The (Lack of) Impact of Government Land Titling: Case Study Evidence from Rural Peru

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Abstract

This paper estimates the ability of government land titling to achieve the positive benefits associated with secure property rights institutions. Specifically, we analyze the impact of government land titling in rural Peru to provide collateral for a loan, increase investment opportunities, and promote entrepreneurship. We find that land titling does not achieve these positive benefits associated with secure property rights. Our findings suggest that government land titling is not an automatic avenue through which countries can achieve secure property rights institutions, and that alternative solutions should be considered.

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1. **Introduction**

Recent development literature emphasizes the important role of institutions in the development process, particularly the institutional structure of property rights. Property rights define an economic system and determine the success of an economy by promoting specialization and the division of labor through voluntary exchange. Private property provides information and incentives that stimulate entrepreneurship, capital accumulation, and investment that efficiently allocate scarce resources and ultimately facilitate economic development (Smith 1776; Mises 1920; Hayek 1945, 1960). Economies realize these beneficial properties of private ownership when property rights are well defined and secure. Several recent studies analyze the relationship between property rights and development (Scully 1988; de Soto 2000; Boettke 1994; Besley 1995; Knack and Keefer 1995; Leblang 1996; Hall and Jones 1999; Acemoglu, Johnson, and Robinson 2001, 2002; Landau 2003; Acemoglu and Johnson 2005; Kerekes and Williamson 2007). These studies conclude that capital formation and investment increase as a result of the incentives provided by property rights.

Given the benefits associated with secure property, many economists are now investigating how to improve the institutional structure of property rights in developing countries. For although economists understand the positive effects of property rights on economic development, many countries in the developing world are still unable to establish and maintain secure property rights institutions. While some economists advocate institutions that evolve from the bottom-up, others favor top-down policies. Top-down policies include government land titling programs in which formal land titles are distributed by the government. Peruvian economist Hernando de Soto is among the most well known supporters of government

In this paper we examine the ability of government land titling programs to achieve their desired effects. That is, does government land titling establish secure, well-defined property rights institutions that allow for the use of assets as collateral, stimulate capital accumulation and investment, and promote entrepreneurship? If successful, following land titling we should observe increases in access to credit from both private and public institutions and increases in long-term investments. Secure property rights should also create the appropriate incentives for entrepreneurship.

To examine the effect of government land titling programs our paper focuses on Peru as a case study. Peru is ideal for analysis for several reasons. For one, Peru currently lacks secure property rights institutions. The International Property Rights Index (Horst 2007) scores countries’ property rights security on a scale of 0 to 10, with 10 representing the highest level of security. Whereas the average score worldwide is 5.3, Peru’s property rights score is only 3.7. This places Peru in the bottom quartile and among countries with the least secure property rights. Also, the Peruvian government has actively undertaken land titling over the last twenty-five years in an effort to improve its property rights institutions. Hernando de Soto argues for the need of a written formal legal property rights system and actively campaigns for government codification of informal property rights. The Peruvian government has adopted many of de Soto’s ideas.

To better understand the effects of government land titling in Peru, we conducted individual interviews in rural communities surrounding Cusco. We rely on qualitative analysis for our investigation due to a lack of quantitative data specific to this region. These interviews
enable us to extract general conclusions regarding the ability of government land titling programs to promote capital accumulation, increase investment, and encourage entrepreneurship. Although other papers examine the impact of land titling within urban areas of Peru (Field 2003, Field and Torero 2004, Field 2005), our paper is unique in that we examine rural areas in Peru to assess the impact of government land titling.

Our initial findings suggest that government land titling programs are not successful in rural Peru. In this region, land titles do not secure property rights. Hence, individuals are not effectively able to use their property as collateral to secure loans. Without access to credit, capital accumulation and investment are not adequate to further development past a subsistence level. Also, land titles are not sufficient in rural Peru to stimulate entrepreneurial activity and increase productivity. In short, government land titles do not achieve their intended effects.

The remainder of the paper is organized as follows. Section 2 introduces the findings of previous studies on the impacts of government land titling, including a brief overview of Peru’s land titling programs. Section 3 presents the methodology and discusses the effects of land titles on access to credit, investment, and entrepreneurship. Section 4 concludes.

