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CONDITIONAL CASH TRANSFERS IN LATIN AMERICA

edited by
Michelle Adato & John Hoddinott
Conditional cash transfer programs (CCTs)—cash grants to poor families that are conditional on their participation in education, health, and nutrition services—have become a vital part of poverty reduction strategies in many countries, particularly in Latin America. In *Conditional Cash Transfers in Latin America*, the contributors analyze and synthesize evidence from case studies of CCTs in Brazil, Honduras, Mexico, and Nicaragua. The studies examine many aspects of CCTs, including the trends in development and political economy that fostered interest in them; their costs; their impacts on education, health, nutrition, and food consumption; and how CCT programs affect social relations shaped by gender, culture, and community. Throughout, the authors identify the strengths and weaknesses of CCTs and offer guidelines to those who design them.
Conditional Cash Transfers in Latin America
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Foreword

Conditional cash transfers (CCTs) are widely viewed as one of the most promising innovations to date for pursuing an integrated, synergistic strategy for improving the nutrition, health, and education of children. This book, drawing heavily on evaluation work conducted by the International Food Policy Research Institute (IFPRI), provides a rigorous assessment of both the impacts and the limitations of CCTs in Brazil, Honduras, Mexico, and Nicaragua—as well as important analyses of their history, political economy, economics, costs, and gender and community dynamics—to provide both a broad-based and a nuanced understanding of their pathways. This assessment arrives at a critical policy juncture for CCTs. While they continue to be adopted in new countries and regions, policymakers in international agencies and national governments are engaged in a critical assessment of their strengths and limitations and are developing new policy goals for the next generation of programs. The chapters contributed by current and former IFPRI staff members, and those by knowledgeable experts outside IFPRI, contribute to these discussions by reviewing what we have learned about CCTs in these countries and by examining the challenges that lie ahead. Strong multidisciplinary and mixed-method evaluation designs, as used in many of these IFPRI evaluations, will continue to be essential to meeting the goals of CCTs.

Shenggen Fan
Director General, IFPRI
Acknowledgments

Many people contributed to this book. The research was made possible by the interest and support of government officials and program staff—too many to name—in Brazil, Honduras, Mexico, and Nicaragua and the generosity of program beneficiaries, other community members, and key informants who gave their time for long and repeated surveys and interviews. Teams of researchers in each country, along with research assistants at the International Food Policy Research Institute and elsewhere, contributed to primary data collection and literature reviews; they are thanked by name in the individual chapters. Several anonymous peer reviewers provided many comments and suggestions that significantly improved the manuscript. We thank everyone who contributed to the content of this book, acknowledging that all opinions expressed are those of the respective chapter authors alone.

At the International Food Policy Research Institute, Lawrence Haddad supported the original idea for this book, and Marie Ruel continued that support through the book’s final stages. Jay Willis provided production assistance at various stages. John Whitehead shepherded the manuscript through the editorial and production processes.

We dedicate this book to Uday Mohan, who supported us through the early phases of the editorial process with diligence, grace, and humor, and whom we miss.
### Acronyms and Abbreviations

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<th>Description</th>
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<tbody>
<tr>
<td>2DIF</td>
<td>double-difference or difference-in-differences estimator</td>
</tr>
<tr>
<td>BA</td>
<td>Bolsa Alimentação</td>
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<tr>
<td>BADIF</td>
<td>before-after estimator</td>
</tr>
<tr>
<td>BAP</td>
<td>Bolsa Alimentação Program</td>
</tr>
<tr>
<td>BE</td>
<td>Bolsa Escola</td>
</tr>
<tr>
<td>BEP</td>
<td>Bolsa Escola Program</td>
</tr>
<tr>
<td>BFP</td>
<td>Bolsa Família Program</td>
</tr>
<tr>
<td>BMR</td>
<td>basal metabolic rate</td>
</tr>
<tr>
<td>CACM</td>
<td>Central American Common Market</td>
</tr>
<tr>
<td>CCS</td>
<td>Conselho de Controle Social</td>
</tr>
<tr>
<td>CCT</td>
<td>conditional cash transfer</td>
</tr>
<tr>
<td>CONASUPO</td>
<td>Compañía Nacional de Subsistencias Populares</td>
</tr>
<tr>
<td>COPLAMAR</td>
<td>Plan Nacional de Zonas Deprimidas y Grupos Marginados</td>
</tr>
<tr>
<td>CSDIF</td>
<td>cross-sectional difference estimator</td>
</tr>
<tr>
<td>CSP</td>
<td>Comunidade Solidária Program</td>
</tr>
<tr>
<td>CTMP</td>
<td>Comité Técnico para la Medición de la Pobreza</td>
</tr>
<tr>
<td>CTR</td>
<td>cost-transfer ratio</td>
</tr>
<tr>
<td>DF</td>
<td>Federal District</td>
</tr>
<tr>
<td>EDA</td>
<td>Esquema Diferenciado de Apoyos</td>
</tr>
<tr>
<td>ENCASEH</td>
<td>Encuesta de Características Socioeconómicas de los Hogares</td>
</tr>
<tr>
<td>ENCEL</td>
<td>Encuesta de Evaluación de los Hogares</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FHIS</td>
<td>Honduran Social Investment Fund</td>
</tr>
<tr>
<td>FISE</td>
<td>Emergency Social Investment Fund</td>
</tr>
<tr>
<td>FZP</td>
<td>Fome Zero Program or Zero Hunger Program</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>HIPC</td>
<td>highly indebted poor country</td>
</tr>
<tr>
<td>ICS</td>
<td>Incentive for Quality in Health</td>
</tr>
<tr>
<td>IDB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IFPRI</td>
<td>International Food Policy Research Institute</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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**Acronyms and Abbreviations**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>IMSS</td>
<td>Mexican Institute of Social Security</td>
</tr>
<tr>
<td>INSP</td>
<td>National Institute of Public Health</td>
</tr>
<tr>
<td>ISSSTE</td>
<td>Institute of Social Security for State Workers</td>
</tr>
<tr>
<td>LBA</td>
<td>Legião Brasileira de Assistência</td>
</tr>
<tr>
<td>LSMS</td>
<td>Living Standards Measurement Survey</td>
</tr>
<tr>
<td>MDS</td>
<td>Ministry of Social Development</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>NBEP</td>
<td>National Bolsa Escola Program</td>
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<tr>
<td>NGO</td>
<td>nongovernmental organization</td>
</tr>
<tr>
<td>PA</td>
<td>Alvorada Project</td>
</tr>
<tr>
<td>PAC</td>
<td>Programa de Ampliación de Cobertura</td>
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<tr>
<td>PAL</td>
<td>physical activity level</td>
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<tr>
<td>PETI</td>
<td>Programa de Erradicação do Trabalho Infantil</td>
</tr>
<tr>
<td>PGRM</td>
<td>Programa de Garantia de Renda Mínima</td>
</tr>
<tr>
<td>PIDER</td>
<td>Programa de Inversiones Públicas para el Desarrollo Rural</td>
</tr>
<tr>
<td>PRAF-I</td>
<td>Programa de Asignación Familiar (first phase)</td>
</tr>
<tr>
<td>PRAF-II</td>
<td>Programa de Asignación Familiar–Fase II</td>
</tr>
<tr>
<td>PRI</td>
<td>Partido Revolucionario Institucional</td>
</tr>
<tr>
<td>PROGRESA</td>
<td>Programa de Educación, Salud, y Alimentación</td>
</tr>
<tr>
<td>PRONASOL</td>
<td>Programa Nacional de Solidaridad</td>
</tr>
<tr>
<td>PT</td>
<td>Partido dos Trabalhadores</td>
</tr>
<tr>
<td>QIT</td>
<td>quality improvement team</td>
</tr>
<tr>
<td>RPS</td>
<td>Red de Protección Social</td>
</tr>
<tr>
<td>SAC</td>
<td>Sistema de Atención a Crisis</td>
</tr>
<tr>
<td>SAM</td>
<td>Sistema Alimentario Mexicano</td>
</tr>
<tr>
<td>SCC</td>
<td>social control council</td>
</tr>
<tr>
<td>SENARC</td>
<td>Secretaria Nacional de Renda de Cidadania</td>
</tr>
<tr>
<td>SGPRS</td>
<td>Strengthened Growth and Poverty Reduction Strategy</td>
</tr>
<tr>
<td>STI</td>
<td>sexually transmitted infection</td>
</tr>
<tr>
<td>UCT</td>
<td>unconditional cash transfer</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>USDA</td>
<td>U.S. Department of Agriculture</td>
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PART I

Introduction and Methods
1 Conditional Cash Transfer Programs: A "Magic Bullet"?

MICHELLE ADATO AND JOHN HODDINOTT

In the mid-1990s, the government of Mexico initiated a new social experiment with unforeseen global impact: it began the phase-out of decades-old food subsidy programs, gradually replacing them with a cash grant given only to the poorest families, and made this support conditional on their sending their children to school and participating in preventative healthcare services. Several processes had converged to usher in this development. The economic crisis of 1994–95 threatened to sharply increase poverty, a set of political crises spelled uncertainty, and a new administration under President Ernesto Zedillo contemplated responses. A debate unfolded on approaches to social protection, informed by new evidence on the role of health, nutrition, and education in poverty reduction and by political-economic trends toward maximizing efficiency in achieving this goal. What emerged from a complex policy process in 1997 was the Programa de Educación, Salud, y Alimentación, or PROGRESA.1 PROGRESA initially covered 300,000 households in 6,344 localities in 12 states, with a budget of US$60 million (Levy 2006).

Fast forward to 2009. PROGRESA is now called Oportunidades and covers more than 5 million households in 86,000 localities in all 31 states of Mexico, with a budget of US$3 billion. PROGRESA was not the first program to tie transfers to investments in human capital: Bangladesh had launched its Food for Education Program in 1993, Brazil and Mexico had developed small regional conditional cash transfer programs in 1995, and richer countries have long had bursary programs to enable children from poor families to attend post-secondary institutions. Brazil’s Bolsa Família program is currently the largest in the world, with 11 million families. But the Mexican program’s high profile, a combination of its scale, media attention, and strong early evaluation results, has had a particularly powerful demonstration effect.

By 2009 more than 20 countries had some form of conditional cash transfer (CCT) program, at pilot or full scale (Fiszbein and Schady 2009). Most such programs are in Latin America, but several are in Asia, and some countries in

1. See Levy (2006) and Yaschine and Orozco in this volume for descriptions of this process.
Africa are beginning to experiment with conditionality. In the United States, New York City launched a program modeled on Oportunidades, and other U.S. cities may be following suit. The World Bank and the Inter-American Development Bank have encouraged their adoption in many low- and middle-income countries. They are the subject of numerous academic papers and student theses—typing “conditional cash transfer” into Google calls up more than two million sites—and have received widespread attention from the media. In 2004, Nancy Birdsall, director of the Center for Global Development, was quoted in the *New York Times* calling CCTs “as close as you can come to a magic bullet in development. . . . Every decade or so, we see something that can really make a difference, and this is one of those things.”

Are such high hopes merited? What do the data show on the impact of CCT programs? Under what circumstances do they fall short of expectations, and what do they miss altogether? What have been the unanticipated social and economic impacts, positive and negative? What do we know about how to design them and what mistakes to avoid? How much do they cost? What questions should be asked as CCTs are taken into new economic, political, and socio-cultural contexts? What issues are important for future research? This is a critical time to step back and ask these questions. Just over 10 years have passed since PROGRESA delivered the first of the current generation of CCT programs. As they spread to new countries and new contexts, it is important to scrutinize them carefully.

This book offers such scrutiny, drawing extensively on primary data from evaluations of four CCT programs undertaken by the International Food Policy Research Institute (IFPRI) for the governments of four countries in Latin America: Bolsa Alimentação (BA) in Brazil, the Programa de Asignación Familiar—Fase II (PRAF-II) in Honduras, PROGRESA in Mexico, and Red de Protección Social (RPS) in Nicaragua. It seeks to make several significant contributions to the literature on CCTs. First, it contributes new evidence on a range of topics, some of which have been underrepresented in the literature on these programs. It includes, among other things, (1) an analysis of the trends that have led to the growing interest in CCTs, and the processes that explain their origins, through an analysis of the political economy of the evolution of CCT programs in Mexico, Brazil, Honduras, and Nicaragua (Chapters 1, 3, 4, and 5); (2) a detailed exposition of the how and why of the research designs and methods chosen for the four studies, representing state-of-the-art quantitative and qualitative methods that have influenced subsequent evaluations globally (Chapter 2); (3) a synthesis of quantitative evidence, much of which is not easily accessible, on the impact of these programs on education, health, nutrition, and food.

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consumption (Chapters 8, 9, 10, and 11); and (4) analysis of how CCT programs are mediated by, and in turn affect, social relations, particularly those related to gender, power, culture, and community (Chapters 12 and 13).

Second, the book provides a comprehensive synthesis across these programs. Existing syntheses of CCTs tend to fall into one of two categories: conceptual reviews such as that in Das, Do, and Ozler (2005) that focus on the general design and implementation principles or broad descriptive summaries of impacts such as that in Rawlings and Rubio (2005). The chapters that follow cover this territory in their discussion of design issues (see Chapter 6) and in reporting on the impacts of several programs on a large number of outcomes, but they expand on these with further nuance and interrogation and cover a broader range of impacts and issues, such as historical political economy (Chapters 3, 4, and 5), cost (Chapter 7), and mechanisms and outcomes with respect to women’s empowerment (Chapter 12) and community participation (Chapter 13). In addition, we have undertaken additional analyses to make our results more comparable across countries. Furthermore, our comparisons draw on our ability to exploit in-depth knowledge as to how and why these programs worked, or did not, drawing on multiyear evaluations conducted by IFPRI for the governments of Mexico, Brazil, Honduras, and Nicaragua. For the most part, these chapters cover results from all four countries. In some cases, data were not available, so the authors could not review particular impacts or issues (for example, cost data for Brazil); in other cases, no primary research had been undertaken in a particular country.

Third, the research in the book uses a mixture of different approaches to quantitative and qualitative methods, from socioeconomic panel surveys to operations research to long-term residential ethnographic fieldwork. The use of mixed methods enables us to understand the complex social dynamics that help to explain why the programs had the expected impacts or did not or why they had impacts that were unexpected. These social dynamics give us insights into, for example, why nutrition supplements seemed to be more effective in Mexico than they were in Nicaragua, why men do or do not feel threatened by a program giving cash to women, and why household targeting had unexpected impacts on social capital (Chapters 10, 12, and 13, respectively).

Some core messages that emerge from this comparative analysis are, first, that generally, CCTs “work” in the sense that they produce a range of positive impacts across these programs on schooling, health, nutrition, and food con-

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3. We do not provide an extensive synthesis of the impact of these programs on current poverty and consumption because such a review can already be found in Morley and Coady (2003). Instead, in this chapter we provide a brief summary of their findings.

4. Fiszbein and Schady (2009) also covers this territory but is more comprehensive in its coverage than these earlier reviews and includes discussion of policy and institutional issues, along with a large database detailing many aspects of, for example, program design and coverage.
consumption. But not always. In the four programs studied, there are a number of areas in which these programs did not achieve their objectives, most notably in the areas of health and the quality of learning. This reflects, in part, problems with quality of services, a theme that we return to at several points. Second, too little attention is paid to three important design and implementation issues: (1) appropriate prior consideration of program objectives and the mechanisms needed to achieve these, (2) clarity in two-way communications with beneficiaries, and (3) the quality of services, a theme that we return to at several points. Second, too little attention is paid to three important design and implementation issues: (1) appropriate prior consideration of program objectives and the mechanisms needed to achieve these, (2) clarity in two-way communications with beneficiaries, and (3) the quality of services, a theme that we return to at several points. Third, although concern is often voiced that CCTs are prohibitively expensive to operate, it is important to distinguish between the initial, fixed costs of establishing a program and these costs once they are spread out over the life of the program. Subject to a series of caveats, it appears that CCTs are not necessarily more expensive than a range of other types of social protection programs that have been implemented in Latin America. Fourth, responses to CCTs at the community, household, and individual levels are shaped by social relationships characterized by gender, power, culture, and community. CCTs in turn have an impact on these relationships. Program designs should be more attentive to these interactions, using opportunities to increase positive impacts and minimize negative ones.

The remainder of this chapter provides an introduction to the rest of the book. We briefly review the design and rationale of the CCT programs covered in the book, summarize the chapter findings, and comment on current debates and knowledge gaps that demand new research and innovation to inform policy and program design as CCTs evolve and move to new locations.

The Design of CCT Programs

CCT programs have three defining characteristics:

1. They are targeted interventions, normally using socioeconomic data to identify the poor regions and households that will receive benefits.
2. They provide cash to beneficiaries, usually paid to the mother or primary caregiver in a household. Cash transfers may be made as a lump sum or determined based on the number of children, with the amount varying by the children’s ages and genders; some programs also include in-kind transfers such as nutritional supplements and school supplies for children.
3. In order to receive these transfers, recipients must commit to undertaking certain actions. The most common is enrolling children in school and maintaining adequate attendance levels, often defined at around 85 percent. Other obligations include attending antenatal and postnatal healthcare appointments and seeing that preschool children receive vaccinations, growth monitoring, and regular check-ups. In addition to these common
Conditional Cash Transfer Programs

features, some programs require women to attend regular health and nutrition training workshops.

A fourth characteristic of some programs is a “supply-side” component involving the provision of resources to improve the supply and quality of the schools and healthcare facilities used by beneficiaries.\(^5\)

The main objectives of a CCT program are thus to reduce both short-term vulnerability and the long-term intergenerational transmission of poverty. Its logic assumes that household participation in these services is often based not only on “supply constraints”—that is, the availability of health and education infrastructure, supplies, and staff—but also on “demand” constraints caused by a lack of information, the need for children to work rather than study in order to contribute to household income, and, particularly with respect to education, a tendency to discriminate against girls. By providing information on the value and availability of services, a cash transfer that compensates for the loss of child labor, and a requirement to participate in program activities, a CCT program seeks to overcome a range of constraints on household investment in human capital.

In the following sections we describe three key design aspects of the programs studied in this book: how they were targeted, the levels and types of transfers they provided, and the conditionalities they imposed. Table 1.1 summarizes this discussion.

Targeting

All four CCT programs considered in this volume used a mix of targeting methods, an approach that Coady, Grosh, and Hoddinott (2004) have shown to be more effective in including the poor than using a single method. Specifically, all used some form of geographic targeting, although the precise manner in which this was carried out varied. In addition, Brazil, Mexico, and, to a more limited extent, Nicaragua also used some form of means testing. Coady, Grosh, and Hoddinott (2004) note that relative to other transfer programs, PROGRESA, PRAF-II, and RPS performed better than the median program in terms of delivering transfers to the poorest two quintiles of the population.

In Brazil’s BA, beneficiary households were selected in a two-stage process. In the first stage, the Ministry of Health (MOH) allocated program funding to each of the 5,561 municipalities in proportion to the fraction of infants (those aged 0–2 years) suffering from malnutrition, as measured by weight for age. Provided that a municipality agreed to fulfill the conditions re-

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5. A description of CCT programs currently in operation (as of late 2008) is found in Fiszbein and Schady (2009).
### TABLE 1.1 Descriptions of CCT programs in four focus countries

<table>
<thead>
<tr>
<th>CCT program</th>
<th>BA (Brazil)</th>
<th>PRAF-II (Honduras)</th>
<th>PROGRESA (Mexico)</th>
<th>RPS (Nicaragua)</th>
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</thead>
<tbody>
<tr>
<td><strong>Program overview</strong></td>
<td></td>
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<tr>
<td><strong>Budget size (US$)</strong></td>
<td>$150 million/year (2003)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>$50 million over 3 years (1999–2002)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>$777 million (1999)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>$11 million over 3 years (2000–2002)&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$998 million (2000)&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>$22 million over 3 years (expansion)&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Number of beneficiary households</strong></td>
<td>1.5 million (2003)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>48,000 (2002)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>300,000 (1997)&lt;sup&gt;e&lt;/sup&gt;</td>
<td>10,000 (2002)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Percentage of household expenditure represented by transfer</strong></td>
<td>8&lt;sup&gt;f&lt;/sup&gt;</td>
<td>4&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.6 million (2000)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>18&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Program components**

**Health**

- **Health benefits**
  - Transfer for pregnant and lactating women and children aged 6 months–6 years<sup>a</sup>
  - Health bonus for children under age 3 and pregnant women<sup>e</sup>
  - Grant for food consumption (food security, health, and nutrition transfer) for children under age 16, pregnant and lactating women, and adults<sup>e</sup>
  - Nutritional supplements for children aged 4–24 months, pregnant and lactating women, and children aged 2–5 years with signs of malnutrition<sup>e</sup>
  - Food security, health, and nutrition transfer for all households eligible for RPS
  - Iron supplements<sup>d</sup>

<sup>a</sup>Budget size for transfer only; includes States' contribution.  
<sup>b</sup>Includes the States' contribution.  
<sup>c</sup>The 1997 million included in the 1999–2002 budget.  
<sup>d</sup>Includes the States' contribution.  
<sup>e</sup>Includes the States' contribution.  
<sup>f</sup>Proportion of household expenditure represented by transfer only.
<table>
<thead>
<tr>
<th>Health conditions</th>
<th>Children: Complete vaccination schedule and participation in growth monitoring sessions</th>
<th>Children aged 0–5: Compliance with required health center visits</th>
<th>Children: Compliance with required health center visits Mothet's: Pre- and postnatal check-ups, attendance at nutrition and health education lectures (pláticas)</th>
<th>Children: Participation in growth monitoring sessions; up-to-date vaccinations for children under age 5 Pregnant women: Attendance at antenatal and postnatal check-ups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant and lactating women: Regular attendance at antenatal check-ups and health and nutrition education sessions</td>
<td>Pregnant women: Antenatal check-ups</td>
<td>Children: Compliance with monthly health center visits</td>
<td>Pregnant women: Antenatal check-ups Attendance at antenatal and postnatal check-ups</td>
<td>Pregnant women: Antenatal and postnatal check-ups</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education benefits</th>
<th>n.a.</th>
<th>Education transfer for school-age children (6–12 years old)</th>
<th>Primary school transfer: Varies by grade; also a transfer for school materials</th>
<th>Education transfer for children aged 7–13 who had not completed the fourth grade of primary school plus a transfer for the purchase of school supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education conditions</td>
<td>n.a.</td>
<td>School enrollment and 85% minimum attendance</td>
<td>School enrollment and 85% minimum attendance, monthly and annually</td>
<td>School enrollment, 85% minimum attendance, and delivery of the teacher transfer</td>
</tr>
</tbody>
</table>

**Sources:**
- Olinto, Morris, and Veiga (2004);
- Caldes, Coady, and Maluccio (2006);
- Skoufias (2005);
- Maluccio and Flores (2005);
- Rawlings and Rubio (2005);

**Note:**
- BA, Bolsa Alimentação; PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA, Programa de Educación, Salud, y Alimentación; RSP, Red de Protección Social; n.a., not applicable.
quired by the BA administration for participation in the program, the MOH then allocated the corresponding quota of grants to that municipality. In the second stage, the municipal government carried out the identification and registration of beneficiary households that would receive the allocated quota of grants (Olinto, Morris, and Veiga 2004). Only families with a reported per capita income of less than half the national minimum wage could be included (Morris et al. 2004).

PRAF-II used geographic targeting based on anthropometric data collected at schools. The height of all first graders in Honduras is measured annually. The 1997 school census data were converted into z-scores and averaged by municipality, and the program was implemented in the 80 poorest municipalities in the country (IFPRI 2000). Initially, the project proposal included the use of a proxy means test to select beneficiaries within these localities. However, analysis of existing data showed that 78 percent of households in these areas had consumption levels below the Honduran poverty line and that 87 percent were below the global US$2-a-day poverty line. As a result, means testing was abandoned and, at the household level, inclusion was based on demographic characteristics (IFPRI 2000), specifically, whether the household had children under 12 years of age (the age range covered by the program)—a form of categorical targeting (Morley and Coady 2003).

PROGRESA used geographic targeting to select localities using a “marginality index,” or community score, that was derived from a weighted combination of household characteristics. Among the localities deemed to be of “high” or “very high marginality,” the program selected localities with populations between 50 and 2,500. Other criteria were then applied, including geographic location, distance between localities, and, initially, the existence of health and school infrastructure. Skoufias, Davis, and de la Vega (2001) note that these additional criteria were needed, given the design of PROGRESA; but that meant that very poor, remote communities were excluded from the program. Within selected localities, a household census was conducted and per capita income calculated (excluding income from children under 18 years old). This is compared to a poverty line derived from Mexico’s “Standard Food Basket.” Discriminant analysis was then used to identify the characteristics that distinguished between poor and non-poor households for each geographic region. These variables were used to compute an index that represented the differences

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6. Specifically, data from the 1990 General Population and Housing Census and the 1995 Population and Housing Count were used. The marginality index is the first principal component of seven household characteristics: adult literacy, access to potable water, availability of drainage and electricity, average number of occupants per room, proportion of dwellings with a dirt floor, and share of the population working in the primary sector. These data were not available for approximately 28 percent of rural localities, and for these regression techniques were used to construct the marginality index (Skoufias, Davis, and de la Vega 2001; Skoufias 2005).
between “poor” and “non-poor” households, with those identified as poor selected as beneficiaries (Skoufias, Davis, and de la Vega 2001).  

Initially rural areas of all departments in Nicaragua were eligible for RPS. The government then selected two departments in the northern part of the central region of the country based on their rates of poverty (which were high), the trend in poverty (which was worsening), a qualitative assessment of their ability to implement the program, reasonably good physical access and communications, and good coverage of schools and health posts (Arcia 1999; Maluccio and Flores 2005). Within these two departments, six municipalities were selected based on their prior experience with a program designed to strengthen local administrative capacity. Finally, for the 59 comarcas (census units) found in these municipalities, census data were used to construct a weighted average of characteristics (family size, access to piped water and sewerage, literacy) known to be highly correlated with poverty. Comarcas with the worst scores were included in RPS (Maluccio and Flores 2005). Virtually all households in the poorest 42 localities were included, as were 80 percent of those in the remaining 17 comarcas.  

Transfer Levels and Their Impacts on Current Poverty  

All four programs provided a cash transfer to poor households. The size of this transfer varied, ranging from 4 percent of household consumption in Honduras to about 20 percent in Mexico. There were a number of factors that determined the size of these payments. Program budgets were an obvious consideration—for a given budget, there is a clear trade-off between the number of beneficiaries and the size of the payment made to each beneficiary. Some CCTs made a deliberate effort to calibrate their payments size to the costs of sending a child to school and an estimate of income that the household would forgo if a child went to school rather than worked. For example, as part of the design work for PRAF-II, the costs of matriculation fees, parent-school association fees, books, school supplies, uniforms, transport, and lunch money were estimated to cost a household 502 lempiras per child per year. In addition, survey data indicated that in rural areas of Honduras, children aged 6–12 (the target group for the schooling component of PRAF-II) contributed approximately 3.3 percent of total household labor. On average, children’s returns to labor were half of what an adult received, so this implied that children contributed just over

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7. A third stage was envisioned in which a community forum would have an opportunity to approve the selection or identify errors, but this was not generally put into practice; see Chapter 13 in this volume.  

8. In the 42 poorest localities, households owning a vehicle or with large landholdings (more than 14 hectares) were excluded. These accounted for 2 percent of the population. In the remaining localities, a proxy means test was used to restrict eligibility to the poorest 80 percent of households (Morley and Coady 2003).
1.5 percent of household income. To calculate the income forgone by having these children in school, this percentage was multiplied by the average number of eligible children per household and by average household per capita income, yielding a figure of 326 lempiras. Based on these calculations, the education-related component of PRAF-II transfers was set at 828 lempiras (approximately $58) per child per year (IFPRI 2000).

RPS used a slightly different approach. Like PRAF-II, it assessed the opportunity cost of children’s attending school as well as direct school costs. In addition, households received a “food security transfer”—the bono alimentario. This was calculated by estimating the difference between consumption levels of extremely poor households and the “extreme” poverty line. The food transfer was calculated such that it plus the school transfers covered two-thirds of the extreme poverty gap, that is, the difference between consumption levels and the extreme poverty line for households that were below this poverty line (Maluccio and Flores 2005).

The impact of these transfers on poverty depends on how successful targeting is and the size of the transfer level. Only two studies—of PROGRESA and RPS—assessed this impact. Skoufias (2005) reports that PROGRESA had a major impact in terms of poverty reduction: the head-count ratio fell by 17 percent and the severity of poverty by 46 percent (Skoufias 2005, 37). In Nicaragua, the RPS increased the average per capita expenditures by 18 percent and the average per capita expenditures of the poorest households by 30 percent (Maluccio and Flores 2005).

Conditionalities

As Table 1.1 shows, the conditions attached to these four programs were fairly similar, with the obvious exception of BA, which did not have the education component. In terms of health, pregnant mothers were required to attend antenatal check-ups. Children under the age of 5 were required to visit health clinics on a regular basis, with particular attention paid to growth monitoring (Brazil and Nicaragua) and timely vaccinations (Brazil and Nicaragua). School enrollment and regular attendance were conditions in PRAF-II, PROGRESA, and RPS.

The Rationale for CCT Programs: Why Is There So Much Interest?

The design of the CCTs considered in this book reflected several trends and growing “consensus”—still far from complete—around a number of issues in the field of development. These trends represent a blend of hard evidence, ethics, and ideology. The first is the increasing recognition that growth alone is not sufficient for poverty reduction and that there is a need for direct, targeted interventions to reduce poverty. “Safety net” programs were promoted in the 1980s as a way to ameliorate the assumed short-term negative affects of struc-
Conditional Cash Transfer Programs 13

Lultural adjustment on poor people. More recently, the term “social protection” has increasingly entered the vocabulary of governments and donors, reflecting the view that programs designed to reduce risks for the poor and vulnerable are options not just for rich countries but also for the majority of the world’s population that live in poor countries. Social protection involves a wide range of program options that enable individuals, families, and communities to reduce risk and/or Mitigate the impacts of stresses and shocks to their livelihoods, as well as programs that support people who suffer from chronic incapacities to secure basic subsistence (Adato, Ahmed, and Lund 2004). There are also several ways in which social protection can contribute to growth: by improving distribution and equity, by mitigating the effects of temporary shocks that may otherwise have long-term social and economic consequences, by avoiding the long-term costs posed by uninsured risks and unaddressed inequalities, and—with the strongest evidence base thus far—by investing in productivity and increasing human capital (Morley and Coady 2003; de la Brière and Rawlings 2006; Alderman and Hoddinott 2007).

Second, CCT programs reflect the view that a major cause of intergenerational transmission of poverty is low levels of education, health, and nutrition at an early age. The focus on antenatal, infant, and early childhood health and nutrition is based on the importance of these investments at these early ages: improving nutrition (particularly for children under 3 years of age) has been found to have positive effects on children’s health and their physical and cognitive development (Martorell 1995; Maluccio et al. 2006; Walker et al. 2007). More recent evidence indicates the positive longer-term effect of an early childhood nutrition intervention on the wages and income earnings of these future adults (Hoddinott et al. 2008). Behrman, Alderman, and Hoddinott (2004) provide a review of numerous studies establishing a relationship between nutrition and education, between education and wages, and between adult cognitive skills and earnings. Such research thus suggests synergies among nutrition, health, and education, which CCT programs exploit.

Third, the integration of human capital investments into social safety net or social protection programs represents another trend—with economic, political, and ideological strands—of moving away from programs that provide short-term relief in the form of a transfer of cash or food toward those with the potential to contribute to longer-term, more sustainable development processes, in this case, through human capital investments. Many approaches to social protection program design attempt to protect and build the assets of poor people (see Guhan 1994; Devereux and Sabates-Wheeler 2004; Adato and Bassett 2008). Programs that make insurance and credit accessible to poor people and provide incentives for human capital investments are also seen as filling in for “market failures” that perpetuate poverty (Ravallion 2003).

Fourth, and arguably related to the previous point above, CCTs can be seen as reflecting a move away from the idea of a rights-based entitlement to social
protection and toward the concept of obligation on the part of beneficiaries, obligations to work or participation in training or social services. This move is not unlike, and not entirely unrelated to, trends toward welfare-to-work programs in the United States and Europe. In the language of CCT programs, this is referred to as the “co-responsibility” of or a “social compact” between government and beneficiaries. In addition to the incentives to drive families’ investment in human capital, conditionality also has a political dimension—the political appeal of giving a “hand up” rather than a “handout”—that is seen as more likely to generate sustained popular support (Handa and Davis 2006). Furthermore, it is argued that beneficiaries themselves may prefer the “hand up” approach, with less stigma and more dignity attached to a program in which they have “co-responsibilities.”

Fifth, with respect to another economic-ideological trend, a program giving cash to households to spend as they choose in the market reflects a growing policy emphasis on the use of “market-oriented, demand-side interventions” for poverty reduction. Unlike food transfers, cash is seen as “efficient and flexible,” giving households spending discretion and avoiding price distortions and the creation of secondary markets (Rawlings and Rubio 2005, 29, 33).

Sixth, CCTs reflect the trend toward narrower poverty targeting on efficiency grounds. In the 1980s, against a global backdrop of economic downturns and neoliberal policy reforms that favored reductions in government expenditure, concerns about efficiency in social spending increased, and narrower poverty targeting responded to this. Yashchine (1999) explains how in Mexico, this meant a change from targeting the “poor” (the two poorest quintiles) to targeting the “extremely poor” (the poorest quintile). The intensified interest in targeting was also a response to evidence that many past social assistance programs in Latin America had been poorly targeted, reaching some who needed them but even more who did not (Levey 2006). Targeting is justified based mainly on two economic principles: first, that the social returns for a given level of transfers are higher for households at the lower end of the income distribution than for those at the higher end, so maximizing the welfare impact for a given population means targeting the poorest, and second, that targeting saves budgetary resources, giving more of these resources to the poorest, who need them most. The targeting approach of CCTs in particular evolved from experiences with earlier forms of social development and poverty alleviation programs, which pointed to the need for substantial design changes. One such experience was with group-based “demand-driven” programs such as those found in social funds. Although there are attractive aspects to these programs, typically they have not performed especially well with respect to targeting (Coady, Grosh, and Hoddinott 2004). This is in part because better-resourced people are more likely to be able to form or use groups to secure resources than are the most destitute. CCTs can be seen as a response whereby the poorest households are identified by the government and resources are given directly to them. Fur-
ther, central government largely controls the targeting process in CCTs, a design feature that in part responds to previous programs in which political patronage resulted in poorly targeted programs (Yaschine 1999).

Finally, CCT program design—particularly those aspects that designate women as beneficiaries and build their capacities and those of their daughters—reflected the growing attention to gender in development—how relations of gender and other sources of social difference structure people’s access to economic and social assets (Feldman 1992). In CCT programs, the designation of the mother in a household as the grant recipient was motivated in part by research showing that income controlled by women was more likely to translate into higher household food expenditures and calorie intake and into expenditures on health, education, and household services than was income controlled by men (Thomas 1990; Hoddinott and Haddad 1995; Haddad, Hoddinott, and Alderman 1997). This designation is often accompanied by a strong message that a woman should keep the cash, not give it to her male partner, deciding herself how to spend the money. Further, the programs emphasize health services for women, and some provide them with health and nutrition education. They also attempt to reduce long-term gender inequalities by promoting girls schooling, offering higher transfers for girls’ schooling than for boys’ and for secondary rather than primary school as a response to lower enrollment rates for girls than for boys at the secondary level. Finally, many programs have elected beneficiary representatives—almost always women—who serve as program liaisons, take on leadership roles vis-à-vis other beneficiaries, and organize collective activities for them. The impacts of these roles for women are taken up by Adato and Roopnaraine in Chapters 12 and 13 of this volume.

**Summary of Findings by Chapter**

In Chapter 2, John A. Maluccio, Michelle Adato, and Emmanuel Skoufias explain how quantitative and qualitative research is used for different, complementary purposes in CCT evaluations. Quantitative research enables the measurement of change in key program outcome indicators, for example, school attendance, grade repetition, transition from primary to secondary school, clinic attendance, vaccinations, or nutritional status, as well as other concerns, such as adult workforce participation or child labor. Qualitative methods unearth the social processes that mediate how a program is received, why the program is or is not effective in a particular context, and unanticipated outcomes. They are used to study issues that are harder to study through surveys, for example, changes in gender or community relationships, social interactions within institutions such as schools, clinics, or government departments, implications of sociocultural attributes for participation, and outcomes. The authors explain the research designs and methods used in the four CCT evaluations in Mexico, Nicaragua, Brazil, and Honduras. The quantitative program evaluations under-
take to establish the average effect of each program on a number of indicators at the household level. To do this they construct a counterfactual situation that establishes what outcomes would have looked like in the absence of the program. This is best done through an experimental design, randomly assigning otherwise similar households into and out of the program using statistical matching of observable characteristics. Ethical problems with respect to the use of control groups have not been a concern because it has not been possible, financially or logistically, to roll out a national program at one time, so communities awaiting a later wave of incorporation can serve as a control group in the meantime. In Honduras, Mexico, and Nicaragua (but not Brazil), randomized selection was done at the locality level rather than the household level because of logistics—the inability to implement the many program components in all localities at the outset—and ethics—the difficulty that would have been encountered if similar households had been included in and excluded from the program.

The qualitative research enabled an understanding of people's perceptions, the discovery of unanticipated issues, the reasons that impacts did or did not occur, and exploration of the significance of social, cultural, political, economic, and historical context. The qualitative studies complemented the survey findings by directly providing explanations for them, as well as sometimes confirming, sometimes contradicting, sometimes illuminating those findings. Research methods included household and community case studies in which field-workers lived in the study communities, developing the familiarity and rapport that enable access to nuanced and sensitive information, intensive interviewing, and participant observation. Other methods included focus groups and semi-structured interviews with beneficiaries, nonbeneficiaries, program and other government officials, health and education service providers, formal and informal local leaders, shopkeepers, and others.

Chapters 3–5 help us to understand the rise and development of CCTs from the perspectives of history and political economy in these four countries. In Chapter 3, Iliana Yaschine and Mónica Orozco provide a historical account of the changing antipoverty agenda in Mexico, explaining the emergence of PROGRESA and Oportunidades. They trace early efforts to promote economic development, social rights, security, services, and assistance for the wider population to the 1970s efforts to shift the focus to rural areas; to the 1980s shift toward structural adjustment and stabilization policies, including major reductions in social expenditure that led to sharp declines in health, nutrition, and education indicators; and eventually to political crisis. The late 1980s saw efforts to maintain a neoliberal economic agenda, but with some (mostly urban) subsidies, the strengthening of the education and health sectors, and a giant new poverty-targeted program. Although the program benefited many poor people, it was not very effective at reaching the poor or addressing the causes of poverty and was seen as manipulated by political interests. In 1994 entered President
Zedillo, who revived some aspects of the 1980s economic orthodoxy but also sought to guarantee the welfare of the extremely poor within a framework of efficiency. From this effort emerged PROGRESA. PROGRESA's principles and objectives coincided with the antipoverty policy orientations within the international agenda, but credit is given to Mexican government officials for their intellectual contributions to the program's design and for their political skill in generating the political support to undertake and sustain it.

Yaschine and Orozco then turn to the 2002 transition from PROGRESA to Oportunidades, whereby the CCT program was continued despite a change not only in government but also in political party. It changed names but maintained the same design while evolving to incorporate improved operational mechanisms; expand benefits to the high school level, urban areas, and the elderly; and incorporate new savings schemes for high school students and adults. The authors note that the program once again survived a government change in 2006 due to a political consensus attributed to the impartiality of its targeting method, the effectiveness of its operation, its positive evaluation results, and its public popularity. However, they remain concerned with the risk of the changing political climate and point to other remaining challenges: the articulation of Oportunidades with other programs; the improvement of the quality of the education and health services where those departments may have other priorities; the controversial issue of how to "graduate" beneficiaries from the program; and the ultimate dependence of long-term program success on the success of the government's broader economic and social policy strategy.

In Chapter 4, Valeria Pero and Dimitri Szerman trace the history and political economy of Brazil's Bolsa CCT programs, attributing their emergence to a political and institutional learning process that occurred over a 20-year period. By the late 1970s the belief that economic growth would by itself generate sustainable poverty reduction began to fade, and policymakers concentrated more efforts on the design of antipoverty policies. But increases in public social spending and the new poverty alleviation programs did not bring about reductions in poverty and inequality. The administration of Fernando Collor, who took office in 1990, faced hyperinflation and fiscal problems and implemented a tight macroeconomic policy, cutting social expenditures and antipoverty programs and ending almost all food and nutrition programs. With the percentage of the population considered poor reaching 43 percent in 1993, the Brazilian Congress took up the cause. Debates between policymakers and academics revived a discussion from the 1970s on the determinants of inequality in Brazil, recognizing the role of education in the intergenerational transmission of poverty. New policies that emerged included the targeting of families with school-age children and the setting of school enrollment and a minimum attendance rate as conditions. In this sense, the earliest CCT was born with Bolsa Escola. Pero and Szerman argue that although features of the program reflected certain trends in the international policy community, it was
largely an internal conception. They close by identifying as current concerns the small proportion of social spending given to CCTs and the need for greater attention to the causes of poverty not related to human capital deficits, supply-side interventions, and the monitoring of the conditionalities.

In Chapter 5, Charity Moore explores the political and institutional contexts in social protection programs, particularly CCTs, that were introduced in Honduras and Nicaragua. Both countries worked with the Inter-American Development Bank to begin CCT programs in the late 1990s. Although their programs were similar in nature, their outcomes were very different. Honduras had difficulty implementing its CCT, its impacts were limited, and a duality developed between the domestically directed and the externally financed program. Nicaragua ran an exemplary CCT that was well implemented and, as discussed in various chapters of this book, had immediate positive impacts. Its success was short lived, however, because the program was discontinued. Although the experiences of the CCTs were distinctive, the challenges to the programs can be traced to several issues at play in both countries. These include the need to cater to both external and internal stakeholders and the need to meet short-term loan requirements while establishing a program that is viable and successful beyond the life of the loan.

The analysis of the historical political economy underlying CCT programs is complemented by a consideration of the economic rationale for CCTs in Chapter 6 by Jere R. Behrman and Emmanuel Skoufias. The authors’ two building blocks are a model of human capital formation and a consideration of the efficiency and distributional motives for public interventions. Using these, they identify three economic rationales for CCTs: externalities, information asymmetries, and as a means of overcoming imperfections in credit markets. There are distributional rationales for CCTs as well, but close examination reveals that these are a little tricky. Although CCTs may contribute to policy goals of reducing inequality, their design is such that they are not necessarily superior to unconditional transfers. The authors argue that although there may be benefits in terms of intrahousehold distribution, these are dependent on the nature of constraints facing the household, the ability to transfer resources across generations and over time, and the extent of altruism within the household. Therefore, the economic case for CCTs is somewhat more nuanced and qualified than is often presented by CCT advocates. Behrman and Skoufias conclude that, especially if political economy and welfare stigma considerations are important, CCT programs may rank highly in policy hierarchies.

Any discussion of the potential benefits of CCTs raises the question: what are the costs? This challenge is taken up in Chapter 7 by Natália Caldés, David Coady, and John A. Maluccio, who analyze the cost-efficiency of three programs: PROGRESA, PRAF-II, and RPS. The authors focus on the ratio of non-

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9. Chapter 7 of this volume, by Caldés, Coady, and Maluccio, was first published in the journal *World Development* (Caldés, Coady, and Maluccio 2006).
transfer costs (that is, administrative costs) to transfers, or the "cost-transfer ratio" (CTR). In doing so, they note that it is misleading to make calculations using only raw accounting data, the approach normally taken. Features of a program and how the CTR is calculated are important in terms of how the program is used and interpreted. This is particularly true for new programs, which typically have a lot of initial fixed costs associated with their design and with setting up operations, on top of other equipment fixed costs. This examination of program costs, transfers, and CTRs includes an assessment of not only the costs required to transfer the money to the beneficiaries but also the costs of activities that may enhance the effectiveness of the program, such as targeting or monitoring of conditionality.

Caldes, Coady, and Maluccio (Table 7.4) calculate that by the third or fourth year of these programs' operation the CTRs for them were 0.041–0.079 for PROGRESA, 0.068–0.161 for PRAF-II, and 0.212–0.245 for the RPS pilot. The lower estimated CTRs for PROGRESA undoubtedly reflect, in part, economies of scale. For PROGRESA, even its upper-bound CTR of 0.047 compares well with the typical social welfare programs in Latin America, which is all the more impressive given the relative complexity of PROGRESA's design compared to the designs of more conventional social safety net programs. Furthermore, it is very low when compared to those of other Mexican programs. The RPS pilot, however, which has a lower-bound CTR equal to 0.212, appears to be relatively more expensive. Of course, RPS is much more complex than conventional poverty programs, and there is clear evidence that it has had large human capital impacts; much is being bought with these expenditures.

Chapters 8–11 examine the impacts of CCTs on education, health, nutrition, and food consumption. The analyses in these chapters are original and rigorous, comparing the results of key impact indicators mainly from the IFPRI CCT evaluations in Mexico, Nicaragua, Brazil, and Honduras.

In Chapter 8, Jere R. Behrman and Susan W. Parker review the extensive literature on the impact of PROGRESA/Oportunidades, PRAF-II, and RPS on education-related outcomes. There are significant positive impacts on a number of important schooling indicators, including enrollment, attendance, and grades of completed schooling. The various estimates for PROGRESA suggest an increase on the order of 9–12 percent in enrollment and an additional grade of schooling completed. RPS led to an enrollment increase of 12.8 percentage points and an increase in attendance of 20 percentage points. The figures for PRAF-II are more tentative, but these appear to show a small increase in enrollment and attendance. Nevertheless, there are two important caveats that the authors attach to these findings. First, they report the results of several simulation exercises suggesting that the enrollment impact of PROGRESA/Oportunidades could be increased by 25–40 percent through better targeting of the CCTs, in particular at the transition from primary to secondary school. Second, PROGRESA/Oportunidades has not demonstrated impacts on the cognitive achievements of the beneficiaries. This is an area for concern.
In Chapter 9, Saul S. Morris considers the effects of the four CCT programs on health. There are a number of positive outcomes reported. Analysis of health service use by young children shows a marked increase in Honduras and Brazil, and possibly in Nicaragua, although not in Mexico. This increase in use has been reflected in large increases in the coverage of growth monitoring in all the countries in which program impact has been evaluated. For infants, increased health service use was intended to increase immunization coverage. The challenge for the implementing countries was to increase childhood immunization series completion rates, because initiation rates were already very high, even in rural areas. Morris finds little evidence that these programs were able to meet this challenge. To some extent, this result may have just been specific to these cases. The best data come from the two countries—Brazil and Honduras—where there was high preexisting coverage and thus little scope for further improvement. In Nicaragua, data marred by “contamination” of the control area—huge increases in vaccination rates in the control as well as the intervention areas (an effect that can, in part, be attributed to the program)—may be hiding an improvement on quite a remarkable scale. With respect to childhood morbidity, data are available only for Honduras and Mexico, and only in Mexico are statistically significant effects observed. Finally, there is weak evidence that the CCT programs may have affected the uptake of antenatal care, but the benefits are undermined by the poor quality of the service. Overall, Morris sees CCT programs in Latin America as a case of a success that could have been. He argues that for older children, the cart was put before the horse: traditional growth-monitoring activities, widely discredited, were not reformed prior to introduction of the CCTs so that the incentive ensured compliance with a meaningless ritual rather than an effective health-enhancing action. Morris concludes by arguing that the greatest failing of these CCT programs is the neglect of the very period in which the need for behavior modification is the greatest: labor, delivery, and the immediate postpartum recovery phase. Only by concentrating resources on this period—including the improvement of birthing facilities so that deliveries take place in a clean, sterile environment with qualified personnel at hand—can maternal and infant mortality be affected.

Chapter 10, by John Hoddinott, examines the impact of these four programs on the nutritional status of preschool children. This assessment is tricky because the interventions were not the same in all countries, different evaluation studies used different methods, the time that elapsed between baseline and follow-up surveys differed, and the baseline extent of malnutrition (and therefore the scope for improvement) varied across countries. With these caveats in mind, a reasonable conclusion is that the outcomes are mixed. In two cases, PROGRESA in Mexico and RPS in Nicaragua, CCTs are associated with improvements in child height that are sizable in magnitude.

Frustratingly, conclusions about why these positive effects emerge can be only tentative. Although PROGRESA and RPS both demonstrate positive and
sizable impacts on child height, the pathways by which this result is attained remain unclear. The other two programs reviewed in this chapter, PRAF-II in Honduras and BA in Brazil, have no meaningful effects on preschool nutritional status, and only for PROGRESA do we observe an improvement in measures of iron status. These results carry with them implications found elsewhere in this book. First, programs need to clearly convey program requirements to beneficiaries. Program implementers also need to understand why people do not necessarily take certain actions, even when they know they are beneficial; the reluctance of Nicaraguan mothers to give the iron supplements to their children is a good example. Second, constraints on implementation capacity will severely limit program impact. As in studies reported in other chapters, difficulties in implementation may have made it more difficult for PRAF-II to achieve its objectives. Policymakers and program designers need to be aware of what can be achieved on the ground, realistic in their expectations, and vigilant about improvements that will be necessary to make the programs succeed.

In Chapter 11, John Hoddinott and Doris Wiesmann note that the analysis of the impact of PRAF-II, PROGRESA, and RPS on food consumption needs to be nuanced. Because the preexisting mean levels of access to food were above the minimum recommended levels and because the existing literature suggested that the income–calorie elasticity was small, a focus solely on the mean impact of these programs on caloric acquisition would be unlikely to be especially revealing. Given this fact, the focus of Chapter 11 is on assessing impact by disaggregating within the sample of beneficiaries and by considering the effect on diet quality as proxied by dietary diversity and calorie availability by food group. The authors find that exposure to these CCT programs raises caloric acquisition by households in the poorest tertiles by 5.6 percent in Mexico, 6.9 percent in Honduras, and 12.7 percent in Nicaragua. In all three countries, these programs led to improvements in the composition of the diet—in particular, the consumption of fruits, vegetables, and animal products—and again, this was most pronounced among the poorest households.

Chapters 12 and 13, by Michelle Adato and Terry Roopnaraine, turn to the less easily measured but influential impacts of the programs on social relations and the ways in which these relations shape program outcomes in Mexico and Nicaragua. Chapter 12 focuses on gender relations and women’s status. The authors argue that reducing gender inequalities is an objective in most CCT programs, although with different degrees of emphasis across programs, and they explain how the programs aim to achieve this in the short and long term, as well as the processes within the programs that were revealed to have impacts on women and gender relations. They explore the hypothesis that giving cash to women rather than men, and the program demands on women’s time, might lead to tensions with male partners. The research found that there were few cases of significant tensions, that more often the program reduced stress by providing more resources for the households, and that men and women were in
agreement that women make better use of the money. The fact that the programs have come to be seen as programs for women and children has established an association with the domestic sphere that reduces the challenge to men’s authority with respect to resource control. Women still adhere to cultural norms associated with securing the consent of spouses before making certain purchases, but the programs provided them with money they could spend independently for the most part.

The programs have strengthened the discourse on women’s equality, on the importance of their role in the family, and on the value of girls’ education, including among men in Nicaragua. Collective activities organized for beneficiaries, opportunities to meet and speak with each other, the increased time they spend outside of the household, and their experience of engaging with new institutions have increased women’s confidence and “sense of self in a wider context” (Rowlands 1998, 23), especially in some communities in Mexico. However, the CCT programs generally offered few opportunities for women to meet and talk, apart from meetings to discuss basic program requirements; the extent of these opportunities depended on the initiative of the promotora. The main exception was in the health and nutrition workshops (pláticas), which were an important source of education for women, although in both countries quality improvements were needed. Also, more effort was needed to ensure that beneficiaries understood the programs well and could thus be more active agents rather than passive participants in the process. Adato and Roopnaraine conclude that although all CCTs strengthen women’s status through the cash transfers and support for girls’ education, the nature and extent of these changes depend on the extent to which women’s empowerment is an explicit and implicit program objective, on how well the relevant design features are operationalized, and on the informal initiatives undertaken at the community level. They argue that there is considerable scope within existing CCT programs for strengthening the promotion of women’s empowerment beyond the health and education objectives; however, this will also depend on the sociocultural environment in which each CCT is located.

In Chapter 13, Adato and Roopnaraine make the point that CCT programs operate with a different logic than do community-driven development programs. CCTs involve a direct relationship between the state and the household and for strategic reasons often deliberately steer away from decentralization. But this chapter shows the ways in which communities mediate program reception regardless. Using research in Mexico and Nicaragua, the authors illustrate this point through a study of responses to household targeting, which was originally intended to include a role for community input but in practice usually did not. Targeting emerged as a significant source of discontent in an otherwise popular program when people did not understand the targeting criteria or felt they could not influence the outcome when it was perceived as incorrect or unfair.
This chapter also shows how the two programs provided opportunities for collective activities among beneficiaries, some organized around program requirements (collecting the cash, the pláticas) and others around related activities (information meetings turned into chances to share experiences and problems, community clean-up days, and food preparation demonstrations). When these occurred, they had substantial benefits for the participants. However, these activities were largely informal, depended mainly on the initiative of the promotora, and in practice were quite limited. The chapter reviews the role of community participation in other CCT programs, finding that they vary widely. Oportunidades has expanded the forms of participation since the days of PROGRESA through several mechanisms; the Bolsa programs in Brazil and PRAF-II in Honduras involved some local input into targeting; and PRAF-II also involved school-based parents’ organizations for improving school quality and quality improvement teams for the health services. Adato and Roopnaraine argue that, at a minimum, a CCT program should ensure that people have regular access to information and should provide a reliable and responsive system through which people can register concerns. Although they recognize that CCTs may not need participation to meet their basic human capital objectives, they suggest that exploring country-specific options for increasing participation could increase program effectiveness and have additional spin-off effects through increasing collective and individual agency.

Conclusion

The CCT programs considered in this book are not a magic bullet. But because their implementation was accompanied by serious efforts to evaluate their effectiveness, it is possible to draw careful and considered conclusions about them. This book reflects the culmination of over 10 years of rigorous research on CCT programs to determine their impacts, explain why these impacts did or did not occur, and derive the policy implications that can assist governments in making better decisions about whether to undertake CCTs, under what circumstances, and with what design. The book ends with a chapter assessing current debates and the landscape of CCTs’ new frontiers. It focuses on the issues not yet well understood or not yet adequately addressed—areas on which CCTs and their evaluations need to focus in order to increase the magnitude of their impacts. It also looks at how CCT designs are beginning to target new, more ambitious outcomes, offering a preview of CCTs’ second decade.

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Combining Quantitative and Qualitative Research Methods for Evaluation of Conditional Cash Transfer Programs in Latin America

JOHN A. MALUCCIO, MICHELLE ADATO, AND EMMANUEL SKOUFIAS

The innovation in approach to poverty reduction represented by conditional cash transfer (CCT) programs came partnered with another innovation—a practice of rigorous impact evaluation using randomized designs and econometric techniques. Often these evaluations include intensive qualitative research using sociological and anthropological methods. Program evaluation of this kind serves several functions: it determines with confidence the effectiveness of the program design and the efficiency of the investment, it identifies design and implementation issues requiring change or improvement, and it illuminates how people understand and react to the program, including, for example, why beneficiaries do or do not respond to program incentives. In revealing their findings publicly, these evaluations increase transparency, making the outcomes visible to policymakers, donors, and the general public and increasing accountability with respect to decisions made and funds spent. The evaluations of the four programs considered in this book used a variety of methods, including the collection of quantitative longitudinal household and individual data, randomized or quasi-randomized designs, focus groups, semi-structured interviews, and ethnographic community and household case studies. The purpose of this chapter is twofold: first, to describe in general terms the design of the evaluations of the Programa de Educacion, Salud, y Alimentación (PROGRESA) in Mexico, the Red de Protección Social (RPS) in Nicaragua, the Programa de Asignación Familiar–Fase II (PRAF-II) in Honduras, and Bolsa Alimentação (BA) in Brazil and, second, to outline how the data used in these evaluations were obtained. The discussion on qualitative

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1. In a study of Mexico’s PROGRESA/Oportunidades, Fox (2008, 271–272) notes the transparency and accountability value of evaluations but points to three features that reduce their effectiveness: (1) they are targeted upward to policymakers, not to beneficiaries; (2) they aggregate data at the national level, which does not enable the location of institutional and operational problems; and (3) they report quantitative impact data, with little qualitative evaluation of the causes of the problems identified.
methods refers only to PROGRESA and RPS, because qualitative studies were not part of the evaluations of PRAF-II and BA.  

**Quantitative Evaluation Designs**

*Overview*

Because many outcomes of interest that we measure change over time, there is often an association between changes over time in outcomes, \( Y \), and new program implementation, \( A \). Mere associations between these two variables, however, do not tell us if changes in \( Y \) occurred *because* of \( A \). At their core, quantitative evaluation designs are about establishing causality; the analyst, program manager, and policymaker want to know if implementing program \( A \) *caused* changes in outcome \( Y \) to occur.

The literature on evaluation design defines causality as the difference between outcomes for program beneficiaries and the counterfactual, that is, what the outcomes for the beneficiaries would have been without the program. The fundamental problem is that an individual, household, or geographic area cannot simultaneously undergo an intervention and not undergo it. Therefore, it is necessary to construct a measure of the counterfactual, that is, of what would have happened if the program had not been available. All quantitative evaluation strategies are designed to find a method for constructing proxy measures of these counterfactual outcomes from information on nonbeneficiaries. This requires controlling for the effects of confounding economic and contextual factors that may make program beneficiaries systematically different from nonbeneficiaries. Confounding factors that may influence the impacts of the program can include the relative poverty of beneficiaries in targeted programs, differences in household characteristics (for example, demographics, skill levels, or social networks), or exposure to economic shocks. Impact estimates that imperfectly control for these potential confounders suffer from "selection bias."

The preferred technique for removing selection bias is to conduct an experiment by randomly providing access to the program for the purpose of the evaluation. Heckman and Smith (1995) and Ravallion (2008) show how random assignment to treatment and control groups eliminates selection bias and leads to a rigorous evaluation. The intuition is that if access to the program is random for similarly eligible households, beneficiary or treatment status can-

---

2. Neither the government of Brazil nor that of Honduras requested qualitative research. In the case of Honduras, it was planned but did not take place due to staff unavailability.

3. Later we explain how this is managed without indefinitely withholding treatment from the control group. Essentially, due to logistical constraints, most programs have to be scaled up gradually; the localities to be reached later can be randomized.
not be correlated with the outcomes for reasons other than the program. As a result, any observed differences in outcomes over time between the treatment group and the control group must be a result of the program.

To see how this method works, consider Table 2.1. The columns distinguish between groups with and without the given program—that is, households that were receiving, say, PROGRESA benefits and those that were not. We denote those receiving (that is, with) the program Group T (for treatment) and those not receiving (that is, without) the program as Group C (for control). The rows distinguish between before (baseline) and after (follow-up) the program (denoted by subscripts 0 and 1). Consider one outcome of interest—school enrollment rates for children. Before the program, one would expect the average percentage enrolled to be similar for the two groups, so that the difference in enrollment rates, \( T_0 - C_0 \), would be close to zero. Once implementation of PROGRESA begins, however, one would expect differences between the groups, so \( T_1 - C_1 \) would not be equal to zero. The so-called double-difference estimate (described more formally later) is obtained by subtracting any pre-existing differences between the groups, \( T_0 - C_0 \), from the difference after the program has been implemented, \( T_1 - C_1 \). Under certain conditions (described later), this design takes into account any preexisting observable or unobservable differences between the two assigned groups, thus yielding average program effects.

The double-difference method also can be illustrated graphically, as in Figure 2.1. For an arbitrary indicator measured over time, it is assumed (for the graph) that both the treatment and control groups start at the same level (on the vertical axis). No change in the indicator over time would lead to the outcome depicted by point \( T_0 = C_0 \). If only the treatment group were being followed, one might then naively calculate the effect of the program as \( T_1 - T_0 \). As the control group makes clear, however, there was a trend over time that led to an improvement (in this example) of \( C_1 - C_0 \). Estimates ignoring this increase would overstate the effect of the program. Instead, a better estimate of the program effect is the double-difference estimate, \( (T_1 - C_1) - (T_0 - C_0) \); in this case, because \( T_0 = C_0 \), this is equivalent to the single-difference (or cross-sectional) estimate after program implementation. If, on the other hand, the

### Table 2.1 Calculation of the double-difference estimate of average program effect

<table>
<thead>
<tr>
<th>Survey round</th>
<th>Treatment group (Group T)</th>
<th>Control group (Group C)</th>
<th>Difference across groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up</td>
<td>( T_1 )</td>
<td>( C_1 )</td>
<td>( T_1 - C_1 )</td>
</tr>
<tr>
<td>Baseline</td>
<td>( T_0 )</td>
<td>( C_0 )</td>
<td>( T_0 - C_0 )</td>
</tr>
<tr>
<td>Difference across time</td>
<td>( T_1 - T_0 )</td>
<td>( C_1 - C_0 )</td>
<td>Double difference ( (T_1 - C_1) - (T_0 - C_0) )</td>
</tr>
</tbody>
</table>
trend line for the control group were declining, ignoring that change would tend to understate the program effect.\textsuperscript{4}

\textit{A Formal Treatment}

We now describe the evaluation problem more formally, making explicit how evaluations of the impacts of PROGRESA, RPS, and PRAF-II are undertaken. (The evaluation of BA was slightly different and is described later.) Let $Y_t$ be the outcome for a given individual or household in the treated state (that is, during or after participation in the program) and $Y_u$ be the outcome in the untreated state (that is, without participating in the program). Then the gain for any specific individual or household from being treated by the program is $D = Y_t - Y_u$. At any given time, however, a person is either in the treated state, in which case $Y_t$ is observed and $Y_u$ is not observed, or in the untreated state, in which case $Y_t$ is not observed and $Y_u$ is observed. Because missing either $Y_t$ or $Y_u$ precludes measurement of this gain for any specific individual or household, we must turn to a statistical approach that estimates the missing information (Heckman, LaLonde, and Smith 1999).

In the analysis we present in subsequent chapters, we are interested in determining whether a given program changed the mean value of various outcome variables among beneficiaries compared to what they would have experienced if they had not participated in the program. The answer is summarized by one parameter called the “mean direct effect of treatment on the treated,” a version of the average program effect developed in Table 2.1, represented in the fol-

\textsuperscript{4} Relaxing the assumption that the two groups start at identical points slightly complicates the graphical exposition, but the underlying logic and equations remain the same.
lowing by $D$. The mean (denoted by the expectation operator $E$) effect of treatment on the treated (denoted by $T = 1$) with characteristics $X$ may be expressed as

$$
E(D | T = 1, X) = E(Y_1 - Y_0 | T = 1, X) = E(Y_1 | T = 1, X) - E(Y_0 | T = 1, X).
$$

(2.1)

The term $E(Y_1 | T = 1, X)$ can be estimated from the experience of program participants. What is missing is the mean counterfactual term $E(Y_0 | T = 1, X)$, which summarizes what outcome participants would have experienced had they not participated in the program. The randomized designs employed in PROGRESA, RPS, and PRAF-II are one way of obtaining estimates of $E(Y_0 | T = 1, X)$. In particular, randomization allows information from individuals or households in the control group to be used to construct an estimate of what participants would have experienced had they not participated in the program. Indeed a randomized design, in conjunction with surveys before and after the intervention, offers a flexible approach to solving the evaluation problem, making it possible to implement the before-after estimator, the first-difference or (cross-sectional) estimator, and the double-difference estimator. We describe these in the following paragraphs using, as our example, the case of PROGRESA.

Within any survey round in PROGRESA before ($t = 0$) or after ($t = 1, 2, 3, \ldots$) the start of the program, the average value of the outcome indicator $Y$ within the total survey population, denoted by $[Y(t)]$, can be divided into four different components, depending on whether the relevant household is classified as eligible to receive PROGRESA benefits ($e = 1$ for eligible households, and $e = 0$ for noneligible households) and whether the household resides in a locality where PROGRESA is in operation (the treatment locality or $T = 1$) or not (the control locality or $T = 0$). Given this decomposition of the sample, one may then construct all of the estimators commonly used in program evaluation. These include the following:

1. The before-after estimator (BADIF), which compares differences in the means of the outcome variable $Y$ within the treatment group during the periods after ($t = 1, 2, 3, \ldots$) and before ($t = 0$) the implementation of the program, that is,

$$
BADIF = E(Y(t) | T = 1, e = 1, X) - E(Y(0) | T = 1, e = 1, X)
$$

for $t = 1, 2, 3, \ldots$. (2.2)

2. The first-difference or cross-sectional difference estimator (CSDIF), which compares differences in the means of the outcome variable $Y$ between
Combining Quantitative and Qualitative Research

3. The double-difference or difference-in-differences estimator \(2DIF\), which measures program impact by comparing differences in the means of the outcome between treatment and control groups in postimplementation survey rounds with the differences in the means of the outcome in the pre-program round; see Table 2.1. Formally,

\[
2DIF = [E(Y(t) | T = 1, e = 1, X) - E(Y(t) | T = 0, e = 1, X)] - [E(Y(0) | T = 1, e = 1, X) - E(Y(0) | T = 0, e = 1, X)] \quad \text{for } t = 1, 2, 3, \ldots \quad (2.4)
\]

The estimator \(2DIF\), in comparison to either \(BADIF\) or \(CSDIF\), is usually the preferred estimator for program evaluation. For example, one major advantage of \(2DIF\) over \(CSDIF\) in evaluating the mean direct effect of treatment on the treated is that the former controls for any preexisting differences in the value of \(Y\) between households in treatment and control groups. Measuring program impact based exclusively on postprogram differences in the mean level of the outcome indicator between treatment and control groups, as done by \(CSDIF\), may provide misleading conclusions about program impact if there are pre-program differences in the levels of \(Y\).

