

The Economics of Land Control Boards in Kenya

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Abstract

The paper develops a simple model of a landowner seeking the consent of Land Control Board (LCB). The model is based on the tradeoffs between the benefits and the cost of acquiring the consent. In the model, the landowner faces two types of risk: the rejection of the application, and possibility of losing land through non-consensual means if the consent is denied. The model provides a theoretical support for an argument that higher values of parcels and lower transaction costs will increase the likelihood of seeking the board's approval. Using farm-level cross-sectional data, the paper demonstrates that the LCB has an impact on title registration. Two conjectures on the behaviour of LCB are made based on efficiency and rent seeking models, respectively, with anecdotal evidence supporting the latter.

Abbreviations and Acronyms

| | |
|------|--------------------------------|
| CLCB | Central Land Control Board |
| DLCB | Divisional Land Control Boards |
| DC | District Commissioner |
| DO | District Officer |
| LCA | Land Control Act |

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1. Introduction

This study investigates the legal framework of Kenya's land control system to determine the impact of land control board on title registration demand. It empirically demonstrates that the establishment of the land control board decreased the likelihood of registering the title of agricultural land. Also, the study provides an economic explanation of the shortcomings in the existing discourse on Kenya's land control system.

The Kenyan land reform model of individual titling and registration of land was once held up as an example for other African countries. It was predicated on private ownership as a pre-requisite to economic development, with land titling and registration as a major component. Lack of a comprehensive national land policy, coupled with weak government institutions, has made the implementation phase of the reform problematic. The titling and registration process has been costly, intractable and remains incomplete. The impact of land titling and registration has been the centre of public discourse and intense academic debate. Recent empirical studies assert that land titling reform has not achieved its stated objective of increasing agricultural productivity. Other criticisms assert that the programme has neither facilitated the emergence of active land markets nor reduced disputes over land ownership. Proponents of the programme find that land title registration protects property rights over the titled land, and the reform process is driven by economic factors.

Although many aspects of the Kenyan model have been studied, the regulatory system of the agricultural lands has not been sufficiently studied (Coldham, 1978; Okoth-Ogendo, 1986; Government of Kenya, 2002; Shipton, 1988; and Wilson, 1972). The Land Control Act (LCA) provides the legal framework under which the transactions of agricultural land are administratively regulated (Government of Kenya, 1989). It establishes a three tier land control board system with unimpeachable statutory powers to grant or deny consent of the controlled transactions of agricultural lands. Controlled transactions, as defined in the LCA, are not capable of conferring any interest/right to land without the board's consent.

The studies conclude that the operation of land control boards has been inefficient. Wilson (1972) asserted that land boards failed to promote rural development by consenting to inefficient transactions,

such as fragmentation. Coldham (1978) argued that the divisional land boards are ineffective because they are incapable of enforcing their decisions. Okoth-Ogendo found that the divisional land board's decisions were based on equity considerations rather than efficiency considerations as mandated by the act (Okoth-Ogendo, 1986). Shipton concluded that the board acted as a rubber stamping agency by approving majority of applications without thorough review (Shipton, 1988). Khan claimed that the land boards' decision continues to enjoy statutory immunity from judicial review (Khan, 1982). Kagagi identifies inconsistency between the LCA and Registered Land Act (Kagagi, 1992).

This paper is organized as follows: Section 2 examines the institutional background of the Kenyan agricultural land regulatory system under the Land Control Act of 1967. Section 3 develops a simple model of landowner's problem based on the trade-off between the benefit and cost of seeking the boards' consent. In the model, the landowner faces risk of the board denying consent, and a possibility of losing land ownership through non-consensual means. While Section 4 provides an empirical analysis and data description, Section 5 explains the empirical results using efficiency and rent-seeking models. A simple idealized model of land transactions regulation is developed based on property rights approach as outlined by Fischel (1985) and Stephen (1987). The model provides the basis for the analysis of the regulation under positive transaction costs of the land control board and from rent-seeking perspective. Section 6 provides anecdotal evidence and Section 7 concludes the study.

2. Institutional Background

The institution of land control in Kenya traces its history from a statutory scheme introduced by Land Control Ordinance of 1944. Specifically, the ordinance established land control boards to prevent inefficient use of land in the Europeans' settlements but not in the African settlements. African settlements were governed by customary law and they lacked formal legal institutions to support the ordinance.

