

Conditional transfers and living arrangements in rural Mexico

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This paper analyzes the impact of the PROGRESA¹ Program on changes of the demographic composition of beneficiary poor households in rural Mexico. PROGRESA grants significant monetary transfers to eligible poor households conditional on keeping their children in school, and on periodical attendance to local health facilities. The monetary subsidy in rural communities adds up to an average of 22 percent of total income of beneficiary households.

Evaluating the impact of the subsidy on living arrangements is important since cohabitation represents an essential component of welfare. The way household member decide to cohabitate is intimately related to consumption, home production (Hoerger, Picone and Sloan, 1996), risk diversification (Rosenzweig and Stark, 1989), and to power within the household (Thomas, 1996 and Rubalcava & Thomas, 2005).

Notwithstanding the importance of living arrangements resolutions on family members' well-being, little is known about the dynamics of household cohabitation decisions in developing countries. Some papers have studied the association of household partition and economic characteristics (Barkat-e-Khuda, 1985); household partition and the disagreement among household members (Engelhardt, Gruber and Perry, 2002); and household partition and the survival of the patriarch, (Caldwell, Reddy and Caldwell, 1984) and (Foster, 1993). This literature has placed great emphasis on changes in living arrangements in households with old members, where cohabitation decisions are linked to the level of care and aid that the elderly members receive, (Cameron and Cobb-Clark, 2001) and (Costa 1997).

The literature on living arrangements suggests an important effect on pension income on living arrangements among the elderly (Costa, 1999), (McGarry and Schoeni, 2000), (Edmonds, Mammen and Miller, 2005) and Hamoudi and Thomas (2005). However our knowledge is still more limited in terms of the impact that conditional public transfers may exert over the general household demographic structure and on the living arrangements with the extended family of beneficiary households in a developing country context.

This paper analyzes the medium run effect of PROGRESA –the most ambitious poverty-combat Program in Mexico- over the demographic dynamics of beneficiary households, the decisions to cohabitate between members of the beneficiary household and the extended family, and over the determination to migrate of household members outside their community of origin.

Results using double-difference matching analysis based on data of program-eligible beneficiary and program-eligible non beneficiary households show that conditional cash transfers' interventions of the type of PROGRESA affect family arrangements decisions, not only among beneficiary household members but also among their extended family. The analysis gains special importance in today's international moment, where the World Bank and the Inter-American Development Bank widely recommend PROGRESA as a policy example, and where public

¹ The Program is currently known as OPORTUNIDADES.

interventions based on conditional cash transfers are currently being implemented by many developing countries as a way to fight poverty.

We use information from households before (1997) and almost six years after (2003) the implementation of the program derived from an quasi-experiment in which eligible households in treatment communities are compared to eligible households in communities not incorporated into the Program as of 2003. The data on treatment and comparison households allows us to reconstruct a longitudinal base with information of a) individuals who remained in the same household between 1997 and 2003, b) household members who left during that period, c) new individuals who joined original households and d) members of the household who migrated outside their community of origin between 1997 and 2003. Using a non-parametric method of propensity score matching in double differences, we compare the change in demographic composition of the household before and after the Program's implementation.

Results show an important redistributive impact of the Program on the living arrangements of beneficiary households. Households who have been benefited from the Program for over 5 years reveal a higher rotation rate of their men and women. The rotation is greater for males, but differs by age and by relationship to the household head.

Conditional transfers promote the departure of young adults who given their age at the onset of the Program were not eligible to receive the educational grants. Males tend to leave their households relatively more than females. Likewise, sons and daughters between 7 and 21 years old are more prone to leave their home as a consequence of the public transfer. However, our estimates show that the subsidy does not affect the decision of other members that share different family ties with the head to leave the household.

Evidence points towards a household partition effect driven by the public transfer, which allows greater independence to young adults in beneficiary households to constitute their own families. Likewise public transfers seems to provide important resources to beneficiary households that permit them to shelter significantly more new members over the course of five years. Beneficiary households adopt more new members and increase their size one percent more than those in the comparison group. These new members are on the one hand, adults over 21 who did not cohabit prior to the public intervention; on the other hand are children and adolescents in age brackets which makes them eligible to receive elementary or secondary school grants. In addition, absent sons and daughters are more prone to return home as a household member, five years after the start of the public intervention.

Members of the extended family also benefit from the conditional subsidy. Parents and grandparents of the household head, who did not cohabit before the Program's implementation, ended-up sharing the same roof with their children or grandchildren that have benefited from the public aid over the past five years.

We use complementary retrospective data on the decision to migrate out of the community of household members in beneficiary and in the comparison groups--for the same period of analysis to better understand how the subsidy impacts the dynamics of exiting the household. First-differences matching analysis at the individual level shows that women in beneficiary households migrate outside their community 8 percent more than the comparison group due to marriage reasons. This effect,

while smaller, is also present for men. Moreover, as a result of the Program, men in PROGRESA who are not household heads are 5.5 percent more likely to abandon their communities relative to women. Household heads appear to prefer to stay in their community as a consequence of the public intervention.

First difference matching analysis shows that moving to a different community for studying purposes is more frequent among members between 7 and 12 years of age who once lived in beneficiary households. This result supports the analysis on living arrangements, and may reflect the need of adolescents to move out of their community in search of one that offers secondary schooling in order to maintain the Program's scholarship.

When in addition, we control for unobserved heterogeneity at the household level by using double difference matching estimators with household fixed effects, we corroborate an indirect effect of the conditional transfers on out migration decisions of female household members due to marriage reasons. This result strengthens the interpretation of the change in living arrangements with respect to household partition.

Matching analysis with household fixed effects shows that teenagers in beneficiary households are more likely to have moved to another state or even to the United States relative to other household members, as opposed to teenagers in the comparison group. The decision to migrate to the United States given the subsidy is greater for males than females.

The public intervention not always fosters the decision of beneficiary members to leave their community of origin. Results based on propensity score matching with household fixed effects show that the individuals in their prime-age are more likely to remain in their town of origin. The paper evidence has important implications not only for design of operational rules and targeting criteria of antipoverty programs which are spreading in developing countries, especially Latin America, but also for consideration in the strategies to follow in the evaluation of such programs.