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14.771 Development Economics: Microeconomic Issues and Policy Models
Fall 2008

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14:771: Recitation Handout #11 Property Rights - Empirical Work

Today's recitation covers 3 papers that all attempt to establish whether there is a link between the security of property rights and investment/credit access. This idea is not new. De Soto has argued that the poor are locked out of the credit market because of their lack of collateralable property. However, little evidence on this hypothesis is available.

Peruvian titling program

In 1991, a Peruvian non-governmental organization embarked on an innovative property titling project in the capital city of Lima whose goal was “the rapid conversion of informal property into securely delineated land holdings by the issuing and registering of property titles”. Between 1992 and 1995, roughly 200,000 titles were issued at an extremely low cost, convincing the government and a growing international audience of the potential for efficiency gains from urban property formalization. In 1996, under the auspices of the public agency COFOPRI (Committee for the Formalization of Private Property) and Decree 424: Law for the Formalization of Informal Properties, the Peruvian government established a national property registry based on the early model to formalize the remaining properties in Lima and extend the program to seven other cities. Just as in the pilot project, implementation of the national program involved area-wide titling by neighborhood, which was “presumed to foster, through community participation and education, a demand for formalization, reduce the unit cost of formalization, and rapidly generate a minimum critical mass of beneficiaries”. While the old process of acquiring a property title was prohibitively slow and expensive, the new process was free and extremely rapid. Once a local property registration system was set up, local program officials were trained, and the city's target areas were properly identified and mapped, several project teams simultaneously entered neighborhoods starting from different points in the city. To be eligible for program participation, title claimants were required to verify residency predating 1995, and had to live on eligible public properties. As a result of the reforms, by December 2001 nearly 1.2 million of the country's previously unregistered residents became nationally registered property owners, affecting approximately 6.3 million of the roughly 10 million untitled residents living in the range from just above to below the poverty line.

Field (2003): Titling and family labor supply

Erica Field uses a survey conducted over the period of the sample and identifies which households are in regions where the titling program has been implemented (treatment) to those where it hasn't (control). *What is the identification strategy? How would you like to check whether this seems valid?*

Table 3 first establishes the existence of a first stage. How should the standard errors be adjusted here?

She first looks at household members' labor supply. *Why would labor supply decisions affected?* If this is the channel through which titling affects labor supply, who should change most their labor supply?

Table 4 suggests that household labor supply increases in program areas after the titling program is in place (about 13.4 hours per week). The effect is smaller for households with more adult workers and those with greater tenure. The effects are also smaller for those who were issued titles late.

To further the argument, Fields also shows that work at home falls vs. work outside the home. Also, children's labor supply falls by 28%.

Can something else be at play here?

Field and Torero (2004): Titling and credit

In a related paper, Field and Torero study the effect of the same program on access to credit. If the De Soto argument is true, this new property right should enable individuals to obtain more/cheaper credit.

The results are somewhat disappointing:

- loan approval rate from the government bank goes up by 4.6 percentage points, and only for the cases where the lender asks for a title.
- neither the amount nor the interest rates changes
- loan approval rate from private banks is unchanged
- but the interest rates for these loans fall by 9 percentage points but not especially for the cases where the lender asked for a title
- All of the increase in loans comes from construction loans. No evidence of an effect on production loans.

Property rights and investments

Goldstein and Udry (2008)

Udry's paper on Burkina Faso argued that land may not be farmed efficiently because women may fear to lose their land rights if their husband invests in their land. Goldstein and Udry study this a little bit more directly in the context of Ghana where land is often held communally and land rights are very weak.

A major investment that can be done in this context is fallowing. Land benefits from being rested for a few seasons before being planted again. However, it is argued that when the land is fallowed, it may be easier to capture. This could arise for two reasons. When the land is being fallowed, the farmer is less present and has less visible claims to the land. This may facilitate capture. Also, the village may interpret land fallowing as a sign that the household is wealthy and thus does not need this parcel of land.

Finally, the authors suggest that the strength of property rights may be linked to political power in this context.

To test this hypothesis, they collect data from a 2-year survey from Ghana with 240 households, interviewed 15 times over 2 years.

As found in Burkina Faso, men and women within the same household have enormous differences in profits and yields (100% higher yields and 200% higher profits for husbands), even after controlling for land quality. This difference appears to stem mostly from the fallowing investment: men fallow their land more than women and this is why their land is more productive. However, fallowing may be endogenous: you fallow only good land. They instrument for fallowing using a large number of family background variables as well as a dummy for whether a person hold a traditional village office. They find that this variable is the key determinant of fallowing decision and that it explains most of the variation between men and women. This political office does not seem to explain assets or other confounding factors.

An Old Exam Question

You are asked by the Millenium Challenge Corporation to design an experiment to measure the overall impact of a comprehensive voucher system, which El Salvador is considering adopting. The Voucher system would be similar to the Chilean system, where every kid is entitled to a voucher for private school (or can attend public school if they want to). Prepare the proposal for an experiment, using the following template (which is roughly the template followed by the NIH, though we will not need 15 pages. . . .)

- A. Research questions:
 - a. What are the main aims of your experiment? What are you trying to learn from it?

- B. Background and Significance:
 - a. What are the rationales for a voucher system? What are the sources of uncertainty regarding whether this is the right system to adopt (using economic reasoning for this)?
 - b. What previous research exists, and why it is insufficient for El Salvador to make a policy decision on whether they should adopt the system or not.

- C. Experimental Design and Methods
 - a. What is the design of your experiment (or experiments)? Explain carefully how you will constitute the treatment and comparison groups.
 - b. What are your variables of interest?
 - c. How would you go about calculating needed sample size (I understand you are not in a position to do it)?

D. Plans for data analysis:

- a. Explain the regressions/analysis of data that you would do once the experiment has been run. Detail the variables you would use and the techniques you would employ.