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Urban land rights and child nutritional status in Peru, 2004

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Abstract

Advocates of land-titling programs in developing countries posit that these programs lead to a multitude of benefits, including health improvements. This paper presents the results of a child health survey of several Lima communities after various time exposures to Peru's urban land-titling program. The results provide suggestive evidence that improved property rights increase children's weight but not their height, which is consistent with previous work on the topic. However, titles also appear to raise children's risk of being overweight or obese, implying that the observed weight gain is not necessarily an improvement in nutritional status.

JEL classification : Q15; I12; O2

Keywords: Land ownership and tenure; Nutritional status; Development policy; Overweight; Obesity; Anthropometry; Underdevelopment; Latin America; Peru

1. Introduction

With slum dwellers now accounting for 43% of the urban population in developing countries (UN-HABITAT, 2003), slum growth confronts the current generation of development policy-makers with one of its greater challenges as it attempts to improve the lives of the urban poor. To this end, policy-makers have increasingly focused on urban property formalization, which is thought to improve credit access, real estate market dynamism, and residential tenure security, with the broader objective of increasing long run well-being among the poor (Deininger, 2003).

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de Soto (1989, 2000, 2003), a major proponent of this policy model, argues that property reform allows market-oriented development to become ''a truly humanistic cause and an important contribution to the war on poverty'' (2003, p. 185). Much at his urging, governments around Latin America – and, to a lesser extent, the world at large – have undertaken land titling projects in their efforts to alleviate urban poverty. However, the specific effects of these property interventions in promoting ''humanism,'' as well as alleviating the myriad deprivations associated with poverty, remain unclear.

This paper considers the effects of urban land formalization on children's nutritional status, an important correlate and long-term determinant of well-being and poverty. Although formalization campaigns rarely cite nutrition as an explicit goal, it is closely related to their overall aims. Certainly, nutrition affects health status, an indicator of well-being; if titling affects children's health, this would be important in itself. Moreover, nutritional deprivation in childhood may also lower lifetime productivity (Strauss and Thomas, 1998)—by impairing cognitive development, limiting educational attainment, decreasing adult body size, and heightening morbidity and mortality though the life course.[1] Land titling arguably remedies one market distortion – poorly defined property rights – but in considering its effectiveness as a panacea to poverty, one should also take into account its impact on childhood deprivation.

One might indeed expect land titling to have such an impact. Previous work has suggested that titles allow squatter households to increase labor force participation, primarily because they no longer need to keep an adult 'guard' at home to protect informal property rights (Field, 2002). Using data from a land-titling program in urban Peru, the same program analyzed in this paper, Field finds that titling leads to a 17% increase in weekly household labor hours and a 47% reduction in the likelihood that household members work at home. As time allocation incentives change, so too may the nature of child nutrition and care. The direction of this change depends on the balance of income and substitution effects. Increased labor force participation by any household member could improve child nutrition by boosting labor income. However, in the case of a child's primary caregivers – in particular the mother – working could reduce the time spent caring for the child, the quality of that care, and the availability of mother-specific inputs such as breast milk. A large body of research has examined these topics, and the results indicate that, although maternal work often affects child well-being, the nature of the effect varies by context, wage rate, the nature of women's work, and a variety of other factors (Glick, 2002).

Other potential pathways from property rights to child nutrition might involve investment incentives or credit access, but the existing evidence casts doubt on these as possibilities in Peru. Although the Peruvian program has led to an increase in housing investment (Field, 2005a), baseline plumbing investment rates among beneficiaries (1.5–3% annually) are probably too low to alter nutrition in the short run. Titling could also expand credit access, enabling credit-constrained households to better finance their children's nutrition, but evidence for credit market expansion in Peru is either non-existent or extremely limited, depending on the author (Calderón Cockburn, 2003; Field and Torero, 2004).

To investigate the effects of land titling on child nutritional status, I analyze data from a survey of 27 Lima communities that have participated in Peru's urban land-titling program, which past

[1] On cognitive development and learning capacity, see Cravioto and Arrieta (1986). On educational attainment, see Glewwe and Jacoby (1995) and Alderman et al. (2001), but also note Behrman's critique of this literature (1996). See Martorell and Ho (1984) and Fogel (1994) on morbidity and mortality, and Martorell (1999) on body size.