Ultimately, the extent to which \(CSDIF\) may lead to biased results critically depends on whether the random selection of treatment and control localities led to pre-program differences. Pure and proper randomization of the selection of localities, when there are a large number of them, should ensure that there are no large pre-program differences between treatment and control localities in the outcome variable of interest (or other variables), as illustrated in Figure 2.1; that is,

\[
[E(Y(0) | T = 1, e = 1, X)] = [E(Y(0) | T = 0, e = 1, X)]. \quad (2.5)
\]

Satisfaction of condition (2.5) ensures that \(CSDIF \approx 2DIF\). In other words, successful randomization implies that focusing exclusively on postprogram comparisons between treatment and controls yields unbiased conclusions about the impact of the program.

The Quantitative Designs and Methods Used to Evaluate Four CCT Programs

The Quantitative Evaluation of Mexico’s PROGRESA

The core of the evaluation design of PROGRESA was the use of baseline and follow-up surveys married to a randomized implementation of the program,
thus allowing a direct application of the double-difference methodology described earlier. The ability of PROGRESA to implement such an evaluation methodology hinged not on technical factors (such as how, in practice, one randomizes) but rather on a crucial operational feature of the program and a political economy consideration.

Because PROGRESA aimed to cover millions of households and this was not possible all at once, it was necessary to expand it over time. The rollout was determined by a planned strategy that involved the annual budget allocations and logistical complexities associated with the operation of the program in very small and remote rural communities (such as verification that the localities to be covered by the program had the necessary educational and health facilities). Consequently, the expansion of the program took place in phases. In the first phase, which began in August 1997, 140,544 households in 3,369 localities were incorporated. Phase 2 of the program began in November 1997, when a further 160,161 households in 2,988 localities were incorporated. The largest expansion occurred in 1998 (that is, in Phases 3–6), when nearly 1.63 million families in 43,485 localities were incorporated. By Phase 11, the final phase of PROGRESA, which began in early 2000, the program included nearly 2.6 million families in 72,345 localities in all 31 states.

The experimental design used for the evaluation of PROGRESA took advantage of this sequential expansion of the program, sampling households residing in 506 localities in the states of Guerrero, Hidalgo, Michoacan, Puebla, Querétaro, San Luis Potosi, and Veracruz. Of the 506 localities, 320 were assigned to the treatment group (T = 1) and 186 were assigned as controls (T = 0) (Hernandez, Gómez de León, and Vasquez 1999; Fernald, Gertler, and Neufeld 2008). As originally planned, the localities in the control group started receiving PROGRESA benefits by December 2000.

There is a critical difference between making the best use of the constraints involved in the coverage of households (as in PROGRESA’s case) and the deliberate withholding of benefits for the purposes of the evaluation. The annual fiscal constraints and logistical complexities associated with the operation of an enormous social program such as PROGRESA in very small and remote rural communities typically do not permit the program to cover all of the eligible households at once. Instead, households have to be covered by the program in phases, as was done in the case of PROGRESA. Rather than purposefully depriving households of program benefits, experimental or quasi-experimental designs often take advantage of the sequential expansion of the program to se-

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6. This section draws heavily on Skoufias (2005). The PROGRESA evaluation was conducted by IFPRI and led by Emmanuel Skoufias. The main members of the research team were Michelle Adato, Jere R. Behrman, Bénédicte de la Brière, David Coady, Benjamin Davis, Paul Gertler, Sudhanshu Handa, John Hoddinott, Dubravka Mindek, Susan Parker, Agnes Quisumbing, Marie Ruel, and T. Paul Schultz.
lect a comparable or control group from the set of households that are eligible for the program but have yet to be covered by the program.

The political economy consideration underlying the evaluation methodology was the high-level political support that PROGRESA enjoyed, described both in Levy (2006) and in Yaschine and Orozco in this volume, which extended to the evaluation design. Since 1998 the federal budget had specific provisions for impact and operations evaluations (Levy 2006, 103). There was a political necessity to show that the program was having an impact if it was to continue, and the evaluation was instrumental to this end.7

The first quantitative survey, called the ENCASEH (Encuesta de Características Socioeconómicas de los Hogares), was conducted in November 1997. It was a census of all 506 localities comprising over 24,000 households (see Table 2.2) designed to obtain information on the socioeconomic conditions of rural Mexican households to determine which of them would be eligible for benefits. Based on PROGRESA's beneficiary selection methods (see Chapter 1 in this volume), households were then classified as eligible or noneligible for participation in the program in both treatment and control communities. In the evaluation sample, on average, 78 percent of the households were classified as eligible for program benefits. The first evaluation survey (Encuesta de Evaluación de los Hogares or ENCEL) took place in March 1998 before any payments were made. In combination, these two surveys provided the baseline observations available for all households before the initiation of the distribution of cash benefits in the treatment villages. They also provided information on the extent to which the selection of localities into treatment and control groups can be considered random (Behrman and Todd 1999).

The remaining evaluation surveys were conducted after beneficiary households started receiving benefits from PROGRESA. One round of surveys took place in October and November 1998, which was well after most households had received some benefits from PROGRESA. The next two waves took place in June 1999 and November 1999, with this last survey comprising approximately 92 percent of households interviewed in the November 1997 ENCASEH. A number of core questions about the demographic composition of households and their socioeconomic status were applied in each round of the survey. There were also specific questionnaires collecting information about family backgrounds, assets brought to marriage, schooling indicators, health status and health service utilization, parental attitudes and aspirations re-

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7. There were some instances in which communities in control localities complained about their temporary exclusion from the program, and this led political figures to lobby for their inclusion. PROGRESA staff could resist these demands in part because of the high-level political support for the evaluation. This would imply that there was some "deliberate withholding" of the program related to the evaluation; however, the capacity constraints on the pace of rollout meant that inclusion of unplanned localities would in theory have meant that others would have had to be excluded.
<table>
<thead>
<tr>
<th>PROGRESA</th>
<th>Noneligible ($E = 0$)</th>
<th>Eligible ($E = 1$)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control ($T = 0$)</td>
<td>Treatment ($T = 1$)</td>
<td>Control ($T = 0$)</td>
<td>Treatment ($T = 1$)</td>
</tr>
<tr>
<td>ENCASEH November 1997</td>
<td>2,048</td>
<td>3,233</td>
<td>7,173</td>
<td>11,623</td>
</tr>
<tr>
<td>ENCEL March 1998</td>
<td>1,925</td>
<td>3,048</td>
<td>6,567</td>
<td>10,549</td>
</tr>
<tr>
<td>ENCEL November 1998</td>
<td>2,058</td>
<td>3,272</td>
<td>7,158</td>
<td>11,585</td>
</tr>
<tr>
<td>ENCEL June 1999</td>
<td>1,837</td>
<td>2,932</td>
<td>6,655</td>
<td>10,682</td>
</tr>
<tr>
<td>ENCEL November 1999</td>
<td>1,921</td>
<td>2,902</td>
<td>6,818</td>
<td>10,475</td>
</tr>
<tr>
<td>RPS</td>
<td>Control</td>
<td>Treatment</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>August–September 2000</td>
<td></td>
<td>771</td>
<td>810</td>
<td>1,581</td>
</tr>
<tr>
<td>October 2001</td>
<td></td>
<td>687</td>
<td>766</td>
<td>1,453</td>
</tr>
<tr>
<td>October 2002</td>
<td></td>
<td>675</td>
<td>722</td>
<td>1,397</td>
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<tr>
<td>PRAF-II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August–December 2000</td>
<td>1,536</td>
<td>1,550</td>
<td>772</td>
<td>1,550</td>
</tr>
<tr>
<td>May–October 2002</td>
<td>1,463</td>
<td>1,447</td>
<td>711</td>
<td>1,445</td>
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<td>BA</td>
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<td></td>
</tr>
<tr>
<td>Households</td>
<td>696</td>
<td>309</td>
<td>443</td>
<td>218</td>
</tr>
</tbody>
</table>

**Sources:** PROGRESA: Skoufias (2005, Table 3.2); RPS: Maluccio and Flores (2005, Table 3.2); PRAF-II: Morris et al. (2004a, figure on trial flow); BA: Olinto, Morris, and Veiga (2004).

**Note:** BA, Bolsa Alimentação; ENCASEH, Encuesta de Características Socioeconómicas de los Hogares, the first quantitative survey of PROGRESA; ENCEL, Encuesta de Evaluación de los Hogares, the first evaluation survey of PROGRESA; PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA, Programa de Educación, Salud, y Alimentación; RPS, Red de Protección Social.

Regarding children's schooling, consumption of food and nonfood items, the time allocation of household members to various activities, and self-employment activities.

These quantitative household surveys were supplemented by school and clinic surveys, community questionnaires, data on student achievement test scores, and other school and clinic administrative data. Finally, the ENCEL surveys were not designed to evaluate the nutritional component of the program. For the purposes of evaluating the nutritional component of PROGRESA, separate surveys of the same families were carried out by the National Institute of Public Health (INSIP) in Cuernavaca. These surveys included the collection of anthropometric measures (weight and height) of children and the collection
Combining Quantitative and Qualitative Research

of blood samples for tests for anemia and other deficiencies (see Hoddinott in this volume).

For most of the key outcome indicators of interest, such as school enrollment and attendance, child nutrition, incidence of illness, and labor force participation, data are available from before and after the start of the program, and these permit implementation of the 2DIF. For some indicators, however, such as household consumption, caloric availability, and individual time allocation, observations are available only for one or more rounds after the start of the program. For these outcome indicators, then, CSDIF provides the best available option for evaluating PROGRESA.

The Quantitative Evaluation of Nicaragua’s RPS

The core of the quantitative evaluation of RPS was also a randomized, community-based intervention, with measurements taken before and after the program was started in both treatment and control communities.8 As described in Chapter 1 in this volume, the government of Nicaragua selected six municipalities in two departments in the northern part of the central region of the country for RPS. Virtually all households in the poorest 42 rural comarcas (census areas) found in these municipalities ultimately were included in the program, as were 80 percent of those in the remaining 17 rural comarcas. One-half of the 42 poorest comarcas were randomly selected into the program, so there were 21 comarcas in the intervention group and 21 distinct comarcas in the control group.

The random selection was public and transparent, carried out at an event at which representatives from the comarcas, the government of Nicaragua, the Inter-American Development Bank (IADB), the International Food Policy Research Institute (IFPRI), and the media were present. The 42 comarcas were ordered by their marginality index scores and stratified into seven groups of six comarcas each. Within each stratum, randomization was achieved by blindly drawing one of six balls without replacement (starting with three blue balls for intervention and three white for control) from a box after the name of each comarca was called out. Three comarcas from each group were randomly selected for inclusion in the program, while the other three were selected as controls. Including a control group from which treatment was initially withheld was not seen as unethical because (1) the effectiveness of the pilot intervention was unknown and (2) it was not clear that there was sufficient capacity to implement the intervention in all the areas at once.

The randomized evaluation was initially designed to last for one year—that is, the control group was meant to be a control for only one year, after which

8. This section draws on Maluccio and Flores (2005). The RPS evaluation was conducted by IFPRI and led by John Maluccio. The main members of the research team were Michelle Adato, Rafael Flores, and Terry Roopnaraine.
it was expected there would be capacity to implement the intervention in the control localities. Due to delays in funding for RPS as a result of a governmental audit unrelated to the program, however, incorporation of households in the control comarcas into the program was postponed until 2003, extending the length of the randomized treatment–control evaluation by more than a year.

The data collected for the quantitative evaluation included data from an annual household panel survey implemented in both intervention and control areas of RPS before the start of the program, in 2000, and after the program began operations, in 2001 and 2002. This enabled the use of the 2DIF described earlier.

The household survey sample was a stratified (at the comarca level) random sample of all 42 comarcas described earlier using the RPS population census collected in May 2000 as the sample frame. Forty-two households were randomly selected in each of the 42 comarcas, yielding an initial target sample of 1,764 households. The first wave of fieldwork was carried out in late August and early September 2000, without replacement—that is, when it was not possible to interview a selected household, another household was not substituted. In this baseline survey, 90 percent (1,581) of the stratified random sample was interviewed in the first round, with a slightly lower rate of completion in control comarcas. For the follow-up survey in October 2001, the target sample was limited to these 1,581 first-round interviews, and 1,453 (91.9 percent) were reinterviewed. In October 2002, just over 88 percent of target households were reinterviewed.

Because the same target sample was used in 2002 as in 2001, regardless of whether the household was interviewed in 2001, some households that were not interviewed in 2001 were successfully interviewed in 2002. The sample for which there is a complete set of observations (in each of the three survey rounds) is 1,359. These form the balanced panel sample used in the estimations throughout much of this book. The percentages interviewed in the intervention and control groups were similar, indicating that at least the level of attrition was not significantly different between them.

A comprehensive household questionnaire based on the 1998 Nicaraguan Living Standards Measurement Survey (LSMS) was used (World Bank 2001). The LSMS questionnaire was expanded in some areas (for example, child health and education) to ensure that all the program indicators were captured but cut in other areas (for example, income from labor and other sources) to minimize respondent burden and ensure the collection of high-quality data in a single interview. An anthropometric module for children under age 5 was implemented in 2000 and 2002, although not in 2001. In this module, height, weight, and hemoglobin (using portable Hemocue machines) were measured following standard international procedures.

In the RPS analyses presented in this book, we condition not on the household-level decision to participate in RPS but only on whether the program was
available in the household’s *comarca*, an estimate of the intent-to-treat effect, that is, the effect of “offering” the program to beneficiaries but not conditioning on whether they took it up (that is, $T = 1$ from earlier). The estimator is not subject to selection biases associated with the decision to participate in the program because it relies only on the randomized design. About 10 percent of the households in the intervention areas were either excluded by RPS or chose not to participate in the program. Survey sample households in this subgroup were not program beneficiaries, so basing estimates on the sample that includes them “dilutes” the estimated effects of the program. The intent-to-treat methodology used is thus conservative relative to measuring the effect of the treatment on the treated.

*The Quantitative Evaluation of Honduras’ PRAF-II*

The evaluation design for PRAF-II shared a number of important similarities with that for PROGRESA and RPS, in particular the random assignment of treatment, with randomization occurring at the geographic level and the baseline and follow-up household surveys carried out to enable the use of 2DIF estimators. PRAF-II also had an important additional feature, the randomization of multiple types of treatment, separating out demand- and supply-side components.

As discussed in Chapter 1 in this volume, improvements to the supply of public services needed to increase levels of human capital (for example, the availability and quality of schools and health posts) are often a component of CCT programs but are also often implemented in an ad hoc fashion. An important concern is whether CCT programs get the balance right between incentives on the demand side and improvements on the supply side. The evaluation design of PRAF-II was devised in such a way as to be able to address these issues directly. Specifically, households were allocated randomly to one of four treatment groups: Group 1, cash transfers to households only; Group 2, supply-side improvements plus cash transfers to households; Group 3, supply-side improvements only; and Group 4, no benefits (that is, the control group). Implementation of this model was complicated, however, because the supply-side aspect of PRAF-II had two components: (1) improvements to schools (funds for strengthening parent–teacher associations; books, globes, and other school supplies; and per diems for teacher training) worth, on average, US$4,000 per school and (2) improvements to health clinics (equipment, training, funds for growth monitoring) worth, on average, US$6,000 per clinic. Because of this

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9. Unlike in the case of PROGRESA, household-level eligibility criteria excluded only a few households from RPS. In terms of the evaluation frame presented earlier, this means that there is only a treatment variable $T$, and not an eligibility variable $e$, to consider.

10. This section draws heavily on IFPRI (2002). The PRAF-II evaluation was conducted by IFPRI and led by Rafael Flores. The main members of the research team were Calogero Carletto, Saul Morris, and Pedro Olinto.
complication, the unit of assignment had to be a geographic entity that would permit the bundling of schools and clinics. For this reason, the program was randomized at the municipality level.

The program was targeted to 80 municipalities in Honduras, those that displayed the highest rates of stunting observed in the VII National Census of the height of first-graders (MNPTSG 2002). The different interventions were allocated equally across the three treatment arms and the control group (20 municipalities per arm), but for cost reasons, only 10 supply-side only municipalities (Group 3) were included in the household surveys. As in the case of RPS, the randomization process was transparent and was carried out at an event attended by representatives from the Ministry of Education, the General Office of Administrative Oversight, the Commissioner of Human Rights, the Honduran Association of Municipalities, IFPRI, the IADB, and PRAF-II. The 70 municipalities were divided into five groups of 14 based on their ranking in the height census of first graders. Fourteen small balls, each representing a treatment, were placed in a box. In each set of 14 there were 4 marked with the number 1, referring to Group 1, which would receive cash transfers only; 4 marked with the number 2; 4 with the number 3; and 2 with the number 4. When the name of the municipality to be allocated a treatment was called, a ball was drawn, determining to which group the municipality would be assigned.

The original survey plan entailed collecting baseline data for 5,600 households in August and September 2000. However, there was insufficient local survey capacity to collect data at this scale so quickly. As a result, it was decided that baseline data collection would be extended until December 2000. After making that change, however, the president of Honduras announced that the introduction of the program was to be accelerated and would begin on October 6, 2000, instead of in January 2001. As a result, the fieldwork was rearranged to ensure that all households that were to receive transfers (Groups 1 and 2) were interviewed prior to program commencement. Groups 3 and 4 were interviewed subsequently. In the follow-up survey in 2002, interviews took place between May and October, covering 94 percent of the 5,408 households interviewed in 2000, and attrition did not vary by treatment status. As a result, analysis using these data needs to take into account possible differences in the timing of data collection for the different groups, such as seasonality effects. Further complicating the analysis is that the supply-side component was not implemented evenly across space, as intended. For example, growth monitoring of children, which was supposed to be part of the supply-side provision, reached only 18 percent of its target population. Moreover, legal complications prevented funds from being transferred to the parent–teacher associations, so this component of the intervention was never really implemented.

The questionnaire design was similar to the survey done for RPS; in addition to standard components such as demographic characteristics and assets, there were extensive modules on child health and education and on consump-
tion. An anthropometric module for children under age 3 was also implemented; height, weight, and hemoglobin were measured.

The Quantitative Evaluation of Brazil's BA

Unlike the other programs considered in this book, BA was from the outset a national program and by the end of 2003 was providing benefits to individuals living in all 5,561 municipalities of Brazil. Therefore, the evaluation of BA, unlike the evaluations of the other programs considered earlier, could not be based on a randomized design. However, three administrative errors meant that a group of households that had applied for the program and were eligible to benefit from it were accidentally, or randomly, excluded, and they can be treated as a quasi-experimental control group. Three types of accidental exclusion were detected:

- Two different data files containing household-identifying information were separated for some areas within municipalities, leading some households in those areas to be temporarily excluded from the program.
- If the individual listed as the primary beneficiary for the household had non-Roman-alphabet letters in his or her name (for example, é, ô, or à), the household was temporarily excluded from the program. This happened because although the software used by the municipalities could read these special characters, the software used for the central data processing system could not.
- Many households eligible for the BA program were already enrolled in another federal cash transfer program, Bolsa Escola (BE). The federal bank responsible for the cash transfers of the two programs blocked the registration in BA of mothers whose data showed any inconsistency with the data previously recorded in their registration for BE, for example, misspellings in their names. Hence, conditional on BE participation, the third type of exclusion can also be considered random.

All three of these errors can be considered random. Nevertheless, additional statistical methods are used in assessing the program's impact.

To take advantage of the natural experiment described earlier, a retrospective household survey was conducted in a number of municipalities in which the aforementioned random exclusions due to administrative errors were identified. Random selection of households within these municipalities for inter-

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11. This section draws heavily on Olinto, Morris, and Veiga (2004) and on Morris et al. (2004b). The evaluation of BA was conducted by IFPRI and led by Pedro Olinto. The main members of the research team were Rafael Flores, Daniel Gilligan, and Saul Morris.

12. It is important to note that this third type of exclusion affected only households already enrolled in the BE program, which was an endogenous choice.
views was stratified based on whether the household was a beneficiary or was accidentally omitted from the program.

Households excluded (for the reasons outlined earlier) were originally found in 67 Brazilian municipalities. After checking with the program’s implementation team, three additional criteria were established for the selection of the municipalities to be included in the evaluation study:

1. Only municipalities from the northeastern region were eligible, given that 60 percent of the beneficiaries reside in this region;
2. For budgetary reasons, the municipality had to have at least 40 excluded families; and
3. Municipalities had to have been participating in the program for at least six months so that there would be enough time for the cash transfers to have had an effect on child growth, a key program objective.

The universe of randomly excluded households provides a very good counterfactual for similar beneficiaries that were selected into the program. To further ensure the comparability of the two groups, however, a sample of matching pregnant women and children was selected from the roster of receiving beneficiaries in each of the 17 municipalities. To increase the power of the statistical tests, two beneficiaries were matched to each accidentally excluded woman and child. The matching criteria used were the following: (1) residence in the same municipality, (2) same gender for the child, (3) same age for the child, and (4) similar socioeconomic characteristics.

After a pool of beneficiary individuals were matched on municipality, child sex, and child age, data collected during the program’s registration process were used to determine which households best matched those excluded in terms of socioeconomic characteristics (criterion 4). The variables used were declared per capita income, number of household members, rent paid, and the value of water, electricity, and gas expenses. Beneficiaries with the smallest Euclidean distances to the excluded applicants in terms of the set of socio-economic variables were selected as comparison observations.

In April 2002, when data collection began, there were four municipalities that fit the three criteria cited. This first phase of data collection for the evaluation of BA (hereafter, the Phase 1 survey) comprised 696 beneficiary households and 309 nonbeneficiaries. Later, in October 2002, a second round was collected in the 13 additional municipalities that fit the criteria at that point (hereafter, the Phase 2 survey), adding 443 beneficiary households and 218 non-beneficiary households. Unlike the other studies, the evaluation of BA is based not on longitudinal data but only on a cross-section of participants and non-participants after the intervention began (randomly excluded by error). The survey questionnaires included information similar to those in the PRAF-II survey.
There were two important differences between the surveys in Phases 1 and 2 that must be taken into account when carrying out analysis. First, although the survey in Phase 1 was carried out right after the selection of the sample of beneficiaries and excluded households, the survey in Phase 2 went to the field three to five months after the sample was drawn. This delay in Phase 2 was sufficiently long to allow many of the originally excluded households in the sample to enter the program. Therefore, although in the first round of data collection only 7 percent of the originally excluded households had been included, this fraction rose to 46 percent in the second round of data collection. As a consequence, participation in the BA program and the initial accidental exclusion are strongly correlated but are not perfectly collinear. Therefore, an indicator of the initial exclusion serves as a good instrumental variable for participation in the BA program, estimated using the matched sample.

The Use and Design of Qualitative Research Methods for the Evaluation of CCT Programs

Combining quantitative and qualitative methods for the evaluation of social protection programs enhances the contributions of both methods, providing a richer set of data and greater analytic power than would have been available with either of these methods alone.\(^{13}\) The benefits of using quantitative and qualitative methods together and in complementary ways have long been established theoretically and empirically (Brewer and Hunter 1989; Creswell 1995; Tashakkori and Teddlie 1998). Triangulation, in which several types of data are used in a single study and used to cross-check and compare results, enables any weaknesses of one method to be offset by the strengths of another (Denzin 1978; Jick 1979). An assessment of 57 mixed-method studies identified five purposes for mixing methods (Greene, Caracelli, and Graham 1989): (1) triangulation—seeking convergence of results; (2) complementarities—examining overlapping and different facets of a phenomenon; (3) initiation—discovering paradoxes, contradictions, and fresh perspectives; (4) development—using the methods sequentially, such that the results from the first method inform the use of the second method; and (5) expansion—adding breadth and scope to a project.

The evaluation of PROGRESA used focus group methods and in-depth, semistructured interviews, and the RPS evaluation also used these plus ethnographic household and community case studies. Ethnography, commonly used in the fields of sociology and anthropology, involves the immersion of the researcher in the everyday life of the people or group being studied, providing de-

\(^{13}\) This section draws extensively on Adato, Coady, and Ruel (2000); Adato et al. (2004); Adato et al. (2007); and Adato (2008).
tailed descriptions and interpretations, with a focus on the interactions between
different aspects of the social systems under study; in this case the social sys-
tems were the CCT program, the household, and the community. This method-
ology employs a number of different research methods in combination, includ-
ing participant observation, in-depth interviews, and informal conversations.
Sometimes referred to as the “extended case method,” it uses intensive inter-
actions and observation of participants to understand their everyday life, using
a reflexive model of science that stresses engagement rather than detachment
(Burawoy 1998).

The qualitative research enabled social analysis that complemented the
economic analysis in the evaluations. The primary objective of quantitative
evaluations of CCT programs is to measure change in the indicators that the
program aims to influence, for example, enrollment and attendance rates, par-
ticipation rates in health services, and changes in nutritional status. Qualitative
methods are used to provide explanations for these changes, or lack of changes
when they do not occur, and to understand program impacts that are harder
to measure through a quantitative survey. The focus is often on the relevance
of social relationships—those involving gender, generation, community, and
institutions—and the implications of economic, political, and cultural attributes
for program participation and outcomes. These methods provide insights into
how people understand, view, and like the program; the meaning they give to
different program features; how and why they do or do not respond to the pro-
gram design, incentives, and training; why we sometimes do not see impacts
even where people appear to participate; and the pathways and mechanisms
through which impacts occur. By focusing on people’s actual lived experience,
qualitative methods enable a richer understanding of the meaning that people
give to events and of processes and structures in their lives.

Qualitative research offers a number of strengths for evaluating CCT pro-
grams that survey methods do not. Although survey methods are essential for
quantifying impacts on key indicators targeted by the program, they are at a dis-
advantage for probing issues requiring deeper exploration due to limitations
faced by survey methods in any research context. These include the necessary
brevity of questions and the use of proxies that are often blunt measures, re-
spondents’ inability to sufficiently express what they mean in selecting among
categorical or continuous variables, the limited ability of enumerators to follow
up when more information or clarification is needed, and the difficulty of es-
ablishing the rapport and trust needed to maximize truthfulness in replies. In
contrast, the qualitative research in these evaluations enabled the exploration

14. Quantitative analysis can also provide explanations. Qualitative research can confirm or
challenge those explanations, provide additional depth and nuance to our understanding, and un-
cover explanations that may not be detectable through quantitative methods.
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of social issues and impacts by requiring open-ended rather than closed responses; enabled an understanding of people's perceptions, expressed in their own words; raised underlying and less obvious issues, including those that the researchers had not anticipated; allowed researchers to probe and challenge responses and internal contradictions or conflicting responses between respondents and to explore relationships between topics and responses; and finally, solicited respondents' ideas about solutions to the problems with the program that they raised. The qualitative research enabled the exploration of the significance of context—social, cultural, political, economic, and historical. The qualitative studies complemented the survey findings by contributing explanations for them, as well as sometimes confirming, sometimes contradicting, sometimes illuminating those findings. The survey data also suggested questions to be asked or prioritized in the qualitative research. The qualitative findings raised new issues that could be turned into productive survey questions. However, the logic of the panel survey meant that it was difficult to add survey questions once the first round was conducted, and in the PROGRESA and RPS studies, this first survey round took place before the qualitative research. However, some earlier qualitative research (for example, CIESAS 1998) was reflected in some of the survey questions. Ideally, with the best of planning and sufficient budgets, one would use the methods iteratively with more than one round of each, starting with qualitative research.

Although both the survey and the qualitative methods provide an interpretation of the world seen by an external observer, ethnographic methods help us to better understand the world as seen from the respondents' (for example, the beneficiaries') viewpoint. Using qualitative research methods implies a recognition on the part of evaluators and social scientists that the views, opinions, and interpretations of beneficiaries are important and credible. Even when program staff and evaluators do not believe that these local perceptions are "correct," they see how these perceptions have a profound impact on program outcomes. Examples of these impacts are found in Chapters 12 and 13 of this volume.

The Qualitative Evaluation of Mexico's PROGRESA

The qualitative research in the PROGRESA evaluation used two main methods: focus groups and in-depth semistructured interviews. The focus groups included three main categories of respondents: beneficiaries, nonbeneficiaries, and promotoras—the beneficiaries elected by the other beneficiaries to be the community-based program liaisons. Semistructured interviews were conducted with key informants, specifically doctors in the local clinics and secondary school directors. These key informants had the advantage of being relatively objective "outsiders" but with intimate windows into community life; they thus provided reliable, insightful information on the health and education issues in
the program and were an effective way of triangulating the information provided in the focus groups.\textsuperscript{15}

Separate focus groups were conducted with beneficiaries, nonbeneficiaries, and \textit{promotoras}, given their different positions in relation to the program. Focus groups were seen as providing several strengths. First, because people’s opinions are dynamic, individuals’ comments can trigger recollections and opinions from other group participants. Second, responses may be more candid because in the group these individuals are anonymous to the interviewer, so there is less fear of being identified than when they are interviewed in their homes (however, they may conversely be less candid in a focus group because their replies are more public). Third, focus groups are cost- and time-efficient; more individuals can be interviewed at a lower cost and in less time than through individual interviews. Focus groups also have certain disadvantages compared to individual semistructured interviews that are taken into account in the data analysis: first, the frequencies of responses are only rough indications of the relative strength of a particular opinion, not a representation of the number of people who hold a particular opinion. Second, there is less time to probe responses because of the number of respondents and time pressure. Third, not everyone answers all questions, and some may not speak at all, so some opinions will be missed. In particular, people with minority viewpoints or those less accustomed to speaking in groups may be uncomfortable speaking and their views are not heard. However, good facilitators can help to overcome this last problem, and very good data were elicited through focus groups in the PROGRESA study, with a variety of views expressed and comments both positive and negative suggesting that participants were being reasonably candid in their responses.

Focus groups were conducted in six states: Estado de México, Guerrero, Hidalgo, Michoacán, Querétaro, and Veracruz. Two localities were selected in Michoacán and Veracruz and one from each of the other states, for a total of eight localities. Five of these states were selected from among the seven states included in the survey (the exception was Estado de México). Localities were selected that were close to the treatment communities in the PROGRESA household surveys (the same communities were not selected to avoid overburdening them). Within each state, \textit{promotoras} came from 10 communities

\textsuperscript{15.} There were many other role players and institutional issues that could have been examined in the PROGRESA evaluation. Adato, Coady, and Ruel (2000, 8) note that due to resource constraints, the IFPRI evaluation focused on institutions at the local level rather than at the state and national levels, for this was the highest priority given the mandate to evaluate the operational performance of the health and education components: “The best and most direct way to gauge this is to focus on those stakeholders who experience at first hand the outcomes of program operations (for example, the beneficiaries themselves) as well as those who are directly involved in delivering program inputs to the beneficiaries (for example, school teachers and health clinic staff).” A study at the level of the health and education ministries would also have been productive, but was not within the scope of IFPRI’s contract with the government.
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around each locality where the beneficiary and nonbeneficiary groups met (with the exception of Estado de México, where no promotor group met). States and localities were also selected to capture some ethnic diversity: two of the eight communities were primarily indigenous, monolingual communities (Nahuatl in Hidalgo and Tenek in Veracruz). Additional monolingual communities were represented by promotoras in those regions.

Each site visit then included a focus group of approximately 10 beneficiaries, a separate group of approximately 10 nonbeneficiaries, and a focus group of approximately 10 promotoras from the surrounding communities. In total, 23 focus groups met involving 230 participants: 80 beneficiaries, 80 non-beneficiaries, and 70 promotoras representing 70 communities. Focus group facilitators used semistructured interview guides to ensure that all respective groups from each locality were asked the same questions. Beneficiaries, non-beneficiaries, and promotoras were asked parallel questions to capture the views of each group on the same issues. Promotoras were asked to comment (as key informants) on the experience of women in their communities, as well as on their personal experience as promotoras and beneficiaries. Each focus group meeting lasted between two and four hours.

Issues covered in the focus groups included the targeting process and outcomes—for example, how people understood the targeting system, their perceptions of its accuracy and fairness, and how people answered the census questions; gender and intrahousehold relations—including how men and women respond to women’s roles and responsibilities in the program, intrahousehold decisionmaking dynamics, and women’s self-esteem and empowerment; attitudes and behavior with respect to education, health, and nutrition; the quality and perceptions of the health and nutrition workshops; the quality of the services in the clinics and schools; program management and administration; the community liaison (promotora); and social capital and social relations at the community level.

In selecting the sample for the semistructured key informant interviews, 16 communities were chosen in four states: Hidalgo, Puebla, Querétaro, and Veracruz (all survey states, three of which overlapped with the focus group states). The sample was stratified using the criteria of poor and very poor and mestizo and indigenous communities (though this was a primary designation as most communities were mixed). Because most of the impact of PROGRESA in the educational sphere occurs at the secondary level, this component concentrated on secondary schools. Secondary school localities were roughly split between those in mostly mestizo communities and those in mostly indigenous communities. For primary schools, one was in a mestizo community and three were in indigenous communities. The clinics included those from the Ministry of Health and the Institute for Social Security.

Semistructured interview guides were used to ensure that the same issues were covered in all interviews, but the researchers were highly skilled and able
to probe responses and pursue valuable additional lines of inquiry or new dimensions of issues that emerged during the interviews. The questions in the interview guides were developed from the overall research objectives, with new questions derived from other components of the evaluation: beneficiary surveys, school and clinic surveys, and the focus groups.

School directors and doctors were asked questions about the education and health dimensions of the program, respectively, including how their work had changed since the program began; their views on the objectives, design, and operations of PROGRESA and their suggestions for changes; the quality of the education and health services; children’s school performance; the additional demands placed on them by the program and how they responded; types of support needed and whether they received it; interactions with government departments; enforcement of conditionalities, that is, whether they always reported absences or experienced pressure not to report; relationships with parents; reasons people did not participate despite the incentives; insights on gender differences in participation; and perceptions of parents’ and children’s attitudes toward education and health. These interviews lasted from one to two and a half hours.

The Qualitative Evaluation of Nicaragua’s RPS

The qualitative research in the Nicaragua study took a different approach to that in the PROGRESA study. Because of the vast size and geographic spread of PROGRESA, focus groups were seen as the best way to include a large number of people from many widely dispersed localities across six states. RPS, by contrast, was a small program in just two “departments” (a geographic entity of which there are 17 in total) in Nicaragua. A more intensive approach in a smaller number of localities provided an opportunity to probe issues that had arisen in the PROGRESA research but required more time, rapport, and trust between researchers and program participants (or nonparticipants) for adequate understanding. The study also aimed to capture the views of household members of different ages, genders, and roles in the family (mothers, fathers, young children, adolescents, aunts and uncles, grandparents), as well as those of other program stakeholders such as program officials, local leaders, and shopkeepers.

The household and community case study method was seen as the best way to achieve these objectives. This involved intensive research in six localities over a period of about five months. Three Nicaraguan field researchers lived with local families in the study communities, each focusing on two communities and moving between them at varying intervals. An average of 10 household case studies and 10 additional semistructured interviews were carried out in each of the six study localities, for a total of 59 case studies and another 66 semistructured interviews, or 125 households interviewed intensively. Two additional “comparison” communities were selected where the program was not offered, where the fieldworkers spent two weeks conducting interviews.
The case studies used primarily an ethnographic approach. What distinguished this research from forms of community-level ethnography was the primary use of household-level case studies and the particular focus on all interactions relating directly and indirectly to the CCT program. Mitchell (1987, 237) notes (with our commentary in brackets): "What distinguishes case studies from more general ethnographic description is the detail and particularity of the account. Each case study is a description of a specific configuration of events [in our case, events related to the CCT program] in which some distinctive set of actors [mainly household members] have been involved in some defined situation [as beneficiaries or nonbeneficiaries] at some particular point of time."

An important element of this household-level case study work was residential fieldwork: researchers lived in the study communities from June through October 2003, each alternating between two communities. This approach had several benefits. First, it allowed researchers to establish a level of rapport and confidence with households that is impossible with other research methods in which the researcher is present only for a short time, for example, a day or a week. This level of rapport translated into more reliable, candid, and complex data. Topics that were otherwise difficult to approach became accessible. Initial responses to questions were later changed as the researcher gained more confidence and respondents became more relaxed. Second, residential fieldwork permitted better triangulation of responses between respondents and methods. Interviewing multiple family members offered a range of perspectives on the program, capturing variations in age, gender, and relationship. Third, multiple visits to study households allowed the capture of data at different points in time rather than in the snapshot provided by a single interview. Research guides were used, ensuring the consistency of the questions asked across respondents, but designed to enable exploration of emergent topics of interest and follow-up questioning. Additional in-depth, semistructured interviews were conducted with beneficiaries and nonbeneficiaries in order to capture the experiences of a larger number of people than could be covered in the more time-consuming case studies. The research topics were similar to those covered in the PROGRESA qualitative study, with some questions shaped by learning processes and findings encountered in the PROGRESA study, which had taken place several years earlier, and other questions varied to reflect differences in program design. The relative importance of some issues came to light as a result of the methods used; for example, participant observation in their homes led to a focus on whether people were applying the lessons learned in the health and nutrition workshops at home and why or why not.

Household case study visits also provided an opportunity for direct observation of household and community dynamics and selected program-related topics. Observations were both participatory—for example, with researchers helping in the fields, shopping, or preparing meals and eating with household members—and nonparticipatory, with researchers just observing. This allowed
the observation of practices, behaviors, and interactions that confirmed, contradicted, or explained what people said or revealed things that people had not mentioned. Bernard (2002) identifies several reasons for insisting on participant observation in the conduct of research among "cultural groups": it increases access to data, reduces people's reactivity to researchers, increases researchers' ability to ask the right questions in the right way, provides researchers an intuitive understanding of what is going on, and enhances the internal and the external validity of what is learned from interviewing.

Wherever possible, the researchers observed and recorded activities such as interactions between household members, the care of children in the household, meal preparation, health and hygiene practices, shopping and other market activities, gatherings and other interactions among community members (including beneficiaries and nonbeneficiaries), health service delivery, school activities, interactions between beneficiaries and program officials, interactions at pay points (surrounding delivery of the transfer), and health and nutrition workshops.

Many stakeholders have a significant influence on program outcomes and from their particular vantage point have insights into the CCT program. Those interviewed in Nicaragua included promotoras, program officials and staff, teachers, health workers, religious officials, community leaders, and shopkeepers. When needed, these informants were interviewed several times, formally or informally, to clarify or deepen their responses and confirm, contradict, or interpret findings from other data sources.

Although the qualitative sample was selected as a purposive rather than a random sample (a random selection would not have been meaningful because of the small size of the sample, although the number of households selected in each community was about 10 percent of the beneficiary population), the research used carefully designed criteria for selecting the community and household sample. The six intervention communities selected had to (1) have participated in the pilot phase of the program, (2) offer physical safety for fieldworkers, (3) have a sufficient population size, (4) include both geographically targeted communities and household targeted communities, and (5) vary in religious composition. The households selected were stratified according to a set of categories based on each household's situation as measured at the start of the program. These included (1) age of children, divided among households with children aged 0–5, aged 6–11, and in both age groups; (2) health status, divided among households with better health, defined as all children under age 5 above the 20th percentile in height-for-age z-scores, and households with poorer health than those just described; and (3) education status, divided among households with better education indicators, defined as all children 7–13 years enrolled in school, and those with nonenrolled children. Some secondary stratification criteria were subsequently applied in order to understand different types of households, for example, households with a male beneficiary or no children,
those expelled or that had voluntarily withdrawn from the program, or unselected households (nonbeneficiaries). The survey data were used to identify candidate households based on these criteria; however, once in the field, the fieldworkers had to revise the selections to some extent based on differences found in actual household conditions.

**Data Analysis in the Qualitative Studies**

Similar approaches to data analysis were used in the PROGRESA and RPS qualitative studies, with some variations. All data from focus groups, semi-structured interviews, and case studies were recorded, the tapes were transcribed, and the transcribed material was coded using a qualitative data analysis software program. A similar coding process was used with field observation notes. Although the analytic process starts much earlier in the research process, coding is a central stage of the data analysis. Codes assign meaning to data. Hierarchical coding schemes (code trees) were developed using codes that were thematic, descriptive, interpretive, or binary. These different approaches use codes representing broad research themes, descriptive characterizations of findings, the researcher’s interpretation of the meaning of a finding, or the presence or absence of a finding. Binary coding can assign data values of 1 or 0, facilitating the quantification of some findings in the qualitative data. For the focus group data from PROGRESA, frequencies of categories of responses were recorded, and in Nicaragua, frequencies of household-level findings were recorded—in both cases to determine the prevalence of a particular view, not a representative figure.

The software permitted the researchers to attach memos to coded data with their notes, caveats, explanations, and interpretations. Following coding, data searches and organization were done through code-based searches, including Boolean statements, and matrices were constructed to organize findings by cases (individual, household, focus group, key informant, community) on one axis and by subthemes, issues, or findings on the other. In addition, for the RPS analysis, case studies were also written up intact to provide context and depth.

**Conclusion**

The purpose of this chapter has been to introduce readers to the state-of-the-art research designs and econometric methods being used in quantitative program evaluations in order to establish a causal relationship between the programs studied and their outcomes. It also explains how qualitative sociological and anthropological research methods are being used in program evaluations to provide greater depth of insight into the social processes that explain or influence program outcomes. This chapter provides the backgrounds and descriptions of the research designs and methods behind the data that are analyzed in Chapters 8–13 of this volume.
In three countries, Honduras, Mexico, and Nicaragua, the quantitative evaluations could draw on randomized designs in which localities and households were randomly assigned to receive program benefits immediately ("treatments") or with a delay ("controls"). Although the ethical issues associated with randomization should always be carefully considered, in all three countries it was not feasible to provide program resources to all potential beneficiaries, so randomization was in fact a fair way of allocating program benefits. The public settings in which this was done in Honduras and Nicaragua provided a transparent means of doing so. Randomization combined with baseline and follow-up surveys allows analysts to use difference-in-differences estimators (2DIF). These measure program impact by comparing differences in the means of an outcome between treatment and control groups in postimplementation survey rounds with the differences in the means of the outcome in the pre-program round. As explained earlier, these comparisons provide unbiased estimators of program impact. In the case of Brazil, neither randomization nor a baseline survey was feasible. Consequently, results using these data rely on stronger assumptions.

The qualitative evaluations in Mexico and Nicaragua used different methods: the PROGRESA evaluation used focus groups, and the RPS evaluation relied primarily on household case studies and semistructured interviews. Both methods provided rich data sets. The focus groups in Mexico stimulated vibrant discussions and debates and enabled the experience of more communities and more people within these communities to be captured. The case study method used in Nicaragua enabled the development of greater trust, rapport, and participant observation, which increased the candidness of responses and the depth of understanding of the issues under investigation. Both studies used key informant interviews to acquire the diverse perspectives of people with relevant insights based on their roles within the program or locality. The results of the qualitative research reported in this book are found primarily in the chapters on gender relations and community participation (see Chapters 12 and 13 of this volume). Where fully exploited, integrating quantitative and qualitative methods provides the basis for both measuring and explaining program impact and for analyzing economic and social issues more powerfully than either method can do on its own.

Although the qualitative research also focused on understanding the dynamics of the education, health, and nutrition components of the program, most of the results are not reported in this volume. Adato (2008) provides examples of the value of integration in evaluations of CCT programs in Nicaragua and Turkey with respect to health, nutrition, and education issues. Additional findings of the qualitative research on these issues in Mexico and Nicaragua can be found in Adato, Coady, and Ruel (2000) and Adato et al. (2004). Adato (2008) also explores a number of reasons why quantitative and qualitative methods are often not integrated as well as they could be at the analysis stage.
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PART II

Politics and Economics
The high level of poverty in Mexico, concentrated mainly in rural areas but also present in urban localities, has been one of the main social problems characterizing periods of weak and strong economic growth. It has been only since the 1970s, however, that the government has targeted integrated development policies directly to the poor. Before that decade, postrevolutionary policies had been centered on creating the institutional, physical, and economic structure to promote general social welfare and economic development, including the redistribution of assets such as land. Since the 1970s, a series of antipoverty programs have been implemented, aimed specifically at improving the welfare of the poor. These programs have been based on different assessments of the nature and causes of poverty, as well as on various ideological precepts, and therefore differ in their particular objectives and design. Across the decades, the trend has been moving from programs directed at collective groups with lax targeting mechanisms to those directed to individuals with strict targeting and from programs focusing on wider subsidies and production incentives to those based on direct transfers conditioned on specific actions by the beneficiaries. These changes are significant. Although there are some similarities across programs, the changes reflect a national learning process across government administrations and political actors.

This chapter centers on the Mexican experience, which has a particularly high degree of relevance to understanding the rise of conditional cash transfer (CCT) programs in Latin America, because in its design, implementation, and evaluation Mexico's CCT program has become a model followed by numerous countries in Latin America and elsewhere. We begin with a description of poverty

The authors thank Rogelio Gómez Hermosillo and Daniel Hernández for granting us interviews and Rodolfo Tuirán for providing valuable information. We are also grateful to Bárbara del Castillo for her research assistance and to Claudia Maldonado for useful comments. Along with our experience participating in Oportunidades, we acknowledge the numerous people working in this program who have informally shared their opinions and information with us. This interaction has greatly enriched the analysis here. The chapter expresses the authors' personal opinions, and they alone are responsible for its content. The content of this chapter was updated to October 2007.
indicators in Mexico. We then review the evolution of antipoverty policy in Mexico over the past three decades. The analysis then centers on the Programa de Educación, Salud y Alimentación (PROGRESA, now Oportunidades), the CCT program that has been the main policy instrument targeted at the poor since 1997. We assess its design, operation, and performance from a political economy perspective, as well as the challenges that lie ahead in ensuring its continuity. We end with some concluding remarks.

The Evolution of Poverty in Mexico

In Mexico, as in the rest of the world, poverty measurements have been a major concern for social research and policymaking. During the past three decades, different methods and measurements have been used by the various governments as parameters for policy formulation, particularly with respect to their targeted programs. In the 1970s, the government conducted research to measure and understand poverty.1 In 1977, that measurement calculated that there were 18 million extremely poor people in Mexico, constituting 30 percent of the population (Valencia and Aguirre 1998). By the late 1980s, the government announced that 48 percent of the Mexican population lived below the official poverty line, and 19 percent (nearly 15 million people in 1989) were classified as living in extreme poverty (Cornelius, Craig, and Fox 1994). Subsequent government figures estimated that in the late 1990s, 40 percent of the population lived in poverty, while 20 percent (around 20 million people) were extremely poor.2 However, because the measurements used over time were not comparable, it was difficult to assess the trends in poverty.

In 2000, the need for an official methodology for the measurement of poverty was highlighted as a priority by the administration of President Vicente Fox. It was the administration's intention to develop an adequate instrument for policy design and to allow the government to follow trends in poverty indicators, and thus be able to adequately evaluate the government's actions with respect to poverty reduction. In 2001, as a result of a government initiative, a group was formed to develop such a methodology. The Comité Técnico para la Medición de la Pobreza (CTMP) was formed, composed mainly of national researchers with the participation of some government technical staff. In 2002 the methodology proposed by this group was made public (CTMP 2002), and the Mexican government used it to estimate the incidence of poverty with data corresponding to the year 2000. Based on this methodology, the government estimated the incidence of three poverty lines: food poverty (that is, lack of enough

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1. This was done under the Plan Nacional de Zonas Deprimidas y Grupos Marginados (COPLAMAR). See the next section for more details.

2. The government in turn did not make public any official poverty measurement. These come from declarations of government personnel quoted in the press (Yaschine 1999).
income to cover basic food needs) was estimated at 24.2 percent of the population; capacities poverty (that is, lack of sufficient income to cover food, education, and health needs) at 31.9 percent; and asset poverty (that is, lack of enough income to cover food, health, education, clothing, shoes, housing, and public transport needs) at 53.7 percent (SEDESOL 2002).

Using this same methodology, Cortés et al. (2002) show the performance of poverty indicators for the last decade of the 20th century. They find that poverty levels remained very similar between 1992 and 1994, but for the period 1994–96, in the middle of the economic crisis that started in late 1994, poverty levels increased, from 21.1 percent, 29.4 percent, and 55.6 percent for the food, capacities, and asset poverty lines to 37.1 percent, 45.3 percent, and 69.6 percent, respectively. They also show that it would take four more years, from 1996 to 2000, to return to the levels cited earlier for 2000, with the most important reduction occurring between 1998 and 2000. The trend of reduction continued, and by 2002 the poverty incidence for the three lines reached 20.3 percent, 26.5 percent, and 51.7 percent, respectively (SEDESOL 2005). Comparison with other poverty indicators, such as those used by the Economic Commission for Latin America and the World Bank, confirms these trends, according to Székely and Rascón (2004). By 2002, Mexico reached and surpassed the first Millennium Development Goal, slated for fulfillment by 2015, in terms of reducing extreme poverty, defined as living on US$1 per capita on a daily basis, with a cumulative decrease of 61.6 percent between 1989 and 2002 (GDHS 2005).

Official data for poverty show a further reduction from 2002 to 2006. In 2004 the national incidence of poverty for the three poverty lines was 17.4 percent, 24.7 percent, and 47 percent, respectively, with the reduction mainly concentrated in rural areas (CTMP 2005). In 2006, Mexico’s poverty incidence decreased to 13.8 percent, 20.7 percent, and 42.6 percent for the three lines, respectively (CONEVAL 2007).

According to a World Bank report published in 2004, Mexico started the century by making progress in the reduction of extreme poverty (Banco Mundial 2004). The report also recognizes Mexico as the only country that reduced its poverty even with no economic growth. It has been argued that these results are in part explained by the improved targeting of social programs, an increase in the purchasing power of salaries, an increase in remittances, and the price reduction of some basic consumption goods (SEDESOL 2003b).

The progress in poverty reduction does not mean that there is little left to do. Mexico’s big challenge is to continue this reduction, to decrease the over-

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3. We can assess the period from 1950 to 2002 using the actual official methodology of the Secretaría de Desarrollo Social (SEDESOL) on the basis of the document by Székely (2003). He performs a retrospective exercise relying on data approximations and finds that during the period from 1950 to 1984 the incidence of food poverty declined constantly from 61.8 to 22.5 percent, capacities poverty from 73.2 to 30.2 percent, and assets poverty from 88.4 to 53.0 percent. It was in 1984 (just after the 1982 economic crisis) that this reduction stopped.
whelming gaps between regions, to sustain the attained achievements with GDP growth and macroeconomic stability, and to guarantee the continuation of an effective and efficient social policy.

The 1970s and 1980s: The Evolution of Antipoverty Programs

After the triumph of the Mexican Revolution in the early 1920s, the country's successive governments, led by the Partido Revolucionario Institucional (PRI), sought to achieve the revolutionary goals of justice and equality through policies centered on institution building, economic development, industrialization, agricultural development, and redistribution. During the following decades, social rights were legislated; land reform was implemented to redistribute this asset in favor of the rural poor; social welfare institutions were created, such as the Ministry of Health, the Mexican Institute of Social Security (IMSS), and the Institute of Social Security for State Workers (ISSSTE); social services (education, health, housing, and social security) were extended to reach a wider population; and social assistance actions for vulnerable groups (children, women, the elderly, and the homeless) were implemented (Valencia and Aguirre 1998).

The government assumed that these initiatives, along with economic policies oriented to promote internal economic productivity and growth, would lead to the improvement of welfare for all of the population.

Although these policies did represent a step forward in the construction of a more egalitarian state according to the revolutionary principles, it was eventually evident—at least to one group within the government—that they were mainly benefiting some sectors of the population and would not be sufficient for the eradication of the widespread poverty in the country. The debate then focused on income distribution and how to reconcile growth with equity. A model of “shared development” (Modelo de Desarrollo Compartido) was initiated, with its principal strategy the redirection of resources to rural areas. It was in this context, in the early 1970s, that the government of Luis Echeverría (1970–76) decided to implement an integrated development program targeted at the rural poor: the Programa de Inversiones Públicas para el Desarrollo Rural (PIDER). Through the promotion of agricultural production and the productivity of farmer cooperatives, infrastructure building, and social service provision targeted at small rural communities, PIDER aimed to improve the living conditions of smallholder peasants. These peasants were the sector that had least benefited from the previous economic policies centered on industrialization and agricultural exports and constituted the majority of the poor (CIDER 1982). By the end of the decade, after a financial crisis that led to the acquisi-

5. See Grindle (1986) for a critical review of PIDER's design and implementation in the context of evolving state policy toward the rural areas.
tion of a loan from the International Monetary Fund (IMF), the rise in the price of petroleum helped to bring a time of economic bonanza that allowed the administration of José López Portillo (1976–82) to spend a large amount of resources on initiatives aimed at income redistribution and the provision of basic needs to the population. Regarding targeted programs, while PIDER continued to operate, two new programs directed to the rural poor were created: the Plan Nacional de Zonas Deprimidas y Grupos Marginados (COPLAMAR) in 1976 and the Sistema Alimentario Mexicano (SAM) in 1980. COPLAMAR was an “umbrella” that coordinated various programs in poor areas that were focused on support for consumption, mainly through an increase in the supply of food and the promotion of productivity and employment, as well as on service provision (COPLAMAR 1977). SAM aimed to achieve farmers’ self-sufficiency in basic grains, gave subsidies for food consumption and incentives for the extension of farming in the poorest areas (through the provision of access to fertilizers and seeds at subsidized prices, as well as irrigation systems and guaranteed prices for farmers’ products) (ISSSTE 1981; Grindle 1986). Also, as a result of the coordination of COPLAMAR and the Compañía Nacional de Subsistencias Populares (CONASUPO), Distribuidora CONASUPO S.A. was created in 1979 as a state enterprise with the objective of guaranteeing the supply of basic products in rural areas.

PIDER, COPLAMAR, and SAM were designed and put in practice by individuals belonging to a progressive trend of thought in the government, and their efforts were directed to the same population (the small farmers) that had been identified as the losers of the economic development policy of the previous decades. Although these programs created an important precedent in Mexican policy in terms of the need for targeted actions, their results were highly questioned. Critics pointed out their duplication of functions, excessive spending, operational problems, and few results.

Overspending, the reduction in the price of petroleum, and the rise in international interest rates sank the country into a deep economic crisis in the early 1980s. With the change of government in 1982 came a change in economic and social policy that has also been identified with a shift of the dominant ideological group within the government (Valencia and Aguirre 1998; Yaschine 1999). Miguel de la Madrid’s administration (1982–88) centered on regaining economic stability through structural adjustment and stabilization policies within the context of a new loan from the IMF. The government’s priority was to de-

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6. Fox (1986) is an in-depth study of the politics of policymaking behind the design and implementation of SAM. Gibson, Lustig, and Taylor (1982) provide an evaluation of SAM’s impact on the income and consumption of peasants and agricultural workers.


8. Miguel de la Madrid was the first of three presidents in Mexico from the PRI (the political party that governed Mexico from 1929 to 2000) who belonged to what has been identified as
crease inflation, protect employment, and attain economic growth, and the state retreated from its social policy with the expectation that structural adjustment and stabilization policies would take care of the main problems.

The change to a neoliberal economic model had implications for social policy in Mexico that were comparable to what happened in many other developing countries in the period of structural adjustment (Cornia, Jolly, and Stewart 1987). The reduction of public investment from 10.8 percent of GDP in 1982 to 4.9 percent in 1989 was the initial factor leading to a drastic change of the social policy model. There was a 6.2 percent annual contraction in social expenditure from 1983 to 1988. Initiatives directed at the poor were especially hard hit; PIDER, COPLAMAR, and SAM were disarticulated. Most consumer and producer subsidies were eliminated, and expenditures on general food subsidies fell from 1.25 percent of GDP in 1983 to 0.37 percent in 1988. Universal subsidies were replaced by targeted ones in order to maintain coherence with the new fiscal situation and the ideological approach guiding the economic model (Friedman, Lustig, and Legovini 1995).

The economic policies rendered fruits, and the de la Madrid administration achieved macroeconomic stability and growth. Health, nutrition, and education indicators deteriorated, however (Stewart 1995), and the informal sector grew (Lustig 1992). These social costs of economic adjustment along with strong mobilization for political democratization set the stage for the controversial 1988 presidential elections.

In 1988, President Carlos Salinas de Gortari assumed office in one of country’s deepest legitimacy crises, which resulted from a strong opposition to the authoritarian one-party rule that had prevailed since the 1920s and the perceived electoral fraud of that year’s presidential elections. However, Salinas also inherited the benefit of a stable economy, growing at 2.2 percent annually from 1988 to 1994. Like his predecessor, Salinas was a member of the new technocratic elite and a supporter of the neoliberal economic agenda. But unlike de la Madrid, Salinas made social policy a key element of his government’s strategy. This was made possible by the improved economic situation and was considered necessary because of the country’s deep social and political crisis (Yaschine 1999).

The outstanding feature of Salinas’s social policy was the creation of the Programa Nacional de Solidaridad (PRONASOL). PRONASOL was presented by the government in 1988 as an antipoverty program designed to reach the 40 percent of Mexicans who lived below the official poverty line, including the 20 percent classified as living in extreme poverty (Cornelius, Craig, and Fox 1994).

the “technocratic group.” This group had a solid technical formation in economics (mainly in the United States) and, in contrast with the previous elite in government (called “social reformists”), they shared a positive view of neoliberal economic policy and cost-efficiency criteria in decision-making (Valencia and Aguirre 1998).
PRONASOL was not the only instrument for poverty alleviation. There were targeted subsidies on some basic goods (for example, milk and tortillas)—mostly for urban areas—and general sectoral policies (for example, those for education and health) that also benefited some of the poor. But PRONASOL became an “umbrella organization” in charge of coordinating specific anti-poverty efforts at federal, state, and local levels (Lustig 1994). It became the emblem of the government and led to the creation of the term “social liberalism” in reference to this administration’s combination of neoliberal economic principles and active social policy.

PRONASOL implemented subprograms in three spheres: social welfare, support for production, and regional development (Trejo and Jones 1993). The program was built on the experience of PIDER and COPLAMAR (Brachet-Márquez 1996; Fox 1997). Some of its main characteristics included the following: it had various targeting criteria but was directed at the poor in rural and urban areas and at some other vulnerable groups, it was demand based, it required community participation, and it decentralized the administration of funds. These characteristics were shared with social programs elsewhere in the developing world that were known at the time as “compensatory programs” (Yaschine 1999).

PRONASOL and its coverage increased tremendously; the resources allocated to the program grew from 6.6 percent of public expenditures in 1989 to 26.3 percent in 1994 (Guevara Sanguinés 1996). In order to implement this program, the Ministry of Social Development was created in 1992. This ministry would also administer the Fideicomiso para la Liquidación del Subsidio a la Tortilla (FIDELIST), a food stamp program intended to subsidize corn tortillas based on previous initiatives that had been promoted by CONASUPO since the mid-1980s, and Liconsa, a subsidized milk program, which had its origins in the 1940s.9

However, at the end of the Salinas administration, the assessment was not very favorable. Although PRONASOL did benefit many poor people, it was not very effective at targeting the poor or tackling the causes of poverty, and it was highly criticized for being manipulated by political interests.10 By the end of the administration the indigenous uprising in Chiapas (parallel to the beginning of the North American Free Trade Agreement, NAFTA) and the financial crisis of December 1994 showed the limitations of “social liberalism.”

The evolution of targeted antipoverty policies in Mexico between the 1970s and the early 1990s tells us the story of how the various administrations confronted the challenges of economic development and social inequality in a

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10. For more on PRONASOL’s performance, see Cornelius, Craig, and Fox (1994); Yaschine (1999); and Díaz-Cayeros and Magaloni (2003).
country with high levels of poverty. Their answer through that period had centered on programs that sought income redistribution and were centered highly on beneficiary participation but were not rigorously targeted, had multiple sub-programs that were sometimes duplicated, and were often attached to patterns of clientelism and political manipulation. Although it cannot be denied that these programs reshaped the Mexican landscape in many ways—mainly in rural areas—and put antipoverty actions high on the Mexican political agenda, they were also highly criticized for their poor performance. This scenario set the stage for important changes in the conception and design of antipoverty policy that materialized in the design of the first CCT program in Mexico.

The New Generation of Programs: Conditional Cash Transfers

PROGRESA

President Ernesto Zedillo (1994–2000), also a member of the technocratic group, took office in December 1994 and soon found himself heading a country mired in economic and political instability due to the financial crisis that broke out that month, the indigenous rebellion that had started earlier that year in the state of Chiapas, and widespread dissatisfaction with what was conceived as an undemocratic political regime. The previous administration was held responsible for the economic and political situation, and a considerable effort was made by the Zedillo government to distance itself from its predecessor.

In this context, a new strategy had to be implemented not only to alleviate the lack of income of the poorest at the time but to face the challenges of poverty in the presence of NAFTA market conditions. Although the economic policies implemented during those years were a reminder of the orthodox policies implemented in the early 1980s, there was also a real necessity to promote competitiveness through human capital development, historically inaccessible to the poorest sector of the population. Thus, social policy aimed not only at income or consumption support from the supply side but also at reconciliation of the economic and social objectives of efficiency in expenditure with guaranteeing the welfare of the neediest.

The social policy proposed in the National Development Plan 1995–2000 (Poder Ejecutivo Federal 1995) was ambitious, highlighting the need to act on two levels: improving the provision and quality of general social services and providing specific attention to the population with greater economic and social disadvantage. Antipoverty policy constituted this second level and consisted of three areas: human capital development, provision of income opportunities, and physical capital development (SHCP 1998). But these general guidelines took

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11. The form of beneficiary participation was variable because of the many different social actions involved.
time to materialize into specific policy actions. PRONASOL was dismantled as an umbrella organization, but some of its programs continued to operate under the new government scheme. It was hard for the new government to assess the previous antipoverty programs, mainly because no impact evaluations had been conducted. By mid-1997, PROGRESA was officially started; it would become the key antipoverty program of this government and was placed in the area of human capital development.12

Two primary antecedents to PROGRESA can be identified. First, according to Daniel Hernández and Rodolfo Tuirán, in December 1994 José Gómez de León, then general secretary of the National Population Council (CONAPO), following President Zedillo’s instructions, drafted a policy note that outlined the characteristics of a program to transfer public resources to poor families through women with the aim of strengthening their social condition and emphasizing the improvement of children’s education.13 Second, Santiago Levy, then undersecretary of expenditure at the Ministry of Finance, led efforts to design a program to transfer cash to poor families who had been receiving in-kind transfers from Liconsa and FIDELIST, conditioned on their attendance at health clinics. This proposal was pilot ed in the state of Campeche in October 1995 (Levy and Rodríguez 2004).

Various institutions had an important role in this process, particularly CONAPO and the ministries of Finance, Social Development, Health, and Education and IMSS. The work that led to the definitive design of PROGRESA was done from the end of 1994 to 1997. Due to the economic crisis, it was not until 1996 that the budgetary conditions necessary for the operation of a large public transfer program were foreseen. In October 1996, President Zedillo officially announced PROGRESA and resources were programmed for its initiation in 1997 (Levy and Rodríguez 2004).

PROGRESA’s principles and objectives coincided with some of the main policy orientations found in the development and antipoverty policies of the international agenda. By the time PROGRESA was conceived, the agenda in international institutions such as the World Bank and the Inter-American Development Bank (IDB) was focused on the importance of building human capital, providing transfers, and targeting benefits to the poor.14 During the design

12. For a more detailed description of the design of PROGRESA, see PROGRESA (1997) and Levy and Rodríguez (2004).

13. Hernández was the national coordinator of PROGRESA from April 2000 to February 2001. From the start of PROGRESA until March 2000, he was its general director for planning and evaluation. Our interview with him was conducted on February 14, 2005. Further consultations were done in May 2006. Rodolfo Tuirán worked in CONAPO and was a close collaborator of José Gómez de León during the design of PROGRESA. He later became general secretary of CONAPO, and during the Fox administration (until early 2006) he was undersecretary for urban development at SEDESOL. We interviewed him in May 2006.

14. Yaschine (1998) describes in more detail the features shared by the international antipoverty agenda and PROGRESA.
process, many international experiences were reviewed; however, PROGRESA was designed by Mexican government officials, and it is unique in the sense that it simultaneously incorporated health, education, and nutrition actions (Levy and Rodriguez 2004). According to Daniel Hernandez, the specific targeting methods and conditionality were also distinctive features of the Mexican experience.