With the recommendation of the East Africa Royal Commission, the Kenyan government embarked on revolutionary land reform to change Africans' land tenure system. The land tenure reform entailed three steps; adjudication, consolidation and registration. The appointed government officers procedurally conducted adjudication under the customary law to ascertain ownership of each parcel. In cases where a landowner possessed multiple parcels at different locations, then all the parcels were consolidated and aggregated to one unit (Onalo, 1986). Following consolidation, the parcel was formally registered and thereafter ceased to be governed by the customary law. The government enacted the Land Control (natives lands) Ordinance of 1959 to prevent rural indebtedness.

In 1967, the government enacted the Land Control Act to provide for controlling transactions in agricultural land. The Act repealed the previous two ordinances. It marked a major legal development in post-independent Kenya by creating a framework to manage agricultural lands in the country. The Act establishes three-tier hierarchical system of land control boards to encourage efficient land use, and to prevent undesirable fragmentation and speculation of land (Government of Kenya, 1967). The Act empowers the Minister for Lands and Settlement to declare any part of the country as land control area under the Act.

The Divisional Land Control Boards (DLCB) consist of eight to twelve residents within their jurisdiction, who are government appointees. Other members include two nominees from the local government and no more than two public officers. The District Commissioner (DC) or District Officer (DO) acts as the Chairman. The DLCB regulates all controlled transactions in its jurisdiction. Provincial Land Control Appeal Board (PLCBAB) is an appellate tribunal and consists of the Provincial Commissioner as chairman, not more than two appointed public officers, and between two and five appointed members from the community where the land in question is located (Government of

Kenya, 1989). The Central Land Control Appeal Board is an appellate tribunal and a final arbiter. It consists of the Minister for Land and Settlement as the Chairman, the Attorney General, Ministers for Home Affairs, Economic Planning, Agriculture and Co-operatives and Social Services (Government of Kenya, 1989).

2.1 Operation of Division Land Control Boards

The Land Control Act compels parties of a controlled transaction to seek consent from the appropriate Divisional Land Control Board (DLCB) within six months after the agreement has been made. The parties use a prescribed form to apply for the consent in which they give a detailed account of the nature of the transaction. Some transactions such as sub-division may require additional information. After filling the application, the parties are requested to attend one of the bi-monthly meetings. If the application is accepted, the consent is granted and parties involved are required to complete the transaction through the process of title registration.

Controlled transaction becomes void if the consent is denied and the statutory limitation has expired. If the board denies consent, the parties may terminate the transaction, appeal or refuse to comply. The appeal to Provincial Land Control Board or Central Land Control Board (CLCB) must be initiated within thirty days after the denial. Non-compliance is a punishable offence but non compliance cases are not prosecuted due to budget limitation.

The LCA exempts the decisions of land control board from judicial review, but it empowers the President to overrule the decisions. The President can grant exemptions to any controlled transaction (Government of Kenya, 1989).

3. Model

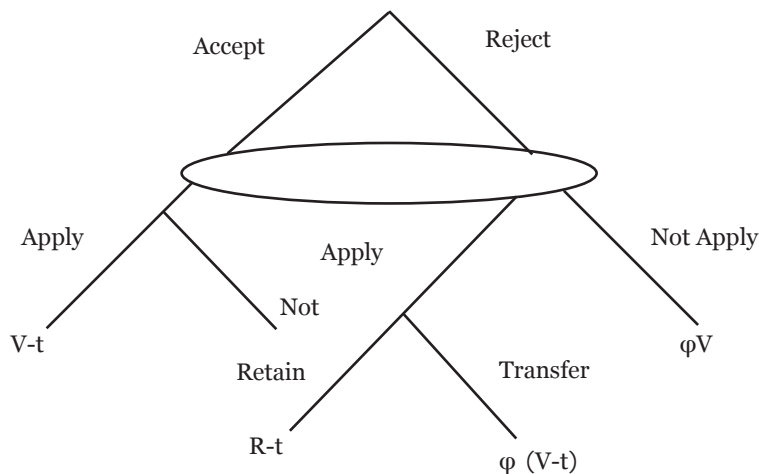
Consider a landowner who contemplates to deal with his parcel but is uncertain whether the Divisional Land Control Board (DLCB) will accept or reject his proposal. Suppose an individual landowner wishes to transfer his parcel, besides the risk of the board rejecting his proposal, the landowner faces another risk of loss ownership through expropriation, fraud, error or non-consensual means if the parcel is not titled.

