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MEXICO'S PROGRESA: INNOVATIVE TARGETING, GENDER FOCUS AND IMPACT ON SOCIAL WELFARE

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PROGRESA (*Programa de Educación, Salud y Alimentación*) is an innovative Mexican program that provides cash transfers to poor rural households, on condition that their children attend school and their family visits local health centers regularly.

Targeted benefits and incentives to invest in health and education

Confronted with rising poverty after the economic crisis of 1995, the Mexican government progressively changed its poverty reduction strategy, ending universal tortilla subsidies and instead funding new investment in human capital through PROGRESA. The program gives cash grants to poor rural households, provided their children attend school for 85 percent of school days and the household, visit public health clinics and participate in educational workshops on health and nutrition.

Founded in 1997, PROGRESA grew to cover around 2.6 million families by the end of 1999, the equivalent of 40 percent of all rural families, and one in nine families nationally. Operating in 31 of the 32 states, in 50,000 localities and 2,000 municipalities, its 1999 budget of US\$777 million equaled 0.2 percent of Mexico's gross domestic product. The high level of funding for PROGRESA, and reduced funding for other programs, was based on a deliberate policy decision - to favor programs that are better targeted to the poor, which involve co-responsibility by beneficiaries, and which promote long-term behavioral change.

In education, PROGRESA provides bi-monthly cash transfers to households with children in school. The amounts rise with grade level, both to compensate for hypothetical lost earnings from child labor and to improve retention of children at the secondary level. Monthly transfers in January-June 1999 ranged from Mexican Pesos \$75 per child in the third grade of primary school to Mexican Pesos \$285 per child in the third year of secondary school. (At the time, one US dollar

Objectives of PROGRESA

- Improve the conditions of education, health and nutrition of poor families, particularly children and their mothers, by providing:
 - Sufficient quality services in the areas of education and health,
 - Monetary assistance;
 - Nutritional supplements.
- Integrate these actions so that educational achievement is not affected by poor health or malnutrition in children and young people, or because they carry out work that makes school attendance difficult
- Ensure that households have sufficient resources available so that their children can complete their basic education
- Encourage the responsibility and active participation of parents and all family members in improving the education, health and nutrition of children and young people
- Promote community participation and support for the actions of PROGRESA, so that educational and health services benefit all families in the localities where it operates, as well as uniting and promoting community efforts and initiatives in actions that are similar or complementary to the Program.

was worth approximately 10 Pesos). Evaluations in 1998 and 1999 showed that PROGRESA raised school enrollment rates, with children from participating households receiving on average 0.64 years of schooling more than others. The evidence suggests that most of the gains are obtained at the secondary level and it may, in fact, make sense to shift some of the resources spent in stipends from primary to secondary education. In health care, PROGRESA provides free basic health care to beneficiaries, prenatal care for pregnant women, growth monitoring of babies, nutritional supplements for children, monetary grants for purchasing food (Mexican Pesos \$115 per month in January-June 1999), and education on hygiene, nutrition and reproductive health. However, these benefits come with conditions, including regular visits to the health center, attendance at educational sessions, and helping to maintain schools and clinics. Evaluations in 1998 and 1999 found increased attendance at health clinics and reduced morbidity among beneficiary children aged 0 to 2 years.

The maximum total cash grant per household was Mexican Pesos \$695 per month in January-June 1999. On average, a typical beneficiary household received Mexican Pesos \$238, which represented 19.5 percent of their average monthly consumption levels.

A 3-Stage Targeting Mechanism

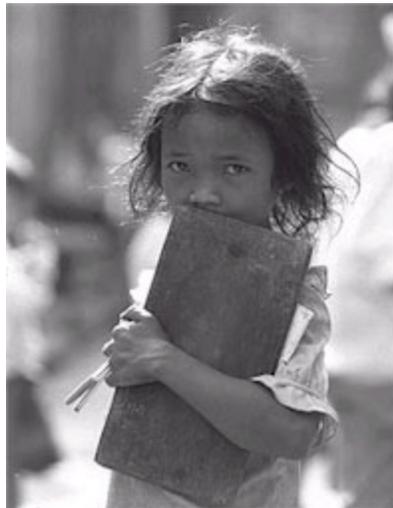
A key feature of PROGRESA is its three-stage targeting mechanism based on community and household characteristics. The first stage selects poor, rural localities to participate in the program. The second stage selects eligible families within participating localities. The third stage involves local meetings to incorporate eligible families and to check on the selection process, allowing for resolution of any disputed eligibility decisions.