The success of the design of PROGRESA can be explained both by the collaboration of the various institutions and by the profiles of the key individuals involved. Gómez de León (who became the first national coordinator of PROGRESA) had a multidisciplinary background in demography, sociology, economics, and statistics that was central to conceiving the program as integral, technically supported, and strategically directed to medium- and long-term impacts. His abilities to reconcile his technical background with the direction of operational teams made it possible to match the operations to the design. Santiago Levy was a recognized economist with an excellent macro-level conception of the distortions obstructing the achievement of an efficient policy of food subsidy allocation and was fully committed to a new design for the social strategy. From the Ministry of Finance he made it possible to reallocate resources from inefficient subsidies and programs, which finally disappeared, to the funding of PROGRESA.15 Both officials had the confidence of the president. The conjunction of a multidisciplinary conception and outstanding professionals in their own fields was key to successful program design and implementation.16

The new program’s main objective was to improve the “basic capabilities” of the extremely poor by integrating actions aimed at simultaneously raising their levels of education, health, and nutrition. The program was designed thinking not about the consequences but about the causes of poverty, conceiving it as a multidimensional problem based on a vicious circle of undernourishment, high morbidity, and low education with intergenerational transmission. The lack of scientific evidence of the positive impacts of previous antipoverty programs and general food subsidies helped to argue for the reallocation of resources and the provision of these resources directly to the poorest people in the country through better-targeted mechanisms. PROGRESA’s actions were targeted to extremely poor households (not the poor in broader terms, as had previously been done) identified through objective targeting mechanisms (geographic and household) in order to ensure transparency and efficiency in the allocation of resources.17

The program provided cash transfers to each selected household for food consumption, scholarships for children attending school from third to ninth grade, access to a basic preventive healthcare package and health education sessions,

15. In 1991, Santiago Levy wrote a report for the World Bank that called for changes in Mexico’s antipoverty policy, endorsing the need for human capital development, better targeting, and attention to the extremely poor (Levy 1991).
16. See Bate (2004b) for an account of the story behind the design of PROGRESA.
17. See Cruz, Pérez, and de la Vega (1999) and Orozco, Gómez de León, and Hernández (1999) for a detailed description of the targeting mechanisms of PROGRESA.
and nutritional supplements for small children and for lactating and breastfeeding women. Although the program sought to improve the welfare of all family members, its emphasis was on women and children and on promoting the demand side instead of the supply side of social services. The benefits were conditioned on beneficiaries’ attendance at health and nutrition check-ups and at health education sessions, as well as on children’s school attendance (see Chapter 1 in this volume for further details). These conditionalities were conceived as a way to increase positive impacts, on the premise that poverty was going to be tackled only with long-term actions and the concrete participation of program beneficiaries in improving their own education, health, and nutritional status. The money was given directly to the mother of a household with the aim of ensuring its adequate use for the family’s welfare, as well as promoting gender equity and a better position for women within their households. The transfer was handed out by an independent financial institution in order to avoid corruption or political manipulation.

The strategy can be seen as having two streams of action: a short-term poverty alleviation aim and a long-term human capital development objective. On the one hand, it was assumed that PROGRESA’s cash transfers were predominantly used for buying food, which would positively impact the immediate needs of the extremely poor reached. On the other hand, the fact that children got better nourishment and more education, as well as improved health, was part of the longer-term human development objectives of the program’s original design, which definitely weighed more heavily in the original planning. In the end, what the program was seeking was to ensure that the next generation would confront life under better circumstances than had their parents and with access to better employment opportunities and higher standards of living.

In line with the integrated nature (education, health, and nutrition) of its design, PROGRESA’s institutional design included the collaboration of the ministries of Social Development (in charge of overseeing overall implementation), Education, Health, and Finance and IMSS. The National Coordination of PROGRESA was formed to coordinate the implementation of the program at the central level. Although the program’s main decisionmaking was centralized for its day-to-day operations in the field, the program also coordinated with the state and municipal governments through offices in each state.

During its first years of operation, as part of its targeting strategy PROGRESA reached families only in rural localities, initially benefiting those with higher marginality indexes on the premise that the poverty gap was deeper in these areas than in urban areas. The coverage was then expanded according to increases in the yearly budget allocations. In 1997 the program covered around 300,000 families in almost 11,000 localities; by the end of the Zedillo

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18. See Yaschine (1998) for an analysis of these two streams of action based on Amartya Sen’s entitlement and basic capabilities approach.
administration in 2000, the program had reached nearly 2.5 million rural families in 53,000 localities.

One of the most recognized features of PROGRESA was its impact evaluation, which was incorporated into its design from the start, with experimental methodologies to assess the effects attributable to its actions. The evaluation was coordinated by the International Food Policy Research Institute and produced short-term results by early 1999. The evaluation results published in 2000 showed that the program had been successful in improving health, nutrition, education, consumption, and poverty indicators, among others. Policy recommendations were made based on both positive effects and limitations detected. Some suggestions were to expand the scholarships to higher grades, increase the coverage in rural areas (both to new localities and within localities already covered in which not all the eligible population had yet been incorporated), and extend the program into urban areas. Stress was placed on the need to improve the quality of operations (especially nutritional supplement delivery) (PROGRESA 2000).

Given the precedent of notorious political manipulation of social programs in Mexico, the issue of the likely politicization of PROGRESA raised concerns among academic circles, policymakers, and members of the public. At one time or another, opposition parties and local leaders made claims regarding the electoral purposes of the program. Academic studies, such as Rocha Menocal (2001) with 1999 municipal data and Takahashi (2007) with 2000 municipal data, pointed to possible political manipulation in the selection of beneficiaries. However, Diaz-Cayeros, Estévez, and Magaloni (2007) consider these arguments highly implausible and propose that the results are more likely explained by the use of data at the wrong level of aggregation and statistical techniques that do not address endogeneity issues. In fact, the targeting rule was consistently the best predictor of program inclusion, and its other design and operation features reduced the possibilities for political manipulation.

The characteristics of the program represent a change of paradigm in Mexican antipoverty policy. The following features can be highlighted: targeting the extremely poor; targeting with objective mechanisms on the basis of families instead of communities; delivering cash instead of in-kind transfers; an integrated, multisectoral design; the participation of beneficiaries in the form of conditionality; the program’s demand-side emphasis; and its impact evaluation (Scott 2004). These aspects are now identified as core features of CCT program design, and PROGRESA is recognized as one of the first programs of this type to be implemented (Vermehren 2003).

Oportunidades

The continuation of PROGRESA was one of the main challenges Mexico faced with the change of government in December 2000. The uncertainty was ex-
plained by a tradition in Mexico of eliminating the emblematic social programs of the preceding government and by the fact that after seven decades of a one-party (PRI) rule, in 2000 the right-wing Partido Acción Nacional (PAN) won the elections.

President Vicente Fox (2000–06) decided not only to continue PROGRESA but also to keep it as the key antipoverty program of his administration. By that time, the design and impact evaluation results of PROGRESA had received extensive national and international attention and praise. The incorporation of a group of new government officials convinced of its positive impacts and the decision to maintain old public servants in key positions strengthened the possibilities of continuity. Also, regardless of the difference in political party, there were similarities between the current and previous governments’ perceptions of the appropriate orientation of economic and social policy. The technical background of the design of PROGRESA and its popularity were definitely attractive to new government officials in printing their own seal.

The program changed its name to Oportunidades (Programa de Desarrollo Humano Oportunidades) in early 2002 but maintained its main objectives and design as well as its high profile within the social policy sphere. Oportunidades was the predominant piece of Contigo, the wider social policy strategy of the Fox administration, which was designed to promote social development and reduce poverty through an array of programs (universal and targeted) articulated under four main areas: human development (capacities), income generation (options), asset accumulation, and social protection. Oportunidades was part of the human development area.

According to Rogelio Gómez Hermosillo, the program’s national coordinator from August 2001 through November 2006, Oportunidades remained dedicated to its original philosophy and design but also evolved and incorporated some new features that aimed to consolidate and increase the benefits that had already been documented. These new features were mainly focused on introducing a culture of total quality within the program’s administration, fine-tuning its operating mechanisms, improving its internal processes by incorporating the latest technology, improving the services and attention received by beneficiaries, promoting the program’s articulation with other development ini-

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19. The recognition of its positive results led the IDB to grant the program a US$1 billion loan in 2002, "the largest investment loan in the Bank’s history" (Bate 2004a, 1). This first loan was successfully completed in 2004. In early 2005, a second loan for US$1.2 billion between the IDB and the Mexican government was signed to support the implementation of Oportunidades until 2008.

20. For more on Contigo, see SEDESOL (2001), Presidencia de la República (2003), Banco Mundial (2004), and Székely (2004).

21. Our interviews with Gómez Hermosillo were conducted on February 24 and March 8, 2005. Further consultations were done in May 2006. SEDESOL (2003a) contains the plan of action for Oportunidades from 2002 to 2006.
tiatives, and fomenting the construction of citizenship and participation among beneficiaries within a context of transparency and accountability.

The outgoing government was careful to allocate enough resources in the PROGRESA budget to implement two main policy recommendations: the extension of scholarships up to high school level and the program’s incursion into semiurban and urban areas. Both of these were accepted and implemented by the new government in 2001. In the years ahead, three new components were designed:

1. In 2003, Jóvenes con Oportunidades, with the aim of providing additional incentives for youth to conclude high school and to support their transition to adult life;
2. In 2006, a monthly cash transfer to all beneficiaries 70 years of age and older; and
3. In 2006, a component to provide monetary incentives to beneficiaries between 30 and 69 years of age for the creation of individual pension savings accounts.\(^{22}\)

Components designed in 2006 responded to a widespread concern regarding the lack of social protection for the poor in their old age; the vast majority of this population is not covered by any social protection scheme.

During President Fox’s administration the program doubled its coverage from 2.5 to 5 million families in around 90,000 rural and urban localities in all of Mexico’s municipalities and states (Oportunidades 2006b), serving 25 percent of the country’s population and almost all of the extremely poor. This made Oportunidades one of the largest CCT programs in the world.\(^{23}\) According to Gómez Hermosillo, considering its size and new actions, the program tends to

\(^{22}\) The new components were designed by the Underministry of Prospective, Planning, and Evaluation of SEDESOL. Following are additional details about each of the three added components. (1) In Jóvenes con Oportunidades, students accumulate points at the conclusion of each year, starting in the ninth grade. When a student finishes high school, the points are converted into money that is deposited in a personal bank account that the youth can access conditioned on fulfilling one of four options: continuing to higher education, starting a productive project, buying health insurance, or constructing or improving housing. Alternatively, the youth can continue saving it and withdraw the money after two years (Oportunidades 2006a). (2) This cash transfer for the elderly was intended for each person of the target age group that is part of a beneficiary household. The amount given is equivalent to US$23.72 for each month (at January 2006 exchange rates) (Oportunidades 2006a). (3) The pension component would have allowed individual beneficiaries in this age group to open individual bank accounts to save money for their retirement. The resources were to come from several sources: funds retained from their Oportunidades cash transfer, a monthly government incentive of the same amount as the retained funds, and voluntary contributions by the beneficiary or third parties. Beneficiaries could have withdrawn their money when they reached the age of 70 (SEDESOL 2006). This component was not implemented, however (Oportunidades 2007).

\(^{23}\) Oportunidades is second in size only to Bolsa Familia in Brasil, which had 8 million beneficiary families by the end of 2005 (World Bank 2005).
be seen as a social protection scheme for the structural poor, as well as an income redistribution mechanism with incentives for the development of capacities.

Many changes to the program from 2001 until 2006 were related to its scaling up, and important improvements in operations were possible due to the use of advanced technology. In 2002 the program was introduced to urban areas and its targeting and incorporation process was adapted to this context, with a demand-based targeting system put in place. In 2004 this urban incorporation mechanism was complemented with a census in the blocks with a high concentration of poor households, in response to targeting problems highlighted by its evaluation (Oportunidades 2004). By 2006 around 1.2 million beneficiary families were receiving their transfers through bank deposits instead of direct cash delivery, which is an advance not only in operational terms but also because it provides access to financial services (Oportunidades 2006b). Also, the process of certifying conditionalities was made more efficient and the program’s operational monitoring and evaluation were strengthened.

One of the most important features of this period was the reinforcement of measures of social accountability and protection against the political use of the program. According to Gómez Hermosillo, one of the priorities was to promote transparency and avoid political manipulation. This was a particularly important and controversial issue in the run-up to the presidential elections in July 2006. Campaigns were aimed at building citizenship among the beneficiaries by educating them to view the benefits of the program as their right as Mexican citizens rather than as government aid. These campaigns also reinforced beneficiaries’ knowledge of how the program should operate, of their right to file complaints, and of the nonpartisan aim of the program.

Although much attention was given to the potential political use of the program, no evidence was found of any systematic political manipulation. The Programa de Naciones Unidas para el Desarrollo (PNUD 2006) analyzed the conditions prevailing in the run-up to the 2006 federal elections and found that there were cases in which local-level actors, contrary to the program’s rules of operation, took advantage of Oportunidades beneficiaries in favor of their political interests. However, these were isolated cases, and there was no evidence of involvement by the central government. To date, Oportunidades can credibly claim to be nonpartisan with regard to its selection mechanisms. In addition, the control and monitoring capacity of the central government has been crucial, as well as the political leadership and determination shown by program officials to protect the program against partisan use during periods of heightened political pressures, such as the proximity of elections.

Regardless of political party militancy, a wide consensus was achieved among political actors in the executive and legislative branches at the federal level, as well as in the state and local governments. With this consensus, the

program's budget, approved by Congress, increased almost four times from 2000 to 2006, reaching US$3.3 billion (Oportunidades 2006b). The budget of Oportunidades in 2006 (integrating resources from the Education, Health, and Social Development ministries) was the highest of any for a federal government program; it was 32 percent higher than that of SEDESOL and represented 0.4 percent of the Mexican GDP and 3 percent of the public expenditure for redistributive programs. The constant increase in the budget is a particularly relevant indicator of consensus around the program's objectives and performance, especially because it has taken place in the context of the most plural government so far in the modern history of Mexico, where disagreements between the executive and legislative powers and among political parties within Congress have not been uncommon.

Some of the reasons consensus was built about the positive nature of Oportunidades are related to the impartiality of its targeting method, the effectiveness of its operation, and the positive results from evaluations delivered by external academic institutions using rigorous research methods. These evaluations have taken place in both rural and urban areas and have covered health, education, nutrition, and consumption indicators, among other indicators of effectiveness (Cruz, De la Torre, and Velásquez 2006).

These features ensured the continued international recognition of PROGRESA/Oportunidades from institutions such as the World Bank, the IDB, and the United Nations Children’s Fund (UNICEF). The program has been highlighted as an example of a successful human development and anti-poverty program. Other programs in Latin America and elsewhere have taken it as a model because of its design (as a CCT program that integrates education, health, and nutrition components), its targeting and impact evaluation systems, and its operating mechanisms (IDB 2003; Vermehren 2003; Bate 2004a; Rawlings 2004; UNICEF 2004; Villatoro 2004). (See Chapter 1 in this volume for countries that have adopted or drawn from this model.)

The new administration of President Felipe Calderón, from the PAN, which began in December 2006, decided to continue Oportunidades. This decision may have been ensured by the program’s proven performance, the wide

25. The conversion to dollars was calculated using the monthly average exchange rate from January 2006, which is $10.54 pesos per U.S. dollar.

26. The estimate for SEDESOL is based on the authors’ calculations from data in SHCP (2006). The percentage of GDP is based on the authors’ calculations. The data on redistributive programs, calculated by the World Bank for the 2002 budget, include public expenditures on education and health services for the whole population, as well as pensions and targeted transfer programs. Besides Oportunidades, the other transfer program considered is Programa de Apoyos Directos al Campo (PROCAMPO), which constitutes 2 percent of the public expenditure for redistributive programs (Banco Mundial 2004).

27. The Instituto Nacional de Salud Pública and Centro de Investigaciones y Estudios Superiores en Antropología Social have been the institutions in charge of the evaluations in this period. The evaluation documents from 2002–07 can be found at www.oportunidades.gob.mx.
The evolving antipoverty agenda in Mexico generated political consensus, recognition by international institutions, and the ideological continuity represented by the new government. The level of coverage and basic principles of the program's design and operation have been maintained; however, there were some changes during the first year of this administration. In 2007 a new cash transfer for all beneficiary households was added with the intention of providing support for energy consumption after the increase in oil prices; the transfer for the elderly was suspended in rural localities, because SEDESOL introduced a new cash transfer program for this age group in these areas, and the pension savings account component was not implemented (Oportunidades 2007).

Future Challenges

Important challenges remain for the consolidation of Oportunidades. First, although the program promotes demand for social services, like many other CCT programs it does not control supply. Improving the quality of the education and health services remains a crucial factor to ensure the long-term success of the program, but the health and education sectors of the economy may have priorities that differ from those of Oportunidades. Second, the decision on how long beneficiaries should receive benefits and how they should exit from the program is one of the most controversial issues. The program actually has a mechanism that addresses this question; however, it is still necessary to evaluate its appropriateness in relation to the program's objective of building human capital as a means of breaking the intergenerational transmission of poverty.28

This issue is closely related to a major challenge that goes beyond the scope of the program. Although Oportunidades is successful in achieving its direct objectives (that is, improving education, health, nutrition, and consumption indicators), the possibility of translating these positive impacts into long-term, sustainable poverty reduction depends on the success of the government's economic and social policy strategy. This issue calls our attention to the limits of what cash transfer programs can achieve on their own and highlights the fact that their gains can be sustainable only if they are implemented within a social policy strategy that manages to articulate various initiatives and an economic policy that generates growth, creates employment, and gives incentives for pro-poor growth. In Mexico, much remains to be done in order to achieve this aim.

28. The mechanism is called Esquema Diferenciado de Apoyos (EDA) and has been implemented since 2003, with adjustments made in 2007. According to this scheme, beneficiary households' socioeconomic conditions are reevaluated after three years in the program. Those households whose conditions are above the eligibility cutoff are transferred to EDA after six years of being in the program. For the next three years they continue to receive secondary and high school scholarships but stop receiving transfers for food consumption, primary school scholarships, and funds for the elderly. Beneficiary households with only elderly people are not transferred to EDA. After these three years, they exit from the program (Oportunidades 2006a, 2007).
Oportunidades officials have made efforts to coordinate actions with other initiatives at the federal and local levels. However, the articulation of programs remains one of the main challenges of the larger government strategy: the articulation that was envisioned conceptually has not materialized in practice. Up to now each program has continued to have its own planning and goals and to operate independently, although an important effort was made to integrate the lists of the beneficiaries of all programs. The government has not yet been able to consolidate a strategy that takes advantage of the wide coverage of Oportunidades to enhance the antipoverty effort or to effectively articulate various initiatives to achieve social development for the poor.

Conclusion

The evolution of antipoverty programs in Mexico illustrates how their design has been shaped by the assessment of the predominant political group in the government with respect to the economic and social circumstances of the country and their positions on how to address the resulting social needs. At the same time, parallels with international trends can also be drawn, highlighting how the Mexican process may have been influenced by the international agenda and how it has influenced that agenda in turn (see Yaschine 1999 for further discussion).

In terms of program design, we can distinguish two main stages of policymaking. The first spanned the 1970s to the early 1990s, with programs sharing some key features, such as flexible targeting, an emphasis on supply-based initiatives and subsidies, a focus on the promotion of productivity and service provision, actions directed toward communities or cooperatives, articulation of various subprograms, mechanisms for community participation, and the absence of an impact evaluation.

The second stage, starting in the late 1990s and continuing until today, represents an important shift from the previous model. With the implementation of PROGRESA/Oportunidades as the main government initiative targeted at the poor, the design has centered on rigorous targeting mechanisms directed at the selection of extremely poor households, short-term poverty alleviation through direct cash transfers, human capital development through demand-based incentives as a long-term strategy, participation of beneficiaries through their compliance with conditionalities, and actions toward social accountability and independent impact evaluation. These are the characteristics shared by most CCT programs, many of which have been learned from the Mexican experience.

However, despite the differences between the first and second stages, there are some characteristics that have been maintained and that indicate a line of continuity amid the changes. Although the success of the Mexican CCT program has been highlighted widely and it is sometimes presented as “the antipoverty policy of the government,” it has not been the only government initia-
tive for poverty reduction. Like previous models, Oportunidades was from 2002 until 2006 part of a wider strategy (Contigo) that articulated various initiatives, some of which are heirs to the subprograms implemented under COPLAMAR or PRONASOL and maintain some of the characteristics of the previous period. Two types of initiatives were relevant, with objectives that were complementary to the more targeted actions of Oportunidades: first, programs that benefit the population living in extreme poverty, who cannot be incorporated into Oportunidades (because they do not have access to health and education services), or programs that serve the poor who live above the extreme poverty line, and second, programs that support other dimensions of social development, such as productive investment, social infrastructure development, social service provision, and community participation. An important part of this strategy has been implemented by the Ministry of Social Development, an institution that stands as a legacy of previous initiatives and represents continuity in the government’s decision to be actively involved in the social policy sphere since the early 1990s.

Oportunidades has gone a long way, strengthening its design, its operation, and its impacts on beneficiaries. This progress has given the program a strong stance within Mexican society and the political arena. However, the Mexican government still faces an important challenge: it must prove that policy articulation is possible and that Oportunidades can be part of an overall social policy strategy that leads to integrated social development for the Mexican poor.

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29. The first type of program is represented by the Programa de Apoyo Alimentario, which started in 2003 and in 2006 benefited 155,000 families (Presidencia de la República 2006). As examples of the second type of program, in 2005 Tu Casa gave 31,500 credits for housing construction or improvement; in 2006 Fondo Nacional de Empresas Solidarias supported the creation of 3,800 microenterprises, Jornaleros Agrícolas benefited around 500,00 rural workers, and IMSS–Oportunidades had an infrastructure of 3,600 health clinics that provided services in poor rural areas (Presidencia de la República 2006). IMSS–Oportunidades originated under COPLAMAR, and the other programs have their origins in initiatives that operated under PRONASOL. Microregiones (which has important similarities with previous regional development initiatives) and Habitat (created by the Fox administration) were also important programs within Contigo that followed a territorial approach to development and poverty reduction. See Presidencia de la República (2006) for an account of all the initiatives implemented by the Fox administration within its poverty reduction strategy.

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The Evolving Antipoverty Agenda in Mexico


Between the mid-1960s and the late 1970s, Brazil experienced the combination of a dictatorial regime and an average annual gross domestic product (GDP) growth of 10 percent, making antipoverty policies a secondary priority. However, low economic growth in the 1980s pushed poverty back to the levels of the mid-1970s, generating a clear lesson: the high economic growth of the 1970s had not promoted a sustainable reduction in poverty. The widespread belief that economic growth would eradicate poverty was weakened, highlighting the need to design effective antipoverty policies.

Under a variety of economic and institutional scenarios, inequality in Brazil has remained consistently high over the past 30 years. As a result, the poverty levels there have been higher than in other countries with similar development levels, despite the fact that public social spending has been proportionally higher than in other middle-income nations. Brazilian social policy was thus perceived as historically inefficient and ineffective in attacking poverty. It was in this context that the idea of social safety nets was first proposed for structuring the country’s social assistance system.

This structuring consisted of changing antipoverty policies to take into account Brazil’s poverty profile in order to better target those most in need. In particular, low human capital development was seen as a major cause of long-term poverty. To overcome this problem, conditional cash transfer (CCT) programs were designed and put into practice in the mid-1990s. Brazil is the first country in Latin America to implement a CCT program for education with the Bolsa Escola Program, which began in 1995 as a pioneer program that served as a model for other CCT programs in the region.\(^1\) CCT programs represented

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1. As noted in Yaschine and Orozco in this volume, Mexico introduced a pilot health CCT program in Campeche Province in 1995. These two countries can be seen as the first to introduce CCT programs in Latin America.

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an important innovation in social policy in that they attempt to alleviate poverty while providing incentives to improve human capital, shifting the focus from social assistance to social development, which characterizes a "new generation of social programs."

The purpose of this chapter is to show the evolution of antipoverty policies toward CCT programs in Brazil. Brazil is an interesting case not only because of the challenges that naturally arise in a country of such diversity and dimensions but also because the emergence of its social programs is a result of a learning process in social policy rather than a mere reflection of the neoliberal contour of the state. This is particularly evident in the intensity of the debate around social policy issues that took place in the 1990s.

The rest of this chapter is organized as follows. The first section describes how ideas around social policy evolved during the 1980s. A second section investigates the emergence of the idea of CCT programs as well as the proposal for the Bolsa Escola Program. The first implementation of such a proposal and the national spread of other CCT programs are then analyzed in a subsequent section. The recent integration of the federal CCT programs into the Bolsa Família Program is then discussed. This is followed by a discussion of the challenges currently faced by Brazilian social policy and, finally, by some conclusions.

**The 1970s and 1980s: Changing Ideas on Social Policy**

The 1960s and 1970s in Brazil witnessed the combination of a right-wing dictatorial regime with a development strategy based on import substitution. Among the effects of this strategy were rapid industrialization and rural-urban migration, annual GDP growth rates of 10 percent, and a sharp rise in economic inequality. The general belief was that poverty could be reduced as a result of economic growth, and antipoverty policies were thus a secondary priority. It was in this context that targeted food-based programs sprouted, such as food distribution, although agriculture subsidies had a long history. Such subsidies had at least three components. First, they had a social component, for they were aimed at guaranteeing the supply of food to the general population at reasonable prices (World Bank 1979). Second, there was an economic component that stemmed from the historical importance of agriculture to the national balance of payments. Finally, there was a political component: the subsidies were also the result of large producers' political influence.

The adoption of targeted food and nutrition programs was, if not influenced, at least supported by the World Bank (1979). A clear example of such programs was the Programa Nacional de Alimentação e Nutrição, administered by the National Food and Nutrition Institute created in 1973. It should be noted that although such programs were based on pro-human capital arguments—aimed at raising the long-term productivity of beneficiaries through raising their human capital—they were internally viewed both as inefficient and clientelistic.
During the 1980s, new ideas concerning social policy emerged in Brazil, although social policy itself remained mostly unchanged. The end of the 20-year military regime and the subsequent democratization process ruled the political agenda at that time. This process had deep effects on ideas concerning the country’s social policy, which had been structured around the social security system in place since the 1930s. Corporatist and clientelist patterns had guided this system, with access restricted to those sectors of the population with more bargaining force, notably urban workers with formal jobs. The new consensus was that policies should cover the population as a whole, especially the most deprived sectors, instead of relatively well-off urban workers. The idea was that there was a need to provide universal coverage with respect to social benefits.

Even with the influx of new ideas, social policy itself did not change qualitatively during the 1980s except for some specific innovations and an overall upward trend in social expenditures. The institutional structure inherited from the 1970s began to change only with the enactment of the Constitution of 1988, with few significant improvements in the quality of social expenditures throughout the previous decade. One of the new features of the social policy reflected a growing concern regarding the need for a new social protection system, because the great economic growth of the 1970s had not been fully translated into sustainable improvements in the standard of living of the poor.

The political liberalization of the late 1970s and early 1980s was accompanied by the emergence of a number of collective actors organized and oriented by new forms of political action (Draibe 2002). These actors consisted of newly organized oppositional political parties (such as the leftist Worker’s Party, the Partido dos Trabalhadores or PT), autonomous labor unions, middle-class activists, and social movements supported by progressive sectors of the Catholic Church (such as the Movimento dos Sem-Terra). Despite various ideological discrepancies among them, these actors built an anti-authoritarian consensus, pushing for democratization and political decentralization throughout the decade. These demands were reflected in the political debates about restructuring social policy and formed the political and social agenda that would be part of the New Constitution of 1988.

The New Constitution was ambitious: it set social-democrat guidelines for social policy, stressing the universality of coverage and benefits, in opposition to the patterns that had prevailed through the 1970s. Nevertheless, the use of specific criteria for determining benefit eligibility based on the characteristics of individuals or households to help those with greatest need was also introduced. Furthermore, the Constitution deepened the ongoing decentralization.

2. The military regime began in 1964 with a coup and ended in 1985 with power returning to civilian rule. It must be understood within the context of the right-wing dictatorships that arose in Latin America during the 1960s and 1970s.
process, strengthening the fiscal and administrative autonomy of subnational governments.

This political agenda pushed for the expansion and decentralization of public social spending. Overall, social expenditures increased significantly throughout the 1980s, rising by 62 percent in a period over which the GDP and GDP per capita increased 22.2 percent and 2.3 percent, respectively.\(^3\) At the same time, the decentralization process the country was undergoing implied a reduction in the role of the federal government vis-à-vis that of subnational governments in provisioning public goods and services. Thus, although the central government was responsible for nearly 66 percent of all social public expenditures in 1980, that percentage fell to 62 percent in 1985 and further to 57 percent in 1992. Although not steady, this process significantly changed the composition of social expenditures, with later impacts on the design and implementation of social policies.

Despite decentralized expenditure, social policy design and implementation remained centralized at the federal level, due mostly to its institutional structure. For instance, the inherited Legião Brasileira de Assistência (LBA), created in the 1940s, continued to be the clearest face of the centralized and clientelistic public action in social assistance.

The increase in public social spending and the new poverty alleviation programs were not accompanied, however, by reductions in poverty and inequality throughout the 1980s. Brazil’s Gini coefficient climbed from 0.58 in 1980 to 0.64 in 1989, and the poverty head-count ratio followed its historical countercyclical behavior: at the lowest point of the early 1980s recession, in 1983, the percentage of the poor reached 49 percent, whereas in 1987, after two years and 10 percent GDP growth, this number dropped to 26 percent.\(^4\)

These figures reflect a historical feature of social spending in Brazil—its inability to reduce poverty and inequality or even to act countercyclically as a safety net, preventing their increase during macroeconomic shocks. This observation raised concerns about the effectiveness of social policy in Brazil. For instance, in 1988 the World Bank published a report showing that despite spending around 8.8 percent of its GDP on the social sector—one of the highest levels among middle-income developing countries—Brazil performed poorly with regard to social welfare indicators such as infant mortality and illiteracy.

The remedy for this ineffectiveness and inefficiency was clear: overcentralized structures and lack of selectivity should be attacked by policymakers.

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3. The only period in which social spending experienced a sharp drop was between 1982 and 1984, when policy-based loans with the International Monetary Fund (IMF) were contracted. Because the reduction of the central government’s public spending was among the measures used to achieve external stabilization, federal social expenditures fell by 23 percent, while GDP rose 2.3 percent and GDP per capita declined by 1.8 percent.

4. Of course, other factors, such as real income gains resulting from an expansionist minimum wage policy, were crucial to this substantial but ephemeral reduction in poverty.
in order to enhance the quality of social spending (World Bank 1988). Even though these issues were addressed by the New Constitution, some factors prevented reforms from having their full impact on the country’s social policy. The low economic growth and subsequent budgetary restrictions sharpened conflicts of interest between organized and nonorganized groups. As a result, the benefits of the former remained untouched, as can be seen from the regressive aspect of social spending still visible today (Brazil 2003). This regressive feature is also a reflection of the weight social security has on overall social policy in Brazil; because benefits in this sector are proportional to contributions, they are not progressive.

In search of efficient and effective social policy, policymakers came up with the idea of safety nets. Proposals of new forms of social assistance in accordance with the New Constitution emerged from the newly formed political elites. The perception that food-based programs were inefficient led to their almost complete elimination in 1990. Meanwhile, debates on proposals of minimum-income programs evolved in the direction of CCT programs, which will be discussed in the next section.

1990–94: The Minimum Income Debate

In 1990, President Fernando Collor inherited a country in a hyperinflationary process with serious fiscal problems. The president had won the 1989 election—the first direct presidential election since 1964—with promises of combating corruption, controlling inflation, and modernizing the country’s economy. A series of corruption-related scandals led to the president’s impeachment in 1992. In its three-year existence, the Collor administration implemented a tight macroeconomic policy combined with liberalizing measures such as commercial and financial deregulation that resulted in decreases in both the GDP and GDP per capita of 3.9 percent and 8.3 percent, respectively. Also, reducing the public deficit as part of the strategy for controlling inflation affected the central government’s social expenditures, which fell sharply between 1989 and 1993, reaching their lowest levels that year. Meanwhile, the levels of poverty and extreme poverty followed their historical countercyclical pattern, and in 1993 the percentage of poor and extremely poor reached 43 percent and 20 percent, respectively.5

The reduction of social expenditures is perhaps the most striking evidence of the Collor administration’s lack of commitment to social policy. Moreover, not only was the provision of public goods and services to the overall popula-

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5. These figures can be obtained at <www.ipeadata.gov.br>. The extremely poor are those whose household income is below a threshold given by the cost of acquiring 2,100 calories per day. The poor are defined by adding to this threshold a nonfood component that is based on a representative bundle consumed by the individuals in the bottom 20 percent of the income distribution.
tion substantially reduced under that administration but the antipoverty programs also suffered severe cuts: almost all the food and nutrition programs were ended in 1990. The low efficiency and effectiveness of those programs were the main reasons given for their extinction, but the fact that no other compensatory program was put into practice—despite increasing poverty levels—reveals how disastrous those years were in terms of social policy.

Some legal instruments that have had positive impacts on social policy were, however, passed in Congress during that time. For instance, the Lei Orgânica da Assistência Social was approved in 1993, which consisted essentially of the provision of cash transfers to poor elderly people living in rural areas and to people with disabilities, with no contributive counterpart. Moreover, a bill to introduce a minimum-income program was presented in 1991 by Senator Eduardo Suplicy of the leftist party PT. This proposal, for the Programa de Garantia de Renda Mínima (PGRM), included the provision of a negative income tax to every individual over 25 years of age with a monthly income less than twice the minimum wage, which was used as a poverty line. In order to reduce disincentives to work, the benefit would correspond to just 30 percent of the difference between the minimum wage and the individual’s income. Furthermore, because of budgetary restrictions, the PGRM would begin with the elderly and then gradually be extended to the younger population (Ramos 1994).

The PGRM introduced several innovations in the Brazilian social protection system. First, it would benefit informal workers, breaking with previous trends of assisting only formal workers. Second, it was the first proposal of cash transfers targeted to the poorest, forming a safety net that protected beneficiaries from both macro- and microeconomic shocks. Third, it broke with the clientelistic feature of Brazilian social policy, for it aimed to cover the entire poor population and not just interest groups. Finally, it openly aimed to fight income inequality, a goal that had never been the direct aim of policymakers in Brazil.

Although originally proposed by Milton Friedman, a well-known liberal thinker, the idea of using a negative income tax as an antipoverty policy was being supported by leftists in Brazil. This unusual mix of ideologies as well as the innovative features contained in this proposal drew the attention of policymakers and intellectuals from different backgrounds. A series of policy-oriented academic debates around the minimum-income proposal of Suplicy took place at the beginning of the 1990s. A summary of the main ideas is given by Urani (1996), who presents the proposals of Senator Suplicy and the academics Schymura and Camargo.6

It is worth noting that the PGRM is grounded on selectivity criteria in line with the recommendations made by the World Bank in the late 1980s, mentioned earlier. However, the proposal of the PGRM was originally formulated

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6. The Schymura proposal consisted of a universal basic income. Camargo’s proposal originated the BEPs and will be discussed further in this section.
in the mid-1970s by José Maria da Silveira, an economist also affiliated with the PT (see Silveira 1975). Even though the existence of a link between the trends in the international policy community and the internal debate initiated with the proposal of the PGRM is undeniable, it is hard to posit that the former caused, or even shaped, the latter.\(^7\)

Even though the importance of cash transfer programs was largely recognized, a number of drawbacks in the PGRM design were pointed out. First, checking the income of informal workers, a group that represents nearly 50 percent of the Brazilian labor force, was extremely difficult. The PGRM generated incentives to underreport income, increasing the chances that a program would reach non-poor individuals, which would mean that the program was mistargeted. Furthermore, because non-poor informal workers would benefit from the program, formal workers would have the incentive to migrate to informal jobs, while informal workers would have the incentive to remain in them. This, in turn, would have potential negative consequences on overall economic efficiency and public accounts.

Some criticism also arose from the fact that the program was designed to begin with the elderly and, further, that it would benefit only individuals over 25 years of age. Besides questioning the program’s affordability, critics pointed out that the incidence of poverty was greater for children than for older age groups. Furthermore, although people in older age groups tend to consume additional income, younger individuals have a greater propensity to invest resources in human capital. Hence, beginning the program with families with children would be a better strategy in terms of poverty alleviation and human capital accumulation.\(^8\)

The very idea of supplementing income was also an object of criticism, especially among leftists. It was argued that a mere cash grant was not sufficient to attack structural poverty-related problems, which weakened the program’s legitimacy. According to this reasoning, antipoverty programs should not be primarily concerned with poverty alleviation. Instead, they should be designed to have long-term effects, which made policies directed at employment opportunities the most appropriate.

These observations assume that the main cause of poverty is unemployment, overlooking the role that education plays in long-term poverty. Besides displaying one of the lowest rates of intergenerational educational mobility in the world (World Bank 2003), Brazil has a strong inverse relationship between education level and poverty rates. There is a clear mechanism of intergenerational transmission of poverty that forms a continuous cycle of low schooling

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7. Indeed, that was a general perception shared by the majority of the interviewees.
8. Much of this concern with human capital stemmed from the pioneer debate initiated in the 1970s with the works of Fishlow (1972) and Langoni (1973) about the determinants of inequality in Brazil.
and poverty. Moreover, poor children do not attend school because they must work to contribute to their families’ income; that is, poor families face a high opportunity cost in sending children to school. Because the credit market is highly imperfect in Brazil, supply-side interventions in education are limited in that they hardly address this opportunity cost.

In light of these criticisms and perceptions, Camargo (1993) suggested two key changes in the PGRM design. First, in order to ensure its effectiveness and affordability, the program should be targeted not to poor individuals but to poor families with children of school-going age. Second, in order to break the vicious poverty cycle, families should invest in the education of their offspring. In order to receive stipends, beneficiaries should not only meet the eligibility criteria but should also enroll all their children in school and ensure minimum school attendance. That is, a *conditionality* was added to the program’s design, with the aim of guaranteeing investments in human capital, which in turn would promote a sustainable reduction of long-term poverty. The CCT program first proposed was soon called the Bolsa Escola Program (BEP), and it was first implemented in 1995.

The conditionalities can be understood in a number of ways. From a liberal perspective, they represent social counterparts; in order to “deserve” society’s aid, potential beneficiaries must take certain definite actions that yield social returns. This view emphasizes the choices made by the poor as a central cause of poverty. On the other hand, social-democratic positions think of conditionalities as a way of guaranteeing that the universal right of access to basic education is being granted. That is, the BEP is seen as a way to strengthen universalistic principles by taking a selective and focused approach (Lavinas, Tourinho, and Barbosa 2001).

The central idea of the BEP is thus to alleviate short-term poverty and attack long-term poverty by giving beneficiaries monetary incentives to improve their children’s schooling. The program’s objectives can thus be summarized as follows: (1) to improve the schooling levels of the beneficiaries’ children, (2) to promote immediate poverty reduction, (3) to reduce the incidence of child labor, and (4) to provide a safety net, thus minimizing the negative effects of both macro- and microeconomic shocks (Ferreira and Camargo 2001).

From investments in education, the generalization to investment in other forms of human capital was straightforward. Various CCT programs that were implemented from 1995 onward, to be discussed in the next section, used conditionalities linked to investments not only in education but in healthcare and nutrition as well.

**The New Generation of Programs: Conditional Cash Transfers**

In 1995 President Fernando Henrique Cardoso inherited a country that had managed to reduce inflation from 40 percent monthly to less than 10 percent
Annually. This had been achieved by the Plano Real, the last of many stabilization plans launched during the 1980s and early 1990s, which had been launched in 1994, when Mr. Cardoso was the minister of finance. Liberalizing measures such as privatization, commercial and financial deregulation, and institutional reforms were deepened, reflecting the neoliberal contour of the Cardoso administration. Stabilization played a central role in reducing poverty, because it ended the well-known “inflationary tax,” which falls mostly on the poor. Also, a significant real increase in the minimum wage raised the purchasing power of the poorest members of the population considerably. Furthermore, despite its neoliberal profile, the administration implemented an expansive fiscal policy, increasing social spending steadily. These elements spurred a short but significant period of economic growth contributing to poverty reduction: in 1993, the poverty head-count ratio was 43 percent, while in 1995 it was 35 percent, reaching 34 percent in 1998, the end of the Plano Real’s first phase and Cardoso’s first term.

The success of the Plano Real in achieving macro-level stability reelected President Cardoso. However, the very beginning of his second term was marked by threats of high rates of inflation. Monetary and fiscal policies were then tightened: nominal interest rates reached 45 percent per year, whereas policy-based loans with the IMF fixed goals for a fiscal primary surplus, constraining social expenditures. As a result, GDP and GDP per capita grew less than 0.1 percent between 1999 and 2002, while the poverty head-count ratio fluctuated between 35 and 31 percent.

During the two Cardoso administrations, social policy in Brazil experienced major progress. The decentralization process reinforced by the New Constitution went beyond spending, affecting policy design and implementation. While the central government stimulated partnerships with other subnational governments as well as with civil society organizations and the private sector, municipalities accounted for important innovative programs. The implementation of the municipal-level BEPs is perhaps the main contribution municipalities have made to the Brazilian social policy of the 1990s.

The next section discusses municipal implementation of the BEPs in 1995–2001. In 2001, the federal government launched the National Bolsa Escola Program (NBEP), which is presented in this section. We turn again to the years 1995–2001 to discuss other federal initiatives, which included the Comunidade Solidária Program (CSP), launched in 1995, and two other CCT programs, namely the Programa de Erradicação do Trabalho Infantil (PETI) and the Bolsa Alimentação Program (BAP), initiated in 1996 and 2001, respectively.

The Municipal Bolsa Escola Programs

The first proposals for the BEP were put into practice in Brazil in 1995. The BEPs that followed were designed and implemented by municipal govern-
ments; this practice was an exception among Latin American countries, where central governments are typically responsible for CCT programs. Despite the support of the federal government that began in 1997, the BEPs continued to be run by municipal governments until 2001, when the NBEP was launched. Although the NBEP itself can be viewed as a strengthening of the local BEPs, its implementation and design were the result of other federal actions that accounted for major innovations in social policy.

The first two CCT programs in Brazil were launched in the Federal District (DF) and in the city of Campinas, both in the form of BEPs. After these two pioneering experiences, municipal BEPs were implemented throughout Brazil. Although at the end of 1995 there were only 6 BEPs, including those in the DF and Campinas, 58 separate programs were in operation by 1999.

It is noteworthy that all BEPs were pure demand-side interventions, meaning that no resources were given to the particular schools that served beneficiaries. The 58 municipal BEPs in operation by 1999 displayed a number of differences among them, but they shared the following common design features (World Bank 2001).

**ELIGIBILITY.** In order to be eligible for a BEP, families had to meet specific criteria: (1) Their per capita income had to be below a certain threshold: the majority of the programs used a threshold of between one-half and one-fourth the minimum wage, while others used R$35 or R$60. (2) They had to have school-age children: the programs outside the state of São Paulo typically required children to be in the 7-14 age bracket. Municipalities within the state of São Paulo usually adopted broader brackets, including the 0-7 age group. (3) They had to meet program residency requirements: most municipalities limited access to their program by requiring a minimum time of residency. Of the 58 programs listed by the World Bank (2001), 43 required a minimum of two years of residency, while other programs required from one to five years. (4) They had to be headed by a female: 19 of the 58 programs gave priority to families in which mothers were the head.

**BENEFITS.** In most programs, stipends were fixed at one or one-half minimum wage and were paid monthly. The main exception was perhaps Campinas, which implemented a truly minimum-income program. A few programs provided in-kind benefits along with, or instead of, cash grants.

**PROGRAM DURATION.** In all municipal BEPs, individuals received benefits for the period of one year, after which they had to reapply for benefits, again meeting all the eligibility criteria.

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9. Campinas is located in the southwestern state of São Paulo. The Campinas program was actually called Programa de Garantia de Renda Familiar Mínima, just as in the original proposal by Senator Eduardo Suplicy. However, because most of the subsequent programs adopted designs similar to that of the DF, they are commonly called Bolsa Escola, regardless of their actual name.
CONDITIONALITIES. In all BEPs, stipends were paid on the condition that all children of school-going age were enrolled and achieved a minimum monthly rate of school attendance (usually 85 percent). Some BEPs also required a standard of scholastic performance, and a few required participation in other programs. For example, the DF program required unemployed parents to participate in the Sistema Nacional de Emprego, while Campinas required children to receive medical care monitoring.

MONITORING. Municipalities asked schools to report students’ compliance with the conditionalities. To this end, the engagement of teachers was crucial.

IMPLEMENTATION. The processes of program implementation used by municipalities were quite similar. Typically, local governments identify the most needy areas in the municipality and send their staff to those areas in order to register potential beneficiaries through household interviews.

The heterogeneity of ideas presented in the conception of the BEP was translated into the political action used to implement the municipal BEPs. The unusual combination of left-wing and liberal positions, which resulted in the BEP proposal, was reflected in the diversity of the political actors that first supported and adopted the BEP. For example, in 1995 Campinas was administered by the Partido da Social Democracia Brasileira, while its main political rival, the PT, administered the DF.

This broad political support can be seen as a reflection of the overall favorable reception of BEPs by society. Among the national elites there was a consensus that the country’s main problems stemmed from its low levels of schooling and healthcare and high levels of poverty and income inequality. This became clear in a study conducted by Reis (2001) in which members of political, entrepreneurial, bureaucratic, and rural elites were surveyed on poverty- and inequality-related issues. From the standpoint of these elites, improving educational levels should constitute the main national goal in the mid-term. Put another way, the need for more effective educational policies was seen as a priority by the political actors and policymakers.

Besides recognizing the ineffectiveness of educational policies, the elites also pointed out the inefficiency and ineffectiveness of overall Brazilian social policy. When respondents were asked about the causes of public policy failures in reducing poverty and inequality, 29.3 percent blamed poor policy planning and execution, implying that the road to innovative policies was opened up politically.

Furthermore, at the same time that the BEP was well received by the elites, it also had wide acceptance among members of the middle class, despite their exclusion from the program. In fact, the arguments that the program was designed to reach the most needy and that there was little leakage to the non-poor were used to generate both domestic and international political support (World Bank 2003). The fact that the BEP did not create domestic political conflicts...
around distributional issues shows that despite being a redistributive policy, the program was not seen as a zero-sum policy.

In addition to this wide acceptance of the very BEP idea, several studies showed overall positive impacts of the municipal BEPs, an important factor in strengthening the consensus around the BEP. Studies estimating the impact of BEPs on educational indicators such as enrollment, attendance, dropout rates, and scholastic achievement show that beneficiaries performed better than non-beneficiaries. Results related to child labor, on the other hand, have not been so conclusive. Furthermore, the evidence demonstrates that the program was well targeted; that is, the beneficiaries' characteristics did match the selection criteria.

Despite these positive evaluations of the municipal BEPs, the increase in the number of municipalities adopting these programs was accompanied by some factors that called for coordination of actions at the national level. First, a great variation in the coverage of the BEPs could be observed (Ferreira and Camargo 2001): while certain municipalities managed to benefit only 6.5 percent of their participating families with per capita income below the threshold, others delivered the program to more than 45 percent of the potential beneficiaries.

Second, BEPs were primarily implemented by those municipalities that had the resources available to afford them. However, these municipalities are exactly the ones with better development indicators and with less poverty incidence. For instance, Rocha (1999) estimated that in order to adopt the BEP in the North and Northeast regions—the poorest regions in Brazil—metropolitan municipalities would require 11.5 to 19.2 percent of the local governments' revenue. For metropolitan municipalities in the South and Southwest regions, however, the cost of a BEP was estimated at only 0.2 to 3.6 percent of the municipalities' revenues. These numbers were clear evidence of mistargeting between municipalities, even though the programs were well targeted within the municipalities.

Therefore, national funding aimed at financing BEPs in poorer regions was seen as the appropriate solution to improve the programs' targeting as well as their effectiveness in fighting poverty. In fact, several studies (Lavinas 1998; Rocha 1999; Rocha 2000; World Bank 2001) recommended federal subsidies in order to ensure programs' affordability and sustainability.

10. Unlike other CCT programs, such as Mexico's Programa de Educación, Salud, y Alimentación, Nicaragua's Red de Protección Social, and even Brazil's Bolsa Alimentação, the BEP did not have built-in experimental evaluation designs, which makes the program harder to evaluate from a methodological standpoint.


12. Rocha (1999) simulates the impacts of a BEP using the following eligibility criteria: per capita family income less than one-half the minimum wage, children in the 7–14 age bracket, and five years or more of residence in the municipality. The benefit is one minimum wage, regardless of the number of children in the family.
The National Bolsa Escola Program

The combination of positive evaluations with the variations in performance of the various municipal BEPs and the growing consensus on the need for educational and antipoverty policies created a favorable (political) environment for federal interventions in the BEPs' financing. In fact, this favorable environment led the president of Senate, from the right-wing Partido da Frente Liberal, to create the Fundo de Combate e Erradicação da Pobreza. This fund later financed the main federal antipoverty programs.

Besides a favorable internal scenario, the municipal BEPs (and other CCT initiatives to be discussed next) soon generated interest in the international policy community (see, for instance, World Bank 2001). Such interest was important because it stimulated the debate around the Brazilian experiences, providing important feedback that was used to enhance the existing programs. Also, as CCT programs sprouted elsewhere in Latin America, lessons from other countries could be passed on to Brazilian policymakers through international organizations.

It was in this context that President Cardoso launched the NBEP in 2001, significantly increasing the amount of resources directed at the program. Nevertheless, the US$680 million directed at the NBEP represented a mere 0.7 percent of federal social expenditures in 2001. This figure reflects the fact that, even though it was receiving attention from the federal government, the NBEP was not at the center of the country's social policy. Despite the general consensus around the NBEP, it is hard to make abrupt changes shifting the focus of policy.

Overall, the NBEP introduced two sets of changes to the existing BEPs, the first of which was the unification of the various BEPs' designs and parameters. Thus thresholds, eligibility criteria, conditionalities, and benefits were made common among all municipalities. The second set of changes concerned the program's functioning and funding. The NBEP was based on partnerships between the federal and municipal governments in a way that avoids the shortcomings of overcentralized structures. In these partnerships, the municipalities were responsible for the execution of the programs, that is, for selecting households and monitoring compliance with conditionalities. The federal government designed the programs, selected the municipalities, and coordinated and financed benefits. Furthermore, stipends were paid directly to the beneficiaries by the federal government, preferably to mothers, through the use of electronic cards. Finally, most of the spending was directed at poor municipalities within the 14 states with the lowest human development index (HDI) scores.

One controversial point about the NBEP was its low cash allowance of R$15 per child, up to a maximum of R$45 per family. Bourguignon, Ferreira, 

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13. Although in 1997 total spending with BEPs amounted to R$10 million, this number increased to R$1.5 billion in 2001.
and Leite (2002) estimated that this amount reduced the short-term head-count poverty ratio by only 1 percentage point. Nevertheless, the program was well targeted, indicating that transfers should be increased so as to accomplish the objective of reducing short-term poverty. However, it should be noted that municipalities were allowed to increase the stipends using their own resources, thus enhancing the impact of the NBEP on poverty.

Other Innovative Federal Programs

Concurrent with the implementation of BEPs at the local level, some innovative policies were also developed at the federal level. Launched in 1995, the CSP changed the form and content of the antipoverty agenda by replacing the LBA.\textsuperscript{14} The CSP had two streams of action. The first had an immediate poverty alleviation focus; actions in this stream consisted primarily of unconditional food distribution in poor regions adversely hit by shocks such as droughts. A federal agency with its own budget was responsible for these compensatory policies. The second stream can be seen as a strategy of providing access to universal policies for the needy population through partnerships between the three levels of government and civil society organizations. These partnerships were presided over by a council that carried out programs requiring low levels of state funding. For instance, the Alfabetização Solidária Program consisted of literacy classes taught by local university students and was jointly funded by the Ministry of Education and private sector donors (Ferreira and Camargo 2000; Draibe 2002).

At least three innovations of the CSP were of major importance to the NBEP. First, the CSP was one of the first federally structured programs to use sound selection and targeting criteria; the geographic areas assisted by the program were chosen according to their poverty incidence. This strategy was also adopted by the NBEP, which used the HDI to select and prioritize the states and municipalities to be assisted. Second, the NBEP inherited the partnership-based structure of the CSP in that it was jointly operated by federal and municipal governments, with clear rules for resource transfers from federal to municipal governments. Finally, both the CSP and the BEP are aimed at ensuring that universal policies—for example, regarding education—reach the neediest segments of the population. In this sense, they try to extend universal benefits by targeting the poor.

Along with the CSP, the PETI was also an innovative federal program (see Table 4.1). Launched in 1996, it was the first federal CCT program implemented, and it had basic objectives similar to those of the later NBEP: reducing child labor by improving school attendance. The program was focused,

\textsuperscript{14} The LBA had traditionally centralized financial resources and the formulation and management of the Brazilian social assistance system and had been marked by clientelism and inefficiency. See the previous section.
**TABLE 4.1** Federal CCT programs in Brazil (pre–Bolsa Familia)

<table>
<thead>
<tr>
<th>Program</th>
<th>Year launched</th>
<th>Target</th>
<th>Objectives</th>
<th>Benefits</th>
<th>Conditionality</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programa de Erradicação do Trabalho Infantil</td>
<td>1996</td>
<td>Families with working children. Priority is given to families with a per capita income less than half the minimum wage and to children working in risky activities.</td>
<td>Eradicate child labor, improve school attendance.</td>
<td>R$25 per month per child in rural areas; R$40 per month per child in urban areas.</td>
<td>Children must have at least 80% attendance at school and attendance at after-hours activities.</td>
<td>In 1996, the program was implemented in 17 municipalities and benefited 3,710 children. In 2003, more than 809,000 children in 2,601 municipalities received monthly stipends.</td>
</tr>
<tr>
<td>National Bolsa Escola</td>
<td>2001</td>
<td>Poor families (earning less than R$90 per month per capita) with children between 6 and 15 years old.</td>
<td>Improve schooling levels; reduce child labor.</td>
<td>R$15 per month per child for up to three children per family.</td>
<td>Children must have at least 85% of attendance to school.</td>
<td>In 2001, the program had 5 million families. In 2003, this number climbed to 5.6 million.</td>
</tr>
<tr>
<td>Bolsa Alimentação</td>
<td>2001</td>
<td>Families with pregnant/lactating women or with children between 0 and 6 years old.</td>
<td>Improve children’s nutrition status.</td>
<td>R$15 per month per beneficiary for up to three beneficiaries per family.</td>
<td>Women must attend to antenatal care, growth monitoring, and vaccination schedules and must send children to day-care and preschool activities.</td>
<td></td>
</tr>
</tbody>
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however, on those children who actually worked in risky labor activities, and it required that these children not work during the program. Also, children were required to attend after-school activities (the Jornada Ampliada) in order to keep them away from labor activities. Municipalities were eligible to receive additional resources to create, expand, and improve these after-school activities and also for tutoring, transportation, feeding, and recreation services. That is, supply-side interventions were present in the PETI design, a feature that has not passed to other CCT programs in Brazil. The program's budget in 1998 was R$25 million, and its evaluations have been positive, emphasizing the support of civil society organizations in selecting and monitoring the program (World Bank 2001).

At the same time that the NBEP intended to expand the coverage of the previous municipal BEPs, it did address the problem of excluding vulnerable families with no children or with children outside the 6–15 age bracket. With the purpose of assisting such families, in particular those with pregnant or lactating women and/or children under 6 years of age, the federal government launched, in the same year as the NBEP, the BAP. Instead of focusing on education, the conditions to be met by the BAP beneficiaries were intended to improve healthcare and nutrition. The BAP's design was very similar to that of the NBEP, besides using the same parameters (see Table 4.1).

Along with other federal targeted programs, all the federal CCT programs were incorporated under an umbrella program, namely, the Alvorada Project (PA). However, the PA was aimed at reducing regional inequalities by offering the programs to the poorest municipalities rather than integrating the administrative structures of the three existing CCT programs. Thus, the issue of avoiding the waste of resources caused by the superposition of administrative efforts in the execution of these CCT programs remained untackled. The next section analyzes the paths to unification of the federal CCT programs into Bolsa Família within the Lula administration.

The Integrated Bolsa Família Program

On his fourth attempt, Luiz Inácio “Lula” da Silva was elected president in 2002. The election of President Lula from the left-wing PT was marked by high expectations of social progress that could rapidly improve the quality of life for those who seemed to be excluded from the process of economic development.\(^\text{15}\) The Brazilian government's strategy had been twofold: to guarantee macro-

\(^{15}\) Such expectations were due to Lula’s biography and expressed left-wing political ideas. Having been born to a poor family, he led union activities during the right-wing military regime (1964–85). He engaged in campaigns for the reestablishment of democracy and founded the left-wing Worker’s Party, the PT. During the 1990s, Lula became one of the leading oppositionists to the so-called neoliberal, post–Washington Consensus administrations that ruled the country. In the 2002 elections, Lula was about to be, and in fact became, the first left-wing president in 40 years.
economic stability and to achieve more equitable growth with more rapid social progress. The economic policy of the Lula administration has not been qualitatively different from the previous administration: inflation control through tight fiscal and monetary policies remains the main guideline. Social policy, however, was to take a different turn.

Instead of enhancing the existing CCT programs, the Lula administration first opted for launching and heavily pushing the Fome Zero Program (FZP or the Zero Hunger Program). The FZP was based on the diagnosis that famine was a major issue in Brazil. It consisted mostly of the distribution of food and food vouchers and incentives or subsidies for local food production, and it was financed by both the administration and private donors. Among many intellectuals and policymakers, the FZP was soon perceived as an old-fashioned program: it revived the 1970s food programs and reminded people ofclientelism and corruption. Also, the FZP disregarded recent learning with respect to social policy, such as how to select beneficiaries, and the benefits of transferring cash instead of food. Finally, the very diagnosis that served as a basis for the FZP was soon contradicted by official data released by the national statistic agency, which indicated that only 4 percent of the Brazilian adult population suffered from undernourishment, whereas 10 percent was obese, and another 30 percent was overweight. These data further undermined the program’s legitimacy and rationale.

Despite these problems, the FZP received immediate support from civil society, which was expressed by a significant amount of donations. For this reason, the program is seen as successful in achieving society’s engagement in the problem of extreme poverty and hunger (Neri 2004). The very election of Lula can be interpreted as a general propensity to engage in such issues, but the massive government publicity around the FZP should not be overlooked.

This conceptualization, however, was doomed to deliver an inefficient program: indeed, it soon became evident that the FZP was not meeting its objectives. The government then shifted its strategy into the social arena, diverting more attention to the existing CCT programs. The failed approach to a new social policy to combat extreme poverty and hunger with the FZP was remedied by upgrading the existing structure of the CCT programs. The NBEP and the BAP were integrated with two other federally targeted transfer schemes, the Cartão-Alimentação and the Auxílio Gás. From this integration emerged the Bolsa Família Program (BFP).

The Cartão-Alimentação was a monthly cash allowance to poor families of R$50 aimed at food consumption. It was part of the FZP, and thus it was both recently implemented and relatively small, benefiting about 774,000 families. The Auxílio Gás was a bimonthly cash transfer of R$15 to families with a per capita income of less than half the minimum wage. The idea was to compensate those families for the elimination of a subsidy on cooking gas. Launched in 2001, the program benefited more than 9.7 million families by 2003.
Two key arguments supported the integration of these four programs into one. First, integration would allow for more comprehensive treatment of poverty, because the BFP is jointly an educational, health, and nutrition policy. Besides that, a unified benefit schedule with higher allowances could be offered instead of the fragmented pre-reform schedule. Thus, the program’s overall effectiveness could be enhanced in terms of both immediate poverty alleviation and long-term poverty reduction. Second, integrated programs would be more efficient, because there are scale gains that stem from using a single registry to select the beneficiaries. Furthermore, unification of the CCT programs would mitigate the waste resulting from disjointed and duplicative programs.

The BFP was created by Law 10.836 in January 2004 to integrate the management responsibilities of four federal CCT programs and the registration of the targeted population in the Cadastro Único, a national registry of poor households. The BFP redefined the target population of the pre-reform programs. In addition to poor families with children, extremely poor families are also eligible for the BFP regardless of the presence of children.16 Extremely poor families receive a base monthly transfer of R$50 aimed at food consumption, while both extremely poor and poor families with children can receive up to three transfers of R$15 based on compliance with the conditionalities. The average family benefit was thus increased by the new benefit schedule, jumping from R$24 (US$8) to R$71 (US$24). Furthermore, the BFP required all members of the families to comply with the conditionalities.

The BFP inherited many features of the pre-reform CCT programs, that is, the NBEP and the BAP. These included the absence of supply-side interventions, the lack of rigid time limits for participation in the program, decentralized implementation and the use of federal–municipal partnerships, and the lack of a built-in program evaluation plan.

The BFP had the following design features:

**Eligibility Criteria.** Those eligible included extremely poor families with less than R$50 of family income per capita and poor families (with less than R$100 of income) with pregnant or lactating woman and/or children from 0 to 12 years of age or teenagers to 15 years of age. In 2006 the income thresholds were adjusted to R$60 and R$120 for extremely poor and poor families, respectively.

**Beneficiary Identification and Selection.** The BFP uses the Cadastro Único for beneficiary selection. Data collection and beneficiary registration are the responsibility of the municipalities, but operation and maintenance of the database are centralized at the federal level by the Ministry of Social Development. The Caixa Econômica Federal is responsible for the system of management and operation.

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16. The eligibility of (the extremely poor) families without children doubled the BFP’s target population in comparison with the NBEP’s.
**Benefits.** Extremely poor families receive a fixed amount (R$50) plus a variable cash transfer depending on family composition: R$15 per child for children from 0 to 6 years of age and for teenagers to 15 years of age, up to a total of three. The total transfer for extremely poor families ranges from R$65 to R$95 (US$22–US$33). The other eligible group of poor families receives the variable cash transfer, with the total transfer ranging from R$15 to R$45 (US$5–US$15).

**Conditionalities.** The change from the old CCT programs is that BFP requires all family members to comply with the conditionalities, which include the following: (1) enrollment and regular school attendance for children aged 6–15 years; (2) keeping vaccines up-to-date for children aged 0–6 years; and (3) attending antenatal visits for pregnant women.

**Institutional Arrangements.** The BFP is administered by the Secretaria Nacional de Renda de Cidadania (SENARC) in the Ministry of Social Development (MDS), which is responsible for supervision of the operation of the program and benefits payments. The program “is guided by the decisions of the President, supported by the recommendations of management board (the Comitê Gestor do Programa Bolsa Familia), which is responsible for policy articulation, promoting partnerships between levels and sectors of government and with civil society, overseeing formal audits and social controls” (World Bank 2004).

**Monitoring and Evaluation.** Local agents from municipalities check the conditionalities, but the quality control of process, payments, and Cadastro Único information are the responsibility of the SENARC/MDS, which also conducts the impact evaluation of the program. However, the monitoring and evaluation of the BFP is still being shaped. The loan of the World Bank to BFP includes recommendations to improve the evaluation and monitoring system.

After four years of existence, the BFP has had some impressive results. First, the program has successfully expanded its coverage. When launched in 2003, the BFP reached 3.6 million families and had a budget of R$3.4 billion, which represented 1.6 percent of social expenditures. In 2006 the BFP’s budget increased to R$8.5 billion, accounting for 2.8 percent of social expenditures. The program now assists 11.2 million families, or 99 percent of all families below the poverty line in Brazil. Second, the program’s targeting was not worsened by this expansion, despite the possibility of leakage (Barros et al. 2006). Moreover, the BFP’s major expansion in coverage and good targeting have had significant impacts on income inequality and poverty in Brazil.17

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17. Between 2001 and 2004, Brazil experienced a fall of 4 percent in its Gini index. Barros et al. (2006) show that the BFP alone is accountable for 14 percent of this decline. In terms of current poverty reduction, measured by the head-count ratio, the implied impact of the BFP is around 21 percent of the 2-percentage-point decline.
It appears that the general population has perceived and valued such impacts. Indeed, Lula’s popularity is high among poorer classes, disregarding the recent corruption scandals involving government members and the PT itself. Moreover, polls showed that 25 percent of those who planned to vote for Lula in the 2006 presidential elections did so because of progress in the social arena. This was the leading reason for which people declared intentions of voting for Lula, while for all other candidates personal image was the main reason, accounting for more than 30 percent of voting intentions.

Issues Going Forward

Despite having received both popular and political support, the use of CCTs as a consistent and integrated strategy for poverty alleviation still has various limitations, which have prevented these initiatives from becoming more effective. The first such limitation is the amount of resources directed to the BFP: in 2006, it represented only 2.8 percent of federal social spending. Moreover, CCTs have gained more importance within other countries’ social policies than they have in Brazil’s.

Second, there is a scope problem: actions within the BFP are limited to improving education, health, and nutrition. While deficiencies in these are certainly some of the major causes of poverty, they are not the only ones. More comprehensive action is required in sectors such as microcredit and job training, for instance.