To capture the DLCB's behaviour, we let θ be the probability that the board will reject the landowner's proposal and $1-\theta$ is the probability that it will accept it. Similarly, the probability that the landowner retains ownership of the parcel if not registered is ϕ .

The analysis focuses on the landowner's decision whether or not to go to the DLCB. The basic trade off underlying this analysis is the benefit of the increased security of obtaining title, if the board consents against the cost of the board's approval. Figure 3.1 depicts the sequence of the moves and the various outcomes with resulting payoffs.

At the end points, V and R indicate the value of land with and without title registration, respectively. The transaction cost of seeking for the DLCB's consent is t . The landowner's first move is whether or not to seek DLCB's consent prior to transferring the land. If the landowner seeks consent, his application may be granted with probability of $1-\theta$. Alternatively, his proposal could be rejected with probability θ whereby

Figure 3.1: Decision tree



he retains the parcel or transfers it without consent of the board. Since in this case we assume that R is less than ϕV , then the transfer will take place.

Given the specification, the landowner's choice to seek DLCB's consent will depend on the expected returns of applying (ER_B) and expected returns of not applying (ER_N).

$$ER_B = (1-\theta)(V-t) + \theta(\phi V-t) \dots \dots \dots (1)$$

$$ER_N = \phi V \dots \dots \dots (2)$$

Thus, the landowner will apply if $ER_B > ER_N$, which is represented by following equation:

$$(1-\theta)(V-t) + \theta(\phi V-t) \geq \phi V \dots \dots \dots (3)$$

If we simplify the equation, we obtain equation 4

$$(1-\theta)(1-\phi)V - t \geq 0 \dots \dots \dots (4)$$

The partial derivatives of the left-hand side of condition (4) with respect to V , t , ϕ , and θ are as follows:

$$\partial LHS / \partial V > 0 \dots \dots \dots (5)$$

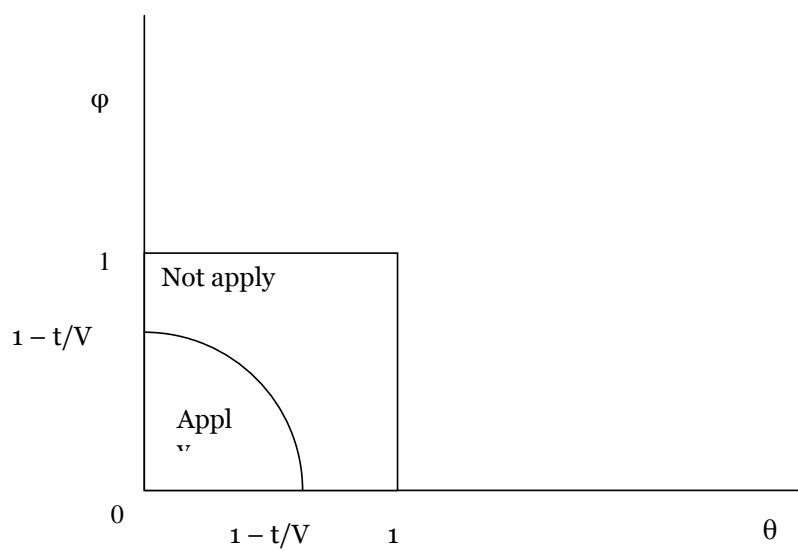
$$\partial LHS / \partial t < 0 \dots \dots \dots (6)$$

$$\partial LHS / \partial \phi < 0 \dots \dots \dots (7)$$

$$\partial LHS / \partial \theta < 0 \dots \dots \dots (8)$$

Assuming that the landowner is indifferent from going to the board or not, then we can express the probability of retaining ownership without registration as a function of the probability of rejection (θ), value of the parcel (V) and transaction cost (t). As Figure 3.2 indicates, the function is concave. Higher values of parcels and lower transaction costs will increase the likelihood of a parcel being registered by shifting the indifference locus to the northeast in the graph.

Figure 3.2: Choice to apply or not



4. Empirical Analysis

The model of the demand for land title structural equation as used by Place and Migot-Adholla (1998) is modified. Using logit regression analysis, the null hypothesis that establishment of land control boards had no impact on the demand for title is tested. A contingent table is then constructed to test the null hypothesis that registration was the same in the two periods. The dependent variable is a dichotomous variable; taking one if the household had a title (t) for his parcel and zero for otherwise. The decision of the household to demand title registration is assumed to be a function of exogenous variables pertaining to characteristics of the parcel and the household.