2. Government Land Titling Programs

Economists disagree on the effect of government land titling on the level of a country’s investment. Several studies find a positive effect of land titles on investment (Feder, Onchan, Chalamwong, and Hongladarom 1988; Banerjee, Gertler, and Ghatak 2002; Do and Iyer 2003; Field 2005). For instance, Carter and Wiebe (1994), Lopez and Romano (1997), and Alston, Libecap, and Mueller (1999) argue that land titles increase the ability to use land as collateral and improve access to agricultural credit. However, other studies conclude that land titles do not
significantly increase capital formation and investment (Kimuyu 1994; Place and Migot-Adholla 1998; Firmin-Sellers and Sellers 1999).

Field (2003) describes the current process of land titling in Peru. The Comisión de Formalización de la Propiedad Informal (COFOPRI) and the Proyecto Especial de Titulación de Tierras y Catastro Rural (PETT) were the two main organizations responsible for distributing land titles in Peru. COFOPRI originated in 1996 with the purpose of facilitating the transformation of urban squatter settlements into nationally registered property. COFOPRI was developed to hasten the process of obtaining legal land titles and to lower the costs. Approximately 1.2 million urban residents had received legal land titles by December of 2001 (Field 2003). PETT focused on converting rural settlements into nationally registered property, whereas COFOPRI concentrated on urban areas. PETT was eventually absorbed by COFOPRI and they now operate as one organization.

Investigating the effects of land titles in Peru, Field and Torero (2004) find that land titling programs are correlated with increases in loan approval rates for housing construction materials from the public sector bank. However, they do not find increases in loan approval rates from private financial institutions. Field (2005) also finds that government land titling leads to increases in housing investment, but most of this investment is financed without credit. These findings suggest to us that government land titles do not necessarily provide sufficient collateral to increase access to credit.

3. **Rural Peru**

This paper builds off of the existing literature to further examine the effects of government land titling programs and their effectiveness. Whereas several of the previous studies focus on urban
areas within developing countries, our study concentrates on rural communities to investigate the impact of government land titles on access to credit, investment, and entrepreneurship.

3.1 Methodology

To examine the impact of government land titles we interviewed individuals in indigenous communities surrounding Cusco, Peru in July of 2007. These communities included Piñancay, Wila Wila, and Pucamarca. Individuals were chosen at random, with both males and females included in the sample. We conducted five separate interview sessions for a total of nine interviewees. The ages of the interviewees range from approximately 30 to 55 years of age. All of the interviewees rely on agricultural production, primarily at a subsistence level. Some of the individuals interviewed possess individual land titles, some are members of communities possessing community land titles, while other individuals do not possess a legal land title. Each interviewee lives within a community, including those possessing an individual land title. To evaluate the overall impact of land titling in rural areas, our interview questions centered on the demand for land titles, the ability to use land titles as collateral to obtain access to credit, and the effect of land titles on entrepreneurship.

3.2 Access to Credit and Investment

Government land titling programs are primarily advocated on the grounds that they increase access to credit, thereby increasing investment. Hernando de Soto (2000) argues that the plight of many developing countries can be attributed to insecure property rights. This insecurity interferes with individuals’ ability to use assets as collateral so as to secure loans. Insufficient

1 In addition, we also inquired about the enforcement mechanisms utilized to secure private property. These questions contributed to our more general examination of how secure property rights are achieved (i.e. via formal or informal channels). See Kerekes and Williamson (2008).
access to credit precludes capital accumulation and long-term investment and stifles economic development. As such, de Soto supports the codification of property rights through government land titling programs. If these programs are successful in establishing secure property rights we should see increases in access to credit and investment following their implementation.

To investigate the success of government land titling programs in rural Peru, we first inquired regarding the ability of individuals to use private property as assets to secure loans following the distribution of land titles. Our questioning revealed that private institutions are currently willing to provide access to credit to the individuals we interviewed, whether or not the individual possesses a legal land title. However, these institutions are willing to lend only at high interest rates. The high interest rates apply whether or not an individual possesses a government land title. This implies that government land titles are not sufficient to guarantee property as collateral for loans from private institutions. Therefore, government land titles do not affect the willingness of private banks to provide access to credit.

Since legal land titles do not increase access to credit from private institutions, we then inquired as to why individuals want land titles. The primary response was that land titles enable individuals to request a loan from a national bank. These loans are provided at lower interest rates than required by private institutions, hence their desirability. However, even a government land title is not sufficient to ensure that an individual will receive a loan from a national bank. In conjunction with the land title, national banks often require additional co-signers and collateral valued in excess of what the loan is worth. As with private institutions, land titles are also not sufficient to increase access to credit from national banks.

