

The impact of linking conditional cash transfers to agricultural credit on productive assets accumulation of rural households in Peru

Cesar Del Pozo Loayza

Centro de Estudios Regionales Andinos Bartolome de las Casas, Cusco-Peru

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- 1 Motivation
- 2 Research questions
- 3 Context background
- 4 Empirical challenges
- 5 Methodology
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- 1 CCTP have direct effects on social outcomes on poor households: education, health, nutrition (Fiszbein et al., 2010).
- 2 CCTP can have indirect effects on economic outcomes (Todd et al. 2010; Gertler et al. 2006).
- 3 Cash transfers are a relevant, stable and regular source of non-labor income (reduce liquidity constraints and serves as a form of collateral for credits).
- 4 Credits can improve assets position of poor households (Karlan et al., 2007; Banerjee et al., 2009; Dong et al., 2010).

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CCTP in Peru: Programa Juntos, relevant policy instrument to poverty alleviation

- 1 Start in 2005 and is operating at national level, mainly in rural areas.
- 2 Covers around 700.000 households.
- 3 Fixed transfers UDS 35 monthly for at least 4 years
- 4 Conditionals: use of health services, school asistance.
- 5 Targeting mechanism: poor distritcs and poor households.

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Rural credit to production

- 1 Lack access to productive credits by rural households: 8 percent of total farmers have credit.
- 2 Several types of credit lenders: informal, private banks, public bank (Agrobanco) and Microfinance Institutions.
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Empirical challenges for impact assessment

- 1 Juntos, was not randomly assigned.
- 2 Juntos, is not formally linked with any credit program at national level.
- 3 Credit access is an endogenous decision of rural households (preferences and risk aversion).
- 4 The linking of Juntos to agricultural credit is mainly based on own decisions of rural households.
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- 2 Identify comparable groups: rural households target and treated (by Juntos) and rural households target but untreated.
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- 1 Data: Agricultural Census 1994 (baseline) and 2012 (endline): sample of 400.000 rural and poor households in 561 poorest districts). Panel data at district level. Pooled cross-sectional data at household level.
- 2 Dependent variables: agricultural assests (cultivated land, equipment, infraestructure); livestock assets (acumulation of cows, sheeps, small animals: guinea pigs, poultry).
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- 1 Technical note: to improve comparison among districts and households was applied a Propensity Score Matching to replicate targeting process and to reduce initial observable differences between treatment and control groups.

- 2 Differences in Differences:

$$Y_{i,j,t} = \mu_j + \alpha_1 T_{i,j,t}^C + \alpha_2 time + \alpha_3 T_{i,j,t}^C * time + \gamma * X_{i,j} + \epsilon_{i,j,t} \quad (1)$$

- 3 Where Y are the outcomes; T is the participation dummy, X are socioeconomics characteristics and C is the household decision about agricultural credit ($C = 0$, without credit; $C = 1$ with credit).
- 4 Estimated parameter α_3 for $C = 1$ is the average effect of CCTP+Credits on outcomes.

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Average effects: CCTP+Credit

- 1 Increase in 0.64 hectares cultivated land (31 percent). 35 percent if lender was a MIF and 48 if was Public Bank (Agrobanco).
- 2 Increase in 4 units of small animals (52 percent). 26 percent if lender was a MIF and 66 if was Public Bank (Agrobanco).
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Conclusions

Potential effects of the interaction between CCTP and productive credits in Peru.

- 1 Improve assets position of farming and poor households: more cultivated land and small animals.
- 2 Evidence that the interaction between social and economic programs can be a relevant instrument to promote rural development.
- 3 However, the impact of CCTP + credit on productivity is not clear.
- 4 Female-headed rural and poor households do not increase productive assets, *why?*: limited access to assets? gender exclusion? preferences?
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www.cbc.org.pe