



## Fertility Responses to Urban Land Titling Programs: The Roles of Ownership Security and the Distribution of Household Assets

Author(s)	Erica Field
Contact	emf23@duke.edu
Country	Peru
Organizing Theme	Voice and Agency
Status	Completed
Intervention Category	Land Titling
Sector	Agriculture and Rural Development
Abstract	<p>This paper examines the link between intra-household allocation of ownership rights and fertility using data from a nation-wide titling program in Peru. A stated objective of the Peruvian program was to improve gender inequality of property ownership by including female names on land titles. I use data from the target population of urban poor to study whether improvements in ownership equality were associated with changes in household decision-making and fertility behavior. I find that women in program regions are 50% more likely to appear as owners on property documents and 30% more likely to participate in household decision-making. My estimates of fertility behavior indicate that land titling is also associated with a significant and sharp reduction in annual birth rates among program beneficiaries of 21% in the year prior to the survey, and a 19% reduction in birth rates two years prior to the survey among households titled early in the program. Meanwhile, annual birth rates corresponding to children two years and older exhibit no significant differences according to whether or not the household resides in an early program neighborhood and is eligible for participation, consistent with the hypothesis that the program is responsible for the trend. In addition to changes in female ownership, three other channels of impact are examined: the effect of titling on household labor force participation, wealth, and tenure-security related demand for children. Instrumental variables estimates provide evidence that increases in female bargaining power are at least partially responsible for the fertility decline associated with titling.</p>
Gender Connection	Gender Informed Analysis
Gender Outcomes	Decision making over family formation
IE Design	Difference in Difference
Intervention	In 1996 the Peruvian Government established a national property registry. The goal of the program was to convert informal property into securely delineated land holdings by issuing and registering property titles. Project teams moved from neighborhood to neighborhood within cities to provide titling.
Intervention Period	New legal rights were issued in 1996; project teams provided titling services through 2003
Sample population	The sample comes from 2750 households randomly sampled from the program target population in 8 cities. The sample includes 4433 women between the ages of 14 and 50,



	42% of whom are married or partnered.
Comparison conditions	The study compares households that have received the land titling to households that have not yet received land titling
Unit of analysis	Household Level
Evaluation Period	1999-2000
Results	There is a substantial reduction in annual birth rates associated with urban land titling. In particular, living in a treated neighborhood is associated with a 21% lower probability of birth from 1999 to 2000. This difference is concentrated among households that receive property titles in female names. Survey evidence suggests that this effect is driven by increased equality in decision making.
Primary study limitations	Since the titling program affects multiple aspects of behavior related to fertility, it is difficult to isolate the mechanism of impact. Additionally, previous survey data was restricted for formal owners.
Funding Source	
Reference(s)	Field, E. (2003). Fertility responses to urban land titling programs: The roles of ownership security and the distribution of household assets. unpublished paper, Harvard University.
Link to Studies	<a href="http://www1.worldbank.org/prem/poverty/ie/dime_papers/385.pdf">http://www1.worldbank.org/prem/poverty/ie/dime_papers/385.pdf</a>
Microdata	