



## Impact of Land Registration on Business Environment and Wellbeing in Kano State using Logit Regression Analysis

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### Abstract

*The paper ascertains the impact of land registration on business environment and wellbeing in Kano state. The data employed for the probability analysis is qualitative in nature gathered using a structured questionnaire administered to households in Tarauni as the pilot Local Government Area. A multi-stage sampling was employed where three wards in Tarauni local government were selected namely: Darmanawa, Gyadi Gyadi Kudu and Tarauni. Two major towns each were selected from the three chosen wards and data were then collected from 40 selected households from each ward making a total of 240 sampled households. The study employed a logit regression model where the endogenous variable is a dummy or categorical variable with 1 representing business environment and wellbeing are improved and 0 if otherwise. The paper found that while household size, dependency ratio and women ownership of land, have business environment and wellbeing decreasing effect, the male household head, education, tenure security and land market participation have been veritable predictors for improving business environment and wellbeing. Significant percentage of the respondents was not aware of importance of Certificates of Occupancy (CofO) in getting access to credit. Although the idea was so appealing to them, but willingness to borrow indicator result shows less likelihood of the property owners to collect loans with their land certificates. The paper, in view of the impact of land registration and slow phase of the collection of (CofO) by the beneficiaries, recommends that enlightenment should be intensified.*

**Keywords:** Land Registration, Business Environment, Wellbeing, Logit

**JEL Codes:** R14

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### 1. Introduction

Evidence of chaotic property rights and flawed land registration system was established in Kano State, Nigeria where millions of people are living without possessing formal titles of the plots of land they occupy and are, therefore, dissatisfied with the sporadic registration process. Consequent to that, Systematic Land Titles Registration (SLTR) was introduced by Growth and Employment of States 3 (GEMS3) to ensure the provisions of simplified titling and registration procedures; to reduce number of days to acquire certificate of occupancy (CofO); to reduce costs; to enable effective land dispute resolution mechanisms; to enhance transparency of information and increase geographic coverage.

Thus, SLTR has been considered as a powerful policy tool for poverty reduction in view of its multifaceted trickle-down and multiplier effects. Lack of land titling hampers security of tenure which in turn delays the attainment of assurance

effects, realizeability effects and collateralization effects. Those effects have significant economic impacts on investment, revenue generation, productivity and growth. Specifically, land titling could allow the owner to use it as collateral to secure loan and this credit could be invested as capital in productive activities, thereby increasing employment, labor productivity and income.

Against this backdrop, the paper aims to examine the impact of land registration on business environment and wellbeing in Kano state, Nigeria. The need for such impact analysis is predicated on the fact that improved business environment and wellbeing are largely functions of households' social and economic characteristics and other SLTR outcome indicators.

### 2. Literature Review

#### *Motivations for Land-Titling and Registration*

To begin with conceptualization, land titling is the initial process of formally recognizing rights to land.

Land registration is the process of initially recording legally valid rights to land. Title registration carries the additional guarantee of not only those rights, but also the guarantee of the transactions regarding those rights being legally valid by virtue of the recordation process.

Land issues have been chaotic and problematic land registration that was flawed with irregularities, bureaucracy and corruption in Kano State (Tsauni, 2016). The situation was not different in most African countries and other developing nations. The pathetic situation led to the growing interest in land registration and formalization of property rights to land in Africa. The interest was motivated by two major reasons from the literature. First, since the 1990s, most African countries have passed new land legislation to remedy some of the perceived shortcomings of existing systems, particularly by strengthening customary land rights, recognizing occupancy short of full title, improving female land ownership, and decentralizing land administration. Advances in information technology and remote sensing have revolutionized the way land is administered in other regions and reduced the cost by providing tools for implementation that were not available before. Second, higher prices for food, fuel, and fiber are capitalized in land values and, together with emerging demand for land by investors, add to pre-existing pressures on land from urban expansion all over Africa. Clearly defined property rights (at the individual or group level) and a well-governed system of land administration are essential to avoid socially undesirable outcomes and conflicts.