4.1 Data Description

The empirical analysis is based on a study that was done in 1988 by Agricultural and Rural Development of the World Bank, in conjunction with the Agricultural Economics Department of Nairobi. The data set was based on survey interviews of 406 randomly chosen households who owned 463 parcels from four regions in two districts in Kenya. The study was conducted in Kakamega and Nyeri districts.

In order to determine the impact of DLCB on title, we estimate a modified version of a logit regression developed by Place and Migot-Adholla (1998). The following variables are included; household total wealth, size of parcel, size of the family, soil type, access to road, type of document, and if the parcel was involved in a dispute that was omitted in the original equation. Inclusion of these variables is based on another structural equation developed by Aston *et al* (1996). The dependent variable is a dichotomous variable, taking one if the household had a title (t) of land and zero otherwise. The decision of household to demand for title registration is a function of exogenous variables pertaining to characteristics of the parcel and the household.

To test the effect of land control board on the demand for title registration, the following logit regression model was estimated:

$$T = \beta_0 + \beta_1 age_i + \beta_2 D2_i + \beta_3 P1_i + \beta_4 P_{2i} + \beta_5 D6_i + \beta_6 D7_i + \beta_7 D8_i + \beta_8 inh_i + \beta_9 pur_i + \beta_{10} fam_i + \beta_{11} tw_i + \beta_{12} st_i + \beta_{13} ra_i + \beta_{14} sz_i + \beta_{15} dis_i + \beta_{16} inhag_i + \beta_{17} pua_i + \beta_{18} lc_i + \varepsilon_i$$

where

- T_i = 1 if the household has a land title and zero otherwise
- R_i = 1 if the parcel is registered without a title and zero if otherwise
- age = age of the head of household
- $D1_i$ = 1 for a parcel acquired post-1968 and zero for parcels acquired pre-1968
- $D2_i$ = 1 if the head of household is male and zero if otherwise
- $P1_i$ = 1 if the head of the household had primary education and zero otherwise
- $P2_i$ = 1 if the head of household had post-primary education and zero if otherwise
- $D6_i$ = 1 if the parcel is located at Lumakanda and zero if otherwise
- $D7_i$ = 1 if the parcel is located at Kianjogu and zero if otherwise
- $D8_i$ = 1 if the parcel is located at Mweiga and zero if otherwise
- inh_i = 1 if the parcel was inherited and zero if otherwise
- pur_i = 1 if the parcel was purchased and zero if otherwise
- fam_i = size of the family
- tw_i = total household wealth
- st_i = 1 if the soil type is fertile and zero if otherwise
- ra = 1 if the parcel has road access and zero if otherwise
- sz = total size of the parcel in hectares
- dis_i = 1 if the parcel was involved in dispute and zero if otherwise
- $inhag_i$ = 1 if the household holds inheritance agreements and zero if otherwise
- pua_i = 1 if the household holds purchase agreements and zero if otherwise
- lc_i = 1 if the household holds letter of consent and zero if otherwise
- ε_t = the regression error term

To determine the effect of the land control board on the demand for title registration, we test the structural stability of title regression. Specifically, we use the dummy variable method approach to test the hypothesis that the coefficients of title equation are equal before and after the creation of land control board (Griffiths, 1993 and Gujarati, 1995). We first estimate the following unrestricted logit regression model:

$$T = \pi_0 + \pi_1 D1_i + \alpha_1 age_i + \alpha_2 D1_i age_i + \alpha_3 D2_i + \alpha_4 D1_i D2_i + \alpha_5 P1_i + \alpha_6 D1_i P1_i + \alpha_7 P2_i + \alpha_8 D1_i P2_i + \alpha_9 D6_i + \alpha_{10} D1_i D6_i + \alpha_{11} D7_i + \alpha_{12} D1_i D7_i + \alpha_{13} D8_i + \alpha_{14} D1_i D8_i + \alpha_{15} inh_i + \alpha_{16} D1_i inh_i + \alpha_{17} pur_i + \alpha_{18} D1_i pur_i + \alpha_{19} fam_i + \alpha_{20} D1_i fam_i + \alpha_{21} tw_i + \alpha_{22} D1_i tw_i + \alpha_{23} st_i + \alpha_{24} D1_i st_i + \alpha_{25} ra_i + \alpha_{26} D1_i ra_i + \alpha_{27} sz_i + \alpha_{28} D1_i sz_i + \alpha_{29} dis_i + \alpha_{30} D1_i dis_i + \alpha_{31} inhag_i + \alpha_{32} D1_i inhag_i + \alpha_{33} pua_i + \alpha_{34} D1_i pua_i + \alpha_{35} lc_i + \alpha_{36} D1_i lc_i + \mu_i$$

The second step involves estimating the restricted logit regression model, which is created by setting D1 equal to zero.

