European Economic Review 54 (2010) 880–899

Contents lists available at ScienceDirect

European Economic Review

journal homepage: www.elsevier.com/locate/eer

Insecurity of property rights and social matching in the tenancy market

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ARTICLE INFO

Article history:
Received 28 September 2008
Accepted 10 February 2010
Available online 23 February 2010

Keywords:
Property rights
Efficiency
Equity
Inequality
Land rental markets

JEL classification:
D23
O12
Q15

ABSTRACT

This paper shows that insecurity of property rights over agricultural land can have large efficiency and equity costs because of the way it affects matching in the tenancy market. A principal-agent framework is used to model the landlord's decision to rent when he takes into account the risk of losing the land to the tenant and when contract enforcement is decreasing in social distance with the tenant. These effects are quantified for the case of local land rental markets in the Dominican Republic. Results show that insecure property rights lead to matching in the tenancy market along socio-economic lines, severely limiting the size of the rental market and the choice of tenants for landlords, both with efficiency costs. Social segmentation reduces access to land for the rural poor, with high equity costs. Simulations suggest that improving tenure security would increase rental transactions by 21% and the area rented to the poor by 63%. Increased property rights security is hence beneficial not only to asset owners, but also to those with whom they might interact in the market.

1. Introduction

Much attention has recently been given to the fact that property rights are frequently highly insecure in developing countries, and that this insecurity can have high efficiency and equity costs. Efficiency costs of property rights insecurity have been analyzed through its effects on investment, access to credit, and labor supply; equity costs through differential security between rich and poor leading to cumulative divergences in investment and income. This paper provides evidence on an additional mechanism through which insecurity of property rights bears on development. It shows how insecurity of property rights over agricultural land induces the land rental market to be segmented along socio-economic lines. It further shows that this results in high efficiency and equity costs, and contributes to the reproduction of deep-rooted local inequalities.

We quantify this effect for local land rental markets in two regions of the Dominican Republic. For each local market, exhaustive records were collected on all land transactions with information on households on the two sides of the market, a large sample of non-participating households, and identification of potential tenants that were constrained out of the market. By simulating the effect of strengthening property rights on land rental market decisions, we show that large efficiency and equity gains can be achieved when formal titles are granted, land conflicts are reduced, and property rights are more effectively enforced. The simulations are based on an empirical estimation of the assortative matching between

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doi:10.1016/j.euroecorev.2010.02.002

landlords and tenants in these markets. The underlying theoretical model uses a principal-agent framework, in which the landlord chooses his tenant taking into account the incentive that the tenant has to squat and the risk that this would result in loss of the plot. With the capacity to enforce contracts decreasing in social distance with the tenant, rental transactions are confined within the same social class. Estimation results support the hypothesis that property rights insecurity reduces the level of activity on the land rental market and confines the choice of tenant to socially proximate individuals, creating inefficiencies. Insecurity of property rights then also limits access to land for the poor, both in numbers and in share of the market. This paper thus brings to light a powerful mechanism through which inequality can be reproduced at the local level over potentially long periods of time. With growing evidence on the efficiency and social costs of inequality (Ravallion, 2001), our results uncover an important mechanism through which this phenomenon occurs. This question is particularly relevant for Latin America where income inequality is among the highest in the world (Bourguignon and Morrison, 2002), where it has been stubbornly persistent over the centuries (De Ferranti et al., 2004), and where access to land plays a key role for these phenomena in rural areas.

2. Security of property rights and social segmentation

While recognizing the fundamental role of property rights for development is not recent (see for example the seminal contributions of the Property Rights School with Demsetz, 1967; Davis and North, 1971), important progress has been made in recent years in rigorously quantifying this role and the channels through which it happens. A growing body of evidence has thus shown the role of security of property rights on investment incentives and access to credit for owners (Feder and Feeny, 1991; Besley, 1995; Jacoby et al., 2002; Johnson et al., 2002). The relation can sometimes be negative: Braselle et al. (2002) observe that land tenure insecurity in Burkina Faso induces investment in tree planting as a way of establishing rights. But Deininger and Jin (2006) find for Ethiopia that while insecure tenure encourages planting of trees it discourages productivity enhancing investments such as terracing. In other cases, the relation is weak or socially confined: Do and Iyer (2008) find positive but small investment effects of a property rights reform in Vietnam, and Carter and Olinto (2003) show that greater property rights security only leads to positive investment effects among wealthier producers. But there is also evidence that the relation can be positive and large: Field (2005, 2007) and Galiani and Schargrodsky (2005) find positive effects of stronger property rights on labor supply and housing investments in urban squatting settings in Peru and Argentina. Di Tella et al. (2007) uncover a potentially important mechanism whereby this happens when property rights security enhances people's beliefs in the market economy.

The literature on security of property rights and inequality has also evidenced existence of a difference in insecurity between rich and poor, with the rich and powerful better able to protect their assets than the poor (de Soto, 2000; Lanjouw and Levy, 2002; Goldstein and Udry, 2008). This difference can lead to the perpetuation of weak property rights institutions in unequal societies as rich elites are not necessarily interested in using the state to increase the security of property rights (Glaeser et al., 2003; Gradstein, 2007). A vicious circle of rising inequality can then emerge as it induces (via incentives to invest, access to credit, and beliefs in markets) a growing divergence in investment and efficiency across these social groups.

This paper uncovers a different channel through which property rights insecurity can lead to the perpetuation of inequality. It shows that property rights insecurity over productive assets can have an impact not only on the direct use of assets by owners, but also on how they select households with whom they decide to interact in markets for these assets. As such it relates to papers that analyze the effects of property rights insecurity on land market activity (Gine, 2005; Conning and Robinson, 2007) and the efficiency and equity gains to be achieved through land rental markets (Deininger and Jin, 2005; Deininger et al., 2008). In our case, the risk of losing the land to the tenant induces landlords to select households from the same social class, reproducing social inequalities. We recognize that insecurity can be caused not only by lack of formal titles but also by lack of informal enforcement of property rights and by the recent history of land conflicts.[1] The paper measures the extent to which land rental market activity can be socially biased as a consequence of the lack of formal or informal property rights, and the magnitude of the resultant efficiency and equity costs.

3. The land rental market and property rights insecurity in the Dominican Republic

The highly unequal distribution of land ownership in most Latin American countries suggests that there is room for redistribution of land under cultivation through the land rental market. Yet, only 12% of agricultural land is rented in Latin America and 14% in the Dominican Republic, compared to 41% in the United States and 67% in Belgium (FAO, 1981). Field observations provide plenty of evidence that land markets do not function well in the Dominican Republic. In our survey, 64% of all households that do not rent to others said that they would like to rent more land from others. In spite of this, field visits in these communities reveal that there are extensive tracts of underused land, mainly in the hands of large landowners who use it at most for extensive grazing when it could be rented out more profitably.

[1] Most papers in the literature focus either on the impact of formal titles or look at informal property rights. With the exception of Lanjouw and Levy (2002), the different dimensions of property rights security are often not considered together.