These findings suggest that government land titling programs are not successful in rural Peru in regards to increasing credit access. Legal titles do not stimulate additional loans by
private institutions, nor do they guarantee a loan from a national bank. Furthermore, the high interest rates required by private banks and the additional warranties demanded by the national bank provide evidence that neither private nor public institutions regard government land titles as fully securing private property. We view our results as complementing the findings of Field and Torero (2004) in which they do not find increases in loan approval rates from private institutions following land titling programs; and Field (2005), that increases in housing investment are financed without credit.

3.3 **Entrepreneurship**

If government land titling programs are successful, we should also observe increases in entrepreneurial activity. De Soto (2000) illustrates that increases in capital accumulation and investment result from increases in credit access. When individuals are secure in their property they have incentives to make long-term investments. Rather than invest in mobile assets and inventories, individuals will prefer to invest in capital and durable assets such as machinery and equipment.

As stated above, the individuals we interviewed live primarily at the subsistence level and depend on agriculture for the majority of their income. The staple products of the area include corn, potatoes, beans, and beets. When we asked what individuals would do with a loan were they able to secure one, the overwhelming response was that they would use the money to buy supplies including seeds and fertilizer. Individuals also need access to water and several stated that they would like to rent equipment to work their land. However, unable to obtain access to credit, the individuals we interviewed were unable to finance any such investments that would enable them to move beyond a subsistence income.
In addition to the inability to secure funds to finance investment, several of the individuals we interviewed expressed another concern that makes them reluctant to invest significantly in their property. This concern is a fear of government expropriating their assets. Although the property owners do not fear that other community members will expropriate their property, they distrust the government. Given this fear of government expropriation, it is clear that property owners do not feel secure in their property rights, even when they possess a government land title.

Our interviews clearly illustrate the important role secure property rights have on incentives. Some of the individuals we spoke with are members of communities that possess a community land title. They expressed that they would work harder and invest more in their land if they possessed an individual land title. They are unwilling to make further investments because they do not believe that they will capture the profits of these investments since they do not individually own the land. For example, one gentleman we interviewed belonged to a community possessing a community land title. He also owns another parcel of land outside of this community and is in the process of trying to obtain an individual land title for that land. He wants to start a small business selling chickens. When we asked on what property he wanted to locate his business he had a clear preference for the land he owned individually. Even though he still fears government expropriation of his property, he believes that he has a better chance of capturing profits on the land he owns individually.

Again, the evidence from our interviews suggests that government land titling programs are not successful in rural Peru. Although the individuals we interviewed possess a strong entrepreneurial spirit, they are unable to invest in capital or small businesses that would allow them to rise above their subsistence incomes. This result is due to a lack of credit and to the
disincentives created when property rights are insecure. Government land titling programs in rural Peru are not successfully securing private property rights.

4. Conclusion

Ultimately, property rights determine how the factors of production are used and allocate scarce resources. This paper investigates whether the government land titling programs in rural Peru create institutions that enable individuals to capture the gains from trade. More specifically, do land titles increase credit access, investment, and entrepreneurship? Our two general findings are: (1) a government land title is not sufficient collateral to increase access to credit through either private or public institutions, and (2) a government land title is not sufficient to stimulate entrepreneurial activity.

In an examination of the development of the American West, Terry Anderson and Peter Hill (2004) argue that property rights emerge as the value of a resource increases. Investment in defining and enforcing property rights depend on the value of the land and the costs of securing ownership. Comparing rural Peru to the American frontier, perhaps the value of the land and the costs of securing property are not yet such as to warrant formal rules and legal land titles in rural Peru…

During our interviews we observed the entrepreneurial spirit, creativeness, and productive potential of the individuals in rural Peru. We believe that the failure of these individuals and communities to develop beyond a subsistence level is not due to a lack of organization or skills, but is the product of the institutional structure that is imposed on them. Rather than distribute land titles and impose exogenous property rights institutions in a top-down approach, developing countries would do more to stimulate economic growth by embracing
endogenous property rights and institutions that evolve from the bottom up. Anderson and Hill (2004) provide an example in which the U.S. government provided property rights to American Indians in the late nineteenth century from the top down with negative consequences.
References