4.2 Results

Table 4.1 provides the estimate of the effects of the explanatory variables on the dependent variables. Two sets of estimates and t-ratios of unrestricted and restricted models are provided, respectively.

4.3 Hypothesis Testing

α

1. Set the null hypothesis:

$$H_0: \pi_1 = \alpha_2 = \alpha_4 = \alpha_6 = \alpha_8 = \alpha_{10} = \alpha_{12} = \alpha_{14} = \alpha_{16} = \alpha_{18} = \alpha_{20} = \alpha_{22} = \alpha_{24} = \alpha_{26} = \alpha_{28} = \alpha_{30} = \alpha_{32} = \alpha_{34} = \alpha_{36} = 0$$

$$H_a: \pi_1 = \alpha_2 = \alpha_4 = \alpha_6 = \alpha_8 = \alpha_{10} = \alpha_{12} = \alpha_{14} = \alpha_{16} = \alpha_{18} = \alpha_{20} = \alpha_{22} = \alpha_{24} = \alpha_{26} = \alpha_{28} = \alpha_{30} = \alpha_{32} = \alpha_{34} = \alpha_{36} \neq 0$$

$$\alpha = 0.05$$

2. The critical values of chi-square with 19 degrees of freedom is as follows

$$\chi^2(0.95, 19) = 30.14$$

3. The likelihood test statistic (λ) is computed as

$$\lambda = 2(-145.9 + 163.1) = 34.4$$

4. Since $\lambda > \chi^2$, we reject the null hypothesis.

Table 4.1: Restricted and unrestricted logit regression results explaining choice of land title

| Unrestricted Logit model | | | | Restricted Logit model | | |
|--------------------------|----------|----------|-----------|------------------------|---------|-------|
| (1) | | (2) | (3) | | (4) | (5) |
| Variable | Estimate | t-ratio | | Estimate | t-ratio | |
| Constant | | -3.36 | -1.53 | | -4.46 | -3.48 |
| D1 | | -1.78 | -0.59 | | - | - |
| D1age | | 0.005 | 0.15 | | - | - |
| age | | 0.04 | 1.65 | | 0.05 | 3.53 |
| D1D2 | | -1.85 | -1.56 | | - | - |
| D2 | | 1.66 | 2.24 | | 0.22 | 0.43 |
| D1P1 | | 0.04 | 0.03 | | - | - |
| P1 | | -0.34 | -0.64 | | -0.25 | -0.59 |
| D1P2 | | 0.76 | 0.58 | | - | - |
| P2 | | -1.17 | -1.4 | | -0.56 | -1.09 |
| D1D6 | | 1.83 | 1.16 | | - | - |
| D6 | | -1.94 | -1.44 | | -0.48 | -0.80 |
| D1D7 | | -1.66 | -1.41 | | - | - |
| D7 | | 5.00 | 5.78 | | 4.10 | 7.71 |
| D1D8 | | -0.31 | -0.22 | | - | - |
| D8 | | 2.62 | 2.33 | | 3.05 | 5.33 |
| D1inh | | 2.65 | 2.11 | | - | - |
| inh | | -1.67 | -1.76 | | -0.60 | -1.37 |
| D1pur | | 3.07 | 2.06 | | - | - |
| pur | | 0.44 | 0.36 | | 2.13 | 4.06 |
| D1fam | | 0.14 | 1.29 | | - | - |
| fam | | -0.10 | -1.47 | | -0.02 | -0.47 |
| D1tw | | -0.4E-05 | -0.57 | | - | - |
| tw | | 1E-05 | 1.62 | | 0.7E-05 | 2.60 |
| D1st | | -0.23 | -0.3 | | - | - |
| st | | -0.34 | -0.6 | | -0.31 | -0.91 |
| D1ra | | 0.21 | 0.27 | | - | - |
| ra | | 0.21 | 0.36 | | 0.42 | 1.19 |
| D1sz | | -0.14 | -1.06 | | - | - |
| sz | | 0.20 | 1.63 | | 0.10 | 1.94 |
| D1dis | | 1.12 | 1.24 | | - | - |
| dis | | -0.73 | -1.15 | | -0.11 | -0.28 |
| D1inhag | | 25.4 | 0.1E-03 | | - | - |
| inhag | | -26.6 | -0.33E-03 | | -2.54 | -2.29 |
| D1pua | | -28.3 | -0.21E-03 | | - | - |