Another problem relates to the lack of supply-side interventions for improvement of the quality of services for beneficiaries, along with the CCTs themselves—with the exception of the PETI. Even though substantial investments were made in the education and health sectors in the 1990s, they should have been more closely attached to the expansion of the BFP to ensure the proper development of human capital.

Furthermore, many problems concerning the monitoring of compliance with conditionalities have been reported. Shortly after the BFP was launched, program officials began to question the importance of checking compliance. Furthermore, no incentives were created for schools to report children’s attendance. Checking whether children are actually attending school is crucial to the program’s long-term objectives; if a program loses its conditional feature, it is unlikely to meet those objectives.

Finally, Brazilian CCT programs have made little use of built-in program evaluation designs. As a result, knowledge of program impacts and targeting

18. This poll was conducted between May 23 and 24, 2006, by the Instituto Datafolha and is representative of the state of São Paulo.

19. Bourguignon, Ferreira, and Leite (2003) simulate the impact of BE and that of an unconditional transfer on school enrollment and find that the main impact is due to the conditionality.
outcomes has been limited. In 2009 an evaluation of the BFP by the International Food Policy Research Institute got under way with funding provided through the United Nations Development Programme, with results expected in mid-2010.

Conclusion

Brazil's antipoverty policy over the past 20 years has reflected a major learning process. The end of the widespread belief that economic growth would generate sustainable poverty reduction led policymakers to concentrate more efforts on the design of antipoverty policies. The macroeconomic shocks the country underwent in the 1980s reinforced this notion, leading to the idea of creating social safety nets to protect the people most vulnerable from economic fluctuations. This idea soon incorporated human capital development incentives, leading to the proposal of CCT schemes. After that, a period of local implementations of this kind of program served as a basis for the more comprehensive use of CCTs as a national strategy for poverty reduction.

Along with combating short-term and future poverty, CCT programs introduced a series of innovations vis-à-vis the previous social assistance policies. The first innovation was the use of technical criteria to define and select the families and geographic areas to benefit from the program. Second, they allowed for a combination of demand-side and supply-side interventions, as in the PETI. Third, CCT programs permitted the inclusion of built-in program evaluation designs, although these have not been extensively used in Brazil. Finally, CCT programs using different transfer components can be combined under one program umbrella, allowing for integration, as in the case of the BFP.

This series of innovations has represented a paradigm shift concerning antipoverty policies. The learning process that resulted in the change from providing social assistance to social development culminated in a new generation of programs.

Multilateral organisms seem to have had some role in the formulation and adoption of CCT programs. For example, the World Bank gave explicit support to the new generation of programs in the form of policy recommendations, advice, or even loans aimed at supporting the programs. On the other hand, there is no ground for asserting that such support has been a determining factor in the adoption of CCT programs in Brazil. Clear evidence to the contrary is found in the first CCT experiences, which were carried without any external support. Moreover, the very ideas that originated the targeted CCT programs in Brazil were developed by Brazilian academics, intellectuals, and policymakers. Thus, it is more likely that the support from multilateral organisms was important in legitimating and reinforcing the preexisting proposed ideas or even in improving the quality of the CCT programs in terms of their management and implementation.
The neoliberal economic adjustments of the 1990s were certainly important in the selection of CCT programs as opposed to other more costly programs because they imposed budgetary restrictions on social spending and therefore created a push for innovative policies in search of efficiency and effectiveness. In this context, international organizations did have a more active role in the adoption of CCT programs because they sponsored such adjustments. However, it would be rather simplistic to state that the emergence of CCT programs in Brazil was solely a reflection of the neoliberal ideology that shaped the state in the 1990s, because this would disregard the role of the learning process experienced by social policymakers in Brazil.

There was nevertheless an internal consensus among those with different political perspectives that CCT programs should be used as the national anti-poverty strategy. The recognition that supply-side interventions were not enough to guarantee access to basic public goods and services led social democrats to support CCT programs as a way of strengthening universal principles by targeting the poor. The fact that leftist mayors were pioneers in the implementation of CCT programs further shows their broad political support.

Policymakers have a tough road ahead if they wish to make Brazilian social policy more effective in combating poverty. After a decade of major innovations, it is now time to focus on the existing shortcomings of the new generation of programs. Consolidating CCT programs as a strategy of poverty reduction in Brazil has provided an opportunity to start breaking with the country’s history of inequality and poverty. Redistributing human capital is essential to ensure that the poor can benefit from, and contribute to, economic growth.

References


Valéria Pero and Dimitri Szerman


Honduras and Nicaragua are countries that exhibit striking similarities and differences. At first glance, the two nations are very similar, connected by their linguistic, cultural, geographic, and historical likenesses. In the late 19th and early 20th centuries, the contiguous Central American countries were both influenced by significant intervention by the United States, which stunted the centralized development of their respective states (Mahoney 2001). Low human development levels and excessive reliance on the agricultural sector and favorable commodity prices now characterize both economies. Throughout their histories, Honduras and Nicaragua have experienced economic developments that have reflected their dependence on and interactions with external economic and political support. These factors have led to similar outcomes: next to Haiti, they are the poorest countries in the Western Hemisphere.

The countries’ similarities are limited when one considers the political philosophies that drove their economic and social policies in the 1980s. Honduras maintained a market economy led by powerful military rulers, followed by a transition to a democratic civilian government. Nicaragua underwent a socialist revolution following the overthrow of the dictator Anastasio Somoza Debayle, and the state controlled much of the economy throughout the 1980s. These regimes indubitably pursued distinctive policies and achieved different impacts while they ruled.

Despite their contrasts in recent history and politics, Honduras and Nicaragua began to focus on similar social policies in the 1990s. Externally guided structural adjustment programs led both countries to acknowledge the exigency of providing social protection for vulnerable groups. By the late 1990s, both had launched conditional cash transfer (CCT) programs that were successful to vary-
ing degrees. These programs and their results reflect the unique interaction of domestically embraced ideals and the influence of external donors in the two countries.

This chapter provides a review of the evolution of social protection programs, particularly CCT programs, in both Honduras and Nicaragua. It proceeds to explain the chronological development of social protection programs in Honduras, then in Nicaragua, paying close attention to how domestic and external influences have changed social priorities and programs over time. A description of political and economic factors in the countries places the CCT programs within their relevant milieu. Future challenges to CCT programs and social protection policies in both countries are also addressed. Finally, the conclusion synthesizes relevant lessons, cutting through disparities between the histories of CCT programs in the two countries to reveal that the programs’ outcomes have been driven by similar underlying determinants.

Honduras

Early in the 20th century, the United States exercised significant influence in Honduras, particularly due to, and facilitated by, the work of U.S. fruit companies in the country’s banana sector. This involvement hindered the development of a strong central government. By the beginning of the 1970s, the Honduran government was still weak and had limited influence in its economy. The government’s involvement in the economy was essentially limited to policies that discouraged exports, savings, and domestic private investment (World Bank 1994a). Fortunately, the economy still enjoyed significant economic growth throughout the 1960s and 1970s.

The military government that ruled the country throughout most of the 1960s and 1970s commanded the support and involvement of the United States, which sought to keep Honduras free of the communism it feared might spread throughout the region. By the mid-1970s, Honduras began to express greater interest in working with international agencies including the World Bank, the International Monetary Fund (IMF), the Inter-American Development Bank (IDB), and the United States Agency for International Development (USAID).

Social protection during this era was extremely limited. A formal social security system had been established in 1959, but this system was contributory and extremely limited in scope and geographic coverage (SSA 2008). It was, and still is, a program that primarily benefits the non-poor. Additionally, food programs for the poor had begun in the 1950s, most of which were financed through external monies (Cohen, Franco, and Villatoro 2006).

The Late 1970s and 1980s: Agrarian Reform, Neoliberal Policies, and Food Aid

Throughout the 1970s, various measures had been taken to redistribute land to the rural poor, although strong opposition by wealthy landowners and other in-
Intersted parties thwarted many of these efforts. Much of the land transferred to peasants was unsuitable for agricultural purposes, and there was significant pressure to use the land for commercial agricultural purposes, which benefited wealthier agricultural workers rather than the poor. The transfer of land from food production to export production, coupled with persistent high population growth, fomented a crisis in food security.

These pressures spurred rural peasants to effectively organize and pressure the government to address their grievances (Brockett 1987). While unrest was prevalent in Central America in the early 1980s, Honduras managed to hold elections and transition from military to civilian rule in 1981–82. Its strong military retained extensive powers that have gradually become more limited.

In the 1980s, U.S. interest in the republic increased as the U.S. administration under President Ronald Reagan mobilized U.S. troops in Honduras and used it as a refuge for Nicaraguan Contras. The U.S. maintained military bases in Honduras, compensating the government by providing development assistance. Partly in response to the interests and influence of the U.S. administration, the focus of agrarian reform was shifted. Rather than redistributing lands, the government worked to provide small landholders with secure land titles. This effort was intended to provide greater property rights and economic security to rural peasants, as well as to generate more political stability (Brockett 1987).

After a strong period in the 1970s, Honduras’s agricultural sector experienced very little growth in the 1980s. This economic downswing was partially attributed to decreasing agricultural prices and an overvalued exchange rate. The weakness in the sector had a strong impact on the poor. The government tried to prop up the agricultural sector through subsidies and government interventions, using price controls, public ownership, and tariffs. Most of these supports aided medium- to large-scale farmers rather than small farmers, who were typically members of poor households that relied on subsistence agriculture (World Bank 1994a).

Development aid during this period, typically focused on economic growth policies, was also accompanied by some efforts to help the poor as they confronted their own economic crises. After Hurricane Fifí struck in 1974, USAID began providing wheat to Honduras on concessionary credit terms. Although there were concerns that the program could lead to market distortions, this practice continued into the 1980s and 1990s.1 In the 1980s, food aid to Honduras from various sources grew greatly. Unfortunately, it was not able to ameliorate the rising malnutrition levels in areas hit hard by the economic downturn (World Bank 1994a).

Complaints against food aid programs included their tendency to alter consumption trends away from locally grown agriculture, their poor targeting, and

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1. After 1991, USAID’s food aid to Honduras was converted from concessionary credit to grants of food aid that could be stored, given to the needy, or sold to fund domestic development (World Bank 1994a).
their high costs due to their reliance on separate distribution channels. Even though the expenses per beneficiary for food aid were lower in Honduras than they were in other countries of the region, administrative costs were still as high as 50 percent for the USAID food aid program (World Bank 1994a). Food aid was also known to crowd out the private sector, which did not like to import the wheat due to its poor quality and restrictive usages (USGAO 1995).

The Early and Mid-1990s: Social Infrastructure and Compensation for the Poor

When a government friendlier to U.S. interests took power in Nicaragua in 1990, the United States lost interest in Honduras as a strategic partner in Central America. It subsequently withdrew much of its assistance from Honduras, which then relied more on bilateral and multilateral lenders for financial and development assistance. The government began accumulating large debts with lenders, especially the IMF and the World Bank. Honduras began implementing structural adjustment policies during this time in order to continue receiving and financing its loans from these creditors. The country’s social protection policies, as well as its economic policies, reflected much of the contemporary ideology embraced by these external lenders.

Poverty indicators in this era were dismal, reflecting the economic struggles and mismanagement of the 1980s. In 1992, the World Bank reported that half of Honduran households were poor and an additional 30 percent lived in extreme poverty. The majority of these households resided in rural areas and owned very little land. The World Bank recognized poverty as a multifaceted issue, and it acknowledged the role that low human capital played in perpetuating poverty. It also highlighted the need for a social safety net that could protect the poor from the adverse effects of structural adjustment (World Bank 1994a).

Aware of both low levels of human development and the potential harm structural adjustment policies might inflict on the poor, Honduras began focusing on poverty reduction through social protection as early as 1990 (Honduras 2000). The social protection programs focused on three areas: developing social infrastructure, protecting the poor from falling below critical consumption levels, and improving the supply-side provision of social services to the poor. There was an increased focus on social spending and improving the targeting of programs to the poor. In 1992 additional protection for the property rights of small farmers and women was provided, which continued to dispel rural unrest and halt land occupations (World Bank 1994a).

The development of social infrastructure, particularly for health and education services, was achieved through the creation of a social fund. The use of social funds similar to those in the Honduran program came into vogue in the 1990s as international lenders sought to protect fragile societies and the poor from the unfavorable impacts of structural adjustment policies. A World Bank
report candidly suggested that social funds could be used to garner political support for adjustment programs (Khadiagala 1995).

The Honduran Social Investment Fund (FHIS), created in 1990, was dedicated to the development of social infrastructure. It is still extant today. Originally envisioned as a workfare program, the Fund's employment creation component did not take hold in practice. The focus of FHIS was on short-term poverty relief through small-scale infrastructure projects. Like many other social funds, it was financed by external lenders and facilitated, rather than implemented, social infrastructure projects. It was able to provide quick proof that the government was helping the poor. FHIS relied on nongovernmental programs, municipalities, and other decentralized entities to initiate and implement projects. In the early 1990s, it tended to partner heavily with the public sector, which encouraged much-needed reform (Khadiagala 1995).

Although it was supposed to function in the most destitute areas and to pay poor beneficiaries who worked on infrastructure projects, FHIS originally focused most of its resources in more populous areas and directed funds to private contractors and nongovernmental organizations (NGOs). Later reforms and projects of FHIS have helped it to gain more credibility and experience in efficiently creating social infrastructure.

By 1991, Honduran food aid programs had expanded to reach over three-quarters of a million beneficiaries through a school feeding program, a work-for-food program, and a health center feeding program. The powerful incentives of food aid programs were soon recognized. It was realized that school feeding programs encouraged school attendance, and food distribution at health centers encouraged visits to clinics. The programs' high costs and perverse effects on local prices led the World Bank to begin encouraging the practice of "monetarizing" food transfers (World Bank 1994a).

One example of the model the Bank promoted was found in the original Honduran CCT, PRAF-I, which was created in 1990.2 It, too, was intended to ease the impact of cuts in social spending resulting from the structural adjustment policies of the 1990s. PRAF-I was viewed as a compensatory mechanism for the poor, who were hit particularly hard by structural adjustment policies. Its goal was to protect poor families from falling below critically low consumption levels. Improving the levels of nutrition, health, and education in extremely poor households was the specific goal of the program (IDB 1995). By 1991, PRAF-I reached 180,000 female and child beneficiaries (World Bank 1994a).

In theory, PRAF-I was a voucher program in which females received food stamps when they fulfilled co-responsibilities in health and education. The first

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2. PRAF-I stands for the Programa de Asignación Familiar. The program was known simply as PRAF but here is referred to as PRAF-I to distinguish the original PRAF from later versions (PRAF-II and PRAF-III).
available vouchers were limited to a school voucher available to children from the first through third grades and a maternal and child voucher given to pregnant and nursing mothers and to qualifying children. The program components were expanded to include a microcredit program, a school materials transfer, a transfer for senior citizens, and a nutritional voucher for malnourished children. Some components had explicit co-responsibilities attached to them, while others did not. In practice, the entire program was little more than an unconditional voucher program, because co-responsibilities were rarely, if ever, enforced.

Vouchers were given to mothers because it was assumed that they would use them in ways that would help their children and promote human capital accumulation, while fathers were less likely to do so. Vouchers directed at health issues amounted to 12 percent of a basic food basket, while the education-related vouchers amounted to 38 percent of the basic food basket (Cohen, Franco, and Villatoro 2006). These original program benefits were eroded by inflation until the transfers eventually had lost 30 percent of their value by 1994.

Significant funding for PRAF-I came from the World Bank and the IDB, which were thereby able to exert considerable influence on the structure and goals of the program. In particular, external lenders were concerned that the program be well targeted to the vulnerable poor, especially children and women.

Expenditures on FHIS and PRAF together equaled approximately 1 percent of Honduras’s GDP in 1991 and 1992 (World Bank 1994a), and both programs expanded over time. PRAF-I grew over 25 percent per year in its first decade, reaching an average of 308,816 beneficiaries annually in the first 10 years of its existence. It represented almost one-fifth of the country’s antipoverty spending from 1992 through 1997 (Cohen, Franco, and Villatoro 2006).

Criticism of PRAF-I was abundant. The program benefits and beneficiaries changed yearly, often without explanation, and no consistent social protection strategy was outlined. In its early days, concerns regarding PRAF-I’s impact on fertility rates among beneficiary families were also voiced. There were concerns that providing regular support to mothers would increase fertility rates among beneficiary families.

The IDB believed that PRAF-I should address supply-side weaknesses in education and healthcare.

The IDB also criticized PRAF-I for its poor targeting and leakage. Early targeting methods relied on subjective, often political, motives. Some children received vouchers through the sixth grade rather than through the third grade, while new children were not allowed into the program. A survey conducted by CARE in 1996 found that 30 percent of the beneficiaries of the school voucher and 40 percent of the beneficiaries of the maternal and child voucher belonged to the top two income quintiles of the population (Cohen, Franco, and Villatoro 2006).

Despite the critiques of PRAF-I, external lenders preferred it to food aid programs. In 1994, the World Bank suggested that PRAF or other voucher-based programs replace traditional food aid programs in Honduras, which were even less targeted and more expensive (World Bank 1994a).
Finally, provision of supply-side services in healthcare and education to the poor was limited, but it grew throughout the 1990s. By the mid-1990s, Honduras prioritized the provision of healthcare, nutrition, education, and hygiene for the poor.

The government spent over 9 percent of its GDP on social expenditures during this time. From 1990 to 1998, social spending increased by 17 percent (Honduras 2000). As a proportion of total government spending, spending in the social sector increased throughout the 1990s, rising from 34 percent in 1994–96 to 40 percent in 1999 and 42 percent in 2000.

These increases in funding did not necessarily translate into the desired outcomes. Primary healthcare services were well directed to the poor, but funding to the education sector was largely ineffective. Education in Honduras was inequitable and inefficient and was conducted based on subjective guidelines and lax procedures. It was also highly regressive (World Bank 1994a).

**The Late 1990s and Beyond: Developing an Effective CCT Program and Situating It within a Broader Social Safety Net**

PRAF-II, Honduras’s Authentic CCT Program. Despite the efforts of early social protection programs, almost half of Honduran households lived in extreme poverty in 1999, and inequality had increased from 1991 to 1999 (Cohen, Franco, and Villatoro 2006). There was a general recognition that human capital indicators, such as literacy rates and child labor force participation, needed significant improvement. Poverty had decreased only from 67 percent in 1994 to 63 percent in 1998, before Hurricane Mitch struck. The hurricane, which devastated Honduras in late 1998, directed the attention of the international community to the country, highlighting the vulnerability of the poor to adverse shocks.

Honduras’s lack of advancement in key indicators, as well as PRAF-I’s inability to combat these problems, led the IDB to initiate a pilot project in 1998. This project, PRAF-II, was the first authentic CCT program in Honduras. It is also the Honduran CCT program that is best known in the international community, probably because of its close ties to the IDB and the International Food Policy Research Institute (IFPRI).

PRAF-II signaled a major break from the objectives and methods of the original PRAF-I. While the domestic PRAF-I program continued as it had in the past, PRAF-II was a new, parallel program. Its objective was to increase human capital accumulation, particularly through improving education and health outcomes, in order to decrease chronic poverty. Because it was known that supply-side constraints were strictly binding in the areas to which PRAF-II directed benefits, the program included extensive plans to improve supply-side supports, which would increase the capacity of the rural health and education sector in targeted areas.³

³ The following discussion is based on Moore (2008).
Representatives from the IDB, IFPRI, the PRAF-II team, and relevant Honduran line ministries worked together through a series of meetings to agree on the objectives, goals, measurement criteria, and evaluation of the project. They met for three days in October 1999, during which IFPRI and IDB officials explained to Honduran functionaries how the program would work. The design of PRAF-II primarily came from IFPRI and the IDB.

The transition to the new CCT program was incomplete in that the original PRAF-I program was retained in its initial format, while PRAF-II was implemented according to the IDB loan specifications. The two PRAF groups, although they worked in the same building, occupied different work spaces and functioned independently. Most vouchers given by PRAF-I still worked in very much the same way as they always had (that is, without monitoring of co-responsibilities and objective targeting), and that program’s coverage continued to expand. The PRAF-II program, on the other hand, focused on improved targeting, demand and supply-side supports, monitoring of co-responsibilities, and an experimental evaluation design.

PRAF-II immediately faced various obstacles in its implementation, some of which were unforeseen. These issues limited its impacts. Hurricane Mitch significantly distorted the market for NGOs in Honduras, effectively pricing PRAF-II out of the market for the supply-side supports it wanted NGOs to provide. This forced PRAF-II officials to reengineer the delivery of supply-side supports for education and then wait for legislative changes that would allow it to direct funds to parent associations instead of NGOs (IDB 2006).

Incomplete implementation was also present in the program’s monitoring and enforcement components. In fact, it is unclear whether supply-side requirements were ever monitored or enforced in PRAF-II (IDB 2004). Even as the respective supply-side organizations received funds, their spending was not tracked to ensure that they were allocating resources in line with PRAF-II objectives. Although anecdotal reports of abuse of funds were not widespread, the lack of supply-side monitoring and enforcement once again undermined any supply-side program results. The lack of monitoring in this area was probably due more to a lack of capacity than to a lack of will.

Additionally, transfers in PRAF-II were delivered somewhat sporadically as officials transitioned from self-banking to use of the official banking system. The transfers were small relative to those in similar programs—3.6 percent of a poor rural family’s total expenditures compared to 20 percent in Oportunidades in Mexico and 18 percent in the Red de Protección Social in Nicaragua (IDB 2004). Undoubtedly, the transfer size and infrequency limited program effects.

The delay in implementation confounded the impacts found in PRAF-II’s intermediate evaluation. In essence, the evaluation plan was too complex for PRAF-II’s institutional framework. The IDB agreed with this conclusion (IDB 2004). Although a less complex evaluation would have been less informative,
it would have been more appropriate given the weak implementation capacity in Honduras. Unexpected changes within the program and the external environment were able to significantly jeopardize the results of the evaluation.

The obstacles that PRAF-II encountered subjected it to increased scrutiny from external and internal critics. These obstacles also uncovered political ambivalence toward the project, which hindered the quick passage of legislation that would allow PRAF-II to work with parent associations.

Following an intermediate evaluation of PRAF-II, the CCT program faced significant criticism from Honduran politicians, including then-President Ricardo Maduro. PRAF-II was forced to defend its existence as well as make substantial changes to meet the demands of domestic and external stakeholders. These changes encompassed the features of the transfers, the expansion of coverage to pregnant females and to children ages 4–6, and the evaluation and refinement of targeting practices.

Finally, as often happens when new governments come into power in Honduras, the 2002 elections saw all current PRAF employees eliminated. This destroyed much of the organization’s institutional memory. Rather than maintaining its distance from politics, PRAF was manipulated as a political tool, and the program was affected by significant politicization.

In brief, PRAF-II officials were trying to manage a program that had too complex a supply-side design and evaluation framework to be implemented within the loan’s time frame. They also had to deal with obstacles to ground-level implementation, domestic criticism and external expectations, and the tendency toward politicization. All of these problems made it difficult for PRAF-I to absorb the institutional framework and culture of PRAF-II, and the programs remained distinct from each other. In spite of the difficulties faced by PRAF-II, policymakers believed that the CCT program could be improved and serve its intended purposes. By the end of 2006, the PRAF-II project had been carried out and the loan was closed.

PRAF-III AND THE SOLIDARITY NETWORK. Recently political leaders from both of the dominant political parties, the National and Liberal parties, have begun to take significant steps to fight poverty. Although PRAF did not enjoy much support under the Maduro administration, which ruled from 2002 to 2006, the Zelaya government was more sympathetic to it. The Honduran government that assumed power in early 2006, led by Liberal Party member and former FHIS director President Manuel Zelaya, agreed to continue the domestically based PRAF (PRAF-I). In addition, another loan and project with the IDB was planned to fund the so-called PRAF-III. The Zelaya administration also designed a full-fledged social protection strategy called the Red Solidaria, or Solidarity Network, in which a harmonized PRAF would play an integral role.

The Solidarity Network, originally led by then–First Lady Xiomara Castro de Zelaya, is an umbrella organization that coordinates the activities of all social protection programs in the country and aims to eliminate extreme poverty
in 200,000 households located in indigent areas (Office of the First Lady of Honduras 2007). It is composed of multiple organizations, some of which are related to the current PRAF-I and PRAF-III. It aims to align programs that were previously isolated in order to capitalize on cross-organizational synergies and to more effectively reach the antipoverty goals of these programs.

The Solidarity Network attempts to provide social protection throughout an individual’s life cycle, and it encourages Hondurans to begin developing productive capacity and eventually to insert themselves in the productive sector. The goals of the program, while decided by then-President Zelaya, are closely tied to the goals of Honduras’s Poverty Reduction Strategy Paper and to the United Nations’ Millennium Development Goals.

PRAF-III is being funded through another major IDB loan. One portion of the most recent IDB loan will be used to administer another pilot project of cash transfers based on the knowledge gained from the experience of PRAF-II. A major goal of the loan will be to assimilate the domestic PRAF-I program with the internationally funded program.

The domestic PRAF-I program had functioned independent of the IDB-funded PRAF-II program in Honduras, despite goals of harmonizing the two programs. The newest loan will be used primarily to absorb the best practices of the joint PRAF/IDB projects within the existing PRAF-I program. The executive director of the PRAF-I program, brought on with the transition to the Zelaya government, decided to immediately begin the absorption and standardization of PRAF-III practices within all of PRAF-I rather than simply implementing the minimal changes required prior to the loan disbursement. This decision forced the loan disbursement to be postponed until the end of 2007.

The PRAF-III program will, at the very least, incorporate lessons learned from PRAF-II, including an increase in transfer size and frequency and an extension of coverage through the end of the second cycle of primary school. Other improvements will consist of streamlined monitoring and improved technology. In PRAF-III, supply-side interventions were placed under the responsibility of the appropriate line ministers, who will coordinate their ministries’ efforts with those of PRAF-III through the Solidarity Network. Finally, the new program also narrows targeting to the village level and extends the program’s banking system.

The harmonized PRAF, assimilated into the Solidarity Network, will take a leading role in the network by providing the use of its databases and infrastructure. Additionally, the Solidarity Network has its headquarters within PRAF’s headquarters in Tegucigalpa. Institutional knowledge is shared, because some employees of the Solidarity Network work closely with PRAF employees. Targeting and poverty mapping completed by PRAF using census and survey data are being used by the Solidarity Network to target and coordinate its programs. Therefore, the villages targeted by PRAF are also targeted by programs of the Solidarity Network.
Issues Moving Forward: Harmonization, Ownership, and Effectiveness

To become an effective CCT program with significant impacts on poverty and human capital in Honduras, PRAF will have to surmount several important obstacles. First and foremost is the challenge of harmonizing a domestic and an internationally financed program in a short period of time. Trying to unite and harmonize a well-established domestic program and a loan-financed program can be extremely difficult. Prior to PRAF-III, the domestic PRAF-I’s inefficiencies had become deeply ingrained, and domestic stakeholders did not have the necessary incentives or resources to increase their own institutional capacity. Whether the standardization can be achieved and sustained remains to be seen. This process was slowed by the political crisis in Honduras in 2009, although PRAF is still supported by the interim government of Roberto Micheletti.

The assimilation process was necessary mainly because of the dual nature of the program that developed over time due to the differences in priorities and capacities of the domestic and international constituencies. Although the externally financed program was more efficient and effective than the domestic program, its development led to some counterproductive results. The parallel functioning of PRAF-I and PRAF-II alienated key domestic stakeholders and weakened the long-term national ownership of the loan-financed program. The program duality has also jeopardized the enhancement of the institutional capability of the domestic CCT program.

Unifying the domestic and external PRAF programs is not solely an issue of ownership of the program; it is an issue of ownership of ideology. Although external pressures have encouraged the Honduran leadership to embrace poverty reduction and social protection, domestic buy-in to these ideals has varied over time. Honduras has relied heavily on external creditors and has been classified as a highly indebted poor country (HIPC). The government has had to acquiesce to the demands of creditors to continue receiving external financial support. Therefore, the degree to which recent Honduran governments have advocated poverty reduction and social protection out of convenience rather than out of principle has not always been apparent.

Some of the difficulties that PRAF has faced, including the development of its dual nature and its opposition from certain governments, have revealed that domestic support for the international agenda has sometimes been lacking. PRAF-I’s continual reluctance to enforce co-responsibilities calls into question the Honduran will to accumulate human capital and commit to long-term goals at the expense of greater short-term efforts. Likewise, if Honduras is concerned with the positive household behavioral changes promoted in many CCT programs, PRAF needs to effectively educate beneficiary households on the practices the program wants to encourage. Current rhetoric in Honduras often fo-

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Cusses on the plight of hapless poor households that the government must rescue through transfers or food aid. Within some circles, it is not clear that PRAF is viewed as much more than a short-term political tool.

Even if PRAF is able to standardize all its policies and integrate them into one CCT program, it is not clear whether it will be sustainable in the long run. Although PRAF has enjoyed a long existence in Honduras, it has sometimes struggled to receive the domestic funding that it needs to function properly. Some PRAF employees indicated that the funds promised to beneficiaries were not always available and that beneficiaries were sometimes compensated with in-kind benefits such as infrastructure or supplies instead of the promised transfers. Government funding of PRAF was guaranteed at least through 2009. Other financial support for the current PRAF-I will come from debt relief programs, external credit, and donations. This financial struggle is another symptom of the potential dissonance between external and domestic priorities.

Another major challenge to PRAF’s effectiveness is that it must now rely on the Solidarity Network to provide supply-side supports. Some say that the Solidarity Network has not yet achieved crucial coordination of supply-side activities. Anecdotal evidence indicates that the AIN-C (Atención Integral a la Niñez en la Comunidad, or Integrated Community Child Health Program) project, for instance, was paralyzed for a significant length of time as the Solidarity Network struggled to organize itself. It has also been reported that the Solidarity Network did not monitor the decentralization of activities at the community level, at least for a time.

On the positive side, government funding promised to Solidarity Network communities for 2008–11 obliges these communities to assign enough money to meet program requirements in their villages. The sharing of information systems will facilitate the coordination of supply-side priorities within PRAF and the Solidarity Network. These examples give reason to believe that the current administration is committed to poverty alleviation and social protection and to hope that there will be important supply-side improvements.

Although PRAF itself has survived through multiple governments and is probably not in danger of being eliminated, the Solidarity Network might not be as long-lived. It is closely tied to the leadership of ousted President Manual Zelaya and to the first lady. Even before the Zelaya government was overthrown, many within Honduras and PRAF believed that the safety net program would not live beyond Zelaya’s administration. The elimination of the Solidarity Network would impact PRAF in proportion to the degree that PRAF has become linked to it.

The collapse of the Solidarity Network, as well as PRAF’s sustainability and effectiveness, is linked to the degree to which the programs are politicized. Politicization can occur in the selection of beneficiaries, the selection of pro-

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5. At the time of this writing, the degree to which changes in external funding due to the country’s political crisis would alter PRAF funding was not clear.
gram staff (based, for example, on political parties rather than merit), and the political use of the program by an incumbent government. The programs’ success is hindered when the programs are associated with a political party rather than viewed and treated as parts of a state policy that is above politicization. Both the domestic and externally funded PRAF programs have experienced significant opposition and turnover as a result of politicization, all of which significantly slowed progress in the programs and could continue to hinder their impacts in the future.

Whatever the criticisms that can be leveled against the domestically funded PRAF program, it should not be written off completely. Despite all of its difficulties and failures, PRAF-I has managed to sustain its existence over a long period of time. Some viewed the timing of the current IDB loan project as the quintessential moment for this project: political will was stronger than it had been in the past, and the top PRAF-I leadership had embraced the vision to see a healthy CCT program functioning in Honduras. The potential advances available at this unique moment may be impeded or reversed by the political crisis and elections of 2009.

Nicaragua

Situated next door to Honduras, Nicaragua has had a very different experience in its economy and politics. The Nicaraguan economy grew quickly from 1950 to 1977 during the end of the rule of the U.S.-backed Somozas. During this time growth was driven by exports and relatively favorable terms of trade, which at first helped to finance import substitution. However, these characteristics made the economy sensitive to the prices of certain exports and to demand in the Central American Common Market (CACM). When the economy began to deteriorate due to the elimination of protection for import substitution in CACM and the deterioration of terms of trade, the government provided subsidies to industry and agriculture, financed through external loans (World Bank 1994b).

Civil unrest and political oppression increased throughout the 1970s. The earthquake of 1972 devastated much of the capital city of Managua, and the misappropriation of international aid revealed blatant corruption in the government of President Anastasio Somoza Debayle. These struggles contributed to the decline of the economy, and the quality of life for most Nicaraguans deteriorated. Political unrest culminated in the resignation of President Somoza in 1979 as the left-wing Sandinistas (formally the Sandinista National Liberation Front, or FSLN) took control of the country.

The Late 1970s and 1980s: The Sandinista Era and a State-Controlled Economy

The period of Sandinista rule, from 1979 to 1990, was characterized by a civil war and declining economy. Real per capita GDP fell dramatically in the 1980s due to the poor economy, the volatile political situation, and the high rate of
population growth. The economy virtually collapsed from 1987 through 1990. The civil war, a U.S. embargo, adverse systemic shocks, poor terms of trade, and unsuitable economic strategies all took their toll on the economy.

Economic mismanagement led to the tripling of current expenditures at the beginning of the 1980s; government expenditures hit 45 percent of GDP in 1983–84. To fund these increases, the government first used reserves and then moved to take on loans, delay payments, and then refinance its loans. By 1988, its debt equaled almost 700 percent of GDP (Nicaragua 2001). In the late 1980s the government printed money, triggering hyperinflation (World Bank 1994b). Inflation rates arrived at 33,000 percent in 1988. External confidence and the extension of credit were virtually suspended. Land redistribution practices produced uncertainty around property ownership, and the agricultural sector declined at a rate of 8 percent per year from 1979 to 1989, with a drop of more than 40 percent in cultivated land and 60 percent in exports (World Bank 1995). Ostensibly, poverty greatly increased.

The 1980s were also characterized by the government’s acquisition of private enterprises and its strict control of the economy through price controls and high tariffs. The Nicaraguan government controlled over half the arable terrain and significant portions of export crops, such as bananas, cotton, beef, and coffee (World Bank 1995). The financial sector was state controlled, as was almost all international trade.

Nicaragua’s experience with social protection programs during this era reflected its socialist influences. The Sandinistas placed a high value on state provision of universal social services in education and healthcare. Despite the economic problems in the 1980s, the government’s efforts to expand primary education and healthcare to Nicaraguans did improve the country’s performance on related indicators. By the early 1990s, Nicaragua had achieved relatively respectable marks on these indicators when compared to other Central American countries.

In the 1980s other programs provided in-kind transfers—accompanied by rationing—of food, transportation, energy, and more (Largaespada Fredersdorff 2006). At this time most social programs attempted to reallocate income and property from the rich to the poor (IDB 2001). However, the weak economy did not support these efforts, and the poor were not well protected against economic failures. Despite the government’s efforts, its attempts to protect vulnerable members of society were neither integrated nor well implemented (Nicaragua 2001).

The 1990s: Economic Recovery and Neoliberal Reforms

When the Sandinistas were voted out of power in 1990, Nicaragua’s GDP per capita was at the level it had been in the 1920s (World Bank 1994b). After 10 years of civil conflict, peace was reestablished. Increased fiscal and monetary responsibility soon brought inflation under control and repaired Nicaragua’s re-
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relationships with multilateral lenders including the World Bank, IDB, and IMF. The government underwent both stabilization and structural adjustment programs that were viewed favorably by its lenders. Cutting the size of the army, selling public businesses, and reducing the size of government ministries all decreased public sector spending. The financial sector was privatized and re-regulated to align it with free market policies and increase transparency (Nicaragua 2001). By the mid-1990s, the economy was growing positively, despite continued hindrances such as persistent problems with land redistribution in rural areas. From 1994 to 2000, real GDP grew, on average, slightly less than 4.7 percent annually.

Although many of its new policies were not directly beneficial to the poor, the government of Nicaragua expressed interest in helping the poor as early as 1991. By 1994, the World Bank was also addressing the need to protect vulnerable members of Nicaraguan society from the adverse effects of structural adjustment. The provision of social services, particularly primary education and healthcare in rural areas, was improved and implemented in new areas. Throughout the 1990s, the Ministries of Health and Education were converted into policy leaders, while local units were given more administrative and implementing power. This required improved information and data management by the central ministries (Nicaragua 2001).

Nicaragua was able to improve its social infrastructure for healthcare and education through the creation of a World Bank–supported social fund similar to FHIS in Honduras. Nicaragua's fund, known as the Emergency Social Investment Fund, or FISE, was created in 1990. It was charged with constructing infrastructure destroyed during the conflicts in the 1980s and with providing relief to the poor as stability and adjustment programs were implemented (World Bank 1994b). FISE worked with local organizations to fund these programs, which were driven by demand at the local level and seen as a means of encouraging community involvement (World Bank 1995). It also encouraged an increase in the domestic focus on poverty reduction in the early 1990s.

At the same time that it was rebuilding infrastructure through FISE, the government provided transfers to compensate individuals who were victims of the civil war (Largaespada Fredersdorff 2006). It also implemented nutritional programs for the poor and employment creation programs in areas with high jobless rates (World Bank 1994b). Programs directed to war victims tried to insert the affected households into the regional economy, and many of these programs were very similar to those implemented by the line agencies. Although these programs were not specifically targeted to the poor, many war victims were poor and therefore benefited (World Bank 1995). Nutrition programs included aid from donors that provided school food programs for 600,000, work-for-food programs for war victims, education on health and sanitation, and investment in infrastructure and agriculture to improve sanitation and nutrition, respectively. Other safety net programs provided credit, subsidies, and trans-
fers of farming equipment and other inputs to poor artisans and agricultural workers, with beneficiaries determined based on a poverty map created by FISE (World Bank 1995). From 1991 to 1994, the Nicaraguan government used around 1 percent of its GDP to fund its safety net programs.

These programs were extremely fragmented and lacked a consistent, well-articulated strategy. Most programs were not well targeted to the poor, and they were inefficiently managed, with many programs overlapping. The Ministry of Social Action was created in 1993 with the mandate to harmonize and monitor social programs. It coordinated over 10 programs to support former war victims. Despite these efforts, the various ministries did not cooperate adequately in their targeting or budgets, and program impacts were not monitored. Finally, given the focus of these programs, some important vulnerable groups were overlooked, including young children, schoolchildren, and pregnant and lactating women (World Bank 1995).

In 1993, 50 percent of Nicaraguans were poor, and 19 percent were extremely poor. The World Bank (1995) calculated that only 12.5 percent of transfers to Nicaraguan households, be they from charities, government, or donor programs, were actually given to the poor. Additionally, poor health and low levels of education were recognized as correlates and causes of poverty. By 1995, a typical Nicaraguan had 4.5 years of education, while an extremely poor person had 3 years on average in urban areas and 1.6 years in rural areas, despite high net enrollment rates (World Bank 1995). Almost one-third of children under age 5 were malnourished, while over 40 percent of extremely poor rural children were chronically malnourished. Low levels of skills and education, as well as underemployment and agricultural sector work, were found to be associated with poverty. In general, the government’s stabilization and reform policies of the early 1990s hurt the poor, who were often still locked into previous state-led markets. Subsidies on items consumed by the poor were revoked, and higher wages and employment security were lost.

By 1995, the World Bank (1995) began to encourage the Nicaraguan government to formally articulate a poverty relief plan. It said that the focus of the plan should be to provide supply-side services in healthcare, education, nutrition, and more. More important, the Bank asserted that a social safety net was necessary to protect vulnerable groups of society and to coordinate development assistance from external lenders and donors. The Bank recommended focusing on rural areas, using better targeting and information management, allowing specific line organizations to fulfill their mandates, monitoring results objectively, and streamlining operations by focusing on the programs with the best targeting and impact.

As the decade wore on, there was an increasing recognition that free market policies were not helping poor Nicaraguans attain a better standard of living. The focus on programs for the poor continued to increase. Although the government spent approximately 12 percent of its GDP on public education and healthcare, its low GDP and high poverty levels limited the impacts of these in-
vestments. Given these constraints, the government recognized that program efficiency was critical to achieve and maintain impacts (Nicaragua 2001). Partially to address this issue, the Supplementary Social Fund was established in 1998 to fund and organize social programs in a more efficient manner (Largaespada Fredersdorff 2006).

By the late 1990s, the country’s performance in relevant indicators had not improved significantly: 48 percent of Nicaraguans lived in poverty in 1998, and 17 percent lived in extreme poverty (IFPRI 2005). Although these numbers were on a downward trend, they were still too high. The Central Region’s rural poverty levels had actually increased to 69 percent and 29 percent, respectively (World Bank 2003). Adult and youth literacy rates, at 54 percent in rural areas, indicated that the educational system had serious flaws in coverage and quality (BID 1999). Sanitation and water access and usage were still dismal in rural areas, contributing to infectious diseases and malnutrition. Nicaragua remained one of the poorest and least developed countries in the Western Hemisphere. The devastation caused by Hurricane Mitch in 1998 further exposed the country’s inability to help its vulnerable citizens cope with adverse shocks. Nicaragua’s CCT program, the Red de Protección Social (RPS), was created to address these issues.

The Late 1990s and After: The Rise and Fall of CCT Programs in Nicaragua

The idea for a social protection program like RPS arose as long ago as 1998, when the Nicaraguan government began discussions of a poverty reduction plan, encouraged by international institutions. Key players from the Nicaraguan government and the IDB began designing RPS in 1999, borrowing much of the program’s framework from Mexico’s CCT program Oportunidades.6 The loan was approved in March 2000, and it was a key part of the HIPC Decision Point Initiative Document, as well as a major component of Nicaragua’s Strengthened Growth and Poverty Reduction Strategy (SGPRS) (BID 2002).

At the same time that RPS began functioning, the government of Nicaragua continued to express interest in fighting poverty and improving its social safety net. Its SGPRS had embraced considerable, if not ambitious, goals in poverty reduction, healthcare, education, nutrition, and sanitation. Two of its four main goals included investment in the human capital of the poor and the protection of vulnerable groups of Nicaraguans (Nicaragua 2001). The government acknowledged that changing household and community behaviors went hand in hand with investing in human capital, recognizing the perverse behavioral incentives of some prior programs. It was also cognizant of the need to protect specific vulnerable groups in society, particularly the indigent, given the country’s susceptibility to adverse systemic shocks. Other groups that were considered vulnerable were children under 5 years of age, abused individuals,

6. Then known as PROGRESA (for Programa de Educación, Salud, y Alimentación).
the elderly, and people with disabilities (Nicaragua 2001). These priorities were reflected in the design of RPS.

RPS was designed to receive external financing through two separate loans, which divided it into two distinct phases. The first phase, a pilot project known as RPS-I, lasted from 2000 through 2002 and reached approximately 10,000 households. If RPS could prove its worth in the first phase, it would then be expanded, eventually to the national level.

Even in its early days, RPS faced significant opposition and criticism. There was a strong aversion within government circles to any program that might be considered "asistencialista," that is, that provided benefits to the poor without helping them move out of poverty, thus prolonging their dependence on institutional assistance. Officials were concerned that a program that gave cash to the destitute was paternalistic and might increase the poor’s reliance on the government, without encouraging them to try to break free of poverty.

The objective of RPS, from its inception, was the accumulation of human capital. Some former RPS officials mentioned that the program’s cash transfer component was purely a mechanism by which to encourage beneficiaries to invest in their own human capital rather than being a central component of the program. The goal of the project, as stated by the IDB, aligned with the emphasis spoken of by the country counterparts.7

RPS-I was implemented in rural areas of the country that were known to have high levels of poverty and low human development. It was launched in areas that already had adequate supply-side supports and high, although not the highest, poverty levels. Its targeting was objective and accurate. An external impact evaluation conducted by IFPRI was planned to fairly measure program outcomes through an initial experimental evaluation. In addition to adopting the typical CCT program co-responsibilities of school attendance and well-child visits, beneficiaries were required to participate in educational seminars that encouraged behaviors consistent with the long-term goal of human capital accumulation. The program worked to encourage supply-side provision through transfers to local educators, and it provided health services through private health providers rather than the Ministry of Health.

RPS was characterized by its professional staff, which had both technical expertise and enthusiasm for the tasks at hand. RPS-I resided in FISE, partially because the original director of RPS had worked at high levels within the social fund. The high caliber of the program’s officials was reflected in the efficiency and punctual implementation of RPS-I. The program’s extensive monitoring and enforcement system was managed through its continuously improved information system and the commitment of officials to monitor implementation at all levels. Although the program initially needed adjustment, officials expressed enough flexibility to alter details in protocol to stay true to the objectives of RPS.

7. The following discussion of RPS is based on Moore (2009).
Monitoring and implementation were enhanced through the participation of community members and local supply-side stakeholders. Local promoters took their responsibilities seriously, and they fomented a sense of community responsibility at the ground level. Medical teams traveled to remote locations through difficult terrain, spending extensive time in the field. Teachers increased school sessions to meet the demands of increased enrollment and the attendance of beneficiary children.

RPS’s focus on the educational seminars it held for beneficiaries appears to have played a part in the CCT program’s success. Certainly, in all CCT programs there are beneficiaries who comply with the requisite co-responsibilities simply to receive cash transfers. However, it appears that many female household heads involved with RPS had a positive, awareness-raising experience through RPS and the educational seminars that encouraged them to voluntarily embrace behaviors encouraged by RPS. Many former RPS beneficiaries spoke highly of the seminars. They indicated that they had learned both practical skills, such as nutritious cooking practices, as well as less tangible values, such as the importance of self-esteem, standing up for oneself, and taking initiative in their families and communities.

Extremely positive outcomes were found in the RPS-I impact evaluation. The CCT program became renowned internationally for its impacts in malnutrition and other areas. The program’s success allowed it to continue into a second phase, known as RPS-II. RPS-II rolled out to reach more communities, providing benefits to 30,000 households by 2004. It continued providing cash transfers to the 10,000 households of RPS-I until each household’s initial three-year enrollment period had ended (BID 2002).

For the most part, RPS-II maintained the original goals and methods of RPS-I. It added a new vocational training component that was intended to encourage productive activity in youth who had completed their schooling. Targeting was further refined, and supply-side supports were provided for former RPS-I beneficiaries for an additional two years, provided the households still fulfilled their co-responsibilities in education and healthcare. The transfer amounts were decreased in the hope that the program could still have its desired impacts while providing benefits to more households. The farthest-reaching change from RPS-I to RPS-II was the transfer of the program from its original headquarters in FISE to its new central office within the Ministry of the Family.

Initially, RPS-II was able to maintain a substantial degree of independence in the Ministry of the Family, all the while moving toward a gradual assimilation into the organization. However, there was a restructuring of the ministry in which many functions of RPS-II were consolidated within similar programs financed by international institutions. Decisionmaking became very centralized, and fewer employees were responsible for more duties (Castro and Regalia 2007). Top RPS-II officials found themselves stretched thin as they managed additional externally financed programs, PAININ (Programa de Atención Inte-
gral a la Niñez Nicaragüense, or Comprehensive Childcare Program in Nicaragua) and SAC (Sistema de Atención a Crisis, or Crisis Attention System).

RPS-II officials were also forced to "share" their technical and administrative employees within the Ministry of the Family. Even their vehicles and purchased goods were no longer under their jurisdiction. These factors kept administrative costs of the program higher than was hoped, which tarnished the program's image. Additionally, salary discrepancies between those paid by international and domestic funds caused tension, jealousy, and eventually a lack of cooperation between domestic officials and RPS-II officials.

RPS was discontinued during the government of President Enrique Bolaños of the Constitutional Liberal Party. Although the IDB had the funds for another phase of RPS (RPS-III) that was intended to expand program coverage, the minister of the family failed to request appropriate funds from Congress to allow this. In 2006, RPS continued to operate at a reduced level using a minimal budget, but it eventually began the process of closing the program. Perhaps somewhat anticlimactically, RPS was not renewed and would have to be discontinued because domestic funds alone could not support it.8

The collapse of RPS is ironic given the international recognition it had received as an effective tool for fighting poverty and accumulating human capital. Support for the CCT program was not always lacking: there had been discussions of making RPS a major component of a broader social safety net program known as the Solidarity for Development Program (LeCayo 2004).9 The IDB had claimed that Nicaragua should be able to secure funds through HIPC debt relief and soft monies to expand RPS to cover all extremely poor households in rural Nicaragua (approximately 80,000 families) within eight years of the initiation of RPS-II (BID 2002). In short, the ability to expand and continue RPS at the national level was available if the political will had existed.

Another small CCT program, SAC, was modeled after RPS and was intended to help the program continue, but to no avail. SAC was supported by the World Bank and reached a small number of households in a poor region sensitive to adverse climatic shocks. It provided the transfers given by RPS-I as well as a vocational training program and productive investment grants.

Some note that the government that took power in 2007, that of President Daniel Ortega and the Sandinistas, would have discontinued RPS had it continued into Ortega's term.10 The current FSLN government of Nicaragua has its own vision of social protection, in which RPS does not play a part. The Ortega

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8. In theory, RPS still exists. There is still a very small program located within the Ministry of the Family known as RPS, but it participates in only minor activities, such as providing schoolchildren with backpacks.

9. Plans for a Unique Beneficiary Registry were in place by 2003 (LeCayo 2004).

10. President Ortega also led the country during the 1980s, both as a ruling member of the Junta of National Reconstruction from 1979 to 1985 and as president from 1985 to 1990.
government began its own program, known as Hambre Cero, or Zero Hunger. This program aims to eliminate chronic hunger in Nicaragua by increasing food production so that households can meet and exceed subsistence levels, then go on to contribute to local economic activities. It provides in-kind transfers to eligible households, which must commit to invest the transfers in productive activities and subsequently repay the government within 18 months of receipt of the transfers. Most eligible households must own a small parcel of land and have access to a water source. Therefore, Zero Hunger is primarily directed at poor, but not indigent, households.

The majority of the program’s funds come from the Nicaraguan national treasury, while approximately one-third are from donations from other countries or organizations. The close connections of Zero Hunger to the FSLN party have generated criticism that it will become highly politicized. Program officials, as well as President Ortega, emphasize that the program’s benefits will not be awarded based on the political affiliations of potential beneficiaries. Stipulations placed on the program by outside donors will increase its accountability and perhaps its sustainability. However, the general consensus is that this program will not outlive Ortega’s rule.

**Issues Moving Forward: Garnering Support for Effective Social Protection**

Whether high-level opinions in Nicaragua about CCT programs will change in the medium or the long term is unclear. Current political leaders say that the governments in power when RPS existed did not commit to social protection, and RPS was therefore useful in those years. Ortega’s government claims it is now taking on responsibilities previously assumed by RPS, and therefore RPS is no longer needed. In addition to the Zero Hunger program, the government manages a school supply program, a school lunch program, and a program providing nutritional supplements for schoolchildren through the Ministry of Education. The Ministry of Health continues to expand the healthcare services available in remote rural areas as the government’s budget allows. However, it is not clear that Ortega’s programs will effectively provide relief for vulnerable groups in the short run or that they will enhance human capital investments and poverty reduction in the long term. While government officials’ comments emphasize a lack of understanding of the goals and mechanisms of RPS, they also highlight the current government’s lack of ownership of the CCT program.

In the future, if any type of effective social protection, particularly a CCT program, is to be established in Nicaragua, some issues must first be addressed. Understanding of these issues can be improved by examining some of the reasons that RPS was discontinued. The two obvious determinants of its failure were its inability to obtain political support throughout its lifetime and the difficulties it faced due to its transition from FISE to the Ministry of the Family.
One former RPS official aptly said that RPS's greatest weakness was its failure to educate domestic stakeholders about the program's components and positive impacts. There had been much skepticism regarding RPS from its inception. RPS officials believed that, rather than wasting their time arguing with government officials, it would be more profitable for them to prove that the program could work. RPS officials did not ignore the public relations aspect of the program, but it is clear that the efforts they made to educate the public and politicians about RPS's purpose, components, and successes were inadequate. The resistance to a CCT program like RPS was so strong in Nicaragua that a full-fledged marketing campaign was probably necessary. Unfortunately, the stretched budgets and schedules of RPS staff could not provide this type of operation.

Although a domestic public relations campaign would have been helpful, the ideas it would have been combating were deeply entrenched. Nicaragua's history has made some Nicaraguans suspicious of programs supported by certain countries and organizations. Others are mistrustful of programs that they perceive to be welfaristic in nature. It was claimed that RPS encouraged reliance on the government's social services while keeping poor beneficiaries trapped in poverty. Some believed that RPS decreased labor force participation, even though this was disproved in the impact evaluations. RPS was also criticized for being too costly, partially because it used private healthcare providers to supply healthcare services to beneficiaries. However, the Ministry of Health was initially unable and reluctant to provide services to remote areas served by RPS, making this design necessary at first.

The transition of RPS from FISE to the Ministry of the Family was also an obvious factor in its eventual failure. FISE was characterized by efficiency, professionalism, and non politicization. RPS was able to operate with significant autonomy while it was located there. The Ministry of the Family, on the contrary, was weak and prone to interventions by top domestic officials. It also experienced significant turnover in its top post, the minister of the family. Some of these ministers were capable and supportive of RPS. Others did not understand RPS or the international organizations with which it worked, and they hindered the CCT program from performing its duties.

Conclusion: Balancing Competing Interests in Loan-Financed Programs

Although Honduras and Nicaragua were influenced by different political agendas and economic policies in the 1970s and 1980s, they fell under similar influence by the 1990s. Both countries followed internationally supported structural adjustment plans. They both began focusing on poverty and social protection as a result of both external influences and the internal economic, political, and social impacts of adjustment on the poor.
Honduras and Nicaragua both worked with the IDB to begin CCT programs in the late 1990s. Although the programs were similar in nature, their outcomes were very different. Honduras had difficulty implementing its CCT program, its impacts were limited, and a duality developed between the domestically directed and the externally financed programs. It is still struggling to assimilate the best practices of its loan-sponsored program within its domestic program. Nicaragua, on the other hand, ran an exemplary CCT program that was well implemented and had immediate positive impacts. Its success was short lived, however; the program was discontinued and will probably not be renewed in the short term.

Although the experiences of the CCT programs have been distinctive, their challenges can be traced to several root issues that affected both Honduras and Nicaragua. These have included the need to cater to both external and internal stakeholders and the need to meet short-term loan requirements while establishing a program that is viable and successful beyond the life of the loan. In particular, generating widespread domestic buy-in and understanding of social protection is crucial for such programs’ long-term sustainability and effectiveness.

The lending relationship was necessary and useful for both programs, and the IDB provided invaluable guidance to program officials, encouraging efficiency and effectiveness. In particular, the loan-financed programs enjoyed the leadership of technically capable and competent leaders who held the programs to high standards. However, this relationship also generated significant challenges for both PRAF and RPS as officials tried to balance the demands of external and internal constituents.

External lenders and program officials were concerned, correctly, that the CCT programs might be unduly influenced by domestic political pressures, and they tried to leverage their institutional structures to limit these influences. To avoid politicization, PRAF-II functioned separately from the domestic PRAF, ensuring that the program met the IDB’s standards in its hiring practices, protocol, and program implementation. This arrangement essentially created two programs that shared little more than a name. In its first phase, RPS located itself within a relatively efficient government agency that allowed it autonomy to function according to the standards set by the IDB.

These arrangements backfired for both programs as they have tried to become integrated into a national social protection strategy. Harmonizing the domestic and externally funded PRAFs has required significant time and financial resources, and its success is not guaranteed. When RPS was transferred into its proper position within the Ministry of the Family, at the behest of the Nicaraguan government, the program lost the independence that had allowed it to function effectively.

PRAF and RPS officials also had to focus on short-term deadlines agreed upon with the lender without losing sight of their long-term program goals.
Both PRAF's and RPS's objectives state their focus on long-term human capital accumulation, but the short length of their loan terms and deadlines directed most of their attention to short-term objectives. The duration of the loans did not allow time for mistakes or unexpected changes, not to speak of government regime changes, the garnering of support from weak line ministries, personnel turnover, legal or political changes, and more. Although the loans were sometimes extended, the pressures of short-term deadlines too often dictated policies and priorities.

In PRAF-II's case, officials were occupied with trying to meet short-term loan deadlines and could not take the necessary time to assimilate the loan's standards into the domestic PRAF program, which they had intended to do. As time went on, the domestic standards became further entrenched, and the programs continued to function independently. Another loan and pilot program had to be created to directly address this issue, and even this effort may not serve to completely unite the two programs.

The pressure that RPS officials faced from their lender also had detrimental impacts on the CCT program. Officials felt significant pressure to meet the short-term contingency deadlines stated in their loan agreement. In retrospect, they agreed that some of the requirements placed on RPS, particularly in targeting goals and the time frames allowed to contract health service providers and create and implement the information system, had been too demanding (BID 2006). Although there was room for learning and mistakes, RPS officials felt pressure to meet the strict standards that they were called upon to uphold.

These requirements directed RPS officials' attention away from winning broad popular and political support for the CCT program. Their failure to "market" RPS to domestic stakeholders allowed uninformed stereotypes and misunderstandings about the program to persist, which contributed to the low level of support for the program. Although it was internationally renowned, Nicaraguan officials were unaware of RPS's purposes and accomplishments. Creating a successful program was insufficient to ensure RPS's sustainability; a strong public relations campaign was also vital.

Internal promotion of PRAF to domestic politicians and stakeholders would also have been helpful. PRAF officials have had to spend precious time and energy justifying the CCT program's existence to government officials multiple times, and more recent domestic support for PRAF has been a boon. Additionally, if the program had been better understood, there might have been more widespread support for the more efficient PRAF-II than for the domestic PRAF, and the duality might not have developed.

Finally, although external lenders encouraged both countries to adopt free market policies, structural adjustment policies, and later pro-poor and social safety net programs, domestic ownership of these ideals has varied over time. Although CCT program officials have embraced social protection for the vulnerable, their work will not be sustainable if future politicians do not believe
these goals are important. In small countries dependent on external aid, such as Honduras and Nicaragua, it is often not clear whether officials advocate certain policies because it is convenient or because they are dedicated to the principles behind them. Unless these countries and their leaders are fully convinced that social protection is necessary and should be implemented in a manner similar to that advocated by lenders, externally financed social protection programs may face continued domestic opposition and compromised impacts.

Although Honduras and Nicaragua have both expressed support for the development of social protection programs and CCT programs, their experiences have revealed that implementing these programs is more easily said than done. Both countries must confront domestic criticisms and external pressures, balance short-term deadlines with long-term program objectives, and garner support for the programs within a broader social protection plan that may change with politics. These challenges are formidable, but failing to address them will result in even more dire consequences for poor households in both countries.

References


Conditional cash transfer (CCT) programs provide cash transfers to households conditional on the fulfillment of co-responsibilities that are defined in terms of specified behaviors. Although these behaviors could in principle be any behaviors (for example, applying appropriate doses of fertilizers or showing up at work on time), in practice the term is currently used to refer to behaviors that are thought to increase human capital investments in nutrition, health, and education. Such co-responsibilities include, for example, regular attendance at health clinics or at school. For many of these programs, the transfers are provided to women in the households under the maintained assumption that transfers to women will result in greater human capital investments, particularly in children, than would equal transfers to men in the same households.

Public cash transfers, of course, are often also provided to the supply side—to schools, clinics, pharmacies, and other suppliers of goods and services—conditional on certain behaviors of these entities. Any subsidies provided to providers (or to others) could be viewed as conditional; for instance, public funds provided to public schools could be viewed as conditional on their admitting students and offering classes, or public subsidies provided to clinics could be viewed as conditional on their serving patients. However, such a broad use of the term CCT to refer to any subsidy would seem to weaken the usefulness of the term, and in fact the term has been used in the academic and policy literature and in the other chapters of this book to refer to demand-side conditionalities of fairly specific natures, so we follow that emphasis in this chapter.

The authors have benefited from the comments of two anonymous referees and the editors and from discussions on related topics with many colleagues—including Orazio Attanasio, David Coady, Paul Gertler, Daniel Hernández, John Hoddinott, James Knowles, Santiago Levy, John Maluccio, Mónica Orozco, Susan Parker, Paul Schultz, Petra Todd, Kenneth Wolpin, and Iliana Yaschine—but we alone are responsible for the content of this chapter. This is a revised version of Behrman and Skoufias (2004). The 2004 working paper that subsequently was published in Das, Do, and Özler (2005) was written contemporaneously and independently and covers some of the same points. See also de Brauw and Hoddinott (2008) for a succinct summary of related points and Fiszbein and Schady (2009) for much more extensive discussion of a number of related points.
Nevertheless, the outcomes on which demand-side CCTs are conditioned generally depend on the interaction between demands and supplies, so how the programs function depends on the nature of supply conditions whether or not a CCT demand-side program is explicitly linked to supply-side changes. And, though they are not the focus of this book, there are many other demand-side (e.g., vouchers, mandatory attendance laws) and supply-side (e.g., mandating teacher or clinic personal training or credentials, improving staff compensation, introducing more performance-based compensation) policies that interact with demand-side CCTs or could be viewed as alternatives to CCTs for increasing human capital (or any other outcomes on which CCTs are conditioned).

What does simple economic analysis say about these CCT demand-side programs? This chapter addresses some aspects of this question. The first section presents standard economic frameworks for investments in human capital and policy motives related to efficiency and distribution on a general level. The next section considers more specific economic rationales for CCT demand-side programs, the conditions under which they are most likely to be successful, and the implications of these rationales for the choice of program components based on more detailed consideration of policy motives.

Analytical Frameworks

Because CCT programs typically focus on demand-side conditionalities related to human capital investments, particularly, but not exclusively, in children, it is useful to begin with a brief summary of standard economic frameworks for what determines the demand side of human capital investments, then turn to basic economic motives for policies. These discussions lay the foundation for the next section with its more focused consideration of CCTs.

Microdeterminants of Human Capital Investments

Becker's (1967) Woytinsky Lecture provides a simple framework that is widely used to think about the microdeterminants of investments in human capital (Figure 6.1). Human capital investment demands reflect the equating of the expected present discounted value of marginal private benefits (the solid downward-sloping line) and the expected present discounted value of marginal private costs (the solid upward-sloping line) for human capital investments in

1. Two of the programs on which this book focuses, those in Honduras and in Nicaragua, have supply-side interventions bundled with demand-side CCTs (see Maluccio, Adato, and Skoufias; Adato and Hoddinott [Chapter 14]; and Caldes, Coady, and Maluccio in this volume; Glewwe and Olinto 2004; Maluccio and Flores 2004). And all demand-side CCTs have operated in contexts in which there were already supply-side subsidies for providing services or other activities.

FIGURE 6.1 Private marginal benefits and private marginal costs of investment for an individual, with increased marginal benefits

Marginal benefits, marginal costs

<table>
<thead>
<tr>
<th>H*</th>
<th>H**</th>
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<td>Human capital investment</td>
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Private marginal benefits

Private marginal costs

Increased marginal benefits

NOTE: $H^*$ and $H^{**}$ denote ascending levels of human capital investment; $R^*$ and $R^{**}$ denote ascending private returns to the human capital investments associated with $H^*$ and $H^{**}$, respectively.

a given individual, often a child, so we refer at times to children in what follows.³ The marginal private benefit curve depends significantly on, inter alia, the expected private gains in productivities (or perhaps in wages/salaries that may be related to productivities) or other outcomes related to welfare (for example, marriage market options) due to human capital investments. These benefits de-

³. Discounting is important because many of the impacts of human resource investments occur many years after the investments. See, for example, Alderman and Behrman (2006); Behrman, Alderman, and Hoddinott (2004); Knowles and Behrman (2004, 2005); Hoddinott et al. (2008); and Maluccio et al. (2009). Considerations of the impact of uncertainty may modify and compli-
pend on the marginal impact of the human capital investment on productivity in production functions for the relevant outcomes (including not only wage functions and health functions but also functions related to the marriage market) and on the marginal rewards that accrue to the investor because of that impact. The marginal private benefit curve is downward-sloping (at least at high enough investment levels) because of diminishing returns to human capital investments given fixed genetic and other endowments and expected postinvestment periods in which to obtain the returns to such investments, which are limited by life expectancies. The marginal private cost may increase with human capital investments because of increasing marginal private costs of borrowing on financial markets. Private returns net of costs are maximized at level $H^*$, at which private marginal benefits are equal to private marginal costs. The curves of both the marginal private benefits and the marginal private costs depend on supply-side factors. If, for example, the quality of schooling increases and school quality and time spent in school are complements, the marginal private benefit curve for investing time in school shifts upward. If schools become more accessible because of the construction of new schools, the marginal private cost curve shifts downward.

This framework implies that private decisionmakers tend to change their investments in response to changes in the private marginal benefits or the private marginal costs. Figure 6.1 illustrates the impact of an increase in private marginal benefits from the solid line to the dashed line so that the privately optimal investment increases from $H^*$ to $H^{**}$. Figure 6.2 illustrates the impact of a decrease in private marginal costs from the solid to the dashed line so that the privately optimal investment increases from $H^*$ to $H^{***}$. Demand-side CCTs and supply-side changes may cause such shifts, as discussed below.

