The abuelita effect: The impact of grandparents on children's schooling and work in Latin America

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A demographic concept such as the dependency ratio implies that a rapidly aging population has negative implications for children. If cohorts of working-age people are small relative to cohorts of old people, then resources are diluted and not available for children.

However, micro-level analysis in the United States suggests that grandparents have a positive impact on children's well-being. A recent study by DeLeire and Kalil (2003) found that children who lived in single-mother households were significantly less likely to graduate from high school or to attend college. However, children from single-mother families who lived with at least one grandparent did as well as or better than children from married-parent families.

In this paper, we will examine the impact that living with grandparents has on school attendance and child labor of 14-to-16 year olds in Brazil, Ecuador, Guatemala, Nicaragua, and Panama. This work builds on an earlier article (Arends-Kuenning and Duryea 2006), in which we found that living in a single-mother household significantly reduced the probability that a child attended school by about 10 percentage points in Brazil, Ecuador, Nicaragua, and Panama. Children who lived in a single-mother household were also less likely to have completed grade 8 by age 14 to 16. Living in a single-mother household did not have a statistically significant effect on the probability that a child worked. We examine whether the negative impact of living in a single-mother household for children's education is mitigated when children live with their grandparents. We also examine whether living with grandparents has implications for child work and domestic work.

We will use the World Bank Living Standards Measurement Surveys (LSMS) for Brazil, Ecuador, Guatemala, Nicaragua, and Panama. These data sets are unique in Latin America because of the detailed information available to construct family composition variables. There are two sets of variables that can be used to identify grandparents and grandchildren. The first is the "relationship to head" variable, which identifies children who are the grandchildren of the head. The second set of variables consists of the mother's code and father's code variables. Therefore, if the mother of a child lives with her mother, we can identify the child's maternal grandmother. The variables allow us to distinguish among maternal and paternal grandparents, and between grandmothers and grandfathers.

DeLeire and Kalil (2003) note that the U.S. literature distinguishes between grandparents who are householders and grandparents who live with their children, who are the householders. With their data, they were not able to distinguish among these two

categories, nor were they able to examine the impact of living with more than one grandparent. With the LSMS data, we will be able to make all of these distinctions.

Similar to Thomas (1994), we can also investigate whether the presence of grandparents has different impacts by gender—for example, do grandfathers have a larger impact on the education of grandsons than granddaughters? Do paternal grandparents have different effects on children than maternal grandparents?

Whether grandparents live with their grandchildren is not a random event. We propose to follow an instrumental variable approach to first estimate equations predicting whether grandparents live with grandchildren. Then, using sample selection correction procedures, we can investigate the impact of the presence of grandparents on grandchildren. Possible instruments include whether the parents of the children's parents are living.

As in Arends-Kuenning and Duryea (2006), we will estimate the children's school attendance and child work equations jointly using bivariate probit models. We will attempt to do the estimations with sample selection correction. We will also look at school attainment at age 14 to 16 using OLS, and using the Heckman sample selection correction.

We expect to find that grandparents play an important role in children's lives, especially in Nicaragua, where 27 percent of children 14 to 16 do not live with their fathers.

References

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