In selecting localities, data from the 1990 census and the 1995 population count were used to create a “marginality index” for 105,749 localities. The index comprises 7 variables for each locality: share of illiterate adults, share of dwellings without water, share of dwellings without draining systems, share of dwellings without electricity, average number of occupants per room, share of dwellings with dirt floor and share of population working in the primary sector. The marginality index was “high” or “very high” for 76,098 localities. The localities ultimately selected as eligible had to have a primary school, a secondary school, and a clinic, and could not have an extremely small population or be so isolated that access was limited. These requirements left 48,501 eligible communities.

In the second stage of targeting, census data was used in a two-step process to classify households as poor or non-poor. The first step involved constructing a per capita income indicator by summing all individual incomes in a given

household and subtracting the income earned by children. This income was compared to a Standard Food Basket to create a binary variable for poor and non-poor status. In the second step, a statistical analysis (called discriminant analysis) identified the non-income variables that best distinguish poor and non-poor households. A second index, called a “discriminant score” was computed using these variables, and used to reclassify households as poor (and therefore eligible to participate in PROGRESA) or non-poor (ineligible). In the third stage, community meetings were held in each locality, for all eligible beneficiaries and local authorities. Each community was given the list of program participants, and it was still feasible at this stage to change the selection if it was believed that some poor families should be reclassified as non-poor or vice versa. However, the proportion of households whose selection was disputed was very small (0.1 percent of selected households).

PROGRESA’s targeting mechanism has been very effective, but of course it is not perfect. The third stage was intended to make use of communities’ knowledge about who are the most needy, and thus to improve the accuracy of targeting using econometric models. In practice, the third stage has not been used often. More thought may be needed on how community participation could enhance the effectiveness of targeting.



Gender Focus

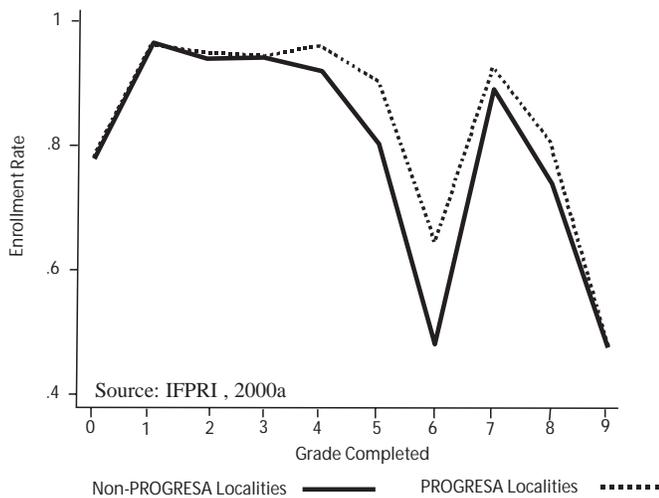
PROGRESA deals with gender in three ways: it gives the financial transfers to the female head of household of each participating household; the transfers associated with children’s school attendance are higher for girls than for boys at the secondary school level; and the program’s health care benefits focus on pregnant and lactating mothers.

Perhaps the most innovative feature of the program is how it channels financial transfers to women, potentially affecting intra-household decision-making. One study of the outcome of the program found that, in five out of eight decision-making categories, PROGRESA decreased the probability that husbands made decisions alone (i.e., without consulting wives). Also, over time, women became more likely to decide by themselves on the use of their extra income from PROGRESA. Results from focus groups showed the PROGRESA policy has promoted recognition of the contribution and role of women in caring for families. In addition, participation in PROGRESA-related group discussions and tasks has developed women’s awareness, knowledge, confidence and control over their activities and movement.

PROGRESA attempts to redress the lower levels of secondary school enrollment found among girls in Mexico (67 percent compared to 73 percent for boys) by making its

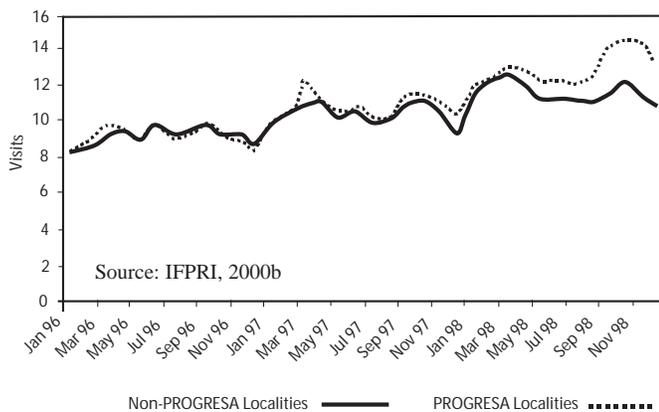
schooling-related transfer amounts rise faster for girls than for boys in secondary school. An evaluation found that PROGRESA caused increases in secondary school enrollment rates ranging from 11 to 14 percentage points for girls (see Figure 1), and for boys, from 5 to 8 percentage points. Whether or not the program's design changes negative attitudes about girls' education (that it is a waste after primary school, since they will marry anyway, or that girls should be kept home from school to lower the risk of their finding a boyfriend), it does seem to counteract the consequences of such attitudes. To the extent that greater educational attainment by girls can help improve their future status in households, there may be some long-term empowerment effects from PROGRESA.