Although the importance of formalizing property rights has been emphasized by a number of scholars (de Soto, 2000; Kolbe-Booyesen, 2017; Hadejia and Andrew, 2017), surprisingly little seems to have happened on the ground or be sustained.

The fragility of property rights is considered a crucial obstacle for economic development (North and Thomas, 1973; North, 1981; De Long and Shleifer, 1993; Acemoglu, Johnson, and Robinson, 2001; Johnson, McMillan and Woodruff, 2002; Kolbe-Booyesen, 2017; Hadejia and Andrew, 2017). In developing world, a pervasive manifestation of feeble property rights are the millions of people living in urban dwellings without possessing formal titles of the plots of land they occupy (Deininger, 2003; Banerjee and Duflo, 2006; Tsauni, 2017 and

2018a). The absence of formal property rights constitutes a severe limitation for the poor. In addition to its investment effects, the lack of formal titles impedes the use of land as collateral to access the credit markets (Feder et al., 1988; Hadejia and Andrew, 2017 and Kolbe-Booyesen, 2017). It also affects the transferability of the parcels (Besley, 1995), making investments in untitled parcels highly illiquid. Moreover, the absence of formal titles deprives poor families of the possibility of having a valuable insurance and savings tool that could provide protection during bad times and retirement, forcing them instead to rely on extended family members and offspring as insurance mechanisms. To this end, land-titling programs have been recently advocated in policy circles as a powerful intervention to rapidly improve business environment and reduce poverty.

#### *Economic Impact of Land-Titling Programmes*

Proper titling could allow the poor to collateralize the land. In turn, this credit could be invested as capital in productive projects, promptly increasing labor productivity and income. Inspired by these ideas, and fostered by international development agencies, land-titling programs have been launched throughout developing and transition economies as part of poverty alleviation efforts. The literature identifies three channels through which higher security and better enforcement of property rights can, in principle, affect economic outcomes. First, clearly defined property rights to land and the ability to draw on the state's enforcement capacity will lower the risks of squatters and eviction, increase incentives for land-related investment (Besley, 1995), and reduce the need for land owners to expend resources to stake out or defend their claims. The latter can be especially important to groups, e.g., women and the traditional discrimination against them owning land (Joireman, 2008).

The positive impacts of more secure land tenure on investment and land values in rural areas have been demonstrated in China (Jacoby et al., 2002), Thailand (Feder et al., 1998), Latin America (Deininger and Chamorro, 2004; Field et al., 2006; Bandiera, 2007; Fort, 2007), Eastern Europe (Rozelle and Swinnen, 2004), and Africa (Deininger and Jin, 2006; Goldstein and Udry, 2006). In urban areas, efforts to enhance tenure security have led to increased levels of self-assessed land values (Lanjouw and Levy, 2002), greater investment in

housing (Galiani and Scharfrodsky, 2005), and more female empowerment (Field, 2005).

Land registration will also reduce the cost of renting or selling land. Renting allows land owners to tap new sources of income, but still retain their land for insurance or old-age protection, or to consolidate it and cultivate larger farm areas. A certificate of land ownership can allay fears that rental land can be taken away, either by the government through redistribution or by a tenant who does not vacate it at the end of the lease period. Certificates can help when migration requires land owners to be absent temporarily or if the number of registration transactions increases beyond the capacity of informal, local mechanisms to handle them transparently. In China, rental land contributed to occupational diversification and was estimated to have increased productivity by about 60 percent (Deininger and Jin, 2008).

### 3. Methodology

The data employed for the probability analysis is qualitative in nature gathered using a structured questionnaire administered to households in Tarauni as the pilot Local Government Area in Kano. A multi-stage sampling was employed where three wards in Tarauni local government were selected namely: Darmanawa, Gyadi Gyadi Kudu and Tarauni. Two major towns each were purposively selected from the three chosen wards and data were collected from 40 selected households from each ward making a total of 240 sampled households.

The study employed a sophisticated micro econometric modeling to ascertain the impact of land registration on business environment and wellbeing in Kano state. In the Logit Model adopted from Chaudhry (2009) and Jibril (2012), the endogenous variable is a dummy or categorical variable with 1 representing business environment and wellbeing are improved and 0 if otherwise.