| | | | | | | |
|------|--|-------|-----------|--|-------|-----------|
| pua | | -1.24 | -1.19 | | -3.43 | -3.47 |
| D1lc | | 2.95 | 1E-05 | | - | - |
| lc | | -30.1 | -0.11E-03 | | -27.2 | -0.25E-03 |

Log-Likelihood function (Lur)=-145.90, Log-Likelihood function(Lr)=-163.1

By rejecting the null hypothesis, we conclude that at 5 per cent level of significance, there is sample evidence of statistically significant difference between the probability of titling the parcel before and after 1968. The year 1968 is used as threshold because the Land Control Act was enacted in December of 1967.

Table 4.2 is a contingency constructed from the sample size (Freund, 1992). Columns two and three indicate the period the parcels were acquired and the last column represents the total of registered and non-registered parcels. On the other hand, rows two and three show the registered and non-registered parcels, respectively. The last row constitutes total of the two periods.

We test the null hypothesis that parcel registration is the same in the pre-1968 and post-1968. The alternative hypothesis is that registration is not independent of the period. From the table, the calculated Chi-square for independence is 71.78 with one degree of freedom. The critical value of the Chi-square with one degree of freedom is 3.81. Since the calculated value of Chi-square is greater than the critical value, we reject the null hypothesis of independence. By rejecting the null hypothesis, we conclude that there is sample evidence at 5 per cent level of significance, the rates of registration between pre-1968 and post-1968 periods are significantly different.

Table 4.2: Contingency table

| | Pre-1968 | Post-1968 | Total |
|----------------|----------|-----------|-------|
| Registered | 231 | 128 | 359 |
| Non-registered | 18 | 86 | 104 |
| Total | 249 | 214 | 463 |

5. Empirical Results

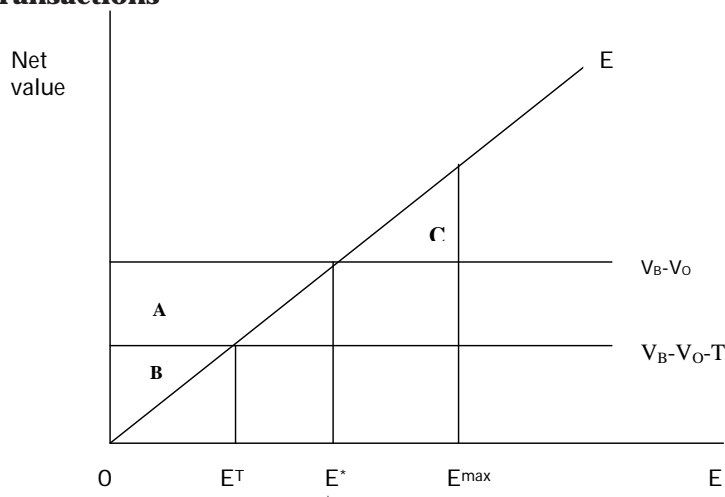
Two conjectures as to why the boards have negatively impacted the process of title registration provide anecdotal evidence for one of the cases. Two simple graphical models of regulation of land transaction are developed. The first model is based on efficiency. We model the behaviour of land control boards similar to zoning board (Fischel, 1998) as operated in many parts of a United States. The model is based on property rights approach, where the community property rights are vested on land control boards to regulate external cost from inefficient land transactions. For example, sub-dividing land into non-economic size or transferring land to an inefficient farmer may generate negative externality to the community. Thus, the role of the land board is to approve efficient transactions and block inefficient ones.

Although board members are government appointees, they are likely to be responsive to the local interests because they are part of the local residents. Thus, by assumption, the divisional land boards' objective is to protect the interest of local residents in case of a new land transaction.