The marginal private benefit curve may be higher for one of two otherwise identical children except for the difference noted later (that is, the dashed line rather than the solid line in Figure 6.1) because one child (or whoever is investing in that child, such as the child’s parents) (1) has greater genetic endowments that are complementary to the resources devoted to human capital investments; (2) has lower discount rates so that the future benefits of human capital investments have greater value at the time of the investment decision; (3) has human investment options of higher quality (for example, access to higher-quality public schools or health programs or other better supply-side factors); (4) has better health and a longer expected life due to complementary investments (again, perhaps because of participation in CCT programs) so that

cate some of the analysis (for example, by requiring consideration of expected marginal utilities rather than expected marginal benefits in monetary terms), although the basic thrust of what is said here remains the same. For simplicity, however, hereafter we refer to marginal benefits and marginal costs without qualifications about expected present discounted values of future marginal benefits and costs or their related marginal welfare effects.
FIGURE 6.2 Private marginal benefits and private marginal costs of investment for an individual, with decreased marginal costs

Marginal benefits, marginal costs

NOTE: $H^*$ and $H^{**}$ denote ascending levels of human capital investment; $R^{**}$ and $R^*$ denote ascending private returns to the human capital investments associated with $H^{**}$ and $H^*$, respectively.

the postinvestment period in which that individual reaps the returns to the human resource investment is greater; (5) has greater marginal private benefits to a given level of such investments because of schooling or labor market discrimination that favors that individual due to gender, race, language, family, village, or ethnic group; (6) has returns to human capital investments that are obtained more by the investor or the relevant decisionmaker (for example, if traditional gender roles dictate that children of a particular sex provide old-age support for their parents, ceteris paribus, parental incentives may be greater to invest in children who are likely to provide such support); (7) has greater marginal private benefits to a given level of investment because of being in a more
dynamic economy in which the returns to such investments are greater (perhaps because of the impact of CCT programs on local labor markets); (8) has greater marginal private benefits to a given level of such investments because of greater externalities from the human capital investments of others in the same economy (perhaps because of CCT programs); or (9) lives in a more stable economy so that the discount rate for future returns is lower and thus the marginal private benefit of future returns is greater.

If the marginal private cost is lower for every level of human capital investment, as for the dashed line in comparison with the solid line in Figure 6.2, the equilibrium human capital investment is greater, with the marginal private benefit lower at the higher investment level. The marginal private cost might be lower for numerous reasons. Compare two otherwise identical individuals except that one individual (1) has lower private costs to access programs related to human resource investments because of closer proximity to such services or lower user charges or other supply-side changes related to private costs; (2) has lower opportunity costs for the time used for such investments (for example, perhaps because of the transfers provided conditional on school enrollment by CCT programs); or (3) is from a household with greater access to credit (or less need for credit) for financing such investments because of greater wealth or status or better connections.

This maximization process leads to dynamic decision rules or demand relations for human capital investments in individual $i$ that depend on all relevant prices, on all relevant resources, on all the parameters of the relevant production functions (including those for the production of human capital), and on preferences. The prices include all prices that enter into the investing household's decisionmaking process, including the prices paid by the household for basic nutrition, health services, childhood development programs, and basic education; for other consumption and investment purposes; for transferring resources over time (that is, the interest rate); and for insuring against uncertainty. At the time that any human capital investment decision is made, these prices include all past and current prices for these goods and services (perhaps embodied in current stocks of human capital), as well as expected future prices (including expected future returns to human capital investments). The resources include all resources of the individual, household, educational and health/nutrition institutions, and community that affect household decisions (identified by ownership if there is intrahousehold bargaining). These resources include human capital that reflects past investments, financial resources, physical resources, genetic endowments, and general learning environments. They also include the quantity and quality of supply-side social services generally, in particular those that reflect the presence of CCT programs.

This simple framework systematizes four critical, common-sense points for investigating dimensions of the determinants of human capital investments and how CCT and other programs might affect human capital investments.
First, the impacts of changes in policies may be hard to predict by policymakers and outside analysts without an explicit model of household behavior. If households face a CCT (or other) policy change, they can adjust all of their behaviors in response, with cross-effects on other outcomes including savings, interhousehold transfers, and consumption of adult goods, not only on the outcome at which the policy is directed. For example, receipt of transfers conditional on behaviors such as attending school may result in a child's receiving more resources through schooling that are offset by receiving fewer resources through other channels; for example, see Martinelli and Parker (2003) and the discussion of intrahousehold distribution that follows.

Second, the marginal benefits and marginal costs of human capital investments in a particular individual differ depending on the point of view from which they are evaluated: (1) there may be externalities or capital/insurance market imperfections so that the social returns differ from the private returns (discussed later), and (2) there may be a difference between who makes the investment decisions (for example, parents) and the one in whom the investment is made (for example, a child) that may, for example, result in gender (or birth order) differentials in incentives for investments in children given traditional gender (birth order) roles in old-age care for parents. To evaluate the role of CCT programs and other determinants of human capital investments and their impact, it is important to clarify from whose perspective the investment decision is being made and from whose perspective it is being evaluated.

Third, the impact of CCT programs on human capital investments are for a given macroeconomic, market, policy, and regulatory environment in which there may be feedbacks both at the local and at the broader level, depending in part on how integrated into markets with broader geographic coverage are the local communities that are directly affected by the programs. If the programs are directed at small, relatively isolated communities that are only weakly integrated into larger regional and national markets and with high proportions of participants, as was the case for a number of the initial Mexican PROGRESA beneficiary communities, for example, prices may be changed by the program.

Fourth, where programs provide an identical package of benefits, conditional on household demographics, for all eligible households, it is very difficult to identify the impact of the separate program components. As noted earlier, CCT programs are likely to shift the marginal benefits curve up and the marginal costs curve down in several ways, all of which may induce greater human capital investment. Moreover, there may also be other effects that shift the curves in the opposite directions, such as more crowding in local clinics and schools. But because all these effects are often tied together, it is not easy to make very confident inferences about the relative importance of various program components.
Private versus Social Returns, Efficiency, and Distribution

Often analyses of the impact of programs related to human capital investments, including CCT programs, are undertaken without consideration of the economic rationales for policies. It is just presumed that policies must be good that, say, through increased investments in children, increase some outcome such as subsequent productivity or health. But such analyses may be of little help in convincing skeptics that scarce resources should be allocated for these purposes, given many competing alternative uses. Moreover, they may not provide much in the way of guidelines for choosing among policy alternatives. Therefore, it is useful to ask why CCT and other policy interventions with respect to human capital investments might be desirable.

At a general enough level of abstraction, policy should be chosen in order to maximize social welfare. However, the practical guidance offered by the injunction to maximize social welfare may be quite limited. For that reason, it is often useful to think separately of the two standard economic justifications for governmental policy interventions: (1) to increase efficiency/productivity and (2) to redistribute resources.4

Policy justifications based on efficiency and on distribution are both firmly rooted in microdimensions of behaviors as outlined earlier. Both of these standard economic motivations for policy are ultimately concerned with the welfare of individuals as judged by those individuals.

EFFICIENCY/PRODUCTIVITY. Resources are used efficiently in the economic sense if they are used to obtain the maximum product possible, given the quantities of the resources and the production technologies available at a point of time and over time, and if the composition of that product increases the welfare of members of society as much as possible, given the resource and technological constraints, preferences, and distribution of resource ownership. Efficiency is not just a concern about the static use of resources at a point in time but is also a concern about the use of resources over time and thus about productivity and productivity growth over time. An investment (or expenditure) is efficient if the marginal social benefit of the last unit of that investment just equals its marginal social cost.5 If the marginal social benefit of a particular investment is greater (less) than the marginal social cost, society is not investing enough (is investing too much) and would benefit from increasing (de-

4. These two justifications include some other common concerns about policies, such as questions of access and quality of services as well as the sustainability of overall economic development and of particular programs; see Behrman and Knowles (1998). The distributional justification includes as a special case poverty reduction.

5. Two points should be noted. (1) These marginal conditions for efficiency may not hold if there are, for example, large discontinuities in production processes. However, such considerations do not appear important for CCT programs. (2) Because of uncertainty in the real world, this discussion could be recast in terms of expected values, with concern about possible risk aversion (or something other than risk neutrality). But, for simplicity, we do not do so.
creasing) the level of investment until the marginal social benefits and costs are
equalized.

Although applying the rule just stated maximizes social gains, private
maximizing behavior leads to investments (including those affected by CCT
programs) at the level at which the marginal private benefit of the investment
equals its marginal private cost under the assumption that, given the informa-
tion available to them and the constraints that they face, individuals act in what
they perceive to be their best interests (discussed earlier). Consider now the pos-
sibility that private incentives for investments differ from social incentives for
such investments, first with respect to the marginal benefits and then with re-
spect to the marginal costs.

Why might marginal social benefits exceed marginal private benefits for
human capital investments? Several answers are frequently given to this ques-
tion. (1) There are externalities in the form of effects on others that are trans-
ferred “external to markets.” For example, investments in education are thought
to have not only private benefits to the person being educated but, by adding to
society’s stock of knowledge, social benefits beyond the private benefits, as
may controlling contagious diseases such as diarrhea or HIV/AIDS, creating
social capital, and developing incentives for legal rather than criminal behav-
iors. (2) The information on which schooling, health, and employment deci-
sions are made may misrepresent the private rates of return to these investments
because it is incomplete or incorrect. For example, youth may not know about
contraceptives or about risks associated with STDs. The “public good” nature
of information (that is, that the marginal cost of providing information to an-
other consumer is virtually zero) leads to underproduction of information from
a social point of view by private markets because private providers cannot cover
their costs if they price information at the social marginal cost as required for
efficiency. (3) The combination of uncertainty, risk aversion, and imperfect in-
surance markets may result in private incentives to underinvest in human, fi-
nancial, and physical assets because from a social point of view the risks are
pooled. (4) The social discount rate may be lower than private discount rates
because individuals value future outcomes more collectively than they do in-
dividually. 6 (5) Prices for outcomes affected by such investments may under-
state social gains so that the private marginal incentives for investing in devel-
op ing specific human capital for certain occupations are less than socially
desirable, in part because of distortions due to policies (for example, policy re-
strictions on salaries in the health and educational sectors).

Why might marginal social costs be less than marginal private costs for
human capital investments? (1) There may be capital market imperfections for

6. On the other hand, the discount rate of governmental officials may be relatively high (so
that the marginal social benefit curve that they use is below the marginal private benefit curve) be-
cause of the need to show results in order to maintain political power, a point to which we return later.
some types of investments (for example, social capital investments and human resource investments, in part because these forms of capital are not accepted as collateral) such that the marginal private costs for such investments exceed their true marginal social costs, which probably is more relevant to individuals from poorer families who cannot relatively easily self-finance such investments. (2) The sectors that provide some types of services (for example, information, healthcare, and schooling) may produce inefficiently because institutional arrangements do not induce efficient production of an efficient basket of commodities. School teachers and staff, for example, might be oriented toward rewards established by the Ministry of Education or union negotiations based on tenure or credentials, not toward satisfying the demands of clients. (3) The sectors that provide services related to human capital investments may produce inefficiently because regulations preclude efficient production of an efficient basket of commodities. For example, regulations that limit hours during which schools are open, limit textbook choices, impose quality standards based on different conditions in other economies, or limit the provision of services to public providers may result in much greater costs of achieving specific investments than would be possible with fewer regulations.\(^7\)

What are the implications of differences in the marginal private and social benefits or cost? Simply, if there are such differences, private incentives for human capital investments differ from social incentives. In such circumstances, policies may increase efficiency by reducing the differences between the private and the social incentives or through other means that cause outcomes to be closer to the socially desirable outcomes. We discuss various policy possibilities that might have such effects later.

**Distribution.** Distribution is a major policy motive distinct from efficiency. Distributional concerns, at least officially in pronouncements of governments and of international agencies, often focus on the command over resources of the poorer members of society. The poor certainly are the stated focus of CCT programs. Society might well want to ensure, for example, that everyone has basic schooling or health even at some efficiency cost. Though distributional concerns are often characterized by their focus on the distribution of income or other resources among households, there may also be important distributional considerations within households. Household decisionmakers are not likely to equally consider the preferences of all household members in allocating household resources. For example, if women have preferences for using more resources to invest in children than do their husbands, these preferences

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7. This is not to say that all regulations are bad. In some contexts regulations may be the most efficient means of attaining a goal, particularly if there are certain types of information problems (for example, those related to the quality of goods and services that cannot be easily discerned by users). But often regulations, no matter how good their intent, are not very effective policy tools (see the later discussion on policy choices for further consideration of policy choices).
may not be weighed equally with those of their husbands in decisions made by their husbands. Moreover, even if some households as aggregates have sufficient resources to cover what society considers basic needs, certain types of individuals in households may not be allocated what society considers sufficient resources for their individual satisfaction of basic needs. A particularly germane example may be child labor. Such labor may contribute significantly to the resources and the welfare of the household decisionmakers but may detract from improving the human resources of the child by, for example, exposing the child to health and other risks and limiting his or her education. Therefore, there may be an important intergenerational distributional trade-off.

POLICY CHOICES TO INCREASE EFFICIENCY AND TO IMPROVE DISTRIBUTION. If all other markets in the economy are operating efficiently and there are differences between marginal private and social incentives in a given market related to human capital investments, CCT or other policies that induce investments in this particular market closer to or at the socially efficient levels increase efficiency.\(^8\) That still does not indicate what policies would be best to induce human capital investments in this market at the socially desirable levels. There is a large set of possibilities, including CCTs, unconditional cash transfers (UCTs), governmental fiat, governmental provision of services at subsidized prices, price incentives in markets related to human capital investments, price incentives in other markets, and changing institutional arrangements in various markets. In choosing among alternatives based on efficiency alone, there are at least two important considerations.

First, policies have costs. These costs include the direct costs of implementing and monitoring policies and the distortionary costs introduced by policies that may encourage socially inefficient behavior (including rent-seeking by both public and private entities). Often policymakers focus only on the direct costs and ignore the distortionary costs because only the direct costs have obvious and visible direct ramifications for governmental budgets. In fact, the costs of policies may be sufficiently high that it is not desirable to try to offset some market failures by policies. But, if it is desirable to do so, there is generally a case for making policy changes that are directed as specifically as possible at the distortion of concern, because that tends to lessen the distortionary costs. An efficiency policy hierarchy can be defined in which alternative policies for achieving the same improvement in efficiency are ranked according to their social marginal costs, including direct and distortionary costs. This hier-

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\(^8\) If all other markets in the economy are not operating efficiently, policies that narrow the differences between private and social incentives in a particular market related to human capital investments do not necessarily increase efficiency and productivity. But, in the absence of specific information to the contrary, such as the existence of two counterbalancing distortions, a reasonable operating presumption is that lessening any one distortion between social and private incentives is likely to increase efficiency.
archy indicates the preferential ordering of policies to deal with particular divergences between private and social incentives.

Second, there are tremendous information problems regarding exactly what effects policies have, particularly in a rapidly changing world. This is an argument in favor of policies that are as transparent as possible, which generally means higher in the efficiency policy hierarchy with regard to at least distortionary costs, because more direct policies are likely to be more transparent. Information problems also provide an argument for price policies (taxes or subsidies), because if there are shifts in the underlying demand and supply relations, they are likely to be more visible in a more timely fashion to policymakers if they have an impact on the governmental budget than if they only change the distortions faced by private entities, as tends to be the case with quantitative policies. Finally, information problems in the presence of heterogeneities across communities point to the possible desirability of decentralization and empowerment of users of social services in order to increase the efficacy of the provision of those services, although such considerations must be balanced against possible economies of scale, higher quality of staff, and possibly lower levels of corruption at more centralized levels, as well as intercommunity distributional concerns.

Thus, for efficiency/productivity reasons, particularly given that in the real world information is imperfect and changes are frequent, there is generally an argument for choosing policies as high as possible in the efficiency policy hierarchy as defined by the extent of marginal direct and distortionary costs—and therefore using interventions that are focused as directly as possible on the distortion between private and social incentives.

Now consider distribution. The subsidization of specific goods and services (and, even less, the direct provision by governments of goods and services at subsidized prices) is generally not a very efficient way of lessening distributional problems. Because subsidies are designed to lower prices to consumers, they induce inefficient consumption behavior unless the previous prices exceeded the social marginal costs of the good or service in question. Instead, it is generally more efficient (and thus less costly in terms of alternative resource uses) to redistribute income to consumers, allowing them to allocate the income in ways that lead to efficient patterns of consumption. Nevertheless, there are some cases in which subsidization of selected goods and services may be defensible to achieve distributional objectives. For example, in cases in which it

9. Nevertheless, there are likely to be some cases, such as providing information regarding the quality of goods and services related to human capital investments, for which quantitative regulations may be higher in the efficiency policy hierarchy than are price policies because of the nature of the information requirements.

10. However, even redistributing income may lead to inefficiency because it can affect the work effort of those on both the tax-paying and the tax-receiving sides.
is difficult (and therefore costly) to target poor households or poor types of individuals within households, subsidizing certain goods and services that are consumed mainly by the poor may be the most efficient policy alternative. As is discussed later, for example, some aspects of CCTs are directed toward attempting to redistribute resources between men and women and between adults and children in recipient households.

Rather than being concerned with the general command over resources of its poorer members, as noted earlier, society may deem it desirable that everyone enjoy basic human resource–related (and other) services, including basic schooling, nutrition, and healthcare. Such an objective might be achieved through many means. But presumably it is desirable to ensure that everyone has these basic options at as little cost as possible in terms of productivity, so, rather than ignoring efficiency considerations, it is desirable to choose policies as high as possible in the efficiency policy hierarchy and still ensure that the basic service objectives are met. Thus, to achieve a given distributional objective it is possible to define a distributional policy hierarchy in which policy alternatives that achieve that objective are ordered from lowest to highest marginal costs, including both direct and indirect costs. Thus efficiency goals should play an important role in interaction with the pursuit of distributional goals, not as independent considerations.

**IMPLICATIONS OF EFFICIENCY AND DISTRIBUTIONAL MOTIVES FOR EVALUATING BENEFITS AND COSTS OF DIFFERENT POLICIES.** There are important implications of the two policy goals—for how the costs and benefits of demand-side CCTs and other policies should be valued:

1. Whether particular policies are warranted depends on the social trade-off between efficiency and distribution. The CCT programs of concern in this book are generally aimed toward the poor, but particular policies may succeed in directing resources more or less effectively at this target group and with differential efficiency costs (see the discussion in the next section).
2. Transfers may be an important tool for achieving distributional ends, but they are not costs in the sense that they are in themselves equivalent to resources. Related to transfers (as well as to other programs) generally, however, are real resource costs related to program administration and distortions caused by programs. The effectiveness of transfers for distributional ends and their costs both are likely to depend on whether they are conditional or not. CCTs may have more resource costs than UCTs of the same magnitude, for example, because resources may be needed to provide and to monitor goods and services on which the transfers are conditional.
3. Just because there are large productivity gains relative to costs does not mean that a program warrants subsidies from the point of view of efficiency. From an efficiency standpoint there is reason for public subsidies
only if the social rate of return to a particular use of resources is greater than the private rate of return.

4. With imperfect capital and insurance markets, particularly for the poor, there are likely to be some productivity and efficiency gains if the poor are the beneficiaries of transfers, as in most CCT programs, and thus there are "win-win" opportunities for both efficiency gains and reducing poverty.

Consideration of Particular Efficiency, Distributional, and Other Reasons CCT Programs Might Be Justified

Based on the frameworks discussed earlier, we now consider a more specific economic rationale for CCT programs, the conditions under which they are most likely to be successful, and the implications for the choice of program components based on more detailed consideration of efficiency and distributional policy motives. We then turn to the question of the extent to which CCT programs might be justified to deal with these situations.

**Efficiency Motives for Policies**

One way of thinking about the efficiency motives for policies in general is that inefficiencies arise because of imperfect or missing markets. If so, CCT programs may be relatively high in the efficiency policy hierarchy if the conditioning is well directed toward the market problem. Here we consider some possibly important imperfect or missing markets that are related to possible justifications for demand-side CCT programs, then turn to the question of the possible effectiveness of CCTs in dealing with these imperfect or missing markets in the section discussing alternatives to policies.

**EXTERNALITIES.** Examples directly related to CCTs noted earlier include knowledge externalities for education, controlling contagious diseases such as childhood infections and HIV/AIDS, creating social capital, and developing incentives for legal rather than criminal behaviors and for reducing fertility (at least given the subsidized pricing of educational and health services).

From a partial equilibrium perspective, if there are positive externalities for an investment in human capital, the private incentives are to invest in human capital (for example, $H^*$ in Figure 6.1 if the solid lines represent the private marginal benefits and costs) less than is socially desirable (for example, $H^{**}$ in Figure 6.1 if the dashed line represents the sum of the private plus the positive purely social marginal benefits and the private and the social marginal costs are identically the solid upward-sloping line).  

11. If that there are positive externalities for the investments of the type represented in Figure 6.1, the solid downward-sloping line will be farther to the right than if the investments in this individual did not benefit from the positive externalities of investments in others.
There are widespread claims and assumptions that externalities are important for human capital investments of the types supported by CCT programs. However, the empirical evidence about these externalities is much more limited than is often assumed or claimed. Most empirical studies that are cited to support the importance of human capital investments (1) do not really identify differences between private and social rates of return to these investments and/or (2) call what would seem to be basically private returns (for example, the health and nutrition of households' own family members) "social returns," although they are not necessarily social returns beyond the private returns of the sort required to justify public subsidies on efficiency grounds. There are a few studies, however, that provide fairly persuasive evidence that true externalities are important. For example, Foster and Rosenzweig (1995) provide evidence that neighboring farmers in India are likely to learn more quickly the appropriate input mixes for new technologies if the initial adopters have basic schooling (and themselves can learn more quickly). For another example, infant and child malnutrition has been shown to increase susceptibility to infectious diseases, with the implication that there are external benefits to other children with whom a particular child comes in contact if that child is better nourished and thus less likely to contract and pass on infectious diseases (Martorell 1999). Thus it would seem accurate to say that there is some systematic empirical evidence supporting the importance of externalities in human capital investments, although not as much as is often presumed.

**Capital and Insurance Markets.** Capital and insurance markets are widely thought to be imperfect, particularly for the poor and particularly for human capital investments, thus, as noted, perhaps presenting "win-win" possibilities for improvements in efficiency in targeting those improvements toward the poor. As a result of these market imperfections, households face higher private marginal costs of capital than the social marginal costs, and therefore they may invest less in the human capital of children than they would if there were not capital market imperfections (for example, at $H^*$ rather than $H^{***}$ in Figure 6.2). Insurance market imperfections mean that risks in investing in human capital may be difficult to pool over many such investments and so be higher privately than they are socially, again resulting in less human capital investment than is socially desirable (again, at $H^*$ rather than $H^{***}$ in Figure 6.2), particularly for the poor if they are relatively risk adverse, as has long been conjectured and is supported by empirical studies dating back at least to Binswanger (1980).

Further, the impact of imperfections in capital markets on the poor may be compounded if the poor have relatively high discount rates or are relatively risk averse because of living close to subsistence with risks of malnourishment or even starvation that cannot be averted through borrowing on capital markets or insuring in risk markets. That is, if discount rates are inversely related to poverty or risk aversion is positively related to poverty because of such
nutrition and health threats, improved capital and insurance markets may increase investments—including human capital investments—by the poor not only because of the better access to capital and insurance but also because of lower discount rates and risk aversion. In such cases, increased access to capital and insurance markets tends to shift upward the marginal private benefit curves (that is, from the solid line toward the dashed line in Figure 6.1) in addition to lowering the private marginal costs curve (that is, from the solid line toward the dashed line in Figure 6.2).

Although there are widespread perceptions that imperfect capital and insurance markets significantly constrain choices for the poor in developing countries, the empirical evidence on the impact of imperfect capital and insurance markets on human resource investments is limited. If capital and insurance market constraints are very important, for example, strong associations between income and human capital investments might be expected to be found broadly.  

There are a few exceptions that seem to provide some persuasive evidence of the importance of these market imperfections with regard to human capital investments. Foster (1995), for example, shows that child growth in poor, landless households is significantly affected by credit market imperfections during periods of scarcity, implying that small-scale targeted credit programs might reduce potentially detrimental fluctuations in child growth. Jacoby and Skoufias (1997), for another example, posit a dynamic model of school attendance with different degrees of financial market completeness and note that with incomplete markets, consumption and schooling investment decisions are not separable. Their estimation strategy is to successively relax restrictions on the relationships between school attendance and income shocks implied by successively more incomplete financial markets, all with control for unobserved household heterogeneity. Their results indicate that seasonal variations in school attendance are a form of self-insurance that significantly reduces the schooling of children in households that are vulnerable to risk and that these variations are likely to be a costly form of insurance, particularly for poorer households.

INFORMATION MARKETS. As noted earlier, the production and dissemination of information are likely to occur in imperfect markets because information typically has public good characteristics so that the marginal costs of one more user are very low or zero. Therefore, there are no incentives for private providers of information to provide such information to the point at which social marginal benefits equal social marginal costs, because if the latter are

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12. Although many studies do not find a strong association, this may be because of the frequent use of noisy measures of income with large transitory components. Behrman and Knowles (1999) show how using longer-run income measures substantially increases the magnitude of empirical associations between parental income and child schooling in the developing country context that they study in Vietnam.
close to or at zero, the private providers cannot cover their costs. Although such arguments are a priori attractive for advocating public subsidies on the basis of increasing efficiency, once again the empirical evidence seems fairly limited; for example, Behrman (1995) surveys some of this literature as related to child health and nutrition.

**Distributional Motives for Policies**

Separate from the question of the efficiency motives for policies, as discussed earlier, are distributional motives for policies. From the point of view of many policies, including those for CCTs, the primary distributional concern has been for the poor, usually operationally defined as those living below some measured poverty cutoff line.13 The distributional concern, therefore, relates to the question of whether CCTs are more or less effectively targeted to the poor than are other policies.

**INTERHOUSEHOLD DISTRIBUTION.** A major component of the variance in consumption (controlling for age and gender) across the members of any population relates to the interhousehold distribution of resources relative to number of household members. There is at least one possibly major way in which CCTs seem to be less successfully targeted to poor households than could be UCTs. In particular, CCT programs typically depend on the existence of some accessible governmental institution for monitoring compliance with conditionalties or providing services on which the CCTs are conditional (for example, schools if the conditionality is school enrollment, health clinics if the conditionality is attendance at regular monitoring or information sessions at health clinics). Therefore, CCTs are not likely to succeed in reaching some of the poorest households, whose members live in relatively remote, very small, poor communities without such services. For example, Mexico’s PROGRESA initially required that communities have reasonable access to primary schools and health clinics in order to be eligible, with full knowledge that this requirement excluded a number of very poor households (which were not in a position to benefit from such a program). Of course such households also could not easily benefit from many other policies, such as those that work through improving the supply of services related to human capital investment. Indeed, even the delivery of UCTs to such households may be difficult in many cases.

CCT programs may also require a critical mass of intended recipients within a localized area to be cost effective. There may have to be a sufficient number of poor families, at least in small communities, to make it cost effec-

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13. The focus on a sharp poverty cutoff line is not unique to CCT programs but is used for many antipoverty programs. This sharp cutoff has some disadvantages compared, for instance, with program benefits declining continuously as income increases, such as treating almost identical (perhaps identical except for measurement errors) households close to the poverty line very differentially and treating households far below and right below the cutoff the same.
tive to establish the institutional modifications needed to monitor compliance with conditionalities and to provide the necessary services. This may mean that poor households that are few in number in a community may be excluded from program benefits. Again, this is likely to hold for some other policies as well, although probably less so for UCTs than for CCTs.

**INTRAHOUSEHOLD DISTRIBUTION.** Questions about intrahousehold distribution focus on gender and generational differences in allocations, at times in interaction. Conventional wisdom is that, if anything, intrahousehold distribution favors adult males relative to adult females and children, and perhaps boys over girls (or at least high-birth-order girls). The empirical evidence, once again, is less strong than is often assumed. For instance, Pitt, Rosenzweig, and Hassan (1990) find that although adult males in rural Bangladesh appear to obtain relatively high levels of macronutrients, they also undertake even relatively higher energy-intensive tasks, so they are more heavily “taxed” relative to other household members.

How might CCT programs affect intrahousehold distribution? There are two major channels.

First, it may matter who in the household receives the transfers. There is a substantial literature on the theoretical determinants of intrahousehold allocations (Manser and Brown 1980; McElroy and Horney 1981; Chiappori 1992; Lundberg and Pollak 1993). A number of empirical studies in developing countries report associations between the resources received by mothers and the resources dedicated to children, sometimes differentially (though not consistently) between sons and daughters (for example, see Schultz 1990; Thomas 1990; Hoddinott and Haddad 1995; Quisumbing and Maluccio 2003). However, many studies in this literature rely on strong assumptions that maternal resource control is not correlated with unobserved characteristics of women, including innate abilities and preferences regarding child quality (Behrman 1997). Nevertheless, similar results are found in a few other studies that avoid such assumptions (for example, Lundberg, Pollak, and Wales 1997; Rubalcava, Teruel, and Thomas 2003). And, apparently based in part on this literature, some CCTs, starting with PROGRESA in Mexico, have directed resources to women in the beneficiary households in order to increase the probability that children and women will benefit more from the program.

Second, the nature of the conditionalities in CCTs may affect distribution within households. For example, children may be better or worse off and each of their parents may be better or worse off than would be the case were the same magnitude of transfers unconditional if the children receive more schooling, because the receipt of transfers is conditional on the children’s attending school. This is the case because the CCTs may increase schooling beyond the level the households would have considered optimal and would have selected with UCTs of the same value so that the marginal returns to schooling are less than the rate
of return to physical or financial wealth, and parents may reduce intergenerational transfers of physical or financial wealth to children more than the wealth that the children gain through the extra schooling beyond what would have been elected with UCTs of the same value. Whether these outcomes occur depends on factors such as whether the parents would have transferred resources to their children in the absence of the CCTs, whether human capital investments can be financed through capital markets, and whether children can be tied to binding commitments to give all their additional wealth to their parents. The appendix to this chapter provides more details.

**Other Rationales for Policies**

Although the standard basic economic motives for policies are efficiency and distribution, on which we have focused to this point in this chapter, it is useful to briefly consider some other possible motives.

**PATERNALISTIC/MATERNALISTIC PREFERENCES.** Policymakers, experts, or the general populace may think that they know better than the poor what is best for the poor and therefore make resource transfers conditional on the use of the resources transferred for particular desirable ends—that is, education, health, and nutrition, not alcohol, cosmetics, and leisure time. If conditionalities are effective, they generally result in less welfare for the poor (or at least for some of the poor) than if the same transfers are made unconditionally. Nevertheless, there are strong advocates for such paternalistic/maternalistic preferences, including some leading development analysts. For example, as Martinelli and Parker (2003, 526) note, Sen (1985, 1990) “has rejected this ‘welfarist’ paradigm, calling for a distinction to be drawn between the perception of interest by individuals and some more objective notion of their well-being. He proposes in particular to focus on the ‘capabilities’ of a person, defined as ‘what the person can do or be.’”

**POLITICAL ECONOMY CONSIDERATIONS.** One political economy consideration is related to paternalistic preferences. For a given level of transfers, the poor are generally better off in the sense that their welfare is higher with UCTs than with CCTs of equal magnitude. However, if the general populace (or the median voter or whoever is making the decisions about political support for transfers to the poor) has paternalistic preferences, it is possible that the poor are better off with CCTs because the amount transferred to them with CCTs may be sufficiently greater than would have been transferred unconditionally to more than offset the welfare losses due to the conditionalities.

Another political economy consideration is that CCTs may make political support for long-run investments more possible. The short-run indicators of satisfying the conditionalities (for example, increasing school enrollment, increasing the use of health clinics) may provide useful evidence of accomplishments for politicians and policymakers who have too high discount rates, given
the nature of political systems, to want to wait until longer-run results (for example, greater productivity, better adult health) are available.\textsuperscript{14}

**Reducing Welfare Stigma.** If those who receive public welfare experience a stigma because of it, fulfilling conditionalities or co-responsibilities may lessen such a stigma by making the recipients active participants in the process, in some important sense "earning the transfers" rather than passively receiving handouts from other members of society. Such an effect might offset part of the welfare loss due to the conditionalities noted earlier.

**CCT Policies versus Alternatives**

Are CCT programs high in the efficiency and distributional policy hierarchies for moving investments from $H^*$ to $H^{**}$ or $H^{***}$? How high they are generally depends in part on how closely the behavior on which the CCT is conditioned is related to the dimension of human capital that is of interest. In general, there are many different policies that might induce movements from $H^*$ to $H^{**}$ in Figure 6.1 or from $H^*$ to $H^{***}$ in Figure 6.2. For instance, if $H$ is cognitive achievement, Table 6.1 indicates some among the many possible policies that might induce movement from $H^*$ to $H^{**}$ or from $H^*$ to $H^{***}$ based on the earlier discussion of the determinants of human resources. Table 6.2 provides other examples if $H$ is preschool child health/nutritional status as measured, for example, by anthropometric indicators. Considering these tables suggests several thoughts.

First, there are many policies that might be used to attempt to move human capital investments toward socially desirable levels. Moreover, although the tables here are long, they are not exhaustive. Many other policies could be added.

Second, the policies vary with regard to the channels through which they work. In both tables, policy options are grouped by those inducing increased $H$ through shifting the private marginal benefits curve upward (with reference to Figure 6.1) and by those inducing increased $H$ through shifting the private marginal costs downward (with reference to Figure 6.2). In addition, in Table 6.1 there is a group of options for constraining the choice of $H$ to be greater than $H^*$ through legal requirements.

Third, the policy options vary substantially in terms of how close they are to the immediate goals of increasing cognitive achievement or improving child health/nutrition. In both cases they include, for example, policies that subsequently in the life cycle may increase the returns to making the investments in these respective improvements—and thus increase the expected returns from these investments. Therefore, policies that might work through changing labor markets affect the incentives for investing in cognitive achievement in Table 6.1, and policies that affect cognitive achievement directly or indirectly through

\textsuperscript{14} This is our interpretation of a comment made by Paul Gertler (which he characterized as "solving a collective action problem").
## Table 6.1 Illustrative alternative policies that might induce improvements in cognitive achievement

1. Constraining choice of $H$ to $H > H^*$
   1.1. Enforced legal minimum cognitive achievement $> H^*$
   1.2. Enforced legal minimum schooling attainment above that associated with $H^*$
   1.3. Enforced legal school-leaving age

2. Inducing increased $H$ by shifting the private marginal benefits curve upward (Figure 6.1)
   2.1. Improving school quality through payments to teachers based on cognitive achievement $> H^*$
   2.2. Improving school quality through more school inputs
   2.3. Increasing postschool private returns in labor markets through improving market flexibility
   2.4. Increasing postschool private returns in labor markets through reduced taxes on earned incomes
   2.5. Increasing postschool private returns in labor markets through effective training
   2.6. Increasing postschool private returns in labor markets through good macro/trade policies
   2.7. Increasing postschool private returns in labor markets through subsidies for products that use technologies that are complementary to cognitive achievement
   2.8. Increasing postschool private returns in labor markets through tariffs on imports and subsidies for exports of products that use technologies that are complementary to cognitive achievement
   2.9. Increasing postschool private returns in labor markets through quotas limiting production of products that use technologies that substitute for cognitive achievement

3. Inducing increased $H$ by shifting private marginal costs downward (Figure 6.2)
   3.1. CCTs conditional on cognitive achievement $> H^*$
   3.2. CCTs conditional on grades completed beyond those associated with $H^*$
   3.3. CCTs conditional on enrollment in grades beyond those associated with $H^*$
   3.4. CCTs conditional on grades completed
   3.5. CCTs conditional on enrollment
   3.6. Increased subsidies for school fees, books, and other materials
   3.7. Loans with repayments conditional on cognitive achievement $> H^*$
   3.8. Loans with repayments conditional on grades completed beyond those associated with $H^*$
   3.9. Loans with repayments conditional on enrolling in grades beyond those associated with $H^*$
   3.10. Loans with repayments conditional on grades completed
   3.11. Loans with repayments conditional on enrollment
   3.12. Increased income transfers

**Note:** CCT, conditional cash transfer; $H$, cognitive achievement; $H^*$, baseline level of $H$ against which increases are measured.
TABLE 6.2 Illustrative alternative policies that might induce improvements in preschool child health/nutritional status

1. Inducing increased $H$ by shifting the private marginal benefits curve upward (Figure 6.1)
   1.1. Improving health service quality through payments to health service workers based on child health $> H^*$
   1.2. Improving health service quality through more health service inputs
   1.3. Improving school quality through payments to teachers based on high cognitive achievement
   1.4. Improving school quality through more school inputs
   1.5. Increasing postschool private returns in labor markets through improving market flexibility
   1.6. Increasing postschool private returns in labor markets through reduced taxes on earned incomes
   1.7. Increasing postschool private returns in labor markets through effective training
   1.8. Increasing postschool private returns in labor markets through good macro/trade policies
   1.9. Increasing postschool private returns in labor markets through subsidies for products that use technologies that are complementary to cognitive achievement
   1.10. Increasing postschool private returns in labor markets through tariffs on imports and subsidies for exports of products that use technologies that are complementary to cognitive achievement
   1.11. Increasing postschool private returns in labor markets through quotas limiting production of products that use technologies that substitute for cognitive achievement

2. Inducing increased $H$ by shifting private marginal costs downward (Figure 6.2)
   2.1. CCTs conditional on child health $> H^*$
   2.2. CCTs conditional on regular monitoring of child health
   2.3. CCTs conditional on cognitive achievement $> H^*$
   2.4. CCTs conditional on grades completed beyond those associated with $H^*$
   2.5. CCTs conditional on enrolling in grades beyond those associated with $H^*$
   2.6. CCTs conditional on grades completed
   2.7. CCTs conditional on enrollment
   2.8. Increased subsidies for school fees, books, and other materials
   2.9. Loans with repayments conditional on cognitive achievement $> H^*$
   2.10. Loans with repayments conditional on grades completed beyond those associated with $H^*$
   2.11. Loans with repayments conditional on enrolling in grades beyond those associated with $H^*$
   2.12. Loans with repayments conditional on grades completed
   2.13. Loans with repayments conditional on enrollment
   2.14. Increased income transfers

NOTE: CCT, conditional cash transfer; $H$, preschool child health/nutritional status; $H^*$, baseline level of $H$ against which increases are measured.
labor markets affect the incentives for investing in preschool child health/nutrition in Table 6.2.

Fourth, in each group in each table, the choices are listed roughly in the order in which they would appear in the efficiency policy hierarchy defined earlier if the efficiency problems that underlay the discrepancy between the private and the social optimal values of $H$ related to externalities or imperfect capital/insurance markets. Of course, in real-world situations, further information would be required about the context and the magnitudes of various responses in order to make such rankings. Nevertheless, the rankings in each group in the table are based on placing policies that more directly address the stated goals and problems higher. (Note that the focus on externalities and capital/insurance market imperfections assumes that there are not information market imperfections. If information market imperfections were of substantial importance, policies that provided information directly would be high in the efficiency policy hierarchies, as might be policies that forced the acquisition of the relevant information through experience.)

Fifth, if the distributional goal is to direct resources to those living in poverty, the policies could also be ranked in terms of distributional policy hierarchies within each group. Under the assumption that targeting is more feasible for policies that more directly address the goals and the underlying efficiency problems that result in differences between optimal private and social levels of $H$, more direct policies are likely to be higher in the distributional hierarchies as well as in the distributional hierarchies. For example, CCTs conditional on enrolling in school and targeted by geography or means tests are likely to be higher in the distributional policy hierarchy than those intended to induce greater cognitive achievement through changes in overall labor markets or in the macro-level economy.

Sixth, some CCTs are likely to be fairly high in the policy hierarchies for achieving goals such as those for which these tables provide illustrations because they can be made conditional on the outcomes of interest or on closely related outcomes. Even among the CCTs indicated in the tables, however, there is likely to be some ranking among the CCTs.

Seventh, some of the considerations that are discussed in the section on other rationales for policies are likely to increase the attractiveness of CCTs relative to alternatives—namely, paternalistic/maternalistic preferences, political economy considerations, and welfare stigma.

Eighth, if the objective is to increase the welfare of the poor, imposing conditionalities for a given level of transfers will reduce the welfare gains for many, probably most or all, of the poor (although, as discussed earlier, under some conditions there may be welfare gains for children at the expense of welfare for one or both of their probably poorer parents). Therefore, if welfare for the poor is of interest, CCTs may be lower in the policy hierarchies than suggested in these tables. Working in the other direction, however, is the possibility that
larger transfers will be made to the poor if they are conditional because of the paternalistic preferences of policymakers, the high discount rates of policymakers, and the possibility that the co-responsibilities of poor recipients reduce their welfare stigma. The overall balance between the reduction in welfare of the poor due to the constraints of conditionalities and the increases due to considerations of political economy and welfare stigma is a (probably difficult-to-assess) empirical question.

Conclusion

Demand-side CCTs with conditionalities related to human capital investment at the micro level have caught the attention of many policymakers and analysts and are being implemented ever more broadly in the developing and developed world. For example, international agencies such as the Inter-American Development Bank and the World Bank have supported the institution of CCT programs in many developing countries, and one of the World Bank’s flagship Policy Research Report publications is on CCTs (Fiszbein and Schady 2009). This chapter considers what simple basic economic models, including those for the determinants of human capital investments and for the efficiency and distributional motives of policies, imply for these CCTs. It provides a much more nuanced and qualified assessment of CCTs than is often presented by CCT advocates. Nevertheless, especially if considerations of political economy and welfare stigma are important, CCT programs may be high in policy hierarchies. However, the relevant considerations for assessing such possibilities go beyond the emphasis on overall impact assessment for poor families that has dominated evaluations of CCT programs to date to include the investigation of matters such as possible differences in private and social rates of return to CCTs, the magnitudes of responses to alternative policies such as those that focus on supply-side factors, market-wide effects, political economy considerations, and welfare stigma.

Appendix 6A: Intrahousehold Allocation Effects of CCTs versus UCTs

Figure 6.3, from the elaboration by Behrman, Pollak, and Taubman (1995) of the Becker and Tomes (1976) “wealth model,” helps to illustrate some of these points. In this model, parents decide what combination of human capital investments (“schooling”) and other resources (“gifts”) to provide their children in order to maximize the children’s wealth and to obtain the parents’ desired distribution of wealth among their children for a given amount of total resources that the parents devote to the children. Figure 6.3 has the wealth of child 1 ($W_1$) measured on the horizontal axis and the wealth of child 2 ($W_2$) on the vertical
FIGURE 6.3 The wealth possibility frontier for two children in a high-resources case

NOTE: \( W_1^n, W_1^*, \) and \( W_1^a \) denote ascending levels of wealth for the first child; \( W_2^n, W_2^*, \) and \( W_2^a \) denote ascending levels of wealth for the second child; \( a \) denotes wealth-maximizing school investment if the parents have equal concern for each child.

axis and a "wealth possibility frontier" for the case in which "high resources" are devoted to the children, under the assumption that child 1 is better endowed than child 2 so the frontier is elongated in the direction of \( W_1^1 \). \( W_1^n \) gives the wealth that child 1 will have with neither schooling investments nor gifts, \( W_1^* \) gives the wealth that child 1 will have with wealth-maximizing schooling investments,\(^{15}\) and to the right of \( W_1^* \) is a segment of the wealth possibility frontier between \( W_1^* \) and \( W_2^* \) that is linear at a 45° angle with the x-axis because there is a one-for-one trade-off from wealth in the form of gifts to child 1 versus child 2. The parents then can choose the combination of schooling and gifts that maximize the wealth of the children, given this wealth-maximizing fron-

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\(^{15}\) The rate of return to schooling declines as schooling increases due to diminishing returns given fixed genetic endowments so the wealth possibility frontier is concave between \( W_1^n \) and \( W_1^* \). The level of the wealth-maximizing schooling investment in the presence of perfect capital markets is the one for which the rate of return equals the rate of interest in the capital markets.
tier. If the parents have equal concern for their children, they choose point $a$, where the 45° ray from the origin intersects the straight-line portion of the wealth possibility frontier: they thus choose to invest resources in the schooling of each child up to the wealth-maximizing schooling investments ($W^* > W^*_1$), then achieve an equal distribution of the wealth that they prefer by giving sufficiently greater gifts to child 2 to offset child 1's greater earnings, so that $W^*_1 = W^*_2$.

What happens if a CCT program is introduced? First, if the schooling level covered by the CCT program is the schooling associated with wealth $\leq W^*_1$ and $\leq W^*_2$, there is no effect on schooling, because $W^*_1$ and $W^*_2$ remain associated with the wealth-maximizing schooling levels. The CCT program transfers simply increase the wealth of the family, which causes the wealth-maximizing frontier to shift outward if the increased wealth is at least partly shared with the children (as it will be if parents are altruistic with regard to their children over the relevant range or expect to receive part of the children's wealth in the form of old-age support), but the shift in the frontier changes not $W^*_1$ or $W^*_2$ but just the length of the straight "gift trade-off" line between them, with the implication that $W^*_1 = W^*_2$ increases when the children both receive more gifts but no more schooling. Of course this is also the outcome if a UCT program is introduced with a transfer of equal magnitude.

If the schooling level covered by the CCT program is greater than the schooling level associated with $W^*_1$ and/or greater than the schooling level associated with $W^*_2$ and if the household elects to participate in the program by increasing schooling above $W^*_1$ and/or $W^*_2$, indeed the CCT program increases the schooling of one or both children beyond what would be given with a UCT of the same magnitude. And indeed someone in the household is better off because of the transfers received from the program—although not as much better off as would be the result with a UCT of the same magnitude because program participation requires inefficiently investing too much in schooling, which reduces overall household wealth. And given the plausible assumption that the children's wealth positively affects the parents' welfare, the children are likely to be better off than without the program (sharing in the increase in household wealth) but worse off than if the transfers were unconditional (sharing in the reduction of household wealth that occurs if the transfers are conditional rather than unconditional). If the children obtain more schooling with the CCT in this case than with a UCT (say the schooling levels associated with $W^* > W^*_1$ and $W^*_2 > W^*_2$ for the case in which the CCT program increases the schooling of both children), how could the children be worse off than under the UCT? The answer is that the parents reduce the "gifts" to the children more than the amount that the

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16. By "equal concern" we mean that the parental welfare function is symmetrical around the 45° ray from the origin (see Behrman, Pollak, and Taubman 1982).
wealth of the children is increased by the increased schooling.\footnote{17. This general point dates back at least to Nichols and Zeckhauser (1982). Das, Do, and Özler (2005) also emphasize the fungibility of resources received by households as a central factor in the context of CCT programs.} Figure 6.4 provides an illustration in which the thicker solid line shows the wealth possibility frontier that is interior to the frontier in Figure 6.3 (represented by the thinner solid line) because the conditionality of the CCT results in schooling above the wealth-maximizing levels (with the rates of return to schooling above the wealth-maximizing levels below the market rate of interest).

To this point we have focused on the case in which the parents provide some resources to the children in forms other than schooling—resources that we call gifts. What if the parents provide so few resources to the children that the schooling investments permitted by these resources are less than the wealth-maximizing schooling levels \((W^*_{1}, W^*_{2})\)? In this “very-low-resources” case,\footnote{18. Behrman, Pollak, and Taubman (1995) discuss intermediate cases between the two on which we focus here. Consideration of the implications of CCTs for these intermediate cases reveals additional subtle implications (particularly regarding distribution among the children), but the basic points are illustrated in the two cases that we consider here.} if capital markets permit borrowing for investing in the children’s schooling, the wealth-maximizing strategy is to borrow the necessary funds at the market rate of interest in order to invest in schooling at the wealth-maximizing levels, assuming that any necessary binding intergenerational commitments can be established in the case in which parents borrow for their children’s schooling. That is, the results are basically the same as in the high-resources case discussed earlier except that the intergenerational flow of “gifts” is in the opposite direction, with children sharing some of their postschooling earnings with their parents to compensate for the loans that the parents made earlier to finance the children’s schooling. And, as in that case, adding conditionality to a given magnitude of transfers increases schooling for the children only if the household participates in the program and \(W^*_1 > W^*_{1}\) and/or \(W^*_2 > W^*_{2}\), which leaves both generations better off than if there were no transfer program but generally worse off than if the same magnitude of program transfers were unconditional.

If, in this “very-low-resources” case, capital markets do not permit borrowing to invest in the children’s schooling, the wealth-maximizing strategy uses all the resources that the household provides to the children to invest in their schooling because the rate of return on schooling exceeds the market rate of interest. In such a case, unconditional transfers are devoted substantially to increasing children’s schooling because there is a high rate of return activity up to the wealth-maximizing schooling levels \((W^*_{1}, W^*_{2})\) if parents are concerned about the children’s wealth out of altruism or concern about old-age support. If UCTs can be used to increase children’s schooling beyond the levels they would receive in their absence (but still below the wealth-maximizing school-
FIGURE 6.4 The wealth possibility frontier for two children in a high-resources case with an effective CCT expanding schooling beyond wealth-maximizing schooling levels so that the wealth-possibility frontier is interior to that from Figure 6.3 between $W^*_1$ and $W^*_2$

Wealth of child 2

\[ W_2 \]

\[ W^*_2 \]

\[ W^*_1 \]

Wealth of child 1

\[ W_1 \]

\[ W^*_1 \]

\[ W^*_0 \]

\[ 45^\circ \]

NOTE: The thicker solid line is the wealth-possibility frontier; the thinner solid line is the wealth-possibility frontier from Figure 6.3. $W^n_1$, $W^n_2$, and $W^n_2$ denote ascending levels of wealth for the first child; $W^*_2$, $W^*_2$, and $W^*_2$ denote ascending levels of wealth for the second child.

ing levels $W^*_1$, $W^*_2$) and the children cannot be tied to binding commitments to give all their additional wealth (income) to their parents, the children are unambiguously better off than they would be not only in the absence of the transfer program but also with a UCT of the same magnitude. At least one of the parents, on the other hand, is worse off than if the same transfer is unconditional, although if the parents differ sufficiently in their altruism toward their children, the parent with greater altruism might be better off (Martinelli and Parker 2003).^{19}

^{19}. Martinelli and Parker (2003) more formally consider many of the issues discussed here. In their simplest model, parents choose how much first-period time children spend in school (which increases their second-period earnings, a fixed amount of which is returned to the parents) versus
It might appear that the "very-low-resources" case with no access to capital markets is the appropriate model for understanding the impact of CCTs on the poor households to which they have been directed. If that is the case, possibly CCTs can be used to increase the welfare of children at the expense of the welfare of at least one parent. From a distributional perspective with an interest in reducing poverty, it would seem that what would be desirable would be distributions from better-off generations to poorer ones. In economies that are secularly growing in terms of per capita income, this would not seem to mean that resources should be shifted from poorer parents to children who are expected to be better off.

In our view, however, it is not obvious that the "very-low-resources" case with no access to capital markets is the appropriate model for understanding the impact of CCTs on the poor households to which they have been directed. Typically even poor households transfer resources across generations in forms other than schooling, even if we limit consideration of such resources to physical and financial resources; for example, Quisumbing et al. (2005) document instances of such resources bought into marriages by individuals born in poor Guatemalan villages. Moreover, poor households invest significant resources in forms of their children’s human capital other than just schooling—for instance, in health, nutrition, social capital, and learning through experiences.20 Therefore, they can probably often adjust other resource transfers, including human resource investments, if CCTs effectively cause them to increase their investments in children’s schooling or in any other explicit form of human capital. As a result, the “high-resources” model discussed earlier may be more appropriate—with the implications that the conditionality may make all household members worse off for a given transfer.

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20. For other human resource investments there are probably also diminishing marginal returns that imply curvature in the relevant portion of the wealth possibility frontier, as does schooling, rather than a straight-line segment such as for financial assets with a given market rate of interest. But such complications in drawing the wealth possibility frontier does not detract from the basic point in the text that adjustments can be made in these other human resource investments to offset in part or in whole the effect of the conditionality on increasing schooling.
References


A common criticism of conditional cash transfer (CCT) programs is that a large proportion of their budgets is absorbed by administrative costs and thus never reaches the intended beneficiaries. Depending on how such administrative resources are used, the poverty alleviation effect of the programs and, consequently, their overall cost-effectiveness may be reduced. Proper assessment of the criticism that such programs are “expensive” is difficult, however, because there is little rigorous empirical evidence on their costs and cost structures. For example, in their review of targeted poverty alleviation programs in developing countries, Coady, Grosh, and Hoddinott (2004) find cost information of any sort for only 32 of the 111 programs examined, and most of these were from a single source (Grosh 1994). Moreover, the available cost information is rarely comparable between studies, even for similar programs. Some studies refer to administrative costs, while others consider costs only in terms of theft or other losses and leakages. When the focus is on administrative costs, it is often unclear whether the figures refer to the entire life of the program or only a specific
period, such as the most recent year. For programs at different stages of maturity that have high fixed costs or in which there is extensive learning-by-doing, analyses based on different time periods can lead to very different conclusions. Improved information and a better understanding of the costs of such programs are crucial for effective policymaking.

In this chapter we implement a replicable methodology for performing a detailed, comparative analysis of the level and structure (i.e., the various activities being carried out) of costs for three of the CCT programs examined in this book: Programa Nacional de Educación, Salud, y Alimentación (PROGRESA), Programa de Asignación Familiar—Fase II (PRAF-II), and the pilot Red de Protección Social—Fase I (RPS). Because the total program budgets are the sum of administrative costs and total (cash and in-kind) transfers, we evaluate the cost-efficiency of each program by considering the cost of making a one-unit transfer to a beneficiary; we refer to this as the “cost-transfer ratio” or CTR (Coady, Perez, and Vera-Llamos 2005). How we use and interpret the CTR depends on how it is calculated and on program characteristics. Whether the fixed costs of setting up the program or only the variable costs of running it are included and whether the entire life of the program or a specific period is under consideration both influence the CTR. Features of the program, including targeting and monitoring; the size, type, and delivery mechanism of the transfers (for example, cash or in-kind, demand- or supply-side); and the program’s coverage, duration, and whether it is expanding also matter. In this chapter we propose strategies for using cost information to assess the relative cost-efficiencies of the different programs, making clear that understanding design differences across programs is essential for making sensible comparisons, even for similar programs such as the three considered here.

Although focusing on CTRs would be sufficient to evaluate a program whose sole objective was to disburse transfers, as discussed in Chapter 1 in this volume, the programs considered in this chapter have more ambitious goals and specific design features aimed at achieving them. The combination of targeting and conditioning makes these programs operationally and administratively complex and affects both the level and the structure of program costs, as well

3. Information that would have permitted a parallel cost study for Bolsa Alimentação in Brazil was not available.

4. For a welfare-based theoretical model underlying the CTR, see Caldes, Coady, and Maluccio (2004). In some frameworks, leakage to the non-poor is also considered as a program cost (Besley and Kanbur 1993); we do not do this. See the section on relating program costs to program benefits as well as MNPSG (2002), Coady (2005), and Maluccio (2009) for discussions of targeting in the three programs.

5. Fixed costs are usually incurred at the start of the program before any “output” is produced and thus do not vary as output varies. Many of these costs are irretrievable (that is, sunk) once incurred, for example, those for program design. As the program evolves, we expect average fixed costs to diminish. Variable (or recurring) costs, on the other hand, vary with the size of the program, that is, with the number of beneficiaries.
as program performance. Hence, there is a potential trade-off: reducing the CTR may not be cost-effective if it comes at the expense of activities devoted to administrative tasks such as targeting the poor or monitoring compliance with conditionalities. For example, program expenditures arising from setting up and implementing program targeting rules will presumably have a return in terms of improved targeting effectiveness, but although the costs will be included in the CTR, the expanded benefits will not. Similarly, expenditures associated with setting up and implementing mechanisms for monitoring adherence to program requirements will presumably lead to greater effects on human capital but will be reflected only as a cost in the CTR. Given these programs’ designs and multiple objectives, particularly improved human capital for children that is likely to yield returns over many years, we emphasize that it would be incorrect to interpret the CTR either as a measure of overall cost-effectiveness or as a cost-benefit ratio. In the section relating program costs to program benefits, however, we discuss evidence on the relative targeting effectiveness and human capital impacts of the programs, facilitating a more comprehensive comparison of program costs.

**Design and Implementation of the Programs**

To analyze the cost structures of these programs, it is necessary to understand how they operate and how they have evolved. Because Part I of the book provides a detailed description, here we focus on those characteristics directly relevant to our analysis of costs.

**PROGRESA**

There are two components to PROGRESA’s cash transfers. Children over age 7 (the starting age for grade 3) are eligible for education transfers. Transfers increase by grade and are higher for girls than for boys in middle school (grades 7–9). In 1999, monthly benefits were 80 pesos (US$8) for grade 3. By grade 9, benefits rise to 265 (US$27) and 305 (US$30) pesos for boys and girls, respectively. In addition to enrollment, transfers are conditioned on an 85 percent attendance record, and children are allowed to repeat a grade, at most, twice. The second component of the transfer, for food security, health, and nutrition, is 125 pesos (US$13) per month for each household, conditioned on household

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6. The importance of this trade-off is noted by Grosh (1994, 46): “The conclusion that total administrative costs are low must be somewhat tempered, however. In several of the programs, it appears that low administrative budgets have led to deficient program management. Spending more on administration with a given program framework might lead to better service quality, better incidence, or both.”


8. In 1999 the exchange rate was approximately 10 pesos per US$1.
members' making regular trips to health clinics for preventive health checks and attending monthly nutrition and hygiene information sessions.

There is a ceiling of 750 pesos (US$75) per month for education and food transfers combined. On average, the transfer to beneficiary households constitutes around 20 percent of pre-program annual household expenditures. Transfer amounts are indexed to inflation and adjusted every six months, something not done in the other two programs.

PROGRESA was targeted in two stages. The first stage identified the most marginal rural localities using a “marginality index” constructed from the national census. The second stage targeted households within eligible localities using census data specially collected in program areas to classify households as “poor” or “non-poor” based on a statistical analysis of income and other household characteristics. After beneficiary households were identified, a general assembly was held to explain the objectives of the program, incorporate households, and inform them of their responsibilities and rights.

The expansion of the program throughout Mexico took place in several phases. The census for the first and second phases began in October 1996. In August 1997, Phase I began with incorporation of approximately 140,000 households in 3,369 localities. The first transfers took place in September 1997. Phase II began in November 1997, when a further 160,000 households in 2,988 localities were incorporated, with the first transfers taking place in January 1998. Expansion of the program has been determined largely by budget allocations, with the greatest expansion occurring in 1998, when nearly 1.63 million households in 43,485 localities were incorporated. By early 2000, the program had an annual budget of US$1 billion and included nearly 2.6 million rural households in 72,345 localities in all 31 states. This constituted approximately 40 percent of all rural households in Mexico.

PRAF-II

PRAF-II began in the second half of 2000 and includes both demand- and supply-side transfers. On the demand side, the education subsidy is 812 lempiras (L) (US$54) per child per year, up to a maximum of three education transfers per household. This transfer is conditioned on the enrollment and regular attendance of all children who have not yet completed grade 4 of primary school. The food security, health, and nutrition transfer provided for pregnant women and children under age 3 is L644 (US$43) per beneficiary per year, with a maximum of two transfers per household. This transfer is conditioned on monthly trips by pregnant women and children to health clinics for preventive check-ups and growth monitoring. Transfers are distributed twice a year and,

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10. In 2000 the exchange rate was approximately 15 lempiras per US$1.
on average, comprise about 4 percent of pre-program total household annual expenditures (one-fifth of the equivalent percentage of PROGRESA).

Unlike PROGRESA, which leaves the supply side to the education and health ministries to manage, PRAF-II directly invests resources to improve supply-side services. For education, it makes grants to school parent associations. For health and nutrition, PRAF-II operates a community-based child growth and monitoring program that provides mothers with one-on-one counseling and also makes grants to local health service committees to improve the quality of the healthcare provided by the government health system.

The program was geographically targeted to poor municipalities. Seventy municipalities with the highest rates of child stunting were considered eligible (MNPTSG 2002). Of these, 50 were randomly selected, leaving the others as a control group for the program evaluation. In 40 of the chosen municipalities, all households with pregnant women, children under age 3, and/or children aged 6–12 who had not yet completed grade 4 of primary school were eligible for benefits (the remaining 10 municipalities selected received only the supply-side transfers described later). Transfers began in November 2000, and by the end of 2002, PRAF-II had 47,800 beneficiaries and was operating in 50 rural municipalities (out of a total of 298) from seven departments. Eighty-seven percent of the households in these departments were classified as poor.

RPS

The third program we consider, RPS, began as a pilot in 2000 in rural areas in the northern part of the central region of Nicaragua. Each participating household receives a food security, health, and nutrition transfer of 240 córdobas (C$) (US$18) per month, conditioned on taking children under age 5 to scheduled health controls and attending health and nutrition workshops. To receive a monthly education transfer of C$120 (US$9) per household, households with children aged 7–13 who have not completed grade 4 of primary school have to ensure that they enroll and achieve over 85 percent attendance at school. In addition, the household receives C$275 (US$21) annually upon enrollment for each eligible child in school for school supplies (for example, uniforms and shoes) and C$100 (US$8) annually per eligible child to be delivered to the teacher. Similar to the case of PROGRESA, the total transfers to each household (excluding the amount passed on to the teacher)—on average, approximately C$3,800 (US$300)—comprised 18 percent of total annual household expenditures for beneficiary households before the program.

RPS also has supply-side components, although they differ from those of PRAF-II. For education, there is the transfer paid to the teacher per student ben-

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12. In 2000 the exchange rate was approximately C$13 per US$1.
eficiary as described earlier. For health and nutrition, RPS contracts, trains, and pays private healthcare providers to deliver the services required by the program (Regalia and Castro 2007). These services, provided free to beneficiary households, are focused on children under age 5 and include growth and development monitoring, vaccination, and provision of antiparasitics, vitamins, and iron supplements. Children under age 2 are seen monthly, while those ages 2–5 are monitored bimonthly.

The pilot program was implemented in six municipalities from two relatively poor departments in Nicaragua, which were chosen using a combination of poverty and operational criteria. Around 80 percent of rural households in these departments are classified as poor. A marginality index was constructed and an index score calculated for each of the 59 rural comarcas (administrative areas comprising one to five villages) in the six municipalities using data from the 1995 national census. Forty-two comarcas were chosen to participate in the first stage of the pilot program, in which there was to be only geographic targeting. Twenty-one were randomly excluded from the program for two years, and these constituted the control group for the program evaluation (Maluccio and Flores 2005). Nearly all of the 6,000 households in these areas were eligible to receive program benefits, and they received their first transfers in October 2000. In the second stage of the pilot program (begun in early 2001), 80 percent (that is, 4,000) of households in the remaining 17 comarcas that had not been part of the evaluation were selected using household targeting based on a proxy means test (Maluccio 2009). By the end of 2002, the RPS pilot covered 2 percent of the rural households in Nicaragua.

Program Differences

The previous descriptions make clear that although the three programs have many similarities, they also have important differences, beyond being in different countries. PROGRESA is a national program and PRAF-II covers one-sixth of the Honduran population, but the RPS pilot is much smaller. All three programs are at different stages of maturity. There are also important program design differences. Although all three programs have a demand-side component, its structure and size differ across programs. PROGRESA is solely a demand-side program, providing transfers of, on average, 20 percent of total household expenditures. RPS delivers similarly sized transfers (as a percentage of total household expenditures), while those of PRAF-II are much smaller. PRAF-II and RPS also have significant supply-side interventions, although even these differ in the services they provide, how those services are provided, and who pays for them. Consequently, PRAF-II and RPS face very different internal program costs, even for components of the services that are similar, such as vaccine provision. All of these differences affect how we collect and process cost information and interpret the CTR, as well as the extent to which we can make sensible comparisons among the programs.
Analysis of Program Cost Structures

Using Existing Accounting Data

The primary source of information on program costs is typically the program's accounting records. It is usually straightforward to obtain annual data on total program costs and transfers, ingredients for the initial estimates of the CTR.

Table 7.1 presents the accounting information for each of the programs, which allows us to present our first crude estimates of the CTR. For PROGRESA, the average CTR for the program to the end of 2000 (total nontransfer program costs divided by total program transfers for four years) is 0.106. That is, 10.6 cents were spent on administrative costs for every dollar transferred to households. Equivalently, 9.6 percent of the total budget was absorbed by program costs.\(^\text{13}\)

We must be careful, however, when interpreting this ratio. First, it includes costs relating to the external evaluation of the program. This was a one-time evaluation that, while influencing the redesign of these and other related programs, did not substantially affect program design or operations in real time. This type of external evaluation must be distinguished from ongoing internal monitoring and evaluation, whose results were fed continuously into program decisionmaking, improving ongoing program design and operations. The external evaluation is plausibly treated as a (sunk) fixed cost that would not recur, at least not on the same scale, in a fully developed, mature program, whereas the internal monitoring and evaluation is a recurring activity and is best treated as a variable cost. Second, in addition to the costs of the external evaluation, the costs presented include a variety of other costs plausibly treated as fixed costs associated with start-up activities. Finally, for data spanning a number of years, adjustments to account for inflation and depreciation of capital investments can be made; for these programs during the period covered, such adjustments made little substantive difference in the results.