The logit model is specified as:

$$IBEW = \beta_0 + \sum \beta_i \chi_{ij} + \mu_i \quad 1$$

where,

IBEW, improvement in business environment and wellbeing, are unobserved latent variables. What is actually observed is a binary variable say IBEW defined by

The scenario here is that outcome indicators of SLTR and socioeconomic characteristics influence business environment and wellbeing improvement or not. The estimable equation then becomes:

$$IBEW = \beta_0 + \beta_{1i}HHS + \beta_{2i}HHG + \beta_{3i}EDUL + \beta_{4i}OAC + \beta_{5i}CTW + \beta_{6i}CTE - \beta_{7i}WOL + \beta_{8i}LTS + \beta_{9i}LMP + \beta_{10i}ACA + \beta_{11i}WTB + \beta_{12i}LV + \beta_{13i}CLV - \beta_{14i}AVL + \beta_{15i}HSLR + \mu_i \quad 2$$

The parameters  $\beta_i$  indicate the influence of the regressors (SLTR indicators and socioeconomic characteristics) on the probability of business environment and wellbeing to improve or not. The variables for Logit model are described in table 1.

Table 1: List of Variables Determining economic potentials of SLTR using Logit Model Analysis

Variables	Description of Variables
Dependent variable	
IBEW	= 1 If business environment and wellbeing are improved = 0 otherwise
Independent variables	
HHS	Household size
HHG	=1, if property owner is a male and = 0, otherwise
EDUL	Household Educational level
OAC	=1, if household own a car, and =0, otherwise
CTW	=1, if property is connected to water, and =0, otherwise
CTE	=1, if property is connected to electricity, and =0, otherwise
WOL	=1, if women own property, and = 0, otherwise
LTS	=1, if secured, and =0, otherwise

Variables	Description of Variables
LMP	=1, if participation is improved, and =0, otherwise
ACA	=1, if aware, and =0, otherwise
WTB	= 1, if willing to borrow, and =0, otherwise
LV	=1, if value of landed property appreciated =0, otherwise
CLB	= 1, If certified land offers more benefits, and = 0, otherwise
AVL	= 1, If household has added value e.g. structure or amenities = 0 otherwise
HSLR	=1, if very satisfied with the land reform programme =0, otherwise

Source: constructed by the researcher, 2017

It was hypothesized that almost all the variables have positive relationship with improvement in business environment and wellbeing. In other words, the SLTR performance indicators have direct probability or likelihood of improving business environment and wellbeing while other variables have negative/inverse relation with IBEW.

The findings in the next section of the paper are the basis for ascertaining the potential economic impact of the land registration programme on improvement in business environment and

wellbeing of people in Kano. The land registration is expected as apriori to unveil more opportunities for investment, revenue generation and poverty reduction.

#### 4. Results and Discussions

The logit regression model was estimated using dummy variable (1, 0) for business environment and wellbeing as the dependent variable to analyse the impact of the land registration. The SLTR outcome indicators and socioeconomic characteristics were used as explanatory variables.

Table 2: Estimates of the Determinants of SLTR Potentials using Logit Regression Analysis

Explanatory Variables	Coefficients (standard error)	z-statistics
HHS	-0.171*	0.553
HHG	-0.224**	-2.22
EDUL	0.89**	0.57
OAC	0.348**	-0.59
CTW	0.98**	0.66
CTE	0.002*	0.43
WOL	-1.77**	0.77
LTS	0.0012*	0.04
LMP	0.0014*	-0.16
ACA	0.0018**	3.71
WTB	-2.225	6.20
LV	0.235**	0.73
CLB	0.66**	1.94
AVL	0.26*	0.32
HSLR	0.47**	0.31
Constant	3.99**	-

Number of Observations = 24, Log likelihood = -30.76

Test that all slopes are zero: G = 104.006, DF = 13, P-Value = 0.006

Notes: \* Indicates statistical significant at 1% level; \*\* Indicates statistical significant at 5% level;

Source: Computed by the researcher using Stata 11

The regression results (table 2) indicate that some coefficients have positive relationship with improved business environment and wellbeing while others have negative relationship. The household size (HHS) at 5% was found to be statistically significant and have negative impact on the probability of business environment and wellbeing in the area to be improved. The finding suggests that household size could become a major constraint to SLTR programme. This is because; higher household size has a business environment and wellbeing - decreasing role as the income per head would be insignificant and lean chances to invest. It is further buttressed by the dominant polygamous marriage in the area.

