajiado’s District Development Budget rose from Ksh. 22 million to Ksh. 445 million—a more than 1900 percent increase (Rutten, 1992: 110–111). Such budgetary windfalls offered new money-making opportunities for privatization-administering bureaucrats, including budgetary expropriation.

The personal benefits that land privatization conferred on the Maasai who voted to create private individual titles were equally straightforward. Some of these voters were politically well-connected Maasai elites who anticipated their ability to secure choice allocations through rent-seeking. Others were presumably more productive Maasai, for whom the private cost of overgrazing attendant to communal land, hence the private benefit of land privatization, was higher, and who either anticipated large parcel allocations or saw a ready means of partnering with someone else for this purpose. Still other Maasai who in their capacity as property decision makers supported the creation of individual land titles were following a defensive strategy: eventual subdivision appearing inevitable, they sought to subdivide sooner rather than later, before their shares were diluted by further growth in their group ranch’s membership (BurnSilver and Mwangi, 2007; Mwangi, 2007a, 2007c; see also, Bruce, Migot-Adholla, & Atherton, 1994; Jacoby and Minten, 2007).

## 5. Conclusion

In parts of the developing world, the creation of private land rights has worsened economic conditions, destroyed social wealth. To explain this phenomenon, we develop a theory of wealth-destroying private property rights. Privatization’s effect on social wealth depends on whether privatizing an asset confers net gains or imposes net losses on society. The decision to privatize, however, depends on whether privatizing an asset confers net gains or imposes net losses on property decision makers. When decision makers are residual claimants, these effects move in tandem; privatization occurs only if it creates social wealth. When decision makers are not residual claimants, these effects may diverge; privatization occurs if it benefits decision makers personally even if privatization destroys social wealth.

We apply our theory to understand the effect of land privatization among the Maasai pastoralists of Kajiado, Kenya. Sustainable pastoralism in the Maasai’s arid and semi-arid climate requires large-scale ranges that include both dry- and wet-season pastures and a low-cost means of coping with drought risk in particular. The Maasai’s traditional property regime, whereby pastoralists owned livestock privately but held land in common, satisfied both of these needs. Common land tenure ensured ranges large and diverse enough to sustain large herds. Equally critical, it served as an inexpensive system of social insurance that permitted pastoralists affected by drought in one area to graze livestock in unaffected pastures, avoiding their herds’ devastation. Although common land

tenure was costly to Maasai society, most notably in terms of overgrazing, its cost seems to have been more than compensated for by the foregoing social benefits of common land tenure in the Maasai’s environment, as evidenced by the economic decay that followed the privatization of their land.

Consistent with our theory, private rights to land the Maasai traditionally held in common were created by property decision makers who were not residual claimants—legislators, bureaucrats, and some of the Maasai themselves in their capacity as privatization voters. Also consistent with our theory, private land rights were created by these decision makers despite the fact that the social costs of privatization exceeded the social benefits because land privatization benefited them personally.

In 2009, Kenya introduced the National Land Policy, and in 2010, it adopted a new constitution, marking the most significant reforms to the country’s land policy since the 1960s. The constitution and new land acts (Land Act, Land Registration Act, and National Land Commission Act of 2012) aim to devolve decision-making authority over land from the national level to the level of counties (previously, districts), granting the latter autonomy over budgets and land-use planning related to unregistered and public land, and removing from the former power over land registration and allocation (Boone et al., 2016). This devolution of land-regime authority could provide a mechanism that partially connects property decision makers’ choices to privatization’s effect on social wealth. Or, it could simply provide “a devolution of land-grabbing, as a new ‘sub-layer’ of elites was created and empowered to grab land at the county level” (Boone et al., 2016: 6).

A potential solution to the latter concern may come from the new Community Land Act (CLA) of 2016. This act transforms untitled trust land to “community land” and provides a formal legal mechanism whereby communities may (re)claim territories they held historically. Once so registered, “Customary land rights, including those held in common shall have equal force and effect in law with freehold or leasehold rights” (Government of Kenya, 2016: 531). The act also prohibits county governments from selling, transferring, or converting for private purpose any unregistered community land, which may provide some protection against encroachment and illegal distribution. Additionally, the CLA puts greater decision-making authority over local land use in the hands of those affected. For example, a registered community may “reserve a portion of the community land for communal purposes” or “reserve special purpose areas including areas for farming, settlement, community conservation. . . or any other purposes as may be determined by the community” (Government of Kenya, 2016: 535). And under the CLA, designations that would convert community land to private holdings require the assent of at least two-thirds of the registered community’s members. Whether these measures will improve the security of land holdings without impairing the productive use of the rangelands, however, remains to be seen.

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