We now examine how such a scheme would handle a voluntary land transfer that may generate an externality. Consider a land transaction within a community where the landowner values the land at V_O and the buyer values the same land at V_B . Suppose the buyer wants to engage in some type of development that may generate an external cost denoted by E . We assume $V_B > V_O$ so in the absence of externality, the transaction is beneficial. Although V_B is greater than V_O , V_B minus E may be equal or less or greater than V_O . We assume E varies across the set of all possible transaction ranging from $E=0$ to E^{max} , where $E^{max} > V_B - V_O$. For instance, think of E as a random variable drawn from some distribution function defined over $[0, E^{max}]$. For realizations of E such that $E < V_B - V_O$, transaction is efficient, but for $E > V_B - V_O$ transaction is not efficient. Figure 5.1 shows the net value of transactions as a function of the realized value of E . Since we assume V_B and V_O to represent a private transaction that ignores the external cost it generates, then the net value, $V_B - V_O$ is constant as shown in Figure 5.1.

Suppose there is no land control board, transactions upto E^{max} will take place where E^{max} is exogenously determined. In other words, the total private benefits to land buyers are maximized when E^{max} set of transactions take place, while total costs to third parties are minimized

Figure 5.1: Conceptual framework of efficient land transactions



when $E=0$. Considering the interests of the third parties, the optimal set of transactions will occur at E^{**} . Within the context of Coase theorem, E^{**} is the level of transactions that would result from a complete property rights assignment and zero transaction costs. Thus, the efficient set of transactions taking account of the externality are those for which $E < E^*$ where $V_B - V_O > E$. With ideal land board, the community receives only net benefits of area $A+B$ (approve transactions up to E^*). Considering a costly land board, where T is the transaction cost paid by the buyer for using the land board, the land board will approve the set of transaction up to ET and the net benefits are given by area B . This is due to the transaction cost T , which limits the set of transaction to those for which $E < ET$, where $V_B - V_O - T = E$. Given the transaction cost, the land board is desirable if $B > (A+B) - C$ or $C > A$, where A is foregone surplus and C is the social external cost. Note that as T increases, A increases but B decreases.

5.1 Rent Seeking Behaviour of Land Buyers

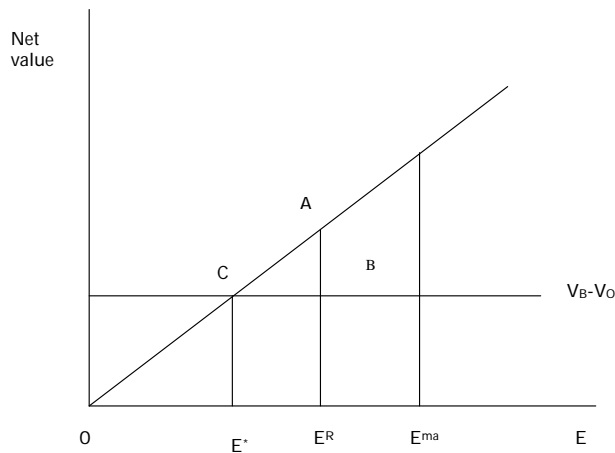
Due to inherent institutional weakness of the regulatory framework, the boards operate inefficiently. First, board members are government appointees rather than elected representatives. Since the board members are not accountable to their respective communities, they are unlikely to represent their communities' interest in the meetings. Thus,

the board will be less restrictive. In Figure 5.2, this would mean that the number of transactions approved would likely lie between E^{max} and E^* .

Consider point E^R in Figure 5.2. Since $V^B - V^O < E$ at this level, then E^R represents an inefficiently high number of transactions. Suppose the land buyers engage in rent seeking behaviour to circumvent the law or influence the board members to approve inefficient transactions. For example, if the board approves the set of transaction up to E^R , the external cost that the community bears is the area E^*CAE^R . On the other hand, the total benefit to the land buyers is equal to area E^*CBE^R which represents the maximum bribe the land buyers would be willing to pay for the board to approve the transaction. Since $E^*CAE^R > E^*CBE^R$, then in the context of Coase Theorem, the community could stop the inefficient transaction by bribing the board to block the transactions. However, due to weak property rights and free-rider problem, members of the community would not participate in voluntary payment to the board or land buyers. Therefore, the set of transaction at E^R are likely to take place in practice with net loss of CBA to the community.

In the absence of direct bribery, area E^*CBE^R represents the rent seeking cost (Tullock, 1967). These costs are expenditures of the land buyers in form of lobbying cost or cost of other means to circumvent the board's requirement. The rent seeking behaviour will result in the use of real resources not just transfer of wealth. Thus, the total social cost of permitting inefficient transactions is equal to area E^*CAE^R .