Because the majority of fixed costs tend to be incurred at the start of a program, examining the annual CTR separately for each year sheds light on the relative importance of these types of costs over time and on the expected long-run CTR for a (more) mature program. As the program matures, we expect the annual CTR to decrease, because the average fixed costs will decline. This is what we find for PROGRESA, for which the annual CTR decreased rapidly over the four years, starting at 1.342 in the first year and declining to 0.054 in 2000. Even the annual CTR of 0.054 observed in 2000 might include some fixed costs, however, and therefore still might overestimate the long-run CTR for a fully mature program. We consider this possibility, and ways to control for it, in the analysis that follows.

\(^\text{13}\) Calculated as follows: \(10.6 \div (100 + 10.6) = 0.096\). The CTR is always greater than the percentage of administrative costs.
### TABLE 7.1 Disaggregated program costs of three conditional cash transfer programs (thousands of U.S. dollars)

<table>
<thead>
<tr>
<th></th>
<th>PRORESA</th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Program costs</td>
<td>20,448</td>
<td>47,703</td>
<td>45,731</td>
<td>41,640</td>
<td>155,522</td>
<td>482</td>
<td>2,483</td>
<td>1,669</td>
<td>1,930</td>
<td>6,564</td>
<td>1,149</td>
<td>1,348</td>
<td>1,492</td>
</tr>
<tr>
<td>Total program transfers</td>
<td>15,237</td>
<td>149,439</td>
<td>525,227</td>
<td>775,688</td>
<td>1,465,591</td>
<td>0</td>
<td>2,589</td>
<td>5,469</td>
<td>5,102</td>
<td>13,160</td>
<td>452</td>
<td>2,702</td>
<td>3,192</td>
</tr>
<tr>
<td>Demand-side transfers</td>
<td>15,237</td>
<td>149,439</td>
<td>525,227</td>
<td>775,688</td>
<td>1,465,591</td>
<td>0</td>
<td>2,486</td>
<td>4,813</td>
<td>4,486</td>
<td>11,785</td>
<td>443</td>
<td>2,315</td>
<td>2,232</td>
</tr>
<tr>
<td>Supply-side transfers</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0</td>
<td>103</td>
<td>656</td>
<td>615</td>
<td>1,374</td>
<td>9</td>
<td>387</td>
<td>960</td>
</tr>
<tr>
<td>Cost-transfer ratio</td>
<td>1.342</td>
<td>0.319</td>
<td>0.087</td>
<td>0.054</td>
<td>0.106</td>
<td>0.959</td>
<td>0.305</td>
<td>0.378</td>
<td>0.499</td>
<td></td>
<td>2.543</td>
<td>0.499</td>
<td>0.467</td>
</tr>
<tr>
<td>Cumulative cost-transfer ratio</td>
<td>1.342</td>
<td>0.414</td>
<td>0.165</td>
<td>0.106</td>
<td>n.a.</td>
<td>1.145</td>
<td>0.575</td>
<td>0.499</td>
<td>n.a.</td>
<td></td>
<td>2.543</td>
<td>0.791</td>
<td>0.629</td>
</tr>
</tbody>
</table>

**SOURCE:** Authors' calculations.

**NOTES:** PRAF-II, Programa de Asignación Familiar—Fase II; PRORESA, Programa Nacional de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.a., not applicable. PRORESA figures U.S. dollars using a constant (1999) exchange rate of 10 pesos per US$. PRAF-II figures U.S. dollars using a constant (2000) exchange rate of 15 lempiras per US$. RPS accounting records were provided in U.S. dollars.

*aPRAF-II accounting costs have been adjusted to include unaccounted-for costs of items including water, telephone service, electricity, and additional staff hired for the delivery of the transfers.*
The other reason that the annual CTR decreases over time is that the programs under consideration have expanded, with total transfers increasing (at a rate much faster than costs). Table 7.1 shows that transfers in PROGRESA increased fivefold over 1998–2000, from US$149 to US$776 million. Total costs, on the other hand, actually decreased over the same period, dropping from US$48 to US$42 million.

We can use the evolution of the estimated CTRs to assess how much we would overestimate the cost-efficiency if we were to base it on early snapshots of the program. The final row of Table 7.1 presents the cumulative average CTR for the program. Because of the sharp decline in estimated annual CTRs, basing the average CTR on only the first two or three years of data would substantially overestimate the average calculated at the end of 2000, when all beneficiary households had been included and the program was nearing maturity. In 1998, the cumulative average was four times as large as the four-year average, and even in 1999 it was more than 1.5 times as large. Had we carried out the analysis in early 2000 using only information to the end of 1999, the results for PROGRESA would have differed substantially. It is important to ensure that the CTR estimates are as comparable as possible before attempting comparisons between programs, or even between years within a program.

We turn now to the other two programs. Because they include both demand- and supply-side transfers, we use the sum of these to calculate the total transfer in the denominator of the CTR. This implicitly equates the value of a unit of transfer to households, regardless of whether it is given to the household directly in cash or indirectly via health and education (in-kind) services. For the in-kind transfers, then, we are valuing their benefit, that is, the beneficiaries’ willingness to pay, at the cost of provision. In the case of PRAF-II, this includes transfers made to school parent associations and local health teams, as well as the cost of the community-based child growth program. For RPS it includes transfers given to teachers as well as the payments made to the private health-care providers.

For PRAF-II, the average CTR for the program to the end of 2002, dividing total program costs by total demand- and supply-side transfers, was 0.499, that is, it cost 50 cents for every dollar transferred by the program. Equivalently, 33 percent of the total program budget to the end of 2000 had been absorbed by administrative costs. Although this is high compared to PROGRESA, there are some reasons we would expect such an unfavorable “raw” comparison between the programs.

Although the annual CTR for PRAF-II began in 2000, at a level below that of PROGRESA in its first year, it did not decline as dramatically or as consistently as that of PROGRESA after that start. Although the annual CTR fell from 0.959 to 0.305 between the first and second years, it increased to 0.378 in 2002. This rise reflects both increased costs and decreased transfers from 2001 to 2002. In late 2001, with elections that brought a change of ruling party, a new
program team was installed, apparently without sufficient overlap with the previous team to ensure a smooth transition. During the transition, effort and resources were diverted from making demand-side transfers and from other regular activities toward updating the beneficiary register. As a result, the annual estimates for 2001 or 2002 may give misleading impressions of what the long-run CTR will look like when the program’s operational problems have been addressed and all or most of the fixed costs have been incurred.

For the pilot RPS, the average program CTR to date is 0.629, even higher than that for PRAF-II. For the three years of operation to the end of 2002, it cost 63 cents in administrative costs for every dollar distributed in demand- and supply-side transfers. Equivalently, administrative costs absorbed nearly 40 percent of the total program budget during the period. There was a substantial decline in the annual CTR after the first year but only a small decline between the second and third years. The increase in total program transfers in 2002 was due largely to the substantial increase in supply-side transfers that year; this part of the program was begun in mid-2001, so only about one-half of the expected supply-side transfers for a normal operating year were made in 2001. The increase in total program costs over the later two years reflects, in part, program activities related not to the implementation of the pilot program itself but rather to the design and planning of the expansion phase of the program, which began in 2003. Therefore, even the year 2002 is likely to yield an overestimate of the pilot program’s CTR.

**Identifying Key Program Activities and Associated Costs**

The existence of fixed costs associated with setting up and planning program activities, as well as activities associated with expansion or operational difficulties, makes clear that it would be misleading to use the “unadjusted” CTRs presented earlier as the basis for assessment or comparison of the relative cost-efficiency of the three programs. A proper comparison requires further consideration of the details of their cost structures, in particular, the relationship between program costs and activities.

In focus groups and key informant interviews with program officials and staff, we first prepared a timeline of important activities from the beginning of each program. This retrospective approach was possible because most key staff had been in place for some time and either could recall many of the institutional developments or could easily refer to different progress reports for each program. Then, on the basis of further interviews with managers and staff, the percentage of time spent by individuals in the office on each of the activities in each year was estimated for program subunits. For example, for RPS, key managers met and completed a month-by-month matrix of activities

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14. In the case of PRAF-II, we also interviewed former staff because there had been high turnover.
and time allocations for the relatively small office. This approach had the benefit that all activities were known, but it suffers from the typical weaknesses of recall data.

Based on the timeline and specific activities, we next identified mutually exclusive key program activities at a more aggregate level in such a way that the specific activities fit into them. To the extent possible, we delineated them in sequential order in the life cycle of the program, in accordance with whether they corresponded to fixed or variable costs for the program, in such a manner as to facilitate comparison among the programs. This enables us to better approximate the cost structure and CTR of mature programs. It also permits an exploration of hypothetical alternative programs that do not include all the activities of the actual programs. For example, by identifying the costs associated with household targeting or with the conditioning of the program, we can explore how the CTRs vary with and without these program features.

Although any such categorization of activities is necessarily somewhat subjective, there are some fairly obvious, broadly defined activities in the three programs that are common to most social safety net programs (for example, program design and benefit delivery). Others are common to targeted CCT programs (for example, identification and incorporation of beneficiaries and monitoring of compliance with conditionalities).

The key activities we identified for the three programs were as follows:

1. **Program design and planning**: Selecting program areas (geographic targeting).
2. **Identification of beneficiaries (household targeting)**: Collecting, processing, validating, and analyzing household socioeconomic data to identify eligible households.
3. **Incorporation of beneficiaries**: Planning and convening assemblies to inform participants of their responsibilities and rights; collecting and processing participation forms.
4. **Delivery of demand transfers**: Calculating transfers, informing beneficiaries about scheduled transfers, and ensuring that they are delivered.
5. **Delivery of supply transfers (and services)**: Organizing, planning, and providing the supply-side services (for example, health services).
6. **Monitoring of compliance with conditionalities**: Distributing the registration, attendance, and performance forms to schools and healthcare providers and later collecting and processing them.
7. **Monitoring and evaluation**: Conducting overall program monitoring and internal evaluation, the results of which are fed into ongoing adjustments made to the program.
8. **External evaluation**: Designing the evaluation, collecting and processing surveys, and performing analysis, the results of which are fed into redesign of the program.
The first three activities (1–3) must be undertaken at the outset, before any cash transfers are made. Program design is a fixed cost that does not vary with the total size of the program (that is, the number of beneficiary localities or households). Therefore, this component of costs per unit of transfer (or per household) will decrease, on average, as the program expands to include more households. Identification and incorporation of beneficiaries, on the other hand, while reasonably treated as fixed per household, involve one-time costs that increase with the number of households included in the program but do not recur once a household has been incorporated. The costs of the next four activities (4–7) increase with the number of beneficiary households and recur throughout the life of the program. External evaluation (8), as discussed earlier, can be treated as a fixed cost that would typically end for an ongoing program. In this way, we crudely separate fixed and variable costs across activities, although we acknowledge that this separation is not perfect. That is, within each activity we expect to find a mix of fixed and variable costs, although one or the other might dominate.

Based on the information from the focus group sessions identifying specific activities and the time spent on them, we grouped them by their relevant key activity and calculated the fraction of time spent by program personnel on each key activity in each year. From this information we developed what we refer to as a time allocation matrix for each program (Table 7.2). Although this methodology is best treated as approximate, it does appear to identify substantive trends and patterns. Reassuringly, much of what we see in the matrixes can be corroborated by our knowledge of the program activities and their relative intensities over time. For future analyses, however, we would recommend elaborating the activity list and time matrix from the start of the program or using survey-based methods for greater accuracy.

The next step in the analysis was to associate, where possible, the various accounting costs described in the previous subsection with program activities. About 25 percent of line item costs from the detailed accounting records could be allocated directly to certain activities without ambiguity. For example, the fees paid to firms delivering the monetary transfers can be allocated directly to the activity related to the delivery of demand-side transfers, or the cost of collecting the baseline evaluation survey can be allocated to the external evaluation activity. For many other costs, such as salaries of management personnel, direct assignment is not possible because they cut across program activities. These are allocated to program activities on an annual basis using the time allocation matrix. By multiplying total unassigned costs by the time allocation

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15. Further details are provided for PROGRESA, PRAF-II, and RPS in Coady, Perez, and Vera-Llamas (2005); Caldés and Coady (2003); and Caldés and Maluccio (2005), respectively. The details of the methodology varied slightly between countries. For example, some categories were not relevant to all programs, such as supply-side delivery for PROGRESA.
## TABLE 7.2 Time allocation matrix: The share of time allocated each year to each activity of three conditional cash transfer programs

<table>
<thead>
<tr>
<th>Program activity</th>
<th>PROGRESA</th>
<th>PRAF-II*</th>
<th>RPS pilot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Program design and planning</td>
<td>0.138</td>
<td>0.068</td>
<td>0.060</td>
</tr>
<tr>
<td>2. Identification of beneficiaries</td>
<td>0.095</td>
<td>0.057</td>
<td>0.055</td>
</tr>
<tr>
<td>3. Incorporation of beneficiaries</td>
<td>0.098</td>
<td>0.134</td>
<td>0.113</td>
</tr>
<tr>
<td>4. Delivery of demand transfers</td>
<td>0.179</td>
<td>0.153</td>
<td>0.148</td>
</tr>
<tr>
<td>5. Delivery of supply transfers</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>6. Monitoring conditionalities</td>
<td>0.195</td>
<td>0.312</td>
<td>0.339</td>
</tr>
<tr>
<td>7. Monitoring and evaluation</td>
<td>0.295</td>
<td>0.276</td>
<td>0.285</td>
</tr>
<tr>
<td>8. External evaluation</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Authors' calculations.

Notes: PRAF-II, Programa de Asignación Familiar—Fase II; PROGRESA, Programa Nacional de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.a., not applicable.

*The identification and incorporation of beneficiaries were not separable for PRAF-II; the figures in the row for identification represent the sum of those two activities.
matrix percentages, we can distribute these shared costs across program activities. Two key assumptions underlying this methodology for assigning costs are that

- the average wage of individuals in each activity is the same (this is true if there is an identical mix of personnel of different skill and salary levels working in each activity) and
- the average use of other inputs is the same in each activity (for example, computer time, transportation, furniture, and other overhead) (Coady, Perez, and Vera-Llamas 2005).

Although in practice some activities might be more intensive in high-wage personnel or other inputs than others, there is no reason to think this would severely bias our results, because all the broad activities involve personnel and materials ranging across the wage spectrum.

The accounting-based approach we use was possible because all three programs operated autonomously and most program-related activities were carried out directly under the programs and therefore the associated costs were under their accounting systems. This is not always the case, however, particularly when projects are embedded in existing ministries. For example, Fiedler (2003), in a cost analysis of a Honduran community-based integrated childcare program that did not have a centralized accounting system, had to construct total program costs from the bottom up, directly estimating the costs required for each activity by costing out the inputs for each activity and then aggregating them, in what is sometimes referred to as “activity-based costing.”

This approach focuses on more specific activities than we do, thereby allowing useful simulations of marginal costs under varying program designs (for example, excluding certain components). A drawback to such a bottom-up approach, however, is that it is difficult to capture all of the activities and associated costs borne by the central office of the program, and usually they are ignored. Our view, supported by Waters (2000) and Fiedler (2003), is that it would likely have led to an underestimate of the overall costs. This approach can be a powerful tool for managers, however, for understanding and controlling the costs of different activities, as it is in business, particularly if implemented early in the evolution of a program.

Activity Cost Shares

After assigning all costs to activities, we calculated the activity cost shares, that is, the fraction of costs devoted to each activity (Table 7.3). For PROGRESA, over the first four years of the program the largest cost items were identification of beneficiaries, delivery of transfers, and monitoring of compliance with conditionalities, accounting for 34, 22, and 18 percent of total costs (excluding transfers), respectively. The annual profile of these cost shares reflects the se-
sequential nature of these activities. The cost share for identification of beneficiaries decreased from 61 percent in 1997 to 3 percent in 2000. In contrast, the share for activities associated with conditionalities increased from 8 percent in 1997 to 24 percent in 2000. Similarly, the cost share for delivery of transfers increased from 8 percent in 1997 to 41 percent in 2000. This shift of costs toward predominantly recurring cost items is consistent with the program's nearing maturity. By 2000, recurring activities accounted for 85 percent of total program costs.

In the case of PRAF-II, over the first four years of the program, activities associated with the external evaluation and the identification of beneficiaries (which included the incorporation of beneficiaries) were the most important cost items, accounting for 35 and 26 percent of total program costs, respectively. These were followed by delivery of demand- and supply-side transfers, which combined to account for 16 percent of total costs. The high cost share for the external evaluation explains a large portion of the difference in the average program CTRs for PRAF-II relative to PROGRESA.16

In addition to declining average fixed costs, the evolution of PRAF-II cost shares over time also reflects the operational difficulties encountered by the program. In 1999, at the very start of the program, program design and planning accounted for 83 percent of program costs. In 2000, activities associated with identifying program beneficiaries dominated, accounting for 35 percent of program costs. In 2001, activities associated with distributing transfers and setting up and implementing the monitoring system became more important, each accounting for between 15 and 21 percent of program costs. Somewhat unexpectedly, the share of program costs associated with the identification of beneficiaries increased substantially in 2002, accounting for 25 percent of program costs. This apparently reflects the problems in program operations described earlier.

For RPS, from the start of the pilot in 2000 to the end of 2002, the largest share of costs (22 percent) was spent on external evaluation, as in PRAF-II. This was followed closely by the 20 percent devoted to implementing the supply side of the program. Unlike PROGRESA and PRAF-II, RPS contracts and trains private healthcare providers. These providers also help monitor compliance with the conditionalities of the program. Internalizing these health service delivery costs into the program has implications for the program budget. The next largest cost category was for general program design, 18 percent, and included work related to both the pilot phase and the expansion phase that started in 2003. This is a natural consequence of the fact that we were looking at the costs of the RPS pilot: despite careful advance planning, there are always details to work out as

16. This finding, in addition to suggesting that it is important to separate out external evaluation costs in the cost analyses of programs, raises the issue of whether smaller programs should have to underwrite the bulk of the evaluation costs, in particular when they arguably generate a number of international intellectual public goods.
### TABLE 7.3 Activity cost shares of three conditional cash transfer programs

<table>
<thead>
<tr>
<th>Program activity</th>
<th>PROGRESA</th>
<th>PRAF-II&lt;sup&gt;a&lt;/sup&gt;</th>
<th>RPS pilot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Program design and planning</td>
<td>0.06</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>2. Identification of beneficiaries</td>
<td>0.61</td>
<td>0.47</td>
<td>0.26</td>
</tr>
<tr>
<td>3. Incorporation of beneficiaries</td>
<td>0.04</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>4. Delivery of demand transfers</td>
<td>0.08</td>
<td>0.13</td>
<td>0.25</td>
</tr>
<tr>
<td>5. Delivery of supply transfers</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>6. Conditionality</td>
<td>0.08</td>
<td>0.16</td>
<td>0.21</td>
</tr>
<tr>
<td>7. Monitoring and evaluation</td>
<td>0.10</td>
<td>0.11</td>
<td>0.13</td>
</tr>
<tr>
<td>8. External evaluation</td>
<td>0.03</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Source:** Authors' calculations.

**Notes:** PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA, Programa Nacional de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.a., not applicable.

<sup>a</sup>The identification and incorporation of beneficiaries were not separable for PRAF-II; the figures in the row for identification represent the sum of those two activities.
a program translates plans into action. Finally, during the pilot, about 10 percent of the nontransfer costs were spent on identification of beneficiaries, incorporation of beneficiaries, and internal monitoring and evaluation.

When we examine the evolution of the cost shares during the three years of the RPS pilot, we find patterns (due to initial fixed investments) similar to the other two programs. Identification of beneficiaries declined in intensity as the program matured. Household survey work, a major component of identification of beneficiaries, was carried out in 2000 and 2001, but once the pilot phase objective of reaching 10,000 beneficiaries was fulfilled, very little activity of this sort was necessary in 2002. The share devoted to incorporating beneficiaries also declined, although the need for continuous updating (for example, for births and other changes in household composition) kept it from altogether disappearing. The fraction spent on program design, however, remained roughly constant. Disaggregating program design and planning activities according to whether they were for the pilot phase or for the expansion phase begun in 2003 (not shown), we find that the former declined substantially over the three years, whereas the latter increased in roughly equal proportions; the combined effect is that the total share dedicated to design activities was roughly constant over the three years (Caldés and Maluccio 2005).

Delivery of demand- and supply-side transfers accounted for more than one-fourth of costs in 2002, with the latter comprising the majority of those costs. Activities related to monitoring whether households were complying with the program conditionalities grew in intensity over time as the number of beneficiaries grew. General program monitoring, including monitoring services delivered to each beneficiary by each of the healthcare providers, also increased substantially over the period (Regalia and Castro 2007). The rise in 2002 was due in part to the implementation of random spot-checks of private providers to ensure high-quality delivery. Finally, even though the time devoted to evaluation declined steadily over the three years, the cost shares increased, largely due to the lumpiness in payments made to external evaluators.

Activity Cost-Transfer Ratios

For each activity and program, Table 7.4 presents annual CTRs and an overall program average. These reflect the costs associated with each activity per one-unit transfer to a beneficiary. The CTR for each program activity is simply the cost share for that activity multiplied by the aggregate CTR (for all activities), so their relative sizes reflect the activity cost shares presented in Table 7.3. Focusing on CTRs by activity type facilitates comparison among programs by making clear the composition of the aggregate ratios and also by ensuring that the costs included in the aggregate ratios are consistent across programs.

To further facilitate comparison, we adjust the CTR by removing the costs associated with external program evaluations. Unsurprisingly, given the overall size of PROGRESA, this changes its CTRs little, with the average program
### TABLE 7.4 Cost-transfer ratios of three conditional cash transfer programs

<table>
<thead>
<tr>
<th>Program activity</th>
<th>PROGRESA&lt;sup&gt;a&lt;/sup&gt;</th>
<th>PRAF-II&lt;sup&gt;b&lt;/sup&gt;</th>
<th>RPS pilot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Program design and planning</td>
<td>0.074</td>
<td>0.010</td>
<td>0.003</td>
</tr>
<tr>
<td>2. Identification of beneficiaries</td>
<td>0.766</td>
<td>0.137</td>
<td>0.022</td>
</tr>
<tr>
<td>3. Incorporation of beneficiaries</td>
<td>0.052</td>
<td>0.020</td>
<td>0.006</td>
</tr>
<tr>
<td>4. Delivery of demand transfers</td>
<td>0.106</td>
<td>0.036</td>
<td>0.021</td>
</tr>
<tr>
<td>5. Delivery of supply transfers</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>6. Conditionality</td>
<td>0.104</td>
<td>0.046</td>
<td>0.017</td>
</tr>
<tr>
<td>7. Monitoring and evaluation</td>
<td>0.120</td>
<td>0.031</td>
<td>0.011</td>
</tr>
<tr>
<td>8. External evaluation</td>
<td>0.037</td>
<td>0.010</td>
<td>0.003</td>
</tr>
<tr>
<td>Total</td>
<td>1.260</td>
<td>0.290</td>
<td>0.085</td>
</tr>
</tbody>
</table>
| Source: Authors' calculations. 
| Source: Authors' calculations. 
| Notes: PRAF-II, Programa de Asignación Familiar—Fase II; PROGRESA, Programa Nacional de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.a., not applicable. 
| *Figures for PROGRESA are inflation-adjusted to 2000 using consumer price indexes of 1.5, 1.3, and 1.1 for 1997, 1998, and 1999, respectively, and adjusted for capital purchases. 
| The identification and incorporation of beneficiaries were not separable for PRAF-II; the figures in the row for identification represent the sum of those two activities. 

<table>
<thead>
<tr>
<th>Total without external evaluation</th>
<th>1.223</th>
<th>0.280</th>
<th>0.082</th>
<th>0.049</th>
<th>0.106</th>
<th>0.664</th>
<th>0.226</th>
<th>0.163</th>
<th>0.325</th>
<th>2.107</th>
<th>0.405</th>
<th>0.331</th>
<th>0.489</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total without external evaluation and program design and planning</td>
<td>1.149</td>
<td>0.270</td>
<td>0.079</td>
<td>0.047</td>
<td>0.102</td>
<td>0.635</td>
<td>0.224</td>
<td>0.161</td>
<td>0.287</td>
<td>1.606</td>
<td>0.325</td>
<td>0.245</td>
<td>0.376</td>
</tr>
<tr>
<td>Total without external evaluation, program design and planning, and identification and incorporation of beneficiaries</td>
<td>0.331</td>
<td>0.113</td>
<td>0.051</td>
<td>0.041</td>
<td>0.057</td>
<td>0.298</td>
<td>0.198</td>
<td>0.068</td>
<td>0.173</td>
<td>0.718</td>
<td>0.203</td>
<td>0.212</td>
<td>0.245</td>
</tr>
</tbody>
</table>
CTR decreasing from 0.111 to 0.106 and in the final year from 0.052 to 0.049. The effect on the other two programs’ CTRs, however, is substantial. The average program CTR for PRAF-II decreases from 0.499 to 0.325, and we now see an annual decline over the period, with the annual CTR for 2002 decreasing from 0.378 to 0.163. For the RPS pilot, the average program CTR decreases from 0.629 to 0.489, and the decline in the annual CTR is now more pronounced, with the annual CTR for 2002 decreasing from 0.467 with external evaluation to 0.331 without.

Even with these adjustments, the CTRs given earlier are likely to overestimate the long-run CTRs, because some of the included activities have a large component of fixed costs. Earlier we stated that one can treat the last year observed for each program as an estimate for the program in a mature state. After excluding external evaluations, the final-year (for which we have data) annual CTRs are 0.049, 0.163, and 0.331 for PROGRESA, PRAF-II, and RPS, respectively. Based on these numbers, the two supply-side programs still appear to cost substantially more, with the RPS pilot costing twice as much per unit of transfer as PRAF-II. This methodology implicitly assumes that the programs are all nearing maturity. Although this is plausible for PROGRESA, it is less likely for the other programs. PRAF-II has had operational difficulties associated with updating its beneficiary lists, implementing its supply side, and monitoring compliance with conditionalities. For the RPS pilot, the 2002 figures include design costs associated with preparing for the expansion of the program. Therefore, even the final-year annual CTRs are still likely to overestimate the long-run CTRs.

To better approximate the long-run CTR, we further adjust it by excluding other fixed costs we can identify. The activity categories are roughly sequential in nature, with the first three (1–3) representing activities that need to be carried out at the outset of a program, before any transfers are distributed to households or service providers. These activities are likely to be much less important cost components of the mature program. Therefore, by subtracting these costs we can derive better estimates of the long-run CTRs. These adjusted estimates are shown in the bottom row of Table 7.4 and result in final-year annual CTRs of 0.041, 0.068, and 0.212 for PROGRESA, PRAF-II, and RPS, respectively. Based on these ratios, we obtain the same rankings across programs according to program costs, but now PRAF-II is closer to PROGRESA, while the RPS pilot remains relatively more costly.

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17. The slight difference between the total CTRs reported in Table 7.1 reflects adjustments for inflation and capital investments made for PROGRESA. These adjustments were not done for the other programs because they made almost no difference in the reported figures.

18. It is probable that some of these costs are recurring in the medium term, however, such as the costs activities related to the identification of beneficiaries, which may include some costs related to periodic updating of the registration system. We implicitly assume that these are relatively small or are offset by the fixed costs in the other activities that we do not subtract. Alternatively, one can think about the estimates excluding the fixed costs as representing lower bounds.
In addition to the relative complexity of the RPS supply-side intervention, which implies additional monitoring and conditioning costs, another reason that the CTR for RPS is higher than the others is related to its being a pilot. Even within the activities we treat as recurring, part of the activities for RPS during the pilot had to do with one-time or fixed costs as new modalities were considered and the team explored how best to do things. Caldés and Maluccio (2005) disaggregate each of the activity categories into their fixed and variable components and find that this further reduces the annual CTR, particularly in the earlier years.

Another important reason that the CTRs differ across programs relates to differences in costs of doing similar things in different settings. The cleanest comparison would be between programs that have identical objectives and target the same population in the same areas. Although the objectives and target populations across the three programs examined here are similar, they are not identical. Moreover, the programs operate in three different countries with, among other things, different institutional settings, infrastructure, population densities, transportation systems, and labor markets. Although it is beyond the scope of this chapter to assess these potential differences, it seems likely that these sorts of differences would lead to higher “operating costs” in Honduras and Nicaragua relative to more developed Mexico.

CTRs also may differ among programs because their average transfer levels differ. If two programs are identical except for the fact that the average household transfer in the first is twice that in the second, the CTR for the first will be half that for the second, assuming the same level of operational efficiency and negligible costs directly related to the size of the transfer (such as delivery costs). When both supply- and demand-side transfers are included for RPS and PRAF-II, the average transfer size for RPS is similar to that for PROGRESA, whereas that for PRAF-II is approximately one-third the size of that for PROGRESA. Increasing the level of transfers in PRAF-II by a factor of three would decrease our estimate of the long-term CTR for the program to 0.024, even lower than for PROGRESA. This is somewhat surprising, because PROGRESA involves only a demand-side intervention (which, based on these programs’ experiences, we conjecture is less costly to implement than a supply-side component), and RPS appears to be an effectively run intervention as documented in its impact evaluation (Maluccio and Flores 2005; Regalia and

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19. Table 7.1 shows that RPS has, by far, the largest relative supply-side transfers, suggesting that only for RPS would netting out the “supply side” of these programs make a substantial difference in the estimated CTRs. We estimate the CTR for RPS if it had no supply-side services by subtracting out all costs that we can associate with the supply side, along with the corresponding transfers. The 2002 annual CTR declines from 0.211, reported in the text, to 0.162, indicating that the supply-side transfers are, indeed, more cost-intensive.

20. We thank an anonymous referee for this observation. This is an example of an instance in which the activity-based costing approach might provide additional insights into relative costs across countries.
We have already noted that the lower costs for PRAF-II are due, in part, to the fact that fewer resources were being devoted to conditionalities and to routine program monitoring and evaluation.

**Relating Program Costs to Program Benefits**

To promote their objectives of decreasing current poverty and generating a sustained decrease in poverty over time, the three programs have two key design features. First, in order to ensure that transfers reach the poorest households, the programs use varying combinations of geographic, categorical, and proxy means-targeting methods. Second, the transfers are conditioned on households’ undertaking certain actions intended to enhance the nutrition, health, and education outcomes of family members, particularly children. Both of these features require resources, thus increasing the share of administrative costs in the program budgets and, consequently, the CTRs.

We assess the relative importance of the costs associated with these key activities by calculating their share in total program costs after excluding the external evaluation and fixed program design costs. We assume that costs associated with the identification of beneficiaries are incurred only when household targeting is used; in the absence of household targeting, there is no operational need for the program to collect and analyze household information. Although this is obviously not completely accurate, because even an untargeted program may require some sort of household registration system, we are implicitly assuming that any such related costs would be minimal. This would be the case, for example, if a reliable and recent census were already available. Similarly, if there were no conditioning, the program would not incur the costs of incorporating households or of certifying that beneficiaries were satisfying their responsibilities.

Table 7.5 presents the share of targeting and conditioning costs in total program costs for all three programs over the periods considered. Excluding external evaluation (the first column for each program), the proportions make clear that targeting and conditioning costs are substantial. Combined, they account for 60, 49, and 31 percent of costs for PROGRESA, PRAF-II, and RPS, respectively. These shares increase modestly when we also exclude costs for program design (the second column for each program) from the share calculation. The relatively low percentage for the RPS pilot partly reflects the fact that setting up and implementing the supply side, an activity included in the costs in this table, has proved very resource intensive. The absence of these activities in PROGRESA increases the relative shares of targeting and conditioning costs. The targeting costs in PRAF-II are higher than they otherwise would have been due to the difficulties in maintaining the beneficiary identification system. At the same time, the resources allocated to dealing with these problems appear to have come at the expense of monitoring compliance with conditionalities,
<table>
<thead>
<tr>
<th>Program Activity</th>
<th>PROGRESA</th>
<th>PRAF-II</th>
<th>RPS pilot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total cost-external evaluation</td>
<td>Total cost-external evaluation</td>
<td>Total cost-external evaluation</td>
</tr>
<tr>
<td></td>
<td>Targeting</td>
<td>Conditioning</td>
<td>Other activities</td>
</tr>
<tr>
<td></td>
<td>0.35</td>
<td>0.25</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>0.37</td>
<td>0.27</td>
<td>0.36</td>
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<td></td>
<td>0.35</td>
<td>0.14</td>
<td>0.51</td>
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<td></td>
<td>0.40</td>
<td>0.16</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>0.28</td>
<td>0.21</td>
<td>0.60</td>
</tr>
</tbody>
</table>

**NOTES:** PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA, Programa Nacional de Educación, Salud, y Alimentación; RPS, Red de Protección Social.
suggesting that the costs of the latter are smaller than would otherwise have been the case during a normal operating year. Because monitoring compliance with conditionalities is important for ensuring that cash transfers are translated into human capital improvements, this raises the possibility that the observed time reallocation was detrimental to the program’s overall cost-effectiveness. On balance, it is possible that the sum for targeting and conditioning is about right, although there is no way for us to be certain. Even with these caveats, the message from this exercise is clear: costs devoted to targeting and conditioning form a substantial part of the ongoing operations of these programs. It is essential that these activities generate an adequate return; we turn now to a crude assessment of their cost-effectiveness.

Targeting and conditioning will be cost-effective if the incurred costs result in a sufficient increase in the share of transfers reaching the poorest households and in improvements in human capital, thereby improving the programs’ current poverty alleviation. Although we do not formally assess the return to targeting- (and conditioning-)related costs, the evidence suggests that the pay-off from targeting has been high across all three programs. A comparative analysis (MNPTSG 2002) finds that the poorest 40 percent of households (of the national distribution for each country) received 62, 80, and 81 percent of total transfers in PROGRESA, PRAF-II, and RPS, respectively.21 In other words, these relatively “poor” households receive from 1.5 to 2.0 times their population shares. To put this performance in perspective, for the more than 100 programs reviewed by Coady, Grosh, and Hoddinott (2004), the median targeting performance was consistent with 50 percent of program benefits’ accruing to the poorest 40 percent of the population (that is, with the poorest 40 percent receiving 1.25 times their population share). The three programs discussed here all ranked in the top third of those reviewed in Coady, Grosh, and Hoddinott (2004). Further, over 80 percent of the transfers went to the poorest 60 percent of the households in PROGRESA, as did over 90 percent in PRAF-II and RPS—suggesting that errors of inclusion, a potential loss of the programs, were small (Besley and Kanbur 1993).

For two of the programs, PROGRESA and RPS, the short-term human capital impacts also have been substantial (Maluccio and Flores 2005; Skoufias 2005). For education, the main effect of PROGRESA was to increase enrollment rates in secondary school (Schultz 2004; Behrman, Sengupta, and Todd 2005). Among those who successfully completed primary school, the program increased enrollment rates in the first year of middle school by 15 percentage points for girls and 7 percentage points for boys. In RPS, the primary enrollment rates in grades 1–4 were about 70 percent before the program and increased 13 percentage points with the program (Maluccio and Flores 2005).

21. Coady (2005, Table 4) calculates alternative estimates for PROGRESA that suggest better targeting to the poorest 40 percent of households.
The effects on nutrition were also substantial. In PROGRESA, prior to the program, stunting levels for children aged 12–36 months were very high, at 44 percent. The program had a substantial effect on reducing the probability of stunting, increasing the annual mean growth rate by 1 centimeter per year for these children (Gertler 2000; Behrman and Hoddinott 2005). There is also evidence of a substantial increase in food consumption and dietary diversity (Hoddinott and Skoufias 2004). RPS also had an enormous impact on a range of health and nutrition indicators. The percentage of children under age 3 who had been weighed in the past six months increased by nearly 30 percentage points, from around 60 percent prior to the program. This was accompanied by a decline of 6 percentage points in the prevalence of stunting for those under age 5 (from 40 percent before the program), an unprecedented decline in such a short period of time. The results on expenditures suggest that not only have the total expenditures on food increased but so, too, has the food budget share, by nearly 4 percentage points. The program has had a beneficial impact on dietary diversity; both the number of different food items consumed and the nutritional quality of diets improved, with households eating more meat, fats, and fruits (Maluc cio and Flores 2005).

Evidence regarding the human capital impacts of PRAF-II suggests that these are smaller than those of the other two programs (IFPRI 2003). For example, the program appears to have had little impact on primary enrollment rates (which were already quite high), although there was an improvement in dropout rates. Visits by children to health clinics for growth monitoring and vaccinations increased in areas with the demand-side program, but the program does not appear to have improved nutritional outcomes substantially. These small effects are consistent with the evidence of operational difficulties and suggest the possibility that the low CTR of PRAF-II comes at the expense of the program's overall effectiveness. The relatively small effect, however, also likely reflects in part the lower transfer level per household compared to the other programs.

Conclusion

This chapter has assessed the cost-efficiency of PROGRESA, PRAF-II, and RPS by focusing on their CTRs, defined as the ratio of nontransfer costs (that is, administrative costs) to transfers. In doing so we have demonstrated that for a meaningful assessment of cost-efficiency it is misleading to make calculations using only raw accounting data, the approach normally taken. Rather, one must delve into the details and activities of a program. The features of the program and how its CTR is calculated are important for how an assessment is used and interpreted. This is particularly true for new programs, which typically have a lot of initial fixed costs associated with designing and setting up operations, on top of other equipment fixed costs. It is also true for complex programs, such
as CCT programs, that have a number of costs associated with specific design features. It is essential to keep in mind that this examination of program costs, transfers, and CTRs includes not only the costs required to transfer the money to the beneficiaries but also the costs of activities that may enhance the effectiveness of the program (for example, targeting or monitoring of compliance with conditionalities). Therefore, in addition to the level of costs, we focused on the structure of costs for the various activities in each program. These details must be considered to make sensible comparisons among programs, either within the same country or across countries.

This chapter begins to fill the gap in empirical evidence on the cost structures of poverty alleviation programs. Examining three large CCT programs in Latin America, we have shown how typically available cost data, augmented by activity-level information on time use, can be used to assess the cost-efficiency of such programs. The analysis also underscores that the interpretation and use of the resulting estimates sensitively depend on how they are calculated. Very different numbers emerge when one takes snapshots of programs at different stages or when one includes or excludes fixed costs. This reflects the fact that fixed costs are typically a more important component of total program costs earlier in the life of a program. Over time, average fixed costs converge toward zero, so the average program CTR converges toward the ratio of recurring operating costs to total transfers. The analysis also underscores that comparisons across programs are complicated, even for seemingly similar programs, particularly if they operate under different conditions in different countries.

How do these three programs’ cost-efficiencies compare to those of other poverty alleviation programs in the region? As highlighted at the outset, evidence is hard to come by and, where it exists, is often not comparable across programs. Grosh (1994) finds that the share of administrative costs for programs she considered ranged from 1 to 29 percent, with a median of 9 percent. For programs involving individual or household assessment mechanisms (including proxy means tests), the median was slightly higher, at 10 percent. In the section on analysis of program cost structures, we calculated various CTRs for each of the programs, two of which serve as lower and upper bounds of our best estimates of the long-run CTR. These are the final-year annual CTRs for the programs, without external evaluation and those activities largely comprised of fixed costs (Table 7.4, bottom row) and without external evaluation and program design but including the other fixed costs that may not completely disappear in later years (Table 7.4, penultimate row). These produce a range for each of the programs of 0.041–0.047 for PROGRESA, 0.068–0.161 for PRAF-II, and 0.212–0.245 for the RPS pilot. The lower estimated CTRs for PROGRESA undoubtedly reflect, in part, economies of scale because the Mexican program is massive in comparison to the others, as well as the fact that it does not have a supply-side component incorporated directly into its operations and cost structure.
For PROGRESA, even its upper-bound CTR of 0.047 compares well with the median program reported by Grosh (1994), which is all the more impressive given the relative complexity of PROGRESA’s design compared to more conventional social safety net programs. Furthermore, this CTR is very low when compared to those for Liconsa (a subsidized milk program delivered through state shops in urban areas) and Tortivales (a tortilla subsidy program), Mexican programs that had costs in the early 1990s of 40 cents and 14 cents per dollar transferred, respectively (Grosh 1994). If we assume that the median levels reported by Grosh (1994) adequately reflect operating costs, the lower-bound CTR for PRAF-II also compares well with the median program, although this conclusion is subject to the caveats made throughout regarding our estimates for PRAF-II. The RPS pilot, however, which has a lower-bound CTR equal to 0.212, appears to be relatively more expensive. Of course, RPS is much more complex than conventional poverty programs, and there is clear evidence that it has had large human capital impacts; much is being bought with these expenditures.22

In closing, we caution that it is difficult to be certain about these comparisons because it is unclear exactly what is included in the figures quoted by Grosh (1994).23 It may be that some of the differences in these numbers reflect different cost definitions used in the studies reported by Grosh (1994) rather than different levels of cost-efficiency. It is difficult to compare the programs more formally without having substantially more detail about the cost structures of the other Latin American programs.

References

22. A comparison of the CTRs for these programs with those for food price subsidy programs shows that the three programs analyzed here are substantially more cost-efficient in delivering resources. Ahmed et al. (2001) examine programs in seven countries around the globe and find the CTRs all in excess of 1.20.

23. Grosh (1994) discusses a range of difficulties associated with collecting and analyzing cost data for poverty alleviation programs. She indicates that one of the weaknesses in her study was “the imprecision in calculating administrative costs” (30).


Part III

Impacts
Many people have long considered education central to the general economic development process and to the long-run alleviation of poverty. Education is broadly defined as the acquisition of knowledge and skills through experiences from conception onward. From the point of view of economic development, education is the acquisition of knowledge and skills that increase productivity broadly defined, and in many quarters it is thought to be an important input into economic development if not the development process itself (as in the "capabilities" emphasis of Sen and others). Education can occur through, but is not limited to, formal educational activities such as those offered in preschool programs, schools, and formal training programs.

The proximate determinants of education are the experiences or inputs into the production function that determine the knowledge and skills that increase productivity. Within a dynamic forward-looking model of human capital investment demand behaviors, these experiences are determined sequentially by a series of family or individual decisions given past, current, and expected future resources, markets, policies, and other institutions. The market, policy, and institutional context in which these micro-investment demands are made, in turn, reflects the decisions of suppliers of services that are explicitly related to education, such as preschool, school, and training programs as well as of options that may be significantly related to education through other experiences, such as those in labor markets. To improve education in developing countries, therefore, attention must be paid to both the demand and the supply sides for investments in education. Historically, much attention to education has focused on the impacts of inputs on the supply side for formal schooling—teachers, textbooks, and school facilities—although some attention has been directed toward demand-side factors through such mechanisms as scholarships and school vouchers.

The authors thank two anonymous referees, along with John Hoddinott and John Maluccio for useful comments on earlier drafts of this chapter and Paul Glewwe and Pedro Olinto for timely help in understanding some dimensions of their estimates for the Programa de Asignación Familiar—Fase II.
The conditional cash transfer (CCT) programs to which this book is devoted have focused, in most cases, almost exclusively on the demand side with regard to education (though the design of the Honduran Programa de Asignación Familiar–Fase II has been somewhat of an exception; see Glewwe and Olinto 2004). Part of this focus has been on improving health and nutrition, particularly of infants and young children, which in similar contexts has been shown to improve learning capabilities and thus apparent returns to and demands for education. ¹ This kind of synergy between investments in health and nutrition and education may be quite important and indeed is one of the reasons that most of the CCT programs have addressed dimensions of health, nutrition, and education directly (for example, see Behrman 2000 and Levy 2006). Other studies in this volume focus on health and nutrition; in this chapter we focus primarily on CCTs and the most-emphasized direct inputs into education, schooling enrollment, and schooling attainment.

To provide some perspective, the Latin American and Caribbean (LAC) region on which this book focuses has relatively high schooling, at least in terms of quantities. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), LAC had a primary-to-tertiary school life expectancy of 12.5 years in 1999 and 13.0 years in 2004, second only to North America and Western Europe and above (in most cases, substantially above) that of other world regions. ² The UNESCO data also indicate that in 2004 the mean school life expectancy for females in LAC was 3 percent greater than for males, in contrast to all other developing country regions, in which, on average, females had lower school life expectancies than males. Table 8.1 gives the 2004 school life expectancies for LAC and for the four countries on which this book focuses—Brazil, Honduras, Mexico, and Nicaragua—for primary–tertiary schooling and, because tertiary data are not available for Nicaragua, for primary–secondary schooling. The school life expectancies are highest for Brazil, then for Mexico (which is closest to the LAC average), and notably lower for Honduras and Nicaragua. For all four countries, the school life expectancies are higher for females than for males, particularly for Honduras.

With regard to indicators of school quality, however, LAC appears more in the middle of the pack in terms of readily available indicators than in com-

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¹. Recent studies for a country (Guatemala) in the same region in which the CCT programs under review were undertaken indicate that there have been substantial impacts of preschool nutritional status on the reading and comprehension and the nonverbal skills of adults 35 years later (Behrman et al. 2008b; Maluccio et al. 2009).

². School life expectancy refers to the years of schooling expected for a synthetic cohort that had the enrollment rates over time that are observed at a point in time in cross-sectional data. School life expectancy exceeds the expected grades of schooling attainment if there is grade repetition that is not offset by grade skipping. The source of the data discussed here is the UNESCO Institute for Statistics, which can be found at www.UNESCO.org/education; the averages for the major world regions, based on this same source, are presented and discussed in Behrman (2009).
### TABLE 8.1 School life expectancies, gender parity indexes, and pupil-teacher ratios in 2004 for Latin America and the Caribbean and the countries of focus in this book

<table>
<thead>
<tr>
<th>Region/country</th>
<th>School life expectancy</th>
<th>Gender parity index</th>
<th>Pupil-teacher ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary-secondary</td>
<td>Primary-secondary</td>
<td>Pupil-teacher ratios</td>
</tr>
<tr>
<td></td>
<td>Primary-tertiary</td>
<td>Primary-tertiary</td>
<td>Primary</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>11.6</td>
<td>1.01</td>
<td>23</td>
</tr>
<tr>
<td>Brazil</td>
<td>12.9</td>
<td>1.02</td>
<td>21</td>
</tr>
<tr>
<td>Honduras</td>
<td>10.2</td>
<td>1.07</td>
<td>33</td>
</tr>
<tr>
<td>Mexico</td>
<td>11.4</td>
<td>1.02</td>
<td>28</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>10.0</td>
<td>1.03</td>
<td>35</td>
</tr>
</tbody>
</table>


**NOTE:** n.a., not available.

Comparison with other major developing country regions for school life expectancies. In 2004 the pupil-teacher ratios in LAC for both primary (23) and secondary (17) schools were substantially lower than in South and West Asia and in Sub-Saharan Africa but somewhat higher than in the other four UNESCO developing regions for primary school and in three of the other four regions for secondary school (Behrman 2009; Table 8.2). Brazil had somewhat lower pupil-teacher ratios than the LAC averages, Honduras and Nicaragua had significantly higher pupil-teacher ratios than the LAC averages, and Mexico was between the other countries but close to the LAC average for secondary school.

For children from poor families, toward which the CCT programs have been directed, it is not surprising that school life expectancies and attainments tended to be lower and school quality tended to be poorer than the national averages summarized earlier. A major component of the CCT programs in all these cases has been directed toward improving the education of these poor children through inducing greater school enrollment and thereby greater schooling attainment and more learning. The policy tool used for this purpose has been CCTs that were provided to mothers conditional on their children’s school enrollment and adequate attendance (for example, at least 85 percent of school days in Mexico) in certain grades, differing across countries.3

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3. Behrman and Skoufias, in another chapter of this volume, consider what simple basic economic models, including those for the determinants of human capital investments and for the efficiency and distributional motives of policies, imply for these CCTs. They present a much more nuanced and qualified assessment of CCTs than is often presented by CCT advocates. They conclude that, nevertheless, especially if considerations of political economy and welfare stigma are important, CCT programs may be high in policy hierarchies.
<table>
<thead>
<tr>
<th>Impact indicator</th>
<th>Summary of principal impacts</th>
<th>Groups</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRESA/Oportunidades</td>
<td>An increase of 9 percentage points for girls and 5–6 percentage points for boys. Simulation of the long-run impact of the program: an increase in schooling of 0.6 years.</td>
<td>6–8 years of schooling</td>
<td>Schultz (2004)</td>
</tr>
<tr>
<td>Enrollment in secondary school</td>
<td>No significant impacts.</td>
<td>6–8 years of schooling</td>
<td>Schultz (2000)</td>
</tr>
<tr>
<td>Proportion of school days attended</td>
<td>Significant impact on reducing repetition and dropout rates and increasing progression in primary and secondary school. Simulation of short-run impacts implies an increase in schooling of 0.7 years over the long run.</td>
<td>Ages 6–14</td>
<td>Behrman, Sengupta, and Todd (2005)</td>
</tr>
<tr>
<td>Failure, repetition, dropout, and progression rates</td>
<td>No significant impacts.</td>
<td>Grades 4–9</td>
<td>Behrman, Sengupta, and Todd (2000)</td>
</tr>
<tr>
<td>Child school achievement test scores</td>
<td>Increases of 10 to 12 percent of 12- to 15-year-olds enrolled in school, long-run estimated increase of 0.5–0.6 years of schooling.</td>
<td>Ages 6–14</td>
<td>Todd and Wolpin (2006)</td>
</tr>
<tr>
<td>Grades of schooling</td>
<td>Increases of about 0.7–1.0 grades of schooling for youth aged 9–12 pre-program (15–18 in 2003). Slightly smaller effects for girls. An increase of 0.45 years for youth aged 6–14 in 2003.</td>
<td>Ages 15–21 in 2003</td>
<td>Behrman, Parker, and Todd (2007)</td>
</tr>
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</tr>
<tr>
<td>Woodcock Johnson achievement tests in math and writing</td>
<td>No significant impacts, but analysis constrained by lack of baseline data on achievement tests.</td>
<td>Ages 15–21 in 2003</td>
<td>Behrman, Parker, and Todd (2007)</td>
</tr>
<tr>
<td>RPS</td>
<td>Enrollment, attendance, and grade advancement</td>
<td>An average enrollment increase of 12.8 percentage points, an increase in grade advancement of 7.3 percentage points, and an increase in attendance of 20 percentage points.</td>
<td>Ages 7–13, below fourth-grade schooling level pre-program</td>
</tr>
<tr>
<td>PRAF-II</td>
<td>Enrollment and attendance</td>
<td>No impact on enrollment; an increase in attendance of 1 day per month.</td>
<td>Ages 6–13</td>
</tr>
<tr>
<td>Enrollment, attendance, and promotion</td>
<td>An increase of 1–2 percentage points in enrollment, increases in grade promotion of 2–4 percentage points, an increase in school attendance of 0.8 days per month, simulated long-run impacts of 0.7 grades.</td>
<td>Ages 6–13</td>
<td>Glewwe and Olinto (2004)</td>
</tr>
</tbody>
</table>

**NOTE:** PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA/Oportunidades, Programa Nacional de Educación, Salud, y Alimentación (now Oportunidades); RSP, Red de Protección Social.
In the next sections of this chapter we review the evidence on the impact of these CCT programs directly related to education. We begin with Mexico because its program is the most studied and most influential, then turn to Honduras and Nicaragua.4

The Mexican PROGRESA/Oportunidades Program

The Mexican CCT program is an antipoverty and human resource investment program initially called PROGRESA.5 It was designed as a major component of the Mexican antipoverty strategy and was first introduced in August 1997 in small rural communities (with populations of less than 2,500), and it has since been expanded to cover over 30 million poor Mexicans in all but the largest urban areas. The program incorporated data collection and systematic evaluation as integral components from the start, with an initial experimental design in rural areas that included random assignment for the first 18 months of treatment among 506 rural communities (320 of which received treatment in 1998, with the remaining 186 receiving treatment in 2000) in the evaluation sample of about 24,000 households and 125,000 individuals and subsequent control samples selected through propensity score matching. Indeed, one major reason that PROGRESA/Oportunidades is so well known has been the centrality of its efforts at serious evaluation from the start—in contrast to some other cases of even larger antipoverty and human resource investment programs (particularly in Brazil) on which information has not been collected that permits much systematic evaluation.6 PROGRESA/Oportunidades has been imitated in some

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4. The Mexican PROGRESA/Oportunidades program has influenced the consideration or adoption of CCT programs in many other developing and developed countries (for an example of the latter, the New York City Opportunities program is explicitly modeled on PROGRESA/Oportunidades), influenced the advocacy of international organizations such as the World Bank and the Inter-American Development Bank for CCTs among important social policy tools, and received considerable attention in the popular media, including The Economist, the Wall Street Journal, the New York Times, the BBC, and Newsweek. See Behrman (2007) for examples and references. We do not include Brazil because we are not aware of any studies evaluating the Brazilian education program, even though there are studies, covered elsewhere in this volume, of the Brazilian health and nutrition programs.

5. PROGRESA is an acronym for the original name of the program (Programa de Educación, Salud, y Alimentación, or Program for Education, Health, and Nutrition) introduced by the government of Ernesto Zedillo. When the government of Vicente Fox came into power after the 2000 election, the program was modified in some details (for example, coverage of upper secondary schooling, extension into more urban areas) and renamed Oportunidades.

6. This book focuses primarily on evaluations of CCT programs in which the International Food Policy Research Institute (IFPRI) was extensively involved. IFPRI was selected to undertake the initial evaluation of PROGRESA and appears to have had an important impact on the quality and effectiveness of the evaluation (see Behrman 2007). IFPRI also was involved in the evaluations of the Honduran and Nicaraguan programs, the educational components of which are discussed later. IFPRI was not, however, involved in analysis of the Brazilian educational program, which may be one reason that there are relatively few systematic studies of that program based, for
important respects in a number of LAC countries (including Honduras and Nicaragua), in other developing countries in Africa and Asia, and in the developed countries; for example, the New York City NYC Opportunities program, including some CCTs for education that are described by Kelley (2007), is explicitly based on PROGRESA/Oportunidades.

PROGRESA/Oportunidades provided CCTs conditional on school enrollment in grades 3–9 (subsequently extended to grade 12) with a schedule of payments that increased with the grade level and favored girls by about 10 percent for the lower and upper secondary school levels. Prior to the start of the program in small rural communities toward which the program was initially targeted, enrollment rates exceeded 90 percent for boys through 11 years of age and then declined to about 85 percent for 12-year-olds, 75 percent for 13-year-olds, 59 percent for 14-year-olds, and 42 percent for 15-year-olds. For girls, pre-program enrollment rates were similar to those for boys until age 12 and then dropped faster, with 78 percent of 12-year-old girls enrolled in school, 65 percent of 13-year-olds, 50 percent of 14-year-olds, and 35 percent of 15-year-olds. The estimated long-run impact of PROGRESA/Oportunidades on schooling attainment, where “long-run” is used to mean the effect of being exposed to the program at all of the ages at which one would typically be in school, has been estimated through a range of approaches using different data:

1. Estimation of enrollment probits based on the initial experimental data for rural areas in 1997–98 and simulation of the implications of these estimates for long-run enrollments and therefore grade attainment under the assumption that these estimates hold for a synthetic cohort (Schultz 2004).

2. Estimation of transition matrices for entering school, progressing through grades, repeating grades, dropping out, and reentering school based on the initial experimental data for rural areas for 1997–98, then use of these estimates to simulate long-run impacts on grade attainment under the assumption that these estimates hold for a synthetic cohort (Behrman, Sen-gupta, and Todd 2005).

3. Estimation, in 2003, of the effects after six years of the initial differential in exposure to the program using the initial experimental data for rural areas in 1997–2003, then use of these estimates to simulate long-run impacts on grade attainment (Behrman, Parker, and Todd 2009, 2010).

example, on pre- and post-program initiation comparisons of randomly assigned treatment and control groups. De Janvry, Finan, and Sadoulet (2006, 23) provide what they claim is the first evaluation of this program. They used longitudinal administrative records over five years from 261 municipalities and 293,500 children in the northeast before and after program initiation to investigate the program’s impact on dropout rates and grade promotion (and found that the program reduced the dropout rate by 7.8 percentage points but increased the failure rate by 0.8 percentage points). The interested reader is referred to their paper for more details.
4. Estimation of program effects with controls for common family background through within-family sibling estimates combining matching, differencing, and instrumental variables in a way that minimizes the need for parametric modeling assumptions using the 2003–04 urban data, then use of these estimates to simulate long-run impacts on grade attainment (Parker, Todd, and Wolpin 2006).

5. Estimation of program effects by comparing those treated (for six years in an rural sample, one year in an urban sample) with controls using propensity score matching methods on observed characteristics for the comparison group, then use of these estimates to simulate long-run impacts on grade attainment (Behrman et al. 2006a; Behrman, Parker, and Todd 2010).

6. Estimation of a structural model of household schooling and fertility behavior based on 1997 rural baseline data, then testing of that model against the original experimental data, then use of the model to simulate (inter alia) long-run impacts on schooling attainment (Todd and Wolpin 2006; also see Attanasio, Meghir, and Santiago 2005).

One striking result is that these differing studies using a wide range of approaches and data have tended to come up with similar long-run program impacts on schooling attainment, basically in the range of 0.5 to 0.9 additional grades of schooling (probably nearer the bottom of that range for urban areas). The largest impacts of the program seem to occur after the completion of primary school at the juncture of entering and progressing through secondary school, which suggests the possibility of better targeting the program to obtain greater enrollment effects at the same program budgetary costs as discussed under the fourth point following this.

Beyond this fairly robust and important finding, these (and other) studies contribute to our understanding of the impacts of PROGRESA/Oportunidades on the schooling dimension of education in a number of other ways.

First, the impact is more nuanced than just an enrollment effect. Behrman, Sengupta, and Todd (2005) found that there are significant effects on the grade completion (versus failure) rates and therefore on the repetition and dropout rates, as well as the reentry rates, although not on the age of initial entry. They also found some evidence consistent with forward-looking behavior in the form of increased progression through the initial years of primary school, even though students in those grades do not receive CCTs.

Second, from the point of view of the resource costs of the program, it seems to have been a good investment; the present discounted value of benefits exceeds the present discounted value of the costs. Behrman, Parker, and Todd (2010) estimate the real benefits conservatively (because they include only benefits in labor markets) and the resource costs (including administrative costs, opportunity costs of time, resources used for added school materials, and distortion costs of raising public revenues) and simulate that the program ben-
benefits are several times higher than the program costs under nearly all scenarios, with the exception of a very high discount rate and a low estimated return to schooling.\(^7\)

Third, no systematic evidence has been found to date that PROGRESA/Oportunidades increases achievement test performance.\(^8\) The evidence to date is very limited because achievement tests were not administered in the initial rounds of the data collection, so it is not possible to control for pre-program achievement test scores (Behrman, Parker, and Todd 2010). But the lack of evidence on such effects raises questions of how much the program is increasing learning and to what extent there are other outcomes that may be important but are not measured well by achievement tests, such as increased discipline.

Fourth, at least three studies using different approaches have suggested that with the same budget constraint, the program could increase schooling attainment significantly by reallocating payments from primary to higher schooling levels. Based on the initial program implemented between 1997 and 1998, Todd and Wolpin (2006) used a structural model to simulate that the impact of the program on grades of schooling would increase from 0.54 to 0.68, a 26 percent gain, under a scheme in which primary school grants were eliminated and reassigned as secondary school grants. Attanasio, Meghir, and Santiago (2005) also used a structural model and report similar gains to more focused attention on postprimary schooling, and they simulated that there might be considerable impacts (e.g., increasing the enrollment of 15-year-olds by 6 percentage points) from a secondary school building program that reduced the distance to such schools to no more than 3 kilometers for all participants.\(^9\) De Janvry and Sadoulet (2006) argue that efficiency gains may be achieved by improving the targeting of CCTs among poor households and better calibrating CCTs. They define the efficiency objective as that which maximizes the impact of the condition imposed on the transfer; in the case of the PROGRESA/Oportunidades educational benefit, school enrollment increases for poor children. Achieving efficiency gains by targeting and calibrating conditional transfers, therefore, re-

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7. Some (for example, Banerjee 2006) have claimed that PROGRESA/Oportunidades is a relatively expensive program for increasing school attainment by comparing governmental budgetary expenditures per added grade of schooling attainment across programs. But to obtain benefit-cost ratios, one wants to compare resource costs. Resource costs are different from governmental expenditures because they do not include transfers but do include private costs, including distortion costs. Also, for comparisons across economies as different as East Africa, Mexico, and South Asia, adjustments need to be made for different relative prices.

8. Though the programs were not explicitly targeted to increased cognitive achievement, they were framed in terms of increasing options in postschooling life, and one major way in which more school is generally thought to improve postschooling options is through improved cognitive achievement.

9. They are explicit that they are not claiming that such a program would have similar costs or other benefits but that they are just presenting this simulation in order to illustrate the impact of an important and possibly alternative policy.
quires focusing on children who have high probabilities of not enrolling in school without a CCT and who have a high response to the CCT given the overall program budget constraint. The authors' empirical estimates show that age, ethnicity, and the presence of a school in the community lead to large differences in enrollment.10 They compare three alternative targeting and calibration schedules: the actual PROGRESA/Oportunidades schedule of conditional transfers that increase with grade level; an "optimal" schedule of variable CCTs;11 and an "implementable" schedule of CCTs for which the criteria used for targeting are easily observable, verifiable by others, and nonmanipulatable by households (for example, age, ethnicity, and the presence of a school in the community). Their simulations indicate that the optimal schedule yields a 44 percent efficiency gain over the universal conditional transfer schedule, the implementable schedule a 29 percent gain. They also simulate that these efficiency gains are not achieved at the cost of rising inequality among poor households. Their conclusion is thus that large efficiency gains can be achieved in implementing CCT programs for human capital formation in poor households if the rules for targeting CCTs are designed to maximize their effects.

Fifth, PROGRESA/Oportunidades appears to serve as a safety net that helps to keep children in school instead of working when households face shocks. Income shocks to poor households are known to induce parents to take their children out of school and send them to work when other risk-coping instruments are insufficient (for example, see Jacoby and Skoufias 1997; Jensen 2000; Duryea, Lam, and Levison 2003; Guarcello, Mealli, and Rosati 2003; Beegle, Dehejia, and Gatti 2005; Skoufias and Parker 2006). State dependence (i.e., dependence on the prior history) for school attendance further implies that these responses to short-run shocks are likely to have long-term consequences on children's schooling. De Janvry et al. (2006) developed a model of household decisionmaking regarding children's school attendance and work under conditions of a school reentry cost, CCTs, and exposure to shocks. They then investigated the model's predictions using the initial rounds of the PROGRESA/Oportunidades rural data. They show that there is strong state dependence for school enrollment and that this CCT program helped protect child school enrollment but did not preclude increasing children's work in response to shocks.

10. Conditional on grade and gender, there are no variations in transfer amounts, making it difficult to estimate impact elasticities. However, de Janvry and Sadoulet generate variation by focusing on families receiving the maximum amount and assuming that grant amounts are effectively lower per child in these families.

11. De Janvry and Sadoulet use "optimal" to mean the maximum enrollment subject to the governmental budget constraint. But, while interesting, this is not optimal in terms of maximizing the benefit-cost ratio of the program because governmental budgetary costs are not the same as resource costs. The latter do not include pure transfers (although a lot of governmental expenditures on CCTs are transfers) but should include private costs (for example, the increasing opportunity costs of the time students spend at the secondary rather than the primary level; see the conclusion).
Sixth, whether the impacts of the program are apparently related to available school quality is clearly an important issue in the poor areas of Mexico where PROGRESA/Oportunidades operates. Behrman et al. (2006b) analyzed how the impacts of PROGRESA/Oportunidades on schooling vary by available school quality and found that higher impacts are generally achieved when students and parents have access to schools with more resources, better-educated teachers, and more extensive facilities. For instance, a reduction in student class size of 10 students (equivalent to a 30 percent reduction) would increase the positive enrollment effect of PROGRESA/Oportunidades by about 1 percentage point.

Seventh, simulations using structural models suggest that the fertility effects of the program are not large (Todd and Wolpin 2006), which had been a concern of the program’s designers, who feared that payments conditional on numbers of children attending school might create incentives to produce more children (for example, see Levy 2006).

Finally, there is mixed evidence as to whether there are spillover effects on the schooling of children living in the same communities but whose families were not eligible for the program. Such spillover effects might be either negative (for example, increasing congestion and reducing school quality given the limited school resources) or positive (for example, increasing norms for school attendance). Behrman, Sengupta, and Todd (2005) find no net effect, which seems to indicate that the negative and positive effects balance out. Bobonis and Finan (2005) found that an increase of 10 percentage points in the enrollment rate of a child’s reference group increases his or her likelihood of attending secondary school by approximately 5 percentage points, suggesting that positive effects on enrollments through channels such as increasing norms outweigh the negative effects through factors such as congestion. Further research would be useful in order to better identify the impacts of the individual and perhaps partially offsetting effects and to clarify why they occur.