Figure 1
Enrollment Rates among Girls from Poor Households, 1998



Thanks to PROGRESA, pre-natal care visits to health clinics by pregnant mothers have increased by 8 percent in the first trimester of pregnancy, which in turn decreased the percentage of first visits in the second and third trimester of pregnancy. There is evidence that this behavioral change has had a significant effect on the health of babies and pregnant mothers (see Figure 2).

Figure 2 - Daily visits to Public Health Clinics



While it is too early to detect behavior changes related to fertility among PROGRESA beneficiaries, the resulting improvement in women's education, in the care of pregnant women, and the health of infants will likely yield changes in birth spacing and reproductive health decisions in the medium to long-run.

Impact on Social Welfare

PROGRESA's impact on social welfare has been evaluated and compared with other social programs in Mexico, taking into account both immediate redistribution effects and long-term growth effects. A program's immediate benefits include the new income received by each individual beneficiary (or the value of goods or services received), and also the benefit of reduced inequality in society, due to the redistribution of income caused by the program. Changes in inequality are included because individuals assess their own welfare based both on their own absolute income level, and on how this income compares with that of others. The impact of a program or policy on social welfare can be broken down into two components, income growth (capturing benefits such as higher future wages due to a better education today), and redistribution.

Consider first the growth impact of PROGRESA, and especially its education component. The long term "income multiplier" effect of the investments in education can be approximated as follows. Consider a boy receiving stipends and other direct benefits for 7 years (grade 3 of primary school to grade 9 of secondary school), at a cost of 13,170 pesos in 1999. If administrative costs are 9 percent of outlays, total cost is 14,473 pesos (13,170/0.91). The boy may expect an increase in schooling of 0.64 year attributable to PROGRESA, with a return of 8 percent per additional year of schooling. Assuming the boy migrates to an urban area upon adulthood and earns an urban wage, and using a discount rate of 5 percent per year, the net present value of future earning gains is an estimated 102,000 pesos (taking into account the probability of working and the age profile of earnings.) This yields a multiplier of 7 (102,000/14,473). But some boys will remain in rural areas where wages are lower. The estimation also does not account for losses in child labor wages and other costs (e.g., private costs of schooling). For girls, the increase in years of schooling is larger, but labor force participation and thus future wages are lower, while program costs are larger (stipends are higher for girls in secondary school). All in all, a multiplier of 5 for boys and girls taken jointly may be realistic. In other words, an investment in program costs of one peso today is probably worth 5 pesos in future discounted benefits.

Consider next the redistributive impact of PROGRESA. This impact is measured using the program's Gini Income Elasticity (GIE), an estimate of how an increase in funding for the program changes the Gini index of inequality. A GIE of zero means that on average, the distribution of the

program benefits is not correlated with income. A negative (positive) GIE means that the program benefits tend to reach comparatively poorer (richer) households. Estimates based on household survey data suggest that the GIE for PROGRESA is -0.93 , which is lower, and thereby more redistributive than many other social programs in Mexico, including PROCAMPO (cash transfers to farmers for 15 years following the implementation of the NAFTA trade agreement), Liconsa (subsidized milk for poor families), and free tortilla (subsidized tortilla for poor families). Thus, apart from its growth effect (higher future wage earnings thanks to a better education), the program also contributes to redistribution today towards the poor who receive schooling stipends, resulting in large social welfare gains.

Taking both the growth impact (our “quick and dirty” multiplier of 5) and the redistributive impact of the program into account, the gain in social welfare of spending one peso on PROGRESA may be as large as 7.4 pesos (the growth impact times one minus the product of the GIE and the Gini index of inequality). In fact, the social welfare gains from PROGRESA appear to be much higher than the gains from several other programs.

Evaluation of PROGRESA

Beginning early 1998, the International Food Policy Research Institute (IFPRI) at the request of PROGRESA conducted an evaluation of its major rural anti-poverty program. This series of reports were presented to PROGRESA from November 1998 through November 2000. They are available for download in English and Spanish at this website:

http://www.ifpri.org/themes/progresas/progresas_report.htm

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Notes

This note is based on a paper by the authors entitled “The Impact of Public Transfers on Inequality and Social Welfare: Comparing Mexico’s PROGRESA to Other Government Programs”. The review section of this note and the background paper is based on evaluation reports by IFPRI, available on the web at www.ifpri.org. Benjamin Kahn provided editorial assistance for the preparation of this note.

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