Figure 5.2: Conceptual framework of inefficient land transactions



6. Evidence

The anecdotal evidence indicates that the rent seeking story captures the operation of the land control boards better than the efficient zoning story. The boards are statutorily required to grant or deny consent based on efficiency ground (Government of Kenya, 1989). However, in most cases, the boards' decisions are neither influenced by equity nor efficiency consideration (Coldham, 1978; and Okoth-Ogendo, 1976, 1986). The boards' hearings are privately conducted in an inquisitorial manner and no legal representation is allowed.

In practice, the boards rarely reject application for consent. This trend was first noted by the earlier assessments of the newly created institutions (Wilson, 1972 and Coldham, 1978). For instance in a research conducted in the early 1970s, Coldham found only 0.6 per cent and 4.4 per cent rejections in two geographically different regions. He further observed that the rejected transactions were nevertheless completed informally, because the boards have no mechanism to enforce their decision. Subsequent research confirms this phenomenon (Shipton, 1988). In recent research cases of rent-seeking, fraud and corruption have been recorded (Rutten, 1992; and *Daily Nation*, 1999). Rutten's indepth investigation of the process of the individualization of land ownership among the Maasai pastoralists of Kajiado district found that the land control board had widely approved inefficient transactions. Maasai land, which comprises mostly semi-arid dry land, had unique land tenure system based on tenancy of common. The system was statutorily designed by the government through creation of group ranches to protect and promote development providing incentive for investment (Coldham, 1986).

Group ranches involve setting aside a certain piece of land communally owned by a group of people who are recorded and registered as the legal owners through membership of the particular ranch. However in the 1980s, most of these group ranches began to sub-divide due to its institutional weakness that encourages the free rider problem. In some cases, consent to sub-divide was granted notwithstanding lack of consensus among the ranch members (Lenaola, 1996). Rutten found cases where original rejections were later approved with or without amendments having been made. In some instances, the boards demand exorbitant fees in order to meet and resolve a land issues. To illustrate this point, Justice M. Ole Keiwua (2000), a judge in the Kenya High Court and a Maasai summed it, "the part played by the Land Control

Boards in land losses tops the list. Undeserved transactions are sanctified by means of illegal special board meetings. These are sessions the consciously dutiful board members are invariably not called to attend". Simel's findings, based on different group ranches, reached a similar conclusion. He further recommended electing the members of boards to make them accountable and independent of the political establishment and the local administration (Simel, 1999). Moreover, local newspaper report cases where appointments of board members are based on political parties' affiliations. In 2001, the government through the Minister for Lands and Settlement admitted widespread abuse of the boards (*Daily Nation*, 2000). A land commission appointed to inquire into the land law system in Kenya found land boards to be corrupt and called for amendment of LCA (Government of Kenya, 2002)

7. Conclusion

This study has provided a theoretical and empirical analysis of the landowner's decision under uncertainty, whether to seek consent from the land control boards. The theory predicts that, given the risk, applying for consent from the land control board should be negatively related to transaction cost. This prediction was tested by applying dummy variable method approach on a logit regression using pooled cross-sectional farm-level data from Kenya. It was found that the probability to title a parcel changed after the enactment of the Land Control Act, which created the land control boards. Also, the rate of parcel registration before and after the enactment of the Act were significantly different, which seems to reinforce the previous result.

The implication of this evidence suggests that the opportunity cost of seeking the land control board's consent in the form of long and repeated visits to land offices and extra legal payments often disguised as contributions to local projects is considerable. These costs induce landowners to take the risk of not registering land transaction by avoiding to go to the land control boards. Therefore, the expected cost of land control boards' approval far outweighs the expected benefit of title protection conferred by the board.

The anecdotal evidence that land control boards have negatively impacted the title registration is supported by the above result. One explanation is that the administrative nature of land control boards makes them susceptible to rent-seeking behaviour of some landowners. The unlimited discretionary power granted to the boards with no judicial review, coupled with inadequate operational budget and lack of qualified board members induces opportunistic behaviour.

The role of land control boards as guidance of efficient land use is important and should be maintained. However, as this paper demonstrated, they presently undermine the process of title registration, which the government wants to promote. The policy implication of the current analysis suggests that the government may reduce the opportunistic behaviour of the boards by providing for judicial review through an amendment of the Act.

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