The Nicaraguan RPS

Nicaragua’s Red de Protección Social (RPS), or Social Safety Net, focuses on reducing the school dropout rate in the first four years of primary school, improving the health and nutritional status of children under 5 years of age, and improving food consumption. The program’s educational component focuses on households with children aged 7–13 who have not yet completed the fourth grade of primary school and includes cash transfers linked to school enrollment and regular attendance, as well as some small supply-side benefits. Before the start of RPS, the enrollment rate in the program area for the target group, those aged 7–13 who had not yet completed the fourth grade of primary school, was 72 percent. The program began with a pilot phase subject to an experimental evaluation in 2000, and it was then extended to other rural communities in 2002.
The pilot phase was implemented in six municipalities in two departments. Within these municipalities, 42 rural communities (comarcas) were targeted based on a marginality index computed from a 1995 census. Half the comarcas were randomized into the program, while the other half were incorporated after two years. The randomization appeared to be adequate, with few significant differences in the pre-program levels of program impact variables (Maluccio and Flores 2004).

Maluccio and Flores (2004) use difference-in-difference estimates between the treatment and control areas to obtain measures of the intent-to-treat effect of RPS. After two years of the program, results show that RPS increased enrollment by children 7–13 years of age (who had not yet completed the fourth grade pre-program) in grades one through four by 12.8 percentage points, on average. Most of this increase was in children aged 7–9, although a large effect on 13-year-olds was also observed, implying that some older children who had previously dropped out returned to school, albeit in low grades. Attendance also increased on the order of 20 percent, with slightly larger effects for boys than for girls, and the school advancement rate, measured as progressing two grades of school over the two years of the program, increased overall by 7.3 percentage points. Although these effects seem fairly substantial, Maluccio and Flores indicate that they may be an underestimate of the true impact because the control group was likely to have learned about the likelihood of becoming beneficiaries in the future and may have adjusted their behavior accordingly, for example, by increasing the enrollment of children in the control communities due to expectation effects.

Gitter and Barham (2008b) examined the relationships among “women’s power,” CCTs, and child schooling based on the RPS experience. A key feature of the RPS program (and of many CCT programs, including PROGRESA/Oportunidades) is that the transfers are made to the female heads of households. Gitter and Barham note that previous research suggests that exogenous transfers to women are more likely to be spent on their children’s health, nutrition, and education and thus to reinforce the goals of these programs. However, much of this research is not as compelling as might be desirable because of questions of whether the “exogenous” transfers examined really are independent of unobserved preferences and capabilities. Gitter and Barham used the randomized experimental data from RPS to test for heterogeneous program impacts on school enrollment and spending based on a woman’s power, as proxied by her completed grades of schooling relative to her husband’s completed grades of schooling. Their assumption is that their power measure is independent of unobserved factors that might directly affect child schooling. Their results indicate that more household resources are devoted to children when women are more powerful by this measure but that this is a secondary effect in comparison with the income effect and there are diminishing marginal effects, so if a woman’s power greatly exceeds her husband’s, additional fe-
male power may even reduce school enrollment. They also find that the impacts of RPS on schooling are much larger than the expected income effects estimated from the control group, suggesting that the conditionality of RPS is probably critical for its impact on schooling.

Gitter and Barham (2008a) investigated CCT programs, shocks, and school enrollment using the RPS data. They first provided a simple household model of the decision between child labor and schooling that highlights how wealth and economic shocks have opposing forces on school enrollment, so that, as found in previous research, the effects are ambiguous: less wealth or negative economic shocks raise the potential marginal utility of income from child labor, but negative shocks can also reduce the productivity of child labor. The authors’ empirical analysis considers communities that differ substantially in terms of labor opportunities for children for both structural and idiosyncratic reasons and differ depending on whether households were eligible for a CCT for school enrollment. Coffee cultivation provides better child labor market opportunities for about half of the communities. Droughts and coffee price variations provide stochastic shocks that reshape labor market opportunities in both coffee- and non-coffee-cultivating communities. RPS provides CCTs that alter the child labor–school enrollment calculus for households in treatment communities. Standard difference-in-difference estimates, but with stratification by wealth groups and separation between coffee- and non-farming communities, lead to three basic results. (1) RPS had the largest positive impacts on school enrollment in coffee-farming communities and for those households with little or no land holdings, but had relatively little impact in the non-coffee-farming communities. (2) Negative economic shocks can increase school enrollment, presumably by lowering the opportunity costs of school, particularly for boys. (3) The effects of wealth on school enrollment can be nonlinear, as reflected in the non-coffee-growing communities, where households in the middle farm size category had the lowest school enrollment outcomes. Gitter and Barham interpret these results as demonstrating that a nuanced understanding of how different types and severity of shocks shape child labor decisions and schooling outcomes is essential for making effective use of limited resources aimed at increasing school attendance, with benefits likely to be greater if more attention is paid to the extensive margin of providing transfers to poor households in regions in which labor market opportunities for children are likely to draw them from school.

The Honduran PRAF

In 2000 Honduras began its CCT program Programa de Asignación Familiar–Fase II (PRAF-II) and also implemented an experimental evaluation. The educational component was targeted at primary school enrollment, with eligible households receiving an educational voucher worth US$58 per child per year.
(on average, US$5 per month) conditional on fulfilling requisites of school enrollment and not having more than seven absences in any three-month period. Schools also received a subsidy (US$4,000 per school per year, on average) if they committed to guarantee an adequate supply and improve the quality of their services. The program was implemented in the 70 poorest municipalities of the country, with random assignment to four different groups: (1) those receiving demand-side interventions only (20 municipalities), (2) those receiving demand- and supply-side interventions (20 municipalities), (3) those receiving supply-side intervention only (10 municipalities), and (4) control groups (20 municipalities). Pre-program enrollment rates in the target population were 52 percent for 6-year-olds, 78 percent for 7-year-olds, 86–87 percent for 8- to 10-year-olds, 81 percent for 11-year-olds, and 70 percent for 12-year-olds. Impact measures taken after the first two years of the program (IFPRI 2003) show that the distribution of demand-side incentives generally reached the target population, with low leakage rates. On the other hand, the execution of supply subsidies was substantially below the planned target, with resource transfers to schools reaching only about 7 percent of the total expected.

Glewwe and Olinto (2004) examined the impact of PRAF on schooling outcomes and found that it had significant impacts on enrollment (1 to 2 percent), reductions in dropout rates of 2–3 percentage points, and increases in promotion to the next grade of 2–4 percentage points. Simulations of the long-term effects of the demand-side program indicate that it would increase the average schooling attainment of 14-year-olds from 4.2 grades to 4.9 grades, an increase of 0.7 grades of schooling.12 These are considerable gains, on the order of magnitude of those estimated for the Mexican PROGRESA/Oportunidades program discussed earlier, despite much smaller transfers. Two factors may underlie the apparently greater responsiveness for PRAF than for PROGRESA/Oportunidades, although it is not clear that they alone account for all of the substantial differences in the estimated responsiveness. First, the Honduran target population is poorer than that in Mexico, and responsiveness may be nonlinear and decrease with income. Second, the PRAF program appears to have been better targeted in the efficiency sense of de Janvry and Sadoulet (2006) as discussed earlier in that pre-program enrollment rates were lower for the grades covered by PRAF than for the primary grades covered by PROGRESA/Oportunidades, so there was more possibility of positive enrollment responses at the primary level for PRAF.

With respect to the supply-side schooling intervention, as might be expected because of the operational difficulties, no significant impacts of the supply-side interventions on schooling indicators were observed (IFPRI 2003; Glewwe and Olinto 2004).

12. These are larger effects than reported by IFPRI (2003) in a preliminary report by the same authors and others.
Conclusion

Overall, the results of the PROGRESA/Oportunidades, PRAF, and RPS programs with regard to education indicate that the programs had significant positive impacts on a number of important schooling indicators, including enrollment, attendance, and grades of completed schooling. Nevertheless, there are still a number of unanswered questions related to the longer-term impacts of CCT programs on education.

Although the estimates to date suggest that the benefit-cost ratios for these programs are likely to exceed one, there remains the question of whether these benefit-cost ratios could be increased. The simulations of de Janvry and Sadoulet (2006) and Todd and Wolpin (2006) discussed earlier suggest that the enrollment impact of PROGRESA/Oportunidades could be increased by 25–40 percent by better targeting the CCTs where they would have greater impacts, in particular at the transition from primary to secondary school, where dropout rates are fairly high. As discussed, the relatively large estimates of the responsiveness of the PRAF program in comparison with the PROGRESA/Oportunidades program may reflect better targeting than for PROGRESA/Oportunidades in the de Janvry and Sadoulet efficiency sense. So it is almost certain that, at least in the case of PROGRESA/Oportunidades, benefit-cost ratios could be increased through better targeting in this sense, although the benefit-cost ratios probably would not increase in proportion to the enrollment impact estimates because the costs would also increase because the opportunity costs of the time of students are higher at the secondary level than at the primary level. So there is merit to further exploration of what is the optimal CCT schedule from a benefit-cost perspective, not just to maximize enrollments. And in such analysis it should be recognized that the program objectives were not limited to increasing schooling but also included improving health and nutrition and relieving current poverty.

Although the evaluations described in this chapter have clearly indicated that the programs improved school enrollment and grades of schooling, they do not yet answer the question of whether this additional schooling will have an important impact on the lifetime earnings or other long-run outcomes of the children involved, such as their health as adults. Substantial direct evidence on this is still lacking, due largely to the relatively short program durations. Further follow-up studies of program beneficiaries will be necessary in order to judge the impacts of the additional schooling received on the employment, wages, and other outcomes of these beneficiaries as they enter early adulthood. The Mexican PROGRESA/Oportunidades program followed up with data collection in rural areas in 2007, for which analysis is under way (e.g., Behrman et al. 2008a; Parker and Behrman 2008), and the program followed up the urban sample in 2009. A follow-up study of the Nicaraguan RPS households began in late 2009, though we are unaware of any intentions to follow up the Honduran PRAF samples. There would seem to be a potential for considerable gains
from doing these follow-up studies to see whether the estimated effects persisted as the children initially affected aged into adolescence.

The importance of school quality in the Latin American context and elsewhere has long been emphasized (for example, see Behrman and Birdsall 1983; Card and Krueger 1992). But the empirical relevance of school quality for the impacts of CCT programs remains uncertain. Most of the geographic areas in which CCT programs have been carried out are poor and isolated, and it would certainly be expected that school quality there would be inferior to that in wealthier areas. In a context of schools with low school quality, additional schooling may have less value. Furthermore, school quality may in and of itself affect even the short-run impacts on schooling. A recent study of PROGRESA/Oportunidades and school quality (Behrman et al. 2006b) suggests that the schooling impacts of the program are greater when the quality of available schools is higher. A point to be noted for the future is that if school quality affects schooling returns, the greatest labor market impacts of the program may be on those children fortunate enough to have access to higher-quality schools.

The program impacts on the cognitive achievements of the PROGRESA/Oportunidades beneficiaries appear to be limited, and there is no other evidence on this topic from other CCT programs. This is an area for concern. Although CCT programs were not explicitly designed to improve academic achievement, clearly spending more time in school should be associated with more learning. More and better evidence on whether CCT programs have impacts on learning is thus urgently needed. It would also be desirable to investigate the impact of CCTs conditional not on enrollment or attendance but directly on learning.

Migration is related to the long-term impacts of CCT programs for at least two reasons. First, CCT programs may affect migration, and in fact, would be expected to, particularly in rural areas, given the general lack of employment opportunities in which there are significant returns to increased schooling. A second important reason for studying migration is that the impacts of CCT programs studied thus far have been based on individuals who have remained in their communities of interest, and it is quite possible that there will be different impacts on those who leave their communities. A pilot study following PROGRESA/Oportunidades migrants (Gandini and Parker 2007) points to the possibility of locating and interviewing migrants and shows that program impacts are different for migrants than for nonmigrants. In order to provide a picture of the long-term impacts of CCT programs, interviewing migrants as well as nonmigrants will be crucial.

The analysis of Schultz (2004) as well as Behrman, Parker, and Todd (2010) suggests that CCTs programs have a reasonable benefit-cost ratio, but similar analyses should be carried out for other programs. Of course it is possible that other potential human capital programs might have higher returns, and ideally one could compare alternative programs with respect to their impact and their costs. Coady and Parker (2004) compared the cost-effectiveness
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of PROGRESA/Oportunidades to that of a program of constructing additional secondary schools in rural areas and found that in all plausible scenarios of discount rates, PROGRESA/Oportunidades grants are a far more cost-effective intervention for increasing enrollment than is building schools, even in rural areas where most communities do not have a secondary school in their community. The PRAF evaluation was also designed to measure the impact of supply interventions; nevertheless, given that full implementation was not achieved, the (low) estimated impacts do not provide much information. More comparisons of the benefits and costs of CCT programs with those of other potential educational programs would be informative.

The empirical evaluation of CCT programs’ impacts to date has been almost oblivious to the possible importance of a set of issues related to the timing and duration of programs. These include initial implementation lags, learning by doing in the provision of program services, increasing or decreasing effects over time or with program exposure, learning by beneficiaries about programs and how best to use them—“pioneer” effects. Instead, most CCT evaluations have been undertaken as if the programs had begun at full steam on some formal implementation date, then continued with the same impacts from that time forward. But the details of aspects of timing and duration may substantially affect the estimated program impacts; for example, Behrman and King (2008) and King and Behrman (2009) summarize evidence from a range of social programs. At this point, these dimensions of CCT programs are underresearched.

Finally, the educational focus of CCTs has been primarily on schooling and secondarily on nutrition (particularly early-life nutrition), which apparently increases learning capabilities. Some important aspects of learning may occur outside of the formal primary–secondary schooling system—both in other formal settings such as preschool programs or postschool training programs and in informal contexts such as in the home and on the job. This raises the question of whether, if the objective is to increase learning that will enhance long-run productivity, the returns to CCTs might be higher for a broader range of dimensions of learning than just formal primary–secondary schooling.

Thus, the analyses to date of the impact of CCT programs on education suggest that these programs have had important effects on progression through schools and completed grade attainment and that they have probably had higher benefit-cost ratios than could have been achieved by investing only on the sup-

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13. An exception to this generalization is that the 2003 rural PROGRESA/Oportunidades data, collected six years after program initiation, have been used to investigate the long-run (after 5.5 years) impact of 18 months’ difference in program exposure and the impact of zero versus 5.5 years of program exposure (Behrman, Parker, and Todd 2007, 2008, 2009, 2010). This study reports an almost linear response, with some diminishing marginal effects in the impacts on schooling attainment as exposure increases—about 0.2 grades for 18 months of exposure and about 0.8 grades for 5.5 years of exposure. Work is currently under way on the longer-run effects of this program using rural data collected in 2007 (e.g., Behrman et al. 2008a; Parker and Behrman 2008).
ply side of primary and secondary schools. They also suggest that the benefit-cost ratios for these programs could probably be enhanced with better targeting at critical junctures in the schooling process, such as the transition from primary to secondary school in Mexico, at which the responsiveness to CCTs appears to be relatively high, or perhaps by moving to CCTs conditional on learning, not just school enrollment and attendance. But further studies are needed on a number of dimensions of these programs, including the importance of conditional versus nonconditional transfers, the importance of who in the household receives the transfers, the various timing and duration issues regarding CCT impacts, their longer-run labor market effects, their impact on cognitive achievement, their relation to school quality and migration, their benefit-cost ratios, and the possible gains from a broader view of education than just that of formal primary and secondary schooling. Such studies would be valuable not only for the particular countries on which this chapter has focused but also for the many other countries that have adopted CCT programs or are considering adopting them as part of their strategies for improving education.

References


9 Conditional Cash Transfer Programs and Health

SAUL S. MORRIS

All of the major conditional cash transfer (CCT) programs in Latin America and the Caribbean have included components specifically intended to improve the health outcomes in beneficiary households. In Colombia, Jamaica, Honduras, Mexico, and Nicaragua, health-related activities were fully integrated with other components of the respective cash transfer programs, while in Brazil a separate program (Bolsa Alimentação) was set up to administer health- and nutrition-related payments. As discussed in detail later in this chapter, the health components of all of the CCT programs are based on the assumption that the achievement of optimal health status is constrained not only by low income but also by low demand for preventive health services. Thus, in all of these programs regular visits to health centers have been a condition for continuing to receive payments. In some countries, such as Mexico and Nicaragua, this conditionality has been rigorously enforced. In others, such as Brazil and Honduras, monitoring and enforcement have been weak. Reflecting both domestic and international policy priorities, most of the CCT programs have focused on young children and pregnant and lactating women, with only the Mexican Programa Nacional de Educacion, Salud, y Alimentacion (PROGRESA) requiring all household members to receive regular preventive health check-ups.

In this chapter we conceive of "health" as something broader than and distinct from nutrition, which will be discussed in the next chapter. In particular, we are interested in the potential of CCT programs to contribute to the United Nations Millennium Development Goals of reducing child mortality and improving maternal health (United Nations 2000). In the current policy environment, such a focus seems natural, but it should be noted that that is not the logic that guided the design of the original CCT programs in the mid-1990s. Rather, these programs were based on the perceived need to foster investment in human capital, an argument set out persuasively in the World Development Report of 1990 (World Bank 1990). Just as low educational levels were seen as a constraint to poor people's ability to achieve full economic productivity, small stature and chronic ill health were seen as holding back economic development. Public investment in health might alleviate these problems, particularly if fo-
cused on those in the most vulnerable stages of life: pregnancy, childhood, and (in the case of the Jamaican program only) old age. The CCT programs therefore set out to ensure that poor people benefited from basic preventive healthcare by making the opportunity cost of doing so zero (in Honduras) or negative (in Mexico and Nicaragua). Other complementary activities aimed to reinforce the conditioned payments to poor families. In Mexico and Nicaragua, health education sessions were provided at the community level, with attendance required. In Mexico, extra funds were available to the Ministry of Health to strengthen peripheral health services in PROGRESA areas. In Nicaragua, essential health services were contracted out to local nongovernmental organizations in areas served by the CCT program Red de Protección Social (RPS). In Honduras, the basic CCT concept was developed significantly by including a group of municipalities that were to receive significant extra funding for local health improvement teams, with training in quality improvement and the initiation of a community-based growth promotion program. Unfortunately, legal difficulties prevented the full implementation of this component.

In the remainder of this chapter we seek to understand whether experience to date supports the use of CCTs (specifically) to improve health outcomes. We first ask whether the different programs have succeeded in increasing the use of basic preventive healthcare services, as they all set out to do. We then ask whether increased contact between poor populations and public (or at least publicly financed) health services led to an increase in the coverage of interventions of demonstrated efficacy. Finally, we seek to assess whether these impacts are likely to have saved children's and mothers' lives. Our conclusion is that in spite of the remarkable success of CCT programs in changing household behaviors, it is most unlikely that they have contributed anything to the global effort to reduce child and maternal mortality. We therefore consider how these programs could be modified to make them more cost-effective.

Findings on Health Impacts

Impacts on the Use of Preventive Health Services

Empty health centers are a depressingly familiar sight in many developing countries. CCT programs assume that one of the reasons for these low use rates is that the opportunity costs (plus direct costs) of getting to a health center, wait-

1. A note on terminology is in order. A health "intervention" is used here in the sense of the promotion by health services of a biologically active material such as a vaccine, a clean birthing kit, or breast milk. "Coverage" means the proportion of the target population actually receiving the intervention. "Efficacy" means that an impact has been demonstrated in a randomized, controlled trial. In contrast, "effectiveness" means that an impact has been demonstrated under program conditions.

2. Lagarde, Haines, and Palmer (2007) also provide a review of these impacts but in less detail than that reported here.
The conditioned payments eliminate these opportunity costs, at least for routine check-ups. There should thus be an observable increase in health center use. Such an increase in use should be detectable both in government records of numbers of consultations per health center and in surveys that ask beneficiary families to recall their history of health service use. Unfortunately, both sources of data are flawed. Routinely collected use data tend to be incomplete and generally do not record where health service users live, which is a problem when assessing the impact of program benefits that have been allocated geographically. Recall data, on the other hand, may be subject to deliberate distortion if survey respondents think there is any chance that the answers they give will affect their beneficiary status, which is quite likely if payments are being explicitly conditioned on health center use.

Gertler and Boyce (2001) find, based on an analysis of facility data, that there were 18.2 percent more visits to clinics in PROGRESA areas than in non-PROGRESA areas following the implementation of conditioned payments in Mexico. Because PROGRESA benefits were targeted only to the poorest families in the program areas, this means that the impact on PROGRESA beneficiary families would have been larger. The authors estimate that there might have been as much as a 60 percent increase in health service use among these families, and they find this figure consistent with the recall-based data, which suggest a 53 percent increase.

No other evaluations of CCT programs have reported their overall impact on health service use. This is understandable, because only PROGRESA required all household members to receive preventive health check-ups. In the following paragraphs we examine differential impacts by demographic groups, starting with pregnant women. All countries in the region provide free antenatal care in public health clinics and recommend frequent check-ups starting in the first trimester of pregnancy.

In Honduras, the household survey data suggested a large impact on the uptake of antenatal care (Morris et al. 2004). In the two evaluation groups receiving health vouchers, the proportion of women reporting five or more antenatal care visits increased by 18–19 percentage points, from a baseline level of 38 percent. There was no change at all in the control group; however, baseline levels in this group were much higher, at 49 percent. The fact that the program and control groups were substantially different at baseline with respect to this variable makes it difficult to be sure that the impact estimate is valid. Further doubts are raised by the routine government facility data, which do not indicate any impact at all on the use of antenatal care services.

In Brazil, there was no difference between Bolsa Alimentação beneficiaries and the comparison group with respect to the number of antenatal care visits. However, this outcome was inevitable given that only about 5 percent of all
program beneficiaries were captured during pregnancy. No data are available from Mexico, and the Colombian and Nicaraguan programs were not conditioned on the uptake of antenatal care.

Table 9.1 summarizes reported CCT program impacts on health service use by young children. By far the largest impacts are observed in Honduras, where the proportion of children in Programa de Asignación Familiar–Fase II (PRAF-II) taken to a health center in the month preceding the interview reportedly increased by 15–20 percentage points. Routine data on trips to government health facilities also suggest large relative increases (of 14–39 percent) for the age group between 1.0 and 4.9 years and somewhat more modest increases (of 4–24 percent) among infants. A smaller but still statistically significant impact was observed in Brazil. In Nicaragua, program impact was eaten away over the two years of the evaluation as the control area gradually caught up with program area. This contrasts markedly with the Honduran situation, in which no improvement over time was seen in the control area. A quite different result is observed in Mexico, where the frequency of visits to health centers apparently diminished markedly in the youngest children, with no evidence of any impact, positive or negative, among children 3.0–5.9 years of age. It must be noted that the overall level of health service use observed in the Mexican data appears astonishingly low, some 5.5 times lower than the baseline levels observed in Honduras. Such low use is, in fact, hard to reconcile with the fact that Mexico had routine levels of immunization (for DPT3 and measles) of over 95 percent in the late 1990s.

**Impacts on Receipt of Key Interventions**

Only the evaluation of PRAF-II in Honduras has analyzed changes in the coverage of key interventions delivered during pregnancy. This study found that there was no significant change in the proportion of women effectively immunized against tetanus.

Several evaluations have analyzed the impacts of the CCT programs on the coverage of early childhood immunizations (Table 9.2). Only the Honduras evaluation reported significant impacts, and this evaluation was limited to an indicator of the timely initiation of the early childhood immunization series. The percentage of children receiving DPT1 (or the equivalent first dose of the pentavalent vaccine) at the recommended age of 42 to 92 days increased by 7–9 percentage points. Coverage of measles-containing vaccine, which is supposed to be given at 12 months of age in Honduras, was not affected. This may be because the increased frequency of contacts with young infants brought about

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3. Both survey data and routine facility-based data suggest that there were smaller impacts in the group that received both cash transfers and the service-level package in the PRAF-II program.

4. In addition to these studies, Attanasio et al. (2005) report the positive impact of a CCT program in Colombia.
### TABLE 9.1 The impact of Latin American CCT programs on the health service use of young children

<table>
<thead>
<tr>
<th>Country</th>
<th>Age group</th>
<th>Indicator</th>
<th>Baseline level in control group</th>
<th>Impact of CCTs</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absolute</td>
<td>Relative</td>
</tr>
<tr>
<td>Brazil</td>
<td>0–6.9 years</td>
<td>Percentage of children with ≥1 contact in the past month</td>
<td>65.2</td>
<td>+5.0</td>
<td>+7.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>0–2.9 years</td>
<td>Percentage of children with ≥1 visit in the past month</td>
<td>44.3</td>
<td>+20.2</td>
<td>+45.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>0–2.9 years</td>
<td>Number of visits per month</td>
<td>0.120</td>
<td>-0.030</td>
<td>-25.0</td>
</tr>
<tr>
<td></td>
<td>3–5.9 years</td>
<td>Number of visits per month</td>
<td>0.081</td>
<td>+0.005</td>
<td>+6.2</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0–2.9 years</td>
<td>Percentage of children with ≥1 visit in the past 6 months</td>
<td>72.9</td>
<td>+11.0</td>
<td>+15.1</td>
</tr>
</tbody>
</table>

NOTE: CCT, conditional cash transfer.

### TABLE 9.2 The impact of Latin American CCT programs on the receipt of early childhood immunizations

<table>
<thead>
<tr>
<th>Country</th>
<th>Age group</th>
<th>Indicator</th>
<th>Baseline level in control group (%)</th>
<th>Impact of CCTs</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Absolute (%)</td>
<td>Relative (%)</td>
</tr>
<tr>
<td>Brazil</td>
<td>12–23 months</td>
<td>DPT3 vaccination</td>
<td>95.4</td>
<td>+0.9</td>
<td>+1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measles vaccination</td>
<td>92.3</td>
<td>+1.4</td>
<td>+1.5</td>
</tr>
<tr>
<td>Honduras</td>
<td>0–2.9 years</td>
<td>DPT1 vaccination at appropriate age</td>
<td>74.2</td>
<td>+6.9</td>
<td>+9.3</td>
</tr>
<tr>
<td></td>
<td>12–23 months</td>
<td>Measles vaccination</td>
<td>79.8</td>
<td>+9.1</td>
<td>+12.3</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>12–23 months</td>
<td>“Up-to-date” vaccinations</td>
<td>40.1</td>
<td>+4.3</td>
<td>+5.4</td>
</tr>
</tbody>
</table>

NOTE: CCT, conditional cash transfer; DPT, diptheria, pertussis, and tetanus vaccine.
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by the program facilitated the process of initiating the immunization series within the fairly tight time window prescribed but did little to alter the overall reach of the immunization program, which uses a number of different strategies to reach the largest possible proportion of children in need. This conclusion is reinforced by the negative results from Brazil, which has an exceptionally active immunization program and the highest coverage levels in the world. The Brazil evaluation also found that the Bolsa Alimentação program had not had any impact on children’s age at first vaccination contact. As mentioned previously, this is scarcely surprising given that—in its early phase, at least—the program was enrolling over 85 percent of all beneficiaries after they had already reached 6 months of age.

The lack of impact on immunization coverage in Nicaragua is perhaps an artifact caused by the massive increase in coverage in the control area: from 40 percent to over 70 percent in the first year of the evaluation period. The authors of the Nicaragua evaluation believe that much of this change must have been due to the program activities “spilling over” to the control areas.

Each of the CCT programs evaluated so far has shown a significant impact on the coverage of growth monitoring (Table 9.3). In general, these impacts have been large in both absolute and relative terms. The lowest impact was recorded for the PROGRESA program, which used a very insensitive measure for its evaluation (a child’s having been weighed at least once over the previous year); because over 80 percent of control children had already met this target before the program began, quantitatively large impacts could not have been expected. Once again, the true magnitude of the impact of the Nicaragua program may have been underestimated due to marked improvements over time in the control group. A surprisingly modest impact is seen in the data from Brazil, in marked contrast to the very large impacts observed in Honduras.

Impacts on Health Status

None of the CCT program evaluations attempted to determine the impacts of the various programs on maternal morbidity or mortality, presumably because to do so would require an enormous sample size, quite beyond the means of a conventional program evaluation. Very large sample sizes would also be required to measure impacts on child (under age 5) mortality. Mortality rates disaggregated by group are reported in the Honduras evaluation, with very slightly higher rates in the two groups receiving CCTs than in the control group; however, these differences are far from statistically significant and in any case are not based on a double-difference analysis.5

Two evaluations have reported impacts on illness rates in young children (Table 9.4). In the study of the impact of PROGRESA, there was a significant

5. This means that it is not possible to determine whether any differences observed after implementation might simply reflect between-area imbalances that already existed at baseline.
### TABLE 9.3 The impact of Latin American CCT programs on the growth monitoring of children

<table>
<thead>
<tr>
<th>Country</th>
<th>Age group</th>
<th>Indicator</th>
<th>Baseline level in control group (%)</th>
<th>Impact of CCTs</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>0–2.9 years</td>
<td>Weighed in the past month</td>
<td>40.8</td>
<td>+13.2</td>
<td>+32.3</td>
</tr>
<tr>
<td>Honduras</td>
<td>0–2.9 years</td>
<td>Weighed in the past month</td>
<td>43.0</td>
<td>+21.1</td>
<td>+49.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>0–2.9 years</td>
<td>Weighed in the past year</td>
<td>83.0</td>
<td>+17.6</td>
<td>+40.9</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0–2.9 years</td>
<td>Weighed at health center in the past 6 months</td>
<td>59.8</td>
<td>+7.0</td>
<td>+8.4</td>
</tr>
</tbody>
</table>

**NOTE:** CCT, conditional cash transfer.

### TABLE 9.4 The impact of CCT programs in Honduras and Mexico on the illness rates of young children

<table>
<thead>
<tr>
<th>Country</th>
<th>Age group</th>
<th>Indicator</th>
<th>Baseline level in control group (%)</th>
<th>Impact of CCTs</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honduras</td>
<td>0–2.9 years</td>
<td>Diarrhea in the past 2 weeks</td>
<td>18.8</td>
<td>+5.9</td>
<td>+31.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+3.0</td>
<td>+16.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>0–2.9 years</td>
<td>Ill in the past 4 weeks</td>
<td>35.1</td>
<td>-4.8</td>
<td>-13.7</td>
</tr>
<tr>
<td></td>
<td>3–5.9 years</td>
<td>Ill in the past 4 weeks</td>
<td>25.4</td>
<td>-0.8</td>
<td>-3.1</td>
</tr>
</tbody>
</table>

**NOTE:** CCT, conditional cash transfer.
reduction for the period in the prevalence of illness in children less than 3 years of age but not among children aged 3–5 years. Supplementary analyses (not shown) indicate that this effect did not materialize until a child’s family had been receiving program benefits for at least 12 months. Unfortunately, the generic categorization of “illness” does not allow for any assessment of the public health relevance of the finding, and the recall period of one month is considerably longer than is normally recommended. The Honduras study did not find a significant effect on childhood diarrhea. It is possible that these results were affected by a seasonality problem, because the groups receiving CCTs had higher prevalences of diarrhea at baseline (and were interviewed before the control group). If the baseline differences were due to seasonal variation, the point estimates of morbidity impact would probably be closer to zero.

The evaluation data from Mexico also indicate that adults’ health status was improved by the program, as measured by days of difficulty with daily activities, days incapacitated, days in bed, and reported ability to walk without tiring.

Summary

It seems likely that CCT programs substantially increase the frequency of routine contacts between young children and health services. Overall contacts in Mexico are stated to have gone down, but uniquely in this study, children reportedly became healthier, which may have altered their health service use patterns. Facility-generated data from Honduras and Mexico are broadly in agreement with parents’ reports, making it less likely that the impacts observed are solely the result of parents’ lying about health service use in order to ensure that their benefits were not discontinued.

Probably as a direct result of the increase in health service contacts, the coverage of growth monitoring increased markedly and significantly in all studies. This effect was even observed in Mexico, where overall health service use apparently decreased in this age group. In the Honduras study, these changes could be confirmed objectively using official records on children’s “Road to Health” cards. There was only weak evidence, however, that immunization coverage was similarly affected. It did appear that timely commencement of the routine immunization series was facilitated in Honduras (the study of that program was the only one to examine this question specifically). There was, however, no evidence of any program impact on the completion rates of the early childhood immunization series.

The evidence of program impact on the coverage of antenatal care is at best equivocal: the key data for this outcome come from Honduras, and in this study the recall data and government health service use data are not consistent. If use was increased, it is not clear why there was no impact on the coverage of tetanus toxoid immunization, because this is one of the main activities carried out during routine antenatal care.
Only the Mexico study provides strong evidence that morbidity in young children was reduced. It is not clear what kind of morbidity was involved or what the biological mechanism for such an impact might be. Other studies do not support this finding. Nothing is known about the impact of CCT programs on child or maternal mortality.

Health Service Use in Latin America: Is There a Demand Problem?

We have seen that the evidence that the CCT programs increased the uptake of preventive healthcare services for young children is quite compelling, whereas for pregnant women it is less so. These observations naturally lead one to wonder whether weak demand for preventive healthcare services was in fact a significant contributor to the poor health outcomes in Latin America and the Caribbean region prior to the introduction of the CCT interventions.

It is difficult to know whether young children experience an adequate frequency of contacts with health services in Latin America and the Caribbean. To some degree, however, immunization coverage may be seen as a proxy for health service contact in infancy. Although immunization coverage rates vary from country to country, on the whole, the region has rather high immunization coverage relative to other regions. Indeed, in urban areas, the rate of initiation of the immunization series is around 95 percent or higher in most countries (Table 9.5). Many countries have series completion rates (as measured by the coverage of DPT3 or measles-containing vaccine) of over 80 percent in urban areas, although some countries—such as Bolivia and Haiti—have low rates. In rural areas, series initiation rates are over 90 percent in most countries, but the ability of the health systems to ensure the completion of immunization series is generally poor. Brazil, Honduras, Mexico, and Nicaragua are all countries where virtually all children get at least the first immunizations in the childhood series, and most of them probably receive these immunizations at the right ages. There was therefore little public health benefit to focusing CCT programs on this issue in these countries.

The vast majority of women in Latin America and the Caribbean receive antenatal care during pregnancy (Table 9.6). In fact, they commence antenatal care fairly early during pregnancy and make—on average—a large number of antenatal care visits during the course of a pregnancy (Table 9.7). Most Latin American governments recommend frequent check-ups during pregnancy, even though a remarkable multicountry study sponsored by the World Health Organization (Villar et al. 2001) has clearly shown that maternal and perinatal outcomes were not affected by replacing standard antenatal care with an evidence-based

6. Other factors that affect immunization coverage levels are the availability of the biologicals, whether the system encourages application at any health service, and acceptance in the population.
<table>
<thead>
<tr>
<th>Vaccinations received</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DPT1 DPT3 Measles</td>
<td>DPT1 DPT3 Measles</td>
<td>DPT1 DPT3 Measles</td>
</tr>
<tr>
<td>Bolivia, 1998</td>
<td>86.7 56.2 54.8</td>
<td>74.7 38.3 45.4</td>
<td>81.6 48.6 50.8</td>
</tr>
<tr>
<td>Bolivia, 2003</td>
<td>94.8 74.3 66.5</td>
<td>93.9 67.5 60.2</td>
<td>94.4 71.5 63.9</td>
</tr>
<tr>
<td>Brazil, 1996</td>
<td>96.3 84.8 90.2</td>
<td>89.1 66.6 76.5</td>
<td>94.7 80.8 87.2</td>
</tr>
<tr>
<td>Colombia, 2000</td>
<td>96.0 78.9 71.6</td>
<td>93.8 72.3 69.0</td>
<td>95.3 76.8 70.8</td>
</tr>
<tr>
<td>Colombia, 2005</td>
<td>98.2 83.9 85.1</td>
<td>94.4 75.3 75.8</td>
<td>96.9 81.1 82.0</td>
</tr>
<tr>
<td>Dominican Republic, 1999</td>
<td>98.9 64.1 83.6</td>
<td>94.8 60.2 81.3</td>
<td>97.1 62.4 82.6</td>
</tr>
<tr>
<td>Dominican Republic, 2002</td>
<td>94.7 58.7 89.5</td>
<td>94.2 52.1 86.0</td>
<td>94.5 56.4 88.3</td>
</tr>
<tr>
<td>Dominican Republic, 2007</td>
<td>91.1 74.4 77.9</td>
<td>90.4 73.9 80.8</td>
<td>90.9 74.3 78.8</td>
</tr>
<tr>
<td>Ecuador, 1999 (ENDEMAIN)</td>
<td>n.a. 85.7 87.0</td>
<td>n.a. 86.1 84.6</td>
<td>n.a. 85.9 82.6</td>
</tr>
<tr>
<td>El Salvador, 2000 (ENSF)</td>
<td>n.a. 85.7 87.0</td>
<td>n.a. 86.1 84.6</td>
<td>n.a. 85.9 85.6</td>
</tr>
<tr>
<td>Guatemala, 1998–99</td>
<td>94.6 73.6 80.8</td>
<td>91.1 68.5 80.4</td>
<td>92.4 70.4 80.6</td>
</tr>
<tr>
<td>Haiti, 2000</td>
<td>80.7 49.0 60.9</td>
<td>73.6 39.7 50.2</td>
<td>76.0 42.9 53.9</td>
</tr>
<tr>
<td>Haiti, 2005–06</td>
<td>87.4 60.3 61.9</td>
<td>80.8 49.3 55.5</td>
<td>83.0 53.0 57.7</td>
</tr>
<tr>
<td>Honduras, 1996 (ENESF)</td>
<td>n.a. n.a. n.a.</td>
<td>n.a. n.a. n.a.</td>
<td>n.a. 95.9 83.5</td>
</tr>
<tr>
<td>Honduras, 2005</td>
<td>98.5 91.6 86.3</td>
<td>99.7 93.6 86.3</td>
<td>99.2 92.8 85.4</td>
</tr>
<tr>
<td>Nicaragua, 1997–98</td>
<td>96.8 83.6 88.5</td>
<td>93.8 75.2 82.6</td>
<td>95.4 79.7 85.7</td>
</tr>
<tr>
<td>Peru, 2000</td>
<td>98.3 88.5 74.0</td>
<td>93.9 77.1 69.3</td>
<td>96.4 83.6 71.9</td>
</tr>
</tbody>
</table>

**SOURCE:** ORC Macro (2004).

**NOTES:** The table shows the percentage of children aged 12–23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report). DPT, diphtheria, pertussis, and tetanus vaccine; ENDEMAIN, Encuesta Demográfica y de Salud Materna e Infantil (Demographic and Maternal and Child Health Survey); ENESF, Encuesta Nacional de Epidemiología y Salud Familiar (National Survey of Epidemiology and Family Health); n.a., not available.
TABLE 9.6 Percentage of live births in the three (five) years preceding the survey for which the mothers received antenatal care or no care, by source of care and urban or rural residence of the mother

<table>
<thead>
<tr>
<th>Country and urban or rural residence</th>
<th>Trained nurse or midwife or other health professional</th>
<th>Birth attendant</th>
<th>None</th>
<th>Unknown/not reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia, 1998, rural</td>
<td>40.1</td>
<td>12.7</td>
<td>0.4</td>
<td>46.5</td>
</tr>
<tr>
<td>Bolivia, 1998, urban</td>
<td>79.6</td>
<td>1.6</td>
<td>0.3</td>
<td>18.1</td>
</tr>
<tr>
<td>Brazil, 1996, rural</td>
<td>62.9</td>
<td>7.4</td>
<td>0.2</td>
<td>28.5</td>
</tr>
<tr>
<td>Brazil, 1996, urban</td>
<td>88.8</td>
<td>3.7</td>
<td>0.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Colombia, 2000, rural</td>
<td>76.0</td>
<td>7.3</td>
<td>0.1</td>
<td>16.6</td>
</tr>
<tr>
<td>Colombia, 2000, urban</td>
<td>91.2</td>
<td>2.5</td>
<td>0.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Dominican Republic, 1999, rural</td>
<td>89.3</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Dominican Republic, 1999, urban</td>
<td>87.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Guatemala, 1998–99, rural</td>
<td>37.4</td>
<td>14.0</td>
<td>35.0</td>
<td>13.6</td>
</tr>
<tr>
<td>Guatemala, 1998–99, urban</td>
<td>66.6</td>
<td>11.2</td>
<td>10.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Haiti, 2000, rural</td>
<td>34.7</td>
<td>39.2</td>
<td>1.1</td>
<td>24.8</td>
</tr>
<tr>
<td>Haiti, 2000, urban</td>
<td>65.7</td>
<td>23.8</td>
<td>0.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Nicaragua, 1997–98, rural</td>
<td>34.7</td>
<td>40.2</td>
<td>1.9</td>
<td>22.3</td>
</tr>
<tr>
<td>Nicaragua, 1997–98, urban</td>
<td>43.5</td>
<td>47.8</td>
<td>0.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Peru, 2000, rural</td>
<td>15.3</td>
<td>56.8</td>
<td>4.3</td>
<td>23.3</td>
</tr>
<tr>
<td>Peru, 2000, urban</td>
<td>47.3</td>
<td>45.1</td>
<td>0.2</td>
<td>7.2</td>
</tr>
</tbody>
</table>


NOTE: If the respondent mentioned more than one provider, only the most qualified provider is considered.
TABLE 9.7 Median number of antenatal care visits and median number of months of pregnancy before first visit in Latin American countries and Haiti in various years

<table>
<thead>
<tr>
<th>Country</th>
<th>Median number of antenatal care visits</th>
<th>Median months of pregnancy at the first visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia, 1998</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Brazil, 1996</td>
<td>6.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Colombia, 2000</td>
<td>5.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Dominican Republic, 1999</td>
<td>7.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Dominican Republic, 1999</td>
<td>7.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Guatamala, 1998–99</td>
<td>5.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Haiti, 2000</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Nicaragua, 1997–98</td>
<td>5.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Peru, 2000</td>
<td>5.7</td>
<td>3.3</td>
</tr>
</tbody>
</table>


NOTE: The table reflects antenatal care for live births in the three (five) years preceding the survey.

model that reduced the average number of check-ups in the study population from eight to five. No study has ever assessed in a scientifically rigorous way whether no antenatal care at all is actually worse than some antenatal care in terms of health outcomes. It is clear, however, that routine antenatal care in most countries in Latin America tends to be of very poor quality. Until these quality issues are resolved, it is far from clear that further increasing the frequency of antenatal check-ups should be expected to lead to significant health gains.

There are no population-based data on the coverage of growth monitoring in Latin America and the Caribbean. Although well-structured individual nutrition counseling clearly focused on behavior change can lead to improved growth (Santos et al. 2001), growth monitoring is rarely delivered in this way in routine health service contexts. The only rigorous study of the impact of growth monitoring alone (George et al. 1993) failed to find any benefit of this mechanistic intervention.

And yet there is indisputably a problem with weak demand for health services in pregnancy and childhood in Latin America and the Caribbean. The real problem is that pregnant women and children who are sick do not receive medically qualified attention on a timely basis. This is illustrated in Table 9.8, which shows the percentage of children under age 3 with symptoms consistent with acute lower respiratory infection who were actually taken to a health center. Ideally, all such children should be seen by a doctor or nurse so that their breathing rate can be measured objectively and their need for antibiotics assessed. However, in rural areas of Bolivia, Brazil, Guatemala, and Haiti, only a third or fewer of all children with these symptoms were actually taken to a health facility over the two-week period preceding the surveys. Similarly, surveys supported by the U.S. Centers for Disease Control indicate that
TABLE 9.8 Percentage of children with acute respiratory infection and fever who were taken to a health facility in Latin American countries and Haiti in various years, by urban or rural residence

<table>
<thead>
<tr>
<th>Country</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia, 1998</td>
<td>57.3</td>
<td>34.8</td>
<td>47.2</td>
</tr>
<tr>
<td>Brazil, 1996</td>
<td>55.3</td>
<td>34.8</td>
<td>50.3</td>
</tr>
<tr>
<td>Dominican Republic, 1999</td>
<td>63.4</td>
<td>66.9</td>
<td>64.6</td>
</tr>
<tr>
<td>Guatemala, 1998–99</td>
<td>52.2</td>
<td>35.3</td>
<td>40.7</td>
</tr>
<tr>
<td>Haiti, 2000</td>
<td>31.4</td>
<td>24.2</td>
<td>26.2</td>
</tr>
<tr>
<td>Nicaragua, 1997–98</td>
<td>66.6</td>
<td>51.5</td>
<td>59</td>
</tr>
<tr>
<td>Peru, 2000</td>
<td>68.1</td>
<td>54.1</td>
<td>61.6</td>
</tr>
</tbody>
</table>


NOTE: The table reflects children under 3 (5) years of age who were ill with a cough accompanied with rapid breathing and fever during the two weeks preceding the survey and were treated with specific remedies.

- in El Salvador in 1998, parents of 39.3 percent of children under age 5 with symptoms consistent with pneumonia did not consult with anyone, and
- in rural Honduras in 1996, 54.6 percent of children under age 5 with symptoms consistent with “severe acute respiratory infection” did not receive antibiotics.

In Latin America and the Caribbean, mothers’ access to medical care during delivery varies dramatically from country to country and also between rural and urban areas of the same country. Although virtually all deliveries in urban areas of countries such as Brazil, Colombia, and the Dominican Republic take place in health facilities (Table 9.9), fewer than 10 percent of rural women in Haiti deliver in a health facility. In the CCT program countries, 70–80 percent of rural deliveries in Brazil and Colombia take place in health facilities compared to just 30–45 percent in Honduras and Nicaragua. Although Honduras has an extensive network of trained nonmedical birth attendants and they are present at well over half of all deliveries in rural areas, there is now a widespread recognition that the proportion of all births taking place in medical facilities must be increased because of the virtual impossibility of providing emergency obstetric care to women delivering at home. As will be seen in the following section, the lack of access to adequate delivery care is clearly reflected in the health statistics of the region.

The Epidemiology of Child and Maternal Mortality in Latin America and the Caribbean

The countries of Latin America and the Caribbean have achieved remarkable reductions in the mortality of children under age 5 over recent years and are on
<table>
<thead>
<tr>
<th>Country</th>
<th>Health facility</th>
<th>Home</th>
<th>Other</th>
<th>Unknown/missing</th>
<th>Health facility</th>
<th>Home</th>
<th>Other</th>
<th>Unknown/missing</th>
<th>Health facility</th>
<th>Home</th>
<th>Other</th>
<th>Unknown/missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia, 1998</td>
<td>75.5</td>
<td>23.9</td>
<td>0.0</td>
<td>0.6</td>
<td>30.1</td>
<td>69.2</td>
<td>0.0</td>
<td>0.7</td>
<td>55.9</td>
<td>43.4</td>
<td>0.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Bolivia, 2003</td>
<td>75.5</td>
<td>23.3</td>
<td>0.8</td>
<td>0.4</td>
<td>32.7</td>
<td>66.3</td>
<td>0.8</td>
<td>0.2</td>
<td>59.3</td>
<td>39.8</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Brazil, 1996</td>
<td>96.5</td>
<td>2.6</td>
<td>0.0</td>
<td>0.9</td>
<td>80.0</td>
<td>18.5</td>
<td>0.0</td>
<td>1.5</td>
<td>92.5</td>
<td>6.5</td>
<td>0.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Colombia, 2000</td>
<td>94.2</td>
<td>5.6</td>
<td>0.0</td>
<td>0.1</td>
<td>70.0</td>
<td>29.7</td>
<td>0.0</td>
<td>0.3</td>
<td>86.8</td>
<td>13.0</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Colombia, 2005</td>
<td>97.7</td>
<td>2.1</td>
<td>0.2</td>
<td>0.0</td>
<td>78.1</td>
<td>21.6</td>
<td>0.3</td>
<td>0.0</td>
<td>91.9</td>
<td>7.9</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Dominican Republic, 1999</td>
<td>97.1</td>
<td>2.1</td>
<td>0.0</td>
<td>0.8</td>
<td>96.2</td>
<td>3.8</td>
<td>0.0</td>
<td>0.0</td>
<td>96.8</td>
<td>2.7</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Dominican Republic, 2002</td>
<td>99.0</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
<td>96.7</td>
<td>2.9</td>
<td>0.3</td>
<td>0.4</td>
<td>97.9</td>
<td>1.5</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Dominican Republic, 2007</td>
<td>98.1</td>
<td>0.6</td>
<td>0.5</td>
<td>0.8</td>
<td>96.2</td>
<td>2.4</td>
<td>0.6</td>
<td>0.8</td>
<td>97.5</td>
<td>1.2</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Ecuador 1999 (ENDEMAIN)</td>
<td>86.2</td>
<td>11.9</td>
<td>0.0</td>
<td>1.9</td>
<td>49.0</td>
<td>49.3</td>
<td>0.0</td>
<td>1.7</td>
<td>69.2</td>
<td>29.0</td>
<td>0.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Guatemala, 1998–99</td>
<td>67.5</td>
<td>31.6</td>
<td>0.0</td>
<td>0.9</td>
<td>25.8</td>
<td>74.0</td>
<td>0.0</td>
<td>0.2</td>
<td>41.7</td>
<td>57.8</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Haiti, 2000</td>
<td>38.6</td>
<td>47.0</td>
<td>13.9</td>
<td>0.5</td>
<td>8.2</td>
<td>88.5</td>
<td>2.7</td>
<td>0.6</td>
<td>18.1</td>
<td>75.0</td>
<td>6.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Haiti, 2005–06</td>
<td>41.7</td>
<td>53.6</td>
<td>4.5</td>
<td>0.2</td>
<td>13.3</td>
<td>83.5</td>
<td>3.2</td>
<td>0.0</td>
<td>22.7</td>
<td>73.6</td>
<td>3.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Honduras, 1996 (ENESF)</td>
<td>83.6</td>
<td>16.4</td>
<td>0.0</td>
<td>31.9</td>
<td>68.1</td>
<td>0.0</td>
<td>53.8</td>
<td>0.5</td>
<td>53.8</td>
<td>46.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Honduras, 2005</td>
<td>89.3</td>
<td>10.5</td>
<td>0.2</td>
<td>0.0</td>
<td>49.6</td>
<td>49.8</td>
<td>0.5</td>
<td>0.0</td>
<td>66.5</td>
<td>33.1</td>
<td>0.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Nicaragua, 1997–98</td>
<td>85.4</td>
<td>13.6</td>
<td>0.0</td>
<td>1.0</td>
<td>44.6</td>
<td>54.1</td>
<td>0.0</td>
<td>1.3</td>
<td>66.1</td>
<td>32.7</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Peru, 2000</td>
<td>82.7</td>
<td>16.0</td>
<td>0.0</td>
<td>1.3</td>
<td>23.8</td>
<td>74.9</td>
<td>0.0</td>
<td>1.3</td>
<td>56.8</td>
<td>42.0</td>
<td>0.0</td>
<td>1.3</td>
</tr>
</tbody>
</table>


Note: ENDEMAIN, Encuesta Demográfica y de Salud Materna e Infantil (Demographic and Maternal and Child Health Survey); ENESF, Encuesta Nacional de Epidemiología y Salud Familiar (National Survey of Epidemiology and Family Health).
track to achieve the Millennium Development Goal of a two-thirds reduction between 1990 and 2015. No other region in the world looks likely to achieve this goal. Yet there are still huge country-to-country differentials in the proportion of children dying before they reach their fifth birthday, with an almost fivefold difference between the levels observed in Colombia and those in Haiti (Figure 9.1).

The overall level of under-5 mortality is strongly related to the age structure of child deaths (see Figure 9.1). At the highest levels of mortality, deaths in early childhood (defined as 12–59 months of age) may account for more than a third of all under-5 deaths, while at lower levels of mortality as few as one in seven under-5 deaths may occur in this age group. Conversely, neonatal deaths (those occurring in the first month of a child’s life) become progressively more important as overall mortality levels fall, accounting for one-half or more of all under-5 deaths at the lowest levels of mortality. The major causes of neonatal mortality are preterm births, infections, and birth asphyxia. Globally, these causes represent 31 percent, 27 percent, and 24 percent of all neonatal deaths, respectively (Simon Cousens, personal communication).

Accurate national or subnational data on the distribution of under-5 deaths by cause are not readily available in Latin America because the poorest seg-

![FIGURE 9.1 Preschool mortality in Latin America, by country, year, and age of child](image)
FIGURE 9.2 Causes of child mortality in children under 5 years of age in northeastern Brazil (percent)

- **I/p**—Infectious/parasitic disorders
- **T**—Tumors
- **B**—Blood disorders
- **N/m**—Nutritional/metabolic disorders
- **M**—Mental disorders
- **N**—Nervous system disorders
- **EY**—Eye disorders
- **EA**—Ear disorders
- **C**—Circulatory disorders
- **R**—Respiratory disorders
- **D**—Digestive disorders
- **S**—Skin disorders
- **O**—Osteomuscular disorders
- **G**—Genitourinary disorders
- **P**—Perinatal disorders
- **Cm**—Congenital malformations
- **ID**—Ill-defined causes
- **EX**—External causes

Percentages of causes of child mortality in northeastern Brazil:
- **I/p**: 11%
- **T**: 11%
- **B**: 0%
- **N/m**: 4%
- **M**: 0%
- **N**: 2%
- **EY**: 0
- **EA**: 0
- **C**: 1%
- **R**: 8
- **D**: 1
- **S**: 0
- **O**: 0
- **G**: 0
- **P**: 44
- **Cm**: 7

Merits of the population do not tend to be well covered by systems that measure vital statistics. Certain causes of death, such as diarrheal diseases, tend to be systematically undercounted because of this bias. Even allowing for such distortions, however, it is clear that the under-5 mortality in the Northeast region of Brazil is dominated by causes arising in the perinatal period (from the 28th week of gestation up to and including the first week of life) (Figure 9.2). Similar patterns would undoubtedly be observed in other regions of Latin America and the Caribbean where high-quality data are available.

Maternal mortality ratios (the number of maternal deaths divided by the total number of live births) also vary dramatically in the Latin American region, from values of 4/100,000 in Martinique to over 1/100 in Haiti (Figure 9.3). However, all but the most developed countries in the Caribbean and the Southern Cone of South America have ratios that are at least 10 times higher than the average for developed countries, which is 12 maternal deaths for every 100,000 live births. Lifetime risks of maternal mortality are particularly high (greater than 1/100) in Bolivia, Haiti, and the Central American countries of Guatemala, Honduras, and Nicaragua; the latter subregion is characterized by a combination of high maternal mortality ratios with persistently high fertility rates. The major causes of maternal mortality worldwide are hemorrhage (25 percent), sepsis (15 percent), complications of abortion (13 percent), eclampsia (12 percent), and obstructed labor (8 percent) (WHO 1999).

In summary, in the CCT program countries, neonatal, maternal, and, to a lesser extent, postneonatal (age 1 month to 1 year) mortality is a serious public
FIGURE 9.3 Maternal mortality ratios in Latin America, the Caribbean, and the Netherlands, by country

health problem. High fertility rates amplify the problem of high maternal mortality ratios in Central America. Virtually all of these problems could be ameliorated by more effective care during labor, delivery, and the immediate post-delivery period.

Conclusions and Recommendations for the Future of CCT Programs

The CCT programs in Latin America represent a notable case of the success that could have been. As a direct result of these programs, health service use by young children increased markedly in Brazil, Honduras, and possibly Nicaragua. This increase in use has been reflected in large increases in the coverage of growth monitoring in all the countries in which programs’ impact has been evaluated (including in Mexico, where health service use was not thought to have increased). Yet for older children, the cart was put before the horse: traditional growth monitoring activities, widely discredited, were not reformed prior to introduction of the CCTs, so the incentive ensured compliance with a meaningless ritual rather than proving an effective health-enhancing action.
For infants, increased health service use was intended to increase immunization coverage. The challenge for the implementing countries was to increase the completion rates of childhood immunization series, because initiation rates were already very high, even in rural areas. So far, there is little convincing evidence that the programs have been able to meet this challenge. To some extent, this may be just a matter of bad luck, for the best data come from the two countries—Brazil and Honduras—where there is high coverage of even the later immunizations and little further improvement could realistically have been expected. The Nicaragua data are marred by a massive contamination of the control area, which may, in fact, be hiding an improvement on quite a remarkable scale: an increase of 46 percentage points in the prevalence of “updated vaccination” in one year. However, even if this does turn out to be the case, policymakers need to be realistic about the fact that better immunization is not going to save the lives of large numbers of children or mothers in these countries. Measles has now been all but eliminated from the Western Hemisphere, and diphtheria, pertussis, tetanus, polio, tuberculosis, and hepatitis B are not leading causes of childhood mortality anywhere in the world. Tetanus is a leading cause of neonatal deaths in only a very few high-risk countries, none of them in Latin America or the Caribbean. The relatively new Haemophilus influenzae type B vaccine, on the other hand, could potentially prevent large numbers of pneumonia and meningitis deaths, although population-based efficacy data for this intervention are yet to become available.

Direct evidence on the impact of the CCT programs on childhood morbidity is frustratingly heterogeneous, with no data at all available from either Brazil or Nicaragua. If there was a reduction in child illness in Mexico, it could be due either to a direct income effect or to the health education interventions. Future research should attempt to disentangle these two effects. However, in Mexico the vast majority of under-5 mortality occurs in the first month of life, so the observed effects, while striking, may be of limited public health significance.

There is only weak evidence that the CCT programs may have affected the uptake of antenatal care. Once again, increasing the uptake of this care would seem to be of dubious benefit while the quality of the service provided is so poor. The World Health Organization and other groups have tried to promote a more evidence-based strategy for antenatal care, but with limited success so far.

However, the greatest failing of the CCT programs implemented in Latin America and the Caribbean in terms of health is the neglect of the very period in which the need for behavior modification is the greatest: labor, delivery, and the immediate postpartum recovery phase. Only by concentrating resources on this period can maternal and infant mortality be affected. In the future, the health components of CCT programs in Latin America and the Caribbean should be radically redesigned to ensure that all deliveries take place.
• in a clean, sterile environment;
• with qualified personnel at hand who have skills that include being able to teach mothers how to breastfeed successfully;
• where there is an adequate supply of antibiotics for both mother and child, as well as a limited range of other essential drugs; and
• where there is access to transport in case of an obstetric emergency.

References


Improving the nutritional status of preschool children was an important policy objective in all four conditional cash transfer (CCT) programs studied in this book. This objective stemmed from several facets of nutrition. Good nutrition is a component of good health, and good health is an important component of well-being. So investments in preschool nutrition have intrinsic value insofar as they lead to improvements in societal welfare. Further, malnutrition is causally linked with greater risk of infant and child mortality and morbidity, so the costs associated with reducing malnutrition can be offset against the benefits of reduced demand for care of malnourished children, who are more susceptible to infectious diseases and premature mortality.

There are other reasons that improved preschool nutrition is a sensible objective. Physical growth lost in children's early years as a consequence of malnutrition may be, at best, only partially regained during childhood and adolescence, particularly when children remain in poor environments. The preschool period—in addition to the antenatal period—represents a window of opportunity to improve nutrition that, if not used, is closed. Investments in nutrition make investments in schooling more productive. Poorly nourished children suffer deficits in cognitive development, start school later, progress through school less rapidly, and have poorer academic achievement. Finally, investment in preschool nutrition is "good economics" in that poor nutrition as a preschooler leads to diminished physical stature and strength, less schooling, and poorer cognitive development as an adult, which in turn reduces productivity.1

In this chapter I examine how well the four CCT programs examined in this book met this policy objective.2 I begin by outlining the nature of the prob-

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1. The literature supporting these claims is voluminous. Summaries and extensive sets of further references are found in Alderman, Behrman, and Hoddinott (2004) and Behrman, Alderman, and Hoddinott (2004).

2. Lagarde, Haines, and Palmer (2007) provide a complementary review of the impact of these programs as well as the impact of Colombia's Familias en Acción.
lem of malnutrition in Latin America and the Caribbean as well as the dimensions of these CCT programs that might be reasonably expected to affect nutritional status. After describing the evaluation design, I report results. The outcomes are mixed. Although Programa de Educación, Salud, y Alimentación (PROGRESA) in Mexico and Red de Protección Social (RPS) in Nicaragua are associated with improvements in child height that are sizable in magnitude, Programa de Asignación Familiar–Fase II (PRAF-II) in Honduras and Bolsa Alimentação (BA) in Brazil have essentially no effects on preschool nutritional status. Further, while improvements in iron status are observed in Mexico, these are not found in Honduras or Nicaragua, the other countries where this indicator was studied.

CCT Programs and Nutrition

To understand how CCT programs affect child nutrition, I proceed in several steps. I begin by explaining how nutritional status is measured and the prevalences of dimensions of nutritional status in Latin America and the Caribbean. I then outline a conceptual framework of the determinants of nutritional status and link this to the components and operation of these CCT programs in Brazil, Honduras, Mexico, and Nicaragua.

Nutritional Status in Latin America and the Caribbean

Indicators of nutritional status are measurements of body size, body composition, or body function reflecting single or multiple nutrient deficiencies. In preschool and school-age children, nutritional status is often assessed in terms of anthropometry. According to Morris (2001, 12), “The basic principle of anthropometry is that prolonged or severe nutrient depletion eventually leads to retardation of linear (skeletal) growth in children and to loss of, or failure to accumulate, muscle mass and fat in both children and adults.” Height for age reflects the cumulative impact of events affecting nutritional status and thus is an indicator of chronic nutritional deprivation. Two other measures are also used, weight for height and weight for age. Weight for height is an indicator of transitory nutritional deprivation; children become thin relative to their stature from deficits in energy intake and/or disease-induced poor appetite, malabsorption, or loss of nutrients. Weight for age is a composite measure of nutritional status capturing both transitory and chronic aspects of nutritional deprivation.

For preschool children, measures of height and weight will vary by age and sex. Consequently, height and weight data are converted to z-scores. A z-score is calculated by standardizing a child’s height, given his or her age and sex, against an international standard of well-nourished children. A z-score of −1 indicates that, given the child’s age and sex, his or her height is one standard deviation below that of the median child of that age and sex. Children with
height-for-age z-scores below −2 are classified as stunted. Children with weight-for-height z-scores below −2 are classified as wasted, and children with weight-for-age z-scores below −2 are classified as underweight.3

Tables 10.1 and 10.2 provide descriptive data on trends in stunting and the prevalence of stunting, underweight, and wasting in Latin America and the Caribbean, drawing on data found in ACC/SCN (2004). Table 10.1 indicates that steady, but slow, progress has been made in reducing stunting over the past 25 years. Across the continent, 13.7 percent of children (7.6 million) from 0 to 5 years of age are stunted. Table 10.2 shows that for three countries studied here, Honduras, Mexico, and Nicaragua, the stunting prevalences are above the continental average. The remaining countries for which data are available are ordered from highest to lowest stunting prevalences. In a well-nourished population we would expect to see about 2.5 percent of children stunted; as Table 10.2 shows, at the time the CCT programs studied were introduced, stunting prevalences were considerably higher than that figure in almost all countries, and in eight countries—Honduras, Mexico, Nicaragua, Bolivia, Ecuador, Guatemala, Haiti, and Peru—the prevalence of stunting exceeded 20 percent. By contrast, with the exception of two countries—Guatemala and Guyana—wasting was not a serious nutritional concern.

Micronutrient status is an important dimension of nutrition. Deficiencies in vitamin A intake compromise the immune system, leading to increased severity of infections and higher mortality in children. Vitamin A deficiency results from low intake of animal products containing high amounts of absorbable retinol or plant products high in beta-carotene. Diarrhea, fever, and some infections can interfere with the absorption or vitamin A or use of retinol. Adequate iron intake is necessary for brain development. Children suffer from anemia as a result of low iron intakes, poor absorption, or illness. Expressed as grams of hemoglobin per liter of blood, children aged 6–59 months are defined as being anemic when their hemoglobin levels are below 110 grams per liter. Iodine is needed for the synthesis of thyroid hormones that play a key role in cell replication; iodine deficiencies lead to increased infant mortality and irreversible impairment of mental capacities. Iodine deficiency results from low intake of iodine in the diet. The prevalence of iodine deficiencies can be based on clinical inspection of enlarged thyroids or on iodine concentrations in urine.4 Finally, micronutrient deficiencies can affect linear growth; Rivera et al. (2003) found that vitamin A, iron, and especially zinc deficiencies lead to growth faltering.

Table 10.3 collates the existing information on these micronutrient deficiencies for countries in Latin America and the Caribbean. Anemia among pre-

3. The z-scores reported in this chapter are based on height and weight standards that have recently been changed; see WHO (2006). To ensure comparability with the published studies, this chapter uses the pre-2006 WHO standards.