The probability of the business environment and wellbeing to improve is likely to increase with a male household head. But where dependency ratio is high as revealed by the social data, chances of land related investment by the property holders become hampered. The dependency ratio is defined as the ratio of number of family members less than or equal to 18 years and more than or equal to 65 years to the household size.

Education is recognized to have business environment and wellbeing increasing effect. As expected, the educated the household head, the higher the likely contribution of the household to improved business environment and wellbeing. This is particularly when the household has a gainful employment or has acquired any trade skills. While male-headed households have high likelihood to contribute compared to female-headed households. Ownership of a car at 57%, connection to water (91%) and connection to electricity (98%) increase the chances of landed property in the area to attract investors. This potential was as a result of geographical location of the LGA and its closeness with the main city. The platform is therefore a veritable source of information to relevant government units and the private sector that provide services to the area like Kano State Electricity Distribution Company (KEDCO).

Another indicator of improving business environment is women ownership of land and participation in the land market. Women ownership of land (-1.77) was found to be low and has less probability of the likelihood to add value to their property or invest due mainly to lack of awareness

and cultural inertia. Perhaps this might be due to low participation of women in economic activities in northern Nigeria and the dependency culture of the northern women. There is significantly high likelihood of increasing tenure security of property at 1% level of significance which will go a long way in boosting the business climate. As a corollary to that, a lot of opportunities for investors exist in the land market. This is buttressed by the potential of rising land market participation in the study area at 1% level of significance. Therefore, tenure security and land market participation are veritable predictors for improving business climate and wellbeing.

Significant percentage of the respondents was not aware of importance of CofO in getting access to credit. Although the idea was so appealing to them, but willingness to borrow indicator result shows less likelihood of the property owners to collect loans with their land certificates. Cultural barriers, high rate of interest, and compliance burden were some of the impediments found to likely hinder any potential increase in borrowing. Titled lands have high likelihood of increasing value at 5% and the worth of certified properties would significantly outweigh the untitled land in the control local governments of the State. In that vein, landed property owners have high probability of adding value to their houses as investment would potentially be attracted.

Results show that households interviewed were very satisfied with the titling and registration procedure which was characterized with simplicity, transparency, cost effectiveness and efficiency. The SLTR was by far not comparable with the old registration system that was engulfed by inefficiencies, compliance burden, corruption and uncertainties. This last variable, household satisfaction with the SLTR programme assesses the impact of the reform on the wellbeing of people of Tarauni in particular and Kano State in general. The household were found to be very satisfied with the SLTR, even though, a lot is needed to be done to reach out to beneficiaries and to strategies on how best to make them pay for the CofO.

## **5. Conclusion and Recommendation**

The paper examined the impact of socioeconomic characteristics of land owners and SLTR outcome indicators on business environment and wellbeing in Kano state. The study was motivated by the chaotic

and problematic land registration existing for ages in the State that has been flawed with irregularities, bureaucracy and corruption. The curiosity came out of the need to ascertain the difference between the two land registration systems, and, indeed, the impact of the new system (SLTR) on business environment and wellbeing of people in the pilot area. Having estimated the logit regression model, the paper found a mixed impact of the socioeconomic and SLTR outcome indicators on the business environment and wellbeing among the people and economy of Tarauni. Evidence has shown that the SLTR has been more appropriate as attested to by results.

The paper, in view of the impact of land registration and the slow phase of the collection of (CofO) by the beneficiaries, recommends that enlightenment should be intensified and the same exercise be replicated in other urban local government areas of the state.

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