TABLE 10.1 Estimated number and prevalence of stunted preschool children (0–5 years old) in Latin America and the Caribbean, 1980–2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Caribbean (millions)</th>
<th>Central America</th>
<th>South America</th>
<th>Latin America and the Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>0.7</td>
<td>4.8</td>
<td>7.2</td>
<td>12.7</td>
</tr>
<tr>
<td>1990</td>
<td>0.5</td>
<td>4.0</td>
<td>5.5</td>
<td>10.0</td>
</tr>
<tr>
<td>2000</td>
<td>0.3</td>
<td>3.3</td>
<td>4.0</td>
<td>7.6</td>
</tr>
<tr>
<td>2005 (est.)</td>
<td>0.2</td>
<td>2.9</td>
<td>3.4</td>
<td>6.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence (percent)</th>
<th>Central America</th>
<th>South America</th>
<th>Latin America and the Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>20.0</td>
<td>32.2</td>
<td>21.3</td>
<td>24.3</td>
</tr>
<tr>
<td>1990</td>
<td>12.4</td>
<td>25.9</td>
<td>15.7</td>
<td>18.3</td>
</tr>
<tr>
<td>2000</td>
<td>7.4</td>
<td>20.4</td>
<td>11.3</td>
<td>13.7</td>
</tr>
<tr>
<td>2005 (est.)</td>
<td>5.7</td>
<td>18.0</td>
<td>9.6</td>
<td>11.8</td>
</tr>
</tbody>
</table>


schoolers is widespread in many countries, including Brazil, Honduras, and especially Nicaragua. Vitamin A deficiencies are less marked, and, apart from Honduras, iodine deficiencies do not appear to be widespread among the general population.5

The Determinants of Nutritional Status and Program Design

To understand the pathways by which CCT programs can affect nutritional outcomes, it is helpful to begin with a brief review of the determinants of nutritional status. As a starting point, it is assumed that parental decisions to devote resources to improving child nutrition are motivated both by immediate concern about the welfare of their children and by longer-run concerns about investing in the human capital of their children. Parents may not have identical preferences regarding the use of family resources but engage in (perhaps implicit) bargaining about such allocations, in which the strength of the bargaining position of each parent may depend on his or her access to resources, including those provided by CCT programs and other interventions. The chapter in this volume by Behrman and Skoufias on the economics of CCTs provides an extended discussion of these ideas.

Parents’ ability to devote resources to their children’s nutrition and health are constrained in several ways. There are resource constraints reflecting the amount of income and time available as well as the prices faced by households. There is also a constraint arising from the biological processes (what economists refer to as a “production function for health”) that produce nutritional out-

5. In many LAC countries, a high (>85) percentage of households consumed iodized salt. This may explain why the prevalences of iodine deficiency are low.
TABLE 10.2 Most recent national estimates of stunting, underweight, and wasting in Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>Latest survey year</th>
<th>Stunting</th>
<th>Underweight</th>
<th>Wasting</th>
</tr>
</thead>
<tbody>
<tr>
<td>All countries</td>
<td>As of 2000</td>
<td>13.7</td>
<td>6.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Brazil</td>
<td>1996</td>
<td>10.5</td>
<td>5.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Honduras</td>
<td>2001</td>
<td>29.2</td>
<td>16.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>1999</td>
<td>24.6</td>
<td>12.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2001</td>
<td>20.2</td>
<td>9.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Argentina</td>
<td>1995–96</td>
<td>12.9</td>
<td>5.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1998</td>
<td>26.8</td>
<td>7.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Chile</td>
<td>2002</td>
<td>1.5</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Colombia</td>
<td>2000</td>
<td>13.5</td>
<td>6.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1996</td>
<td>6.1</td>
<td>5.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Cuba</td>
<td>2000</td>
<td>4.6</td>
<td>3.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1998</td>
<td>26.4</td>
<td>14.3</td>
<td>2.4</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2002–03</td>
<td>18.9</td>
<td>10.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1998–99</td>
<td>46.4</td>
<td>24.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Guyana</td>
<td>1997</td>
<td>10.0</td>
<td>11.8</td>
<td>11.4</td>
</tr>
<tr>
<td>Haiti</td>
<td>2000</td>
<td>22.7</td>
<td>17.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Jamaica</td>
<td>1999</td>
<td>4.4</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Panama</td>
<td>1997</td>
<td>18.2</td>
<td>8.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1990</td>
<td>13.9</td>
<td>3.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Peru</td>
<td>2000</td>
<td>25.4</td>
<td>7.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Suriname</td>
<td>1999–2000</td>
<td>9.8</td>
<td>13.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>2000</td>
<td>3.6</td>
<td>5.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1992–93</td>
<td>9.5</td>
<td>4.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2000</td>
<td>12.8</td>
<td>4.4</td>
<td>3.0</td>
</tr>
</tbody>
</table>


NOTES: Country-specific results are taken from the most current surveys. All results for Latin America and the Caribbean (LAC) are model-based estimates. Data are not available for other countries in LAC.

comes. These processes link nutrient intakes—the physical consumption of macronutrients (calories and protein) and micronutrients (minerals and vitamins)—as well as the time and inputs devoted to the production of health and nutrition (such as feeding and other dimensions of childcare), locality characteristics such as the presence and use of preventive and curative health facilities and the prevalence of infectious diseases, the individual’s genetic make-up, and knowledge, skills, and behaviors regarding the combination of these inputs to produce the individual’s nutritional status.

It is important to note that the risk of malnutrition is particularly high during the first few years of life. Growth rates are highest in infancy, so adverse
### TABLE 10.3 Estimates of micronutrient deficiencies in Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>Vitamin A deficiency</th>
<th>Iron deficiency</th>
<th>Iodine deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated percentage of children under age 6 with subclinical vitamin A deficiency</td>
<td>Estimated prevalence of iron deficiency anemia in children under age 5</td>
<td>Percentage of population with urine iodine levels &lt; 100 μg/l</td>
</tr>
<tr>
<td>Brazil</td>
<td>15</td>
<td>21</td>
<td>0.0</td>
</tr>
<tr>
<td>Honduras</td>
<td>15</td>
<td>34</td>
<td>31.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>n.a.</td>
<td>n.a.</td>
<td>8.5</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>9</td>
<td>47</td>
<td>0.0</td>
</tr>
<tr>
<td>Bolivia</td>
<td>23</td>
<td>59</td>
<td>19.0</td>
</tr>
<tr>
<td>Chile</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.2</td>
</tr>
<tr>
<td>Colombia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>6.0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>n.a.</td>
<td>n.a.</td>
<td>9.0</td>
</tr>
<tr>
<td>Ecuador</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.0</td>
</tr>
<tr>
<td>El Salvador</td>
<td>17</td>
<td>28</td>
<td>5.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>21</td>
<td>34</td>
<td>14.0</td>
</tr>
<tr>
<td>Guyana</td>
<td>n.a.</td>
<td>n.a.</td>
<td>27.0</td>
</tr>
<tr>
<td>Haiti</td>
<td>32</td>
<td>66</td>
<td>n.a.</td>
</tr>
<tr>
<td>Panama</td>
<td>n.a.</td>
<td>n.a.</td>
<td>9.0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>13</td>
<td>52</td>
<td>13.0</td>
</tr>
<tr>
<td>Peru</td>
<td>17</td>
<td>50</td>
<td>12.0</td>
</tr>
<tr>
<td>Venezuela</td>
<td>5</td>
<td>41</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**SOURCE:** Vitamin A and iron deficiency prevalences are taken from MI (2004); iodine deficiency is taken from ACC/SCN (2004).

**NOTES:** Data are not available for other countries. n.a., not available.

Factors experienced at this time have a greater potential for causing retardation. Younger children have higher nutritional requirements per kilogram of body weight and are also more susceptible to infections. They are also less able to make their needs known and are more vulnerable to the effects of poor care practices such as nonexclusive breastfeeding in the first six months of life and the failure to introduce safe complementary foods at the right time, in adequate quantities, and at the correct frequency. For these reasons, almost all the growth retardation observed in developing countries has its origins in the antenatal period and the first two to three years of life (Martorell 1995).

The review here provides insights into the mechanisms through which the CCT programs studied can affect nutrition outcomes of interest. All four programs worked to relieve the constraints described earlier in three ways: by
providing financial resources to mothers, by providing food supplements directly to children, and by providing new knowledge to mothers. The rationale for the cash transfers to mothers was that they would provide the means to increase food availability at the household level. Although there remains some controversy over the extent to which increased income translates into increased nutrient consumption, estimates for the PROGRESA sample indicate that an increase of 10 percent in income translates into an increase of 3.0 to 4.5 percent in caloric availability at the household level (see Hoddinott and Wiesmann in this volume), with much of this increase going to foods richer in micronutrients. Our evaluations do not provide direct evidence on the intrahousehold distribution of foods and nutrients. However, studies of other poor populations have concluded that larger shares of resources that go to mothers than those given to fathers are directed toward child health and nutrition, and in part for this reason, these programs chose to direct resources to mothers.

Supplementation works through several channels. It increases the resources available to the household. If the supplement “sticks” to the children in the sense that receipt of the supplement does not cause parents to reduce the amount of food children receive, it will increase the resources that flow to children. Further, given the links between micronutrient deficiency and illness and micronutrient deficiency and growth, these supplements will increase the biological efficiency with which macronutrients are used.

Finally, an objective of all four interventions was to increase maternal knowledge about the nutritional status of their children. In part, this was to be accomplished through growth monitoring and promotion. It is believed that growth monitoring and promotion may substantially increase the probability that parents or other caregivers will become aware of nutritional problems before longer-run damage occurs and can be advised on how to act on them in a timely fashion. In addition, PROGRESA participants were required to regularly attend meetings (platicas) at which, inter alia, health and nutrition issues and practices are discussed. These sessions are conducted by physicians and nurses trained in these specific topics (Rivera et al. 2000). As part of the RPS, mothers attended bimonthly workshops covering topics such as household sanitation and hygiene, nutrition, reproductive health, and breastfeeding. If effective, nutrition education and behavior change activities may improve child nutrition and health through improved maternal knowledge and practices.

Table 10.4 summarizes the way in which these programs address the constraints that impede the attainment of good nutrition outcomes among children as well, noting where there were difficulties in implementation. Broadly speak-
<table>
<thead>
<tr>
<th>Constraint addressed</th>
<th>Program</th>
<th>Program component</th>
<th>Comments on implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers lack sufficient resources to purchase goods that</td>
<td>BA</td>
<td>Mothers received a</td>
<td>Transfers covered approximately 80 percent of intended beneficiaries</td>
</tr>
<tr>
<td>will improve the nutritional status of preschool children</td>
<td></td>
<td>cash transfer of 15—45 Brazilian reais (US$6.25—18.70) per month</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PRAF-II</td>
<td>Mothers received</td>
<td>Transfers were not always received on a bimonthly basis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a monthly cash</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>transfer worth</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>approximately US$$3.85 for each child under 3 or for each pregnant mother to a maximum of two beneficiaries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PROGRESA</td>
<td>Mothers received a bi-monthly cash transfer worth, on average, approximately 260 pesos per month (US$28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RPS</td>
<td>Eligible households received a bi-monthly cash transfer, the <em>bono alimentario</em>, worth approximately US$18 per month and a school attendance transfer worth approximately US$9 per month</td>
<td></td>
</tr>
<tr>
<td>Children’s diets are deficient in micronutrients</td>
<td>BA</td>
<td>No specific</td>
<td>One year after implementation commenced, only 61—64 percent of eligible children aged 4—24 months actually received the supplement; roughly half of children in the age categories 24—36 and 36—48 months received the supplement</td>
</tr>
<tr>
<td></td>
<td>PRAF-II</td>
<td>component</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PROGRESA</td>
<td>The daily food</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>supplement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>constituted 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>percent of calorie</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>requirements and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 percent of all</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>necessary</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>micronutrients</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>provided to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>children between</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the ages of 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>months and 2 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>and to children</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>between 2 and 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>years of age if</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>any signs of</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>malnutrition are</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>detected</td>
<td></td>
</tr>
<tr>
<td>Mothers require additional knowledge of good childcare and nutritional practices</td>
<td>RPS</td>
<td>Provision of antiparasitics, multivitamins, and iron supplements</td>
<td>There was some difficulty in distribution in the first year of the program</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>BA</td>
<td>No specific component</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRAF-II</td>
<td>Community-based growth monitoring and counseling in supply-side intervention areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROGRESA</td>
<td>Monthly meetings (platicas) at which health and nutrition issues and practices were discussed; sessions were led by physicians and nurses trained in these topics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers need information about the nutritional status of their children</td>
<td>BA</td>
<td>Routine growth monitoring at health facilities</td>
<td>In supply-side intervention areas, coverage was approximately 18 percent of children under age 2. Coverage was high</td>
</tr>
<tr>
<td>PRAF-II</td>
<td>Routine growth monitoring at health facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROGRESA</td>
<td>Regular growth monitoring Monthly (for children 0–2 years old) and bimonthly (for children 2–5 years old) measurements and meetings with a nurse and doctor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** BA, Bolsa Alimentação; PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA, Programa de Educación, Salud, y Alimentación; RPS, Red de Protección Social.
ing, RPS incorporated the most extensive set of program components that directly affect nutritional status: cash transfers to mothers, micronutrient supplements for children, the transmission of knowledge, and growth monitoring and promotion. PROGRESA also included all four components, and although it provided cash transfers, the initial delivery of benefits was somewhat less timely and the coverage somewhat less good (particularly the supplement) than those of RPS. I return to this point later in a discussion of evaluation design. Growth monitoring in the supply-intervention areas of PRAF was low and the value of the cash transfer small. BA provided a somewhat larger cash transfer than PRAF but, apart from the cash transfer and regular growth monitoring, did not address other possible constraints affecting child nutrition.

**Evaluation Design**

**Survey Design**

I now describe the evaluation design used to assess the impact of these CCT programs on nutrition. All studies collected anthropometric data, but the modalities by which this was carried out differed somewhat. In all countries, for children less than 2 years of age, their length was measured recumbent; for children aged 2 and older, standing height was measured. Weights were measured using electronic scales. Raw weights and heights were converted to age- and sex-standardized measures using the National Center for Health Statistics reference standard, as recommended by the World Health Organization (1995). In the case of PRAF, PROGRESA, and RPS, specially trained enumerators measured the heights and weights of children under 5 years of age in conjunction with the collection of other household data. These data were collected in both intervention and control areas before the start of the program operations. PRAF collected anthropometric data annually after program implementation began, while RPS collected these data two years after the start of the program. In addition, PRAF, PROGRESA, and RPS collected hemoglobin data using portable ("Hemocue") machines following standard international procedures.8

There were some additional notable features of the data collected in Mexico. Nutrition data were collected at baseline by Mexico’s Instituto Nacional de Salud Pública (INSP) in August–September 1998. This collection effort was fielded in a random selection of 202 of the 320 communities scheduled to enroll in the program at the end of 1998 (the treatment localities) and 142 communities randomly selected from the 185 communities (the control localities) that began receiving benefits in late 1999 (Rivera et al. 2004; Behrman and Hoddinott 2005). The resulting data partially overlap those from the Encuesta de Características Socioeconómicas de los Hogares (ENCASEH) and Encuesta

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8. These data were also collected in Mexico but are not available to us.
de Evaluación de los Hogares (ENCEL) surveys, which collected detailed household- and community-level data; see Maluccio, Adato, and Skoufias in this volume for further details on these surveys. A follow-up survey was fielded in September–December 1999, and a second follow-up occurred in November–December 2000. Because households in the control localities began receiving benefits from PROGRESA at the end of 1999, comparisons of outcomes between 1998 and 2000 uncover the effect of being exposed to PROGRESA for two years rather than one. It is also worth noting that there is considerable attrition in the INSP data. For example, among children 0–12 months of age who were included at baseline, only 63 percent in treatment localities and 60 percent in control localities were remeasured in 1999. Attrition was lower in the second follow-up survey, but the extent of attrition by treatment status reversed, with, respectively, 73 and 78 percent of children in treatment and control localities resurveyed. Some of this attrition appears to have been nonrandom. For example, attrition rates were considerably higher in children aged 0–6 months in 1998 than in those aged 6–12 months.

In Brazil, two complementary sets of data were used to assess child growth. First, a specially trained anthropometry team that visited the study municipalities six months after the launch of the program assessed the growth attained by all children under 7 years of age in the study households. Although these measurements conducted by the study team may have reflected program impacts, they may also have reflected imbalances already present in the two samples before the program was launched. Accordingly, the BA study sought to reconstruct each child’s growth trajectory over time based on the routinely collected data on child weight recorded on each child’s Ministry of Health growth monitoring card. The weights were copied to the study questionnaires, starting with the most recent recorded weight and going back in time. Up to a maximum of 10 weights were copied, together with the child’s age at the time of each measurement. Because the frequency of weighings decreased very markedly after 36 months of age, the analysis of these data was limited to children less than 36 months old at the time of interview.

Table 10.5 summarizes the baseline values of measures of nutritional status in treatment communities in all four countries. Given the geographic targeting of these programs, it is not surprising that these values are considerably worse than those found elsewhere in Latin America and the Caribbean (see Table 10.1) and in the national-level statistics reported in Table 10.2.

9. INSP collected data in six of these seven states that were part of the third phase of the rollout of PROGRESA (Guerrero, Hidalgo, Puebla, Querétaro, San Luis Potosí, and Veracruz but not Michoacán). The subsample was chosen because power calculations indicated that this would be sufficient to assess the expected two-year impacts on growth and anemia (Rivera et al. 2004). INSP (1998) provides further details regarding survey design, sampling, and sample size calculations. A further round was collected in 2000, but the resulting data are not available to us.

10. In Brazil, height is not being routinely recorded on growth monitoring cards.
### Evaluation Methodology

The basic approach adopted by the studies reviewed in this chapter uses the following framework. Let

\[ H_{ict} = \text{a measure of nutritional status of child } i \text{ in community } c \text{ at time } t; \]

\[ T = 1 \text{ if a child is observed after the intervention has begun}; \]
\[ = 0 \text{ if the child is observed at baseline}; \]

\[ P_{ct} = 1 \text{ if a child's household is resident in a community receiving program benefits}; \]
\[ = 0 \text{ if it is resident in a community not receiving benefits}; \]

\[ \mu_{ic} = \text{all (observed and unobserved) household- (or individual-) level time-invariant factors}; \]

\[ \nu_{ict} = \text{unobserved idiosyncratic household (or individual) and time-varying error}. \]

We write the relationship between nutrition outcomes and exposure to the program as

\[ H_{ict} = \alpha_0 + \alpha_3 T_{ct} + \delta_{ic} P_{ct} T + \mu_{ic} + \nu_{ict}, \quad (10.1) \]

where the \( \alpha \)s and \( \delta \) are unknown parameters. A variant on equation 10.1 is to include additional controls so as to reduce idiosyncratic variation and improve the power of the estimates (Gertler 2004). We write this as

<table>
<thead>
<tr>
<th>Nutritional status indicator</th>
<th>BA</th>
<th>PRAF-II (demand interventions)</th>
<th>PROGRESA</th>
<th>RPS</th>
<th>All LAC, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting (prevalence, %)</td>
<td>n.e.</td>
<td>52.0</td>
<td>45.1</td>
<td>41.9</td>
<td>13.7</td>
</tr>
<tr>
<td>Height-for-age z-score</td>
<td>-0.90</td>
<td>-2.05</td>
<td>-1.72</td>
<td>-1.79</td>
<td>n.e.</td>
</tr>
<tr>
<td>Underweight (prevalence, %)</td>
<td>n.e.</td>
<td>26.7</td>
<td>27.4</td>
<td>15.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Weight-for-age z-score</td>
<td>-0.75</td>
<td>-1.32</td>
<td>-1.32</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Wasting (prevalence, %)</td>
<td>n.e.</td>
<td>1.5</td>
<td>4.1</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Weight-for-height z-score</td>
<td>n.e.</td>
<td>-0.08</td>
<td>-0.31</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Anemia (prevalence, %)</td>
<td>n.e.</td>
<td>40.0</td>
<td>n.e.</td>
<td>33.7</td>
<td>n.e.</td>
</tr>
<tr>
<td>Hemoglobin levels (grams per deciliter)</td>
<td>n.e.</td>
<td>11.2</td>
<td>n.e.</td>
<td>11.4</td>
<td>n.e.</td>
</tr>
<tr>
<td>Age group</td>
<td>&lt; 7 years</td>
<td>&lt; 5 years</td>
<td>6 months</td>
<td>6 months</td>
<td>&lt; 5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 years</td>
<td></td>
<td>5 years</td>
</tr>
</tbody>
</table>

**NOTE:** BA, Bolsa Alimentación; LAC, Latin America and the Caribbean; PRAF-II, Programa de Asignación Familiar–Fase II; PROGRESA, Programa de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.e., not evaluated.
\[ H_{ict} = \alpha_0 + \alpha_{3ct} T + \delta_{1ct} P T + \beta X_{ict} + \mu_{ict} + \nu_{ict}. \]  

(10.1a)

where \( X_{ict} \) is a vector of child, household, and community characteristics and \( \beta \) is the vector of their associated parameter estimates.

The parameter of interest is \( \delta_1 \), the “double-difference” estimator of the average program effect for the postintervention period relative to the baseline. If the sample consists of children residing in households in treatment and control localities who are all eligible to receive benefits, \( \delta_1 \) tells us the impact of being in a treatment locality after the intervention has commenced, taking into account time trends common to both treatment and control localities (via \( \alpha_3 T_{ct} \)). Program effects are identified by the randomized design; assuming the successful randomization of \( P \), it (and any interactions involving it) is uncorrected with all observed or unobserved household- (or locality-) level variables so that the \( \delta \)s can be consistently estimated.

Equations 10.1 and 10.1a represent our basic evaluation strategy, providing an “intent-to-treat” estimate of impact. However, there are complications in the case of PROGRESA, and a different estimation strategy is required for BA. As noted in Table 10.4, there were difficulties in making the papilla-fortified supplement available for all targeted children. Among the intended beneficiaries, children aged 4–24 months, only 61–64 percent actually received the supplement. By contrast, roughly half of children in the age categories 24–36 and 36–48 months received the supplement. \( ^{12} \) Behrman and Hoddinott (2005) show that the likelihood of receiving the supplement was strongly correlated with baseline nutritional status; children with lower height-for-age z-scores were more likely to receive the papilla. \(^{13} \) This implies that at the level of the child, actual treatment was nonrandom and that a double-difference estimation strategy will underestimate the impact of PROGRESA. One way of addressing this problem follows from the assumption that unobservable heterogeneity, \( \mu_{ict} \) (including nutritional status as observed by clinic staff), is time invariant. Defining \( R_{ct} = 1 \) if a child receives the papilla (that is, \( R_{ct} = 1 \)) but = 0 otherwise and rewriting equation 10.1 in terms of deviations from mean values yields

\[ H_{ict} - H = \alpha T_{ct} + \beta (TR_{ct}) + \mu_{ict} - \mu + \nu_{ict} - \nu. \]  

(10.2)

11. Adato, Coady, and Ruel (2000, xix) note that the “distribution of the nutritional supplement [was]... the most serious operational problem of the health component of PROGRESA.”

12. These supplements were also given to non-PROGRESA households if any signs of malnutrition were detected. This biases downward the estimated impact of PROGRESA because some control children may be receiving this part of the treatment (Behrman and Hoddinott 2005).

13. One plausible hypothesis as to why this occurred is the following. Faced with the combination of shortages of supplements and malnutrition among children not intended to receive supplements, local program administrators reduced their availability to very young children and redirected these supplements to slightly older preschoolers based on an assessment of nutritional status that was observable to doctors and other local program staff.
Equation 10.2 captures the impact of "treatment on the treated" and is estimated as a child-level fixed-effects regression. The deviations in the disturbance terms are assumed to be the consequence of stochastic shocks and thus do not bias $\beta$.

As explained by Maluccio, Adato, and Skoufias in this volume, although we do not have a randomized design available to evaluate the impact of BA, we can exploit a series of administrative errors to create a quasi-experimental design. Data on household characteristics (income, household size, rent payments, and expenditures on utilities) were combined into a single socioeconomic score using principal components analysis. Children in households accidentally excluded from BA were then matched to two children in beneficiary households using nearest-neighbor matching. As noted earlier, height data were collected during the survey, whereas weight data were taken from children’s health cards.

Outcomes

**Anthropometry**

There are three studies that assess the impact of PROGRESA on anthropometric outcomes: Rivera et al. (2004), Gertler (2004), and Behrman and Hoddinott (2005). A summary of their findings is found in Table 10.6. All three focus on aspects of preschooler height. Rivera et al. and Behrman and Hoddinott both examine differences in height growth between treatment and controls. Gertler examines height levels and prevalence of stunting at follow-up. In addition, Table 10.6 reports new estimates of changes in the prevalence of stunting using a child fixed-effects specification.

A quick glance at the results found in the top rows suggests two diametrically opposing sets of findings: (1) irrespective of the methods used, all three studies show that access to PROGRESA benefits improved growth rates in child height (columns 1 and 4), increased child height (column 2), and reduced stunting (columns 5 and 6); on the other hand, (2) none of these findings look robust. Depending on the methods used, different researchers using the PROGRESA data set find either improvement or no improvement in growth rates (compare columns 1 and 3) and either no reduction or a reduction in stunting (compare column 2 with columns 5 and 6).

Adjudicating between these two interpretations requires understanding exactly how these results were obtained; as a quick glance at the bottom rows reveals, there are significant methodological differences across these three studies. These include the following:

- Rivera et al. could follow children exposed to PROGRESA for two years; Gertler and Behrman and Hoddinott had access to only one year of follow-up data. This should have led to a larger estimate of impact, particularly
given the operational difficulties that existed in the first year of operation. However, as Rivera et al. themselves note, because control localities began receiving benefits in late 1999, this biased downward their estimates of the impact of PROGRESA.

- Rivera et al. and Behrman and Hoddinott defined treatment in terms of a child's residing in a PROGRESA-eligible household in a locality where PROGRESA was providing program benefits. They both defined the control group as children residing in a PROGRESA-eligible household in a locality where PROGRESA was not providing benefits. Rivera et al. went one step further, interacting this representation of treatment with baseline socio-economic status under the reasonable assumption that this is uncorrelated with receipt of program benefits (which, recall, was randomized). By contrast, Gertler defined treatment as residing in a locality where PROGRESA was providing benefits. Therefore, his treatment group included children residing in households that were not receiving any PROGRESA benefits. This should have led to more conservative estimates of impact.

- Behrman and Hoddinott also estimated the treatment on the treated model described earlier. This should have led to a higher estimate of impact (which is, in fact, what is observed). Although actual receipt of benefits (specifically the papilla) was endogenous, Behrman and Hoddinott show that taking this into account does not affect their results.14

- Each study included different child and parental controls. Rivera et al. included child height at baseline, which is itself an outcome. Including an endogenous variable as a regressor led to inconsistent estimates for all estimated coefficients (Wooldridge, 2002, 83). Behrman and Hoddinott included changes in household consumption, which is correlated with receipt of treatment because the program changed consumption (see Hoddinott and Wiesmann in this volume). Because consumption change is endogenous, this also led to inconsistent estimates. The new estimates, reported in columns 5 and 6, drop this covariate.

- Each study took a different approach to locality controls. Rivera et al. did not include any, arguing that randomization made their inclusion unnecessary. Gertler estimated a single-difference model and included

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14. Specifically, suppose that an unobserved (by the econometrician) negative shock is correlated with the likelihood of receiving the papilla food supplement and that this shock induces a subsequent, time-varying increase in child growth rate. Where this occurs, there is a correlation between our explanatory variables and the time-varying disturbance term, yielding biased parameter estimates, even though we use child-level fixed effects. For this reason, as a robustness check, Behrman and Hoddinott (2005) treat receipt of PROGRESA benefits as endogenous, using eligibility for treatment as an instrument for receipt of treatment, following a suggestion originally found in Imbens and Angrist (1994), and include controls for fixed characteristics at the state level as well as household, maternal, and child characteristics. This produces statistically significant parameter estimates that are larger in magnitude than those reported here.
**TABLE 10.6** Program impact on anthropometric status: PROGRESA

<table>
<thead>
<tr>
<th></th>
<th>(1) Rivera et al. (2004, 2568)</th>
<th>(2) Gertler (2004, Table 3)</th>
<th>(3) Behrman and Hoddinott (2005, Table 4)</th>
<th>(4) Behrman and Hoddinott (2005, Table 4)</th>
<th>(5) New results</th>
<th>(6) New results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in height (cm)</td>
<td>1.1 (p = 0.046)</td>
<td>n.e.</td>
<td>0.46</td>
<td>1.02</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>n.e.</td>
<td>0.96 (p = 0.20)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Stunting (log-odds ratio)</td>
<td>n.e.</td>
<td>0.91 (p = 0.004)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Stunting (change in probability)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>-0.10</td>
</tr>
<tr>
<td>Representation of treatment: Child</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>-0.18</td>
</tr>
<tr>
<td>resides in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(p &lt; 0.01)</td>
</tr>
<tr>
<td>Locality where PROGRESA operates</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Household eligible for PROGRESA</td>
<td>n.e.</td>
<td>n.e.</td>
<td>X</td>
<td>n.e.</td>
<td>X</td>
<td>n.e.</td>
</tr>
<tr>
<td>benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household eligible for PROGRESA benefits and has a socioeconomic score below the median</td>
<td>X</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Household received fortified supplement</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>X</td>
<td>n.e.</td>
<td>X</td>
</tr>
<tr>
<td>Duration of exposure to intervention (years)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Age range (months) at time of follow-up survey</td>
<td>24–36</td>
<td>12–36</td>
<td>12–36</td>
<td>12–36</td>
<td>12–36</td>
<td>12–36</td>
</tr>
<tr>
<td>Duration of exposure to intervention (years)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Estimation method</td>
<td>Random-intercept model</td>
<td>Random effects (locality-level)</td>
<td>Fixed effects (child-level)</td>
<td>Fixed effects (child-level)</td>
<td>Fixed effects (child-level)</td>
<td>Fixed effects (child-level)</td>
</tr>
</tbody>
</table>

**NOTES:** PROGRESA, Programa de Educación, Salud, y Alimentación; n.e., not evaluated. Additional controls included but not reported by study: Rivera—age, height at baseline; Gertler—age, sex, parental age, schooling, Spanish-speaking, income at baseline, village wage rates; Behrman and Hoddinott—age, year dummy, log per capita consumption, food prices; new results—linear probability model with same controls as Behrman and Hoddinott except that log consumption is not included.
locality-level wages as a control. Because he modeled treatment at the community level, he could not estimate community-level fixed effects and instead opted for a random-effects model. Behrman and Hoddinott used child-level fixed effects, thus differencing out all fixed child, household, and community characteristics. They also included changes in food prices to control for some, but not all, community-level time-varying factors.

- No study explicitly accounts for attrition, even though it was clearly substantial and, along certain dimensions (child age and treatment), it appears nonrandom. However, the estimates based on child-level fixed effects (the Behrman and Hoddinott results and the new results reported in columns 5 and 6) difference out all time-invariant unobservables, including those that are associated with increased likelihood of attrition and, as such, provide some control for bias brought about from nonrandom attrition.

Given all this, one approach to adjudicating these results is to start by identifying the most conservative estimates. Arguably, these are found in columns 3 and 5—results based on an intent-to-treat estimator with controls for child-level unobservables that account for (time-invariant) factors that are associated with attrition. These results show that PROGRESA had no effect on average height growth but did reduce stunting by 10 percentage points. Relaxing these standards in one of several ways—for example, using village-level random effects (column 2) or the treatment-on-the-treated estimates (column 4)—also shows that PROGRESA led to an increase in growth velocity.

Table 10.7 presents results from the other three programs from measures of height and weight for age. A challenge in comparing these results is that they compare impact across different age ranges, and these age ranges differ from those used in the PROGRESA studies. To assist comparability, I present two additional estimates of the impact of PROGRESA, using the intent-to-treat estimator...
<table>
<thead>
<tr>
<th>Impact indicator</th>
<th>PROGRESA</th>
<th>RPS</th>
<th>PROGRESA</th>
<th>Demand interventions</th>
<th>Demand and supply interventions</th>
<th>BA 1</th>
<th>BA 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting (change—7.3—5.5—6.0—0.3—0.8 n.e. n.e. n.e. n.e. n.e.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in prevalence</td>
<td>(4.4)*</td>
<td>(3.0)*</td>
<td>(7.2)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Height-for-age z-score</td>
<td>0.16</td>
<td>0.13</td>
<td>0.14</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.09)</td>
<td>(0.09)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Underweight (change—1.0—6.2—0.4—0.5—3.0 n.e. n.e. n.e. n.e. n.e.</td>
<td>(4.1)</td>
<td>(2.5)**</td>
<td>(3.6)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>in prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight-for-age z-score</td>
<td>0.07</td>
<td>n.e.</td>
<td>0.10</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td></td>
<td>(0.9)</td>
<td>n.e.</td>
<td>(0.83)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Weight (kg/month)</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>(0.007)**</td>
</tr>
<tr>
<td>Duration of exposure to</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6 months—3 years</td>
<td></td>
</tr>
<tr>
<td>intervention (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age range</td>
<td>&lt; 3 years</td>
<td>&lt; 3 years</td>
<td>&lt; 5 years</td>
<td>&lt; 5 years</td>
<td>&lt; 5 years</td>
<td>6 months—3 years</td>
<td></td>
</tr>
<tr>
<td>Additional controls, comments</td>
<td>Child fixed effects, age, food prices</td>
<td>Child fixed effects, age, food prices</td>
<td>Child random effects, age, receipt of Bolsa Escola</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:** BA, Bolsa Alimentación; PRAF-II, Programa de Asignación Familiar—Fase II; PROGRESA, Programa de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.e., not evaluated. Unless otherwise indicated, program impact is defined as the difference-in-difference estimate of the “intent-to-treat” effect. Standard errors (in parentheses) for PROGRESA and RPS intent-to-treat results are corrected for heteroskedasticity and clustering at the localidad and comarca levels, respectively. *, significant at the 10 percent level; **, significant at the 5 percent level.
John Hoddinott

model reported in Table 10.6, column (5), but with the age ranges used in the RPS and PRAF studies.

Table 10.7 shows that RPS had a powerful impact in terms of improving preschooler height. Compared to stunting among children in the control localities, stunting in the treatment communities fell by 5.3 percentage points among children aged 0–3 years. The prevalence of children considered underweight also fell. These effects are larger than those observed for PROGRESA, although this may partly reflect the fact that the impact of RPS was measured two years after the introduction of the program as opposed to one year in the case of PROGRESA. By contrast, neither the demand-side nor the combined demand- and supply-side interventions undertaken as part of PRAF had any effect whatsoever on any measure of child anthropometry. There are two assessments of the impact of BA. One, by Morris et al. (2004), found that the program led to reduced weight gain, indicating that it had an adverse effect on nutritional status. A second, reported by Olinto (2005), using the same methods but a different sample, showed that the program had a small, positive effect on weight gain.¹�

Why are such divergent outcomes observed? In the case of BA, the study design controlled for preexisting differences between the treatment and control groups as well as access to other welfare programs. Further, as discussed by Hoddinott and Wiesmann in this volume, the program appears to have increased the availability of nutritious foods in the household. However, a predecessor intervention, a Brazilian federal program called Incentivo para o Combate de Carências Nutricionais, made milk powder available to mothers of underweight children but with the condition that children were dropped from the program if the child started to grow well. Morris et al. (2004) posit that although this was not a condition of BA, this change in program operation was not well advertised, and many (probably the majority) of the mothers in our sample had previously been beneficiaries of the earlier program. There were anecdotal reports that BA beneficiary mothers were deliberately keeping their children malnourished in the mistaken belief that this was necessary in order to continue to qualify for benefits.¹⁸ That said, the magnitude of the effect is small. The coefficient of 0.03 implies a reduction in weight gain of 0.36 kilograms per year, which is not functionally significant, and of course there are the results of the second study (Olinto 2005), which reported a small positive effect.

The absence of any effect in the case of PRAF is somewhat easier to explain. The program provided relatively little in the way of cash transfers compared to the other interventions, and coverage on the supply side—for only 18 percent of intended beneficiaries—was minimal. Given that the interventions under PRAF that might have been expected to have an effect on nutrition were

¹⁷. Unfortunately, Olinto (2005) does not report significance levels.

¹⁸. Using qualitative methods described by Maluccio, Adato, and Skoufias in this volume could have helped to substantiate this, though this was not undertaken as part of this evaluation.
so minor in magnitude, it is not surprising that we find no impact. It is possible that the absence of impact was a consequence of the wider age range, 0–5 years, used in the PRAF study; for example, older preschoolers have less potential to gain from interventions that increase household income. Although the impact of PROGRESA was smaller and less well measured for this wider age range, this consideration is somewhat offset by the fact that the impact of RPS was assessed over a longer period.

Iron Deficiency

As discussed earlier, iron deficiency is a serious nutritional concern in much of Latin America and the Caribbean, and it has serious functional and economic consequences. Three of the evaluation studies, those of PRAF, PROGRESA, and RPS, assessed program impact on blood hemoglobin levels and on the prevalence of anemia. Studies of PRAF and RPS by the International Food Policy Research Institute used the double-difference methodology described earlier. For Mexico, blood hemoglobin data were collected not at baseline but in 1999 and 2000. Two studies, those of Rivera et al. (2004) and Gertler (2004)—both described earlier—used these data. As mentioned before, Rivera et al. (2004) used as their sample children who were less than 1 year of age when the baseline survey was implemented in 1998 and thus were 12–24 months old at the time of the 1999 survey. They used a single-difference methodology, comparing the mean values in treatment and control localities of both hemoglobin levels and anemia. Gertler (2004) used a larger sample, including children aged 12–18 months at the time of the survey. He estimated a random-effects logistic regression of the determinants of anemia, where the random effects were at the village level. Additional controls were child age and sex and parental and household characteristics measured in the 1997 ENCASEH survey.

The results are reported in Table 10.8. The two PROGRESA evaluations show a large impact; the log odds difference of 0.745 reported by Gertler (2004) implies a reduction of 25.5 percent in the probability of being anemic. Rivera et al. found a smaller impact—a reduction of 10.6 percent—but their estimate is also statistically significant. Although they used the same data source (the 1999 nutrition survey), the two PROGRESA studies used different statistical techniques and drew different subsamples from this common survey. This makes it difficult to ascertain why the magnitudes of these estimates of impact are so different.

Table 10.8 shows that neither PRAF nor RPS had an impact on blood hemoglobin levels or on rates of anemia. The PRAF results are not especially surprising given that PRAF had limited effects on diet quality (see Hoddinott and Wiesmann in this volume), and there is no guarantee that these would have trickled down to young children.19 By contrast, the absence of an observed im-

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19. Data on child dietary intake would shed light on this question, but these were not collected.
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demand interventions</td>
<td>Demand and supply interventions</td>
<td>Logistic regression with village random effects</td>
<td>Double-difference</td>
</tr>
<tr>
<td>Method</td>
<td>Double-difference</td>
<td>Double-difference</td>
<td>Single-difference</td>
<td>Logistic regression with village random effects</td>
</tr>
<tr>
<td>Anemia</td>
<td>-1.5</td>
<td>7.8</td>
<td>-10.6</td>
<td>n.e.</td>
</tr>
<tr>
<td>Change in prevalence</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Anemia</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>0.745</td>
</tr>
<tr>
<td>Log-odds difference</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
<td>n.e.</td>
</tr>
<tr>
<td>Reported test of significance</td>
<td>Not reported</td>
<td>Not reported</td>
<td>P value = 0.03</td>
<td>P value = 0.012</td>
</tr>
<tr>
<td>Hemoglobin levels (grams per deciliter)</td>
<td>0.1</td>
<td>-0.1</td>
<td>0.37</td>
<td>n.e.</td>
</tr>
<tr>
<td>Reported test of significance</td>
<td>Not reported</td>
<td>Not reported</td>
<td>P value = 0.01</td>
<td>n.e.</td>
</tr>
<tr>
<td>Age range at follow-up</td>
<td>&lt; 5 years</td>
<td>&lt; 5 years</td>
<td>12–24 months</td>
<td>12–48 months</td>
</tr>
</tbody>
</table>

**SOURCES:** PRAF-II results are taken from IFPRI (2003, Tables 64 and 65). PROGRESA results are taken from Rivera et al. (2004, 2568) and Gertler (2004, Table 3). RPS results are found in Maluccio and Flores (2005, Tables 4.22 and 4.23).

**NOTES:** PRAF-II, Programa de Asignación Familiar—Fase II; PROGRESA, Programa de Educación, Salud, y Alimentación; RPS, Red de Protección Social; n.e., not evaluated. Unless otherwise indicated, program impact is defined as the difference-in-difference estimate of the “intent-to-treat” effect. Standard errors for RPS intent-to-treat results are corrected for heteroskedasticity and clustering at the comarca level.
Impact in the case of RPS is particularly striking. RPS included the provision of iron supplements for children, and the program had a significant effect on the percentage of mothers receiving ferrous sulfate for their children in the past four months; average effect estimated by the double-difference method was 36.1 percent in 2002. Despite this, RPS did not reduce the prevalence of anemia, nor did it raise average hemoglobin levels.

There are at least five possible explanations. Although twice as many children in the intervention areas had received iron supplements in the past four months compared to those in the control areas, it is not possible to ascertain whether complete doses were received or whether the supplements were actually ingested. Program administration data show that there were severe shortages of vitamins, iron supplements, and antiparasites during 2001, so it is likely that complete supplements were not received at each visit. Shortages and inconsistent or incomplete delivery to children present one possible reason for the program’s failure to improve hemoglobin in the population, as well as the fact that even though the program effect was massive, fully one-fifth of the children under age 5 in the intervention areas had not received a supplement in the past four months.

Second, although mothers often reported to both survey enumerators performing the quantitative surveys and the researchers completing the qualitative assessments of RPS that they were giving the supplements, field observation over time, combined with intensive interviewing on the topic, revealed that they often were not. Adato et al. (2004) reported that the main reason mothers did not give these supplements to their children was that children do not like them. In particular, mothers said that the children do not like the taste of the iron supplement and that it adversely affects the children’s stomachs, sometimes causing them to throw up or get diarrhea. A number of respondents were also concerned that the iron would adversely affect their children’s teeth. For example, the authors quoted one mother who stated, “At the beginning it was bad for him because it gave him diarrhea and made him feel sick, but since they say it is good for them, I kept giving it to him. However, it was also bad for his teeth; now his teeth are damaged” (Adato et al. 2004, 36).

Another possibility is that children are deficient in other micronutrients, potentially limiting the hematological response to iron supplementation. Allen et al. (2000) failed to find an improvement in hemoglobin in children aged 18–36 months who were given supplements of iron over 12 months in a controlled experiment. They concluded that the failure of the treatment could not be attributed to failure to take the supplement, inadequate length of supplementation, or inadequate absorption of the iron provided. One thing that can be expected from an iron supplementation intervention is an increase in the reserves of iron in the human body. For future evaluations of CCT interventions, it may be valuable to measure changes in serum ferritin and other indicators to obtain a more complete picture of the effect on the state of children’s iron nutrition.
Finally, although Rivera et al. (2004) found that exposure to PROGRESA led to reductions in anemia, they noted that even in treatment localities, anemia rates remained high, over 44 percent. They argued that these high anemia rates cannot be explained by nonnutritional causes of anemia, such as parasitic infections, because malaria and hookworm infections are rare in these populations. Instead they note that relatively modest effects may be occurring because reduced iron, which is not absorbed well, was used for the fortification of the papilla. 20

Conclusion

There are many good reasons that policymakers should be concerned with improving preschool nutritional status. The studies of four CCT programs presented here provide a prima facie case for including the improvement of nutritional status as an objective of CCT programs and ensuring that program components are designed to directly affect this outcome. So what is the impact of these four CCTs on nutrition?

In answering this question it is important to note that the interventions were not the same in all countries, different evaluation studies used different methods, the time that elapsed between baseline and follow-up surveys differed, and the baseline extent of malnutrition (and therefore the scope for improvement) varied across countries. With these caveats in mind, a reasonable conclusion is that the outcomes of these programs are mixed. In two cases, PROGRESA in Mexico and RPS in Nicaragua, CCTs are associated with improvements in child height. These impacts are sizable in magnitude. They also carry clear economic benefits. Behrman and Hoddinott (2005) estimate that PROGRESA’s impact of increased height increases an individual’s lifetime earnings by 2.9 percent via the consequences of increased height for physical productivity in adulthood. Note that this is a considerable underestimate of the total economic impact; Behrman, Alderman, and Hoddinott (2004) show that the benefits of improved nutritional status on lifetime earnings through increased physical productivity are dwarfed by the benefits that accrue through improved educational attainments.

Frustratingly, however, our conclusions about why these positive effects emerge must be much more tentative. Although PROGRESA and RPS both demonstrate positive and sizable impacts on child height, the pathways by which this is attained remain unclear. Both programs incorporate regular growth monitoring, the provision of information about nutrition and good childcare practices, sizable monetary transfers to mothers (equivalent to approximately 20 percent of household consumption levels in Mexico), and nutritional supple-

20. Pérez-Expósito et al. (2005) found that in a sample of Mexican children, ferrous sulphate is more bioavailable than the reduced iron used in the papilla distributed by PROGRESA.
ments directly targeted to children. The fact that we obtain a larger positive impact for PROGRESA when receipt of the fortified supplement (which contained zinc) is also taken into account suggests that in this case the supplement played a key role in improving preschoolers’ anthropometric status.

The other two programs reviewed in this chapter, PRAF in Honduras and BA in Brazil, have no meaningful effects on preschool nutritional status, and only for PROGRESA do we observe an improvement in measures of iron status. These results carry with them implications found elsewhere in this book. First, programs need to clearly convey program requirements to beneficiaries; we surmise that the failure to do so in the case of BA may have contributed to the negative effects observed in the Brazilian study by Morris et al. (2004), though I again caution that these were not replicated in a second study. Programs also need to ensure that beneficiaries understand why they are asked to undertake certain actions; the reluctance of Nicaraguan mothers to give the iron supplements to their children is a good example of why this is important. Second, constraints on implementation capacity will severely limit program impact. As in studies reported in other chapters, difficulties in implementation may have made it more difficult for PRAF to achieve its objectives. Policymakers and program designers need to be realistic about what can be achieved on the ground.

References


One of the most important of the United Nations Millennium Development Goals (MDGs) is the halving of the proportion of the world's population who suffer from hunger by 2015 (United Nations 2000). The reduction of poverty and the improvement of food consumption and nutrition were policy objectives of the conditional cash transfer (CCT) programs being considered in this book. These were of particular importance in Mexico because the Programa Nacional de Educacion, Salud, y Alimentacion (PROGRESA) replaced a number of food subsidy programs and there was concern that this change should not adversely affect access to food (Levy 2006). For these reasons, an assessment of the impact of PROGRESA, as well as the Honduran CCT Programa de Asignación Familiar–Fase II (PRAF-II) and the Nicaraguan Red de Protección Social (RPS), on food consumption is of interest both in terms of assessing whether these programs met their objectives and in terms of assessing whether CCT programs can contribute to meeting the MDGs on hunger.

The relationship between CCTs and food consumption should be straightforward; one would think that some of the cash transferred to beneficiaries would be used to purchase food and that this would be a good thing. But there are three complicating factors. First, in many localities in Latin America, food availability is not a major concern. The food balance sheets of the Food and Agriculture Organization of the United Nations (FAO) indicate that currently mean dietary energy consumption is 2,360 kilocalories per person per day for Honduras, 3,180 for Mexico, and 2,290 for Nicaragua (FAO 2007). In all three countries, these consumption levels are above the minimum recommended requirements. Based on these mean levels, it is not obvious that the policy attention paid to food consumption is warranted. Second, a number of studies have

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1. Dietary energy consumption per person is the amount of food, in kilocalories per day, available for human consumption for each individual in the total population as estimated by the FAO food balance sheets. However, FAO notes that the actual food consumption may be lower than the quantities reported, depending on the magnitude of wastage and losses of food in the household during storage, in preparation and cooking, and so on (FAO 2007).
assessed the relationship between increased income and food consumption in a Latin American context. Estimates of income–calorie elasticities, measuring the responsiveness of caloric acquisition given changes in income, tend to produce small magnitudes. In Nicaragua, Wolfe and Behrman (1983) and Behrman and Wolfe (1984) found elasticities ranging from 0.01 to 0.05. Strauss and Thomas (1990) reported elasticities ranging from 0.11 to 0.20 for Brazil; in later work, using nonparametric methods, they found a slightly higher estimate of 0.29 for very poor households, although this elasticity falls to zero for much better-off households (Strauss and Thomas 1995). Third, a growing concern in these countries is overnutrition. Both country-specific studies such as Fernald et al. (2004) and WHO estimates indicate that the prevalence of overweight and obesity has reached alarming proportions in these countries; recent national estimates of these rates are, for men, 36.2 percent (Honduras), 64.6 percent (Mexico), and 48.9 percent (Nicaragua), and for women, 47.5 percent (Honduras), 65.6 percent (Mexico), and 63.0 percent (Nicaragua) (WHO 2007). Taken together, these factors suggest that inadequate food consumption is not a significant concern and that, even if it were, increasing incomes would not increase caloric acquisition.

Although these arguments seem plausible, they are not entirely persuasive. First, in Honduras and Nicaragua a considerable proportion of the population (22 and 27 percent, respectively) is undernourished (FAO 2007). Second, as we show later in this chapter, income–consumption elasticities for poor households are considerably higher than those reported earlier. Third, these arguments neglect considerations of dietary quality. Not only is a more varied diet a valid outcome in its own right; it is associated with a number of improved outcomes in areas such as increased birthweight (Rao et al. 2001), improved hemoglobin concentrations (Bhargava, Bouis, and Scrimshaw 2001), reduced incidence of hypertension (Miller, Crabtree, and Evans 1992), and reduced risk of mortality from cardiovascular disease and cancer (Kant, Schatzkin, and Ziegler 1995). Evidence from Mexico (Allen et al. 1991, 1992) suggests that poor physical growth in young children—those aged less than 30 months—can be attributed in part to poor-quality diets (on this, see also Taren and Chen 1993; Onyango, Koski, and Tucker 1998; Tarini, Bakari, and Delisle 1999; and Hatloy et al. 2000). Arimond and Ruel (2004) used data from 11 recent demographic and health surveys to examine the association between dietary diversity and height-for-age z-scores (an indicator of child growth) for children 6–23 months old while controlling for household wealth and several other potentially confounding factors. They found that dietary diversity was significantly asso-

2. Undernourishment refers to the condition of people whose dietary energy consumption is continuously below the minimum dietary energy requirement for maintaining a healthy life and carrying out light physical activity FAO (2007). These FAO data are contested; see, for example, Klasen (2008).

3. Because dietary diversity also tends to increase with income and wealth, the association between dietary diversity and child nutrition may be confounded by socioeconomic factors.
associated with child growth, either as a main effect or in an interaction, in all but one of the countries analyzed. These findings suggest that there is an association between child dietary diversity and nutritional status that is independent of socioeconomic factors and that dietary diversity may indeed reflect diet quality. Further, increased consumption of animal products results in increased intake of a variety of nutrients and a decrease in intake of phytates and fiber that reduces bioavailability (Allen et al. 1992). Finally, iron and vitamin A and other micronutrient deficiencies are a serious concern in all three countries (Micronutrient Initiative, undated; Muñoz et al. 2000).

Given these considerations, this assessment of the impact of CCT programs such as PRAF, PROGRESA, and RPS on food consumption needs to be nuanced. Although the average effect of these programs on food consumption—measured in terms of caloric acquisition—across all beneficiaries is of interest, two other issues are particularly germane. First, what is the impact of these interventions on households in which pre-program food availability was low? Second, what is their impact on dietary quality? These questions are the focus of this chapter. To address them, we begin by describing the data available to us, then present descriptive results and, for Mexico, explore in depth the relationship between income and caloric acquisition. We then assess the impact of PRAF, PROGRESA, and RPS on food consumption and diet quality, mindful of the distributional issues noted earlier. Concluding remarks complete the chapter.

Data Sources Used

We begin by describing the data sources we use.

Honduras

For Honduras we use data from the evaluation survey described by Maluccio, Adato, and Skoufias in this volume. Longitudinal data on about 5,600 households were collected from August to December 2000 (baseline) and from May

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4. For the purposes of this work, we define a high-quality diet as a diet that confers a low risk of inadequate intake of micronutrients. We recognize that definitions of diet quality often include other dimensions, such as moderation (for example, in intakes of energy, saturated/trans fats, cholesterol, sodium, and refined sugars) and balance, but we do not focus on these aspects of diet quality in our study.

5. On the other hand, excessive consumption of animal-source foods can lead to suboptimal intakes of fiber and overly high intakes of cholesterol and saturated fats, factors that elevate the risk of cardiovascular diseases. In the region of Honduras where the CCT program was implemented, the consumption of saturated fat is at a low level, contributing only about 4 percent of total calorie consumption, while the calories from total fat amount to 15 percent of calorie consumption. A share of calories from fat of 15 percent is considered adequate for adult males, but 20 percent is recommended for women of reproductive age (Joint WHO/FAO Expert Consultation 2003). For the poorest group of households in our sample, caloric availability from fat is much lower.
to October 2002 (follow-up). The survey area is located in northwestern Honduras, in a region that is very poor, even by Honduran standards. Seventy municipalities were the primary sampling units that had been randomly assigned to the demand, the demand and supply, the supply, or the control group. Because supply-side interventions require large sums of money and the financial resources of the project were quite limited, only 10 municipalities could be included in the group with the supply intervention. The other three groups comprised 20 municipalities each. The survey sample was a stratified random sample at the municipality level (IFPRI 2003).

Two types of questions on food consumption were asked with reference to 89 different food items: (1) questions on the frequency of acquisition or consumption via purchases, consumption of households' own production, or gifts and transfers and (2) questions on the amount acquired or consumed. Quantities were converted into a common metric unit, and volumes were converted to weights using conversion factors from the U.S. Department of Agriculture (USDA) National Nutrient Database. The amount of each food item acquired, expressed in grams, was then divided by household size and checked for extreme outliers. The food item variables (excluding salt and mineral water, which contain no dietary energy) were then multiplied by the percentage weight of the food deemed edible, and these edible grams of food were converted to kilocalories based on information found in the Guatemala Food Composition Table (or the USDA National Nutrient Database if the dietary energy content of a food item was not available from the former source). Caloric availability per person per day was obtained by forming the aggregate of the converted caloric variables for the various food items. These were aggregated into four food groups: cereals and other starchy staples (tortillas, corn, fresh corn on the cob, bread, wheat flour, pasta, rice, beans, breakfast cereals, potatoes, manioc, and yams); meats, fish, dairy products, and eggs (chicken, beef, pork, fish, sardines, eggs, milk, milk powder, infant formula, cheese, and curds); fruit and vegetables (tomatoes, onions, carrots, chilis, cucumbers, pataste, lettuce, pumpkins, herbs, oranges, plantains, bananas, apples, lemons, avocados, pineapples, mangoes, watermelons, papayas, juice, and canned fruit or vegetables); and other foods (sugar, candy, honey, jelly, cookies, mustard, sodas, alcohol; coffee, cooking oil, lard, butter, margarine, and other fats). Summing across these food groups gives total caloric acquisition. Also created was an indicator of dietary diversity: the number of foods from the food record.

In using these data, there were two complications worth highlighting. First, as explained by Maluccio, Adato, and Skoufias in this volume, the randomized

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6. Because respondents had the opportunity to report the consumption of "other foods" not covered in the list and specify these items, the data contained information on the consumption of more than 160 different food items.

7. We used these sources because there was no food composition table specific to Honduras and the foods consumed in Guatemala and Honduras are very similar.
design had four arms: a demand-side intervention (cash transfers), a supply-side intervention (efforts to improve the quality of schools and health clinics), a demand- and supply-side intervention, and a control intervention. However, very little of the supply-side intervention actually took place; money transfers to healthcare provision units reached only 17 percent of expected levels, quality assurance training could not be completed, and the implementation of the Integral Childcare in the Community component was carried out at only 11–22 percent of the intended level. The supply-side incentive to education was partially implemented. Teacher training in math and Spanish pedagogy was carried out at 74 percent of the expected level, but resource transfers to schools reached only 7 percent, and the planned parental associations could not be established. As to indicators of antenatal care quality, as of yet there is no evidence of improvement in the quality of the antenatal care services provided (IFPRI 2003). Given the effective absence of the supply-side intervention, we combine the demand- and the demand- and supply-side groups into a single treatment group and omit from our analysis the supply-side group.

Second, the initial evaluation design called for baseline and follow-up surveys to be conducted during the same three months of the year (between August and September) to avoid seasonality problems. Both rounds of surveys, however, had to be rescheduled because actual project implementation forced a change in plans. The baseline survey could not be completed by the end of September and had to be extended until December. Moreover, the president of the Republic of Honduras decided to inaugurate the project on October 6, 2000, instead of in January 2001. This meant that data collection had to be carried out first in the two demand-side intervention groups in the August–October period and that the households in the control and supply-only groups had to be interviewed later, in November and December. The next evaluation round had been planned for 2001, but was postponed to May–October 2002 because the supply-side interventions were considerably delayed (IFPRI 2003).

The seasonal variation of food consumption in combination with the almost perfect overlap of “being in the demand or demand and supply group in 2000” and “being interviewed in November or December” is clearly problematic; the correlation of interview dates and treatment status has the potential to confound our efforts to assess impact. To overcome this problem, we later estimate the determinants of caloric acquisition for 2000 and, separately, for 2002, 8. This is not a problem for either the Mexican or the Nicaraguan data. There is an additional issue that compounds this problem for the Honduran data. There is some evidence to suggest that in the first interviews that were conducted, respondents overreported food consumption; specifically, they reported their total consumption in the past month on a question that asked about the last time they had consumed a particular food item in the past month. As explained in the text, our seasonal correction and our exclusion of households with extreme values of food consumption should take care of much of this problem. To the extent that it does not, it leads to a downward bias in our estimate of impact.
including as controls household characteristics and month-of-interview dummies. In effect, we assume that at baseline the randomized groups were basically equal if we control for differences in a range of characteristics such as household head’s education, household size, household composition, and so forth, and that significant differences in outcome indicators can be attributed to seasonal factors. The product of these month-of-interview dummy variables and their associated coefficients are subtracted from the calorie data, producing a seasonal correction to the data. We apply this correction when we estimate program impact later.

Table 11.1 and Figure 11.1 provide some descriptive results using these data. Table 11.1 shows the consumption, in calories, of households in both treatment and control localities. The first column describes mean levels at baseline. There are two noteworthy results. Mean per capita consumption was well above the threshold for a diet adequate in caloric terms. However, the diet of the average household was dominated by the consumption of cereals and to a lesser extent foods from the “other foods” category. Together, these accounted for almost 90 percent of the calories consumed by these households. If we disaggregate by food items, we find that 65 percent of the calories consumed were obtained from five food items: tortillas, corn, beans, sugar, and cooking oil. The second and third columns show, in percentage terms, how consumption changed between the August–December 2000 and the May–October 2002 survey rounds. We observe falling consumption levels for cereals, fruit and vegetables, and animal-source foods in both treatment and control localities; interannual variation in food consumption as well as the mismatch in the timing of the two surveys may account for this. The last column provides unconditional mean difference-in-difference estimates of these changes between households in treatment and control localities. They suggest that, except for the category of “other foods,” households in demand-side intervention areas saw their food consumption fall. Note, however, that these unconditional means do not account for the seasonality problems described earlier.

Figure 11.1 explores the distribution of caloric acquisition by household consumption level. Using the baseline data for all households, it maps out the density functions of caloric acquisition by consumption tercile. The vertical rule is placed at 1,780 kilocalories per person per day—the level of the daily per-person minimum dietary energy requirement for light activity for Honduras as specified by the FAO (2007). What emerges are significant differences in the likelihood of dietary adequacy in caloric terms between poor and rich households, suggesting that even though average levels were more than adequate, there is a significant proportion of households for which this was not the case.9

9. There is a caveat that should be noted, however. Food consumption in poor areas of Honduras, and also in Mexico and Nicaragua, accounts for a significant share of total consumption. Any measurement error in the food consumption data, therefore, is positively correlated with
TABLE 11.1 Descriptive statistics for the Honduran Programa de Asignación Familiar–Fase II (PRAF-II)

<table>
<thead>
<tr>
<th></th>
<th>Mean values at baseline: Households eligible for PRAF-II benefits in treatment and control localities</th>
<th>Percentage change between baseline (August–December 2000) and follow-up (May–October 2002) surveys</th>
<th>Unconditional difference-in-difference percentage changes between eligible households in treatment and control localities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Households eligible for PRAF-II benefits in treatment localities</td>
<td>Households eligible for PRAF-II benefits in control localities</td>
<td></td>
</tr>
<tr>
<td>Total caloric consumption per person per day</td>
<td>2,736</td>
<td>-8.8</td>
<td>-6.2</td>
</tr>
<tr>
<td>Calories from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>1,887</td>
<td>-11.2</td>
<td>-7.9</td>
</tr>
<tr>
<td></td>
<td>(69%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit and vegetables</td>
<td>189</td>
<td>-7.4</td>
<td>-5.9</td>
</tr>
<tr>
<td></td>
<td>(7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal-source foods</td>
<td>172</td>
<td>-10.7</td>
<td>-6.1</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other foods</td>
<td>488</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>(18%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of unique foods consumed</td>
<td>25</td>
<td>1.8</td>
<td>-1.1</td>
</tr>
</tbody>
</table>

**NOTE:** Percentages in parentheses refer to the share of total calories obtained from individual food groups.
FIGURE 11.1 Distribution of household caloric acquisition, by pre-program expenditure terciles, Honduras

NOTE: The vertical rule is placed at 1,780 kcal per person per day—the level of the daily per person minimum dietary energy requirement for light activity for Honduras as specified by the FAO (2007).

Mexico

For Mexico we use the PROGRESA evaluation data, called the ENCEL (Encuesta de Evaluación de los Hogares). As explained by Maluccio, Adato, and Skoufias in this volume, the first round of surveys took place in March 1998, before the initiation of benefits was supposed to start in May 1998. Unfortunately, the module on consumption was poorly designed, rendering it unusable for the purposes of assessing program impact on food consumption. Additional rounds—with a much-improved consumption module—were conducted in October–November 1998 (ENCEL98O), June 1999 (ENCEL99J), and November 1999 (ENCEL99N). This presents a dilemma; we have comparable data measurement error in total consumption, and this will accentuate any positive correlation between the two. Also, caloric availability has a greater variability than caloric intake (see the later discussion on desiderata), which may cause a greater proportion of people to fall below the minimum requirement cutoff when measures of availability are considered.
for three rounds but no usable pre-intervention baseline. However, as Hoddinott and Skoufias (2004) explain, beneficiaries had received only a minimal level of transfers prior to the October–November 1998 round. For this reason, we use ENCEL980 as the baseline survey, noting that because some, albeit minimal, transfers had previously occurred, we will underestimate the impact of PROGRESA.

These three survey rounds included a set of questions of the following form: “In the last seven days, how much have you consumed of the following foods?” This was asked with reference to 35 different foods. In order to undertake the analysis reported here, we converted these data into calories via the following steps. First, different units of measurement were converted into a common measure for each food item. Next, volumes were converted to weights using the Tablas de Valor Nutritivo for Mexico (Muñoz de Chávez et al. 1996). The weight of each food item acquired, expressed in kilograms, was multiplied by the percentage weight of the food deemed edible, and these edible kilograms of food were converted to kilocalories, again based on information found in the Tablas de Valor Nutritivo. These 35 food variables and their aggregate, expressed in calories per family per week, were then converted to daily amounts and divided by household size to obtain caloric availability per person per day.¹⁰ In order to assess the impact of PROGRESA on diet quality, we also aggregated these data into four food groups: cereals (tortillas, corn, bread, wheat flour, noodles, rice, biscuits, beans, and breakfast cereals); animal-source foods (chicken, beef, pork, goat meat, fish, sardines, eggs, milk, cheese, and lard); fruit and vegetables (tomatoes, onions, potatoes, carrots, oranges, plantains, apples, lemons, and prickly pears); and other foods (cooking oil, sodas, alcohol, coffee, sugar, and other oils).

Table 11.2 and Figure 11.2 provide some descriptive results using these data. Table 11.2 shows the consumption, in calories, of households eligible for PROGRESA benefits in both treatment and control localities. The first column describes mean levels at baseline. There are two noteworthy results. Mean per capita consumption was just above the threshold for a diet adequate in caloric terms. However, the diet of the average PROGRESA-eligible household was dominated by the consumption of cereals and to a lesser extent foods from the “other foods” category. Together, these accounted for more than 90 percent of the calories consumed by these households. In fact, if anything, this column understates the monotony of these diets. If we disaggregate by food items, we find that 85 percent of calories were obtained from just five food items: tortillas, corn, beans, sugar, and cooking oil. The second and third columns show, in percentage terms, how consumption changed between the October 1998 and the November 1999 survey rounds. The last column provides unconditional

---

¹⁰. This measure of household size excludes members not regularly eating in the home and includes non–household members who eat there.
### TABLE 11.2 Descriptive statistics for the Mexican Programa de Educación, Salud, y Alimentación (PROGRESA)

<table>
<thead>
<tr>
<th></th>
<th>Mean values at baseline: Households eligible for PROGRESA benefits in treatment and control localities</th>
<th>Percentage change between baseline (October 1998) and follow-up (November 1999) surveys</th>
<th>Unconditional difference-in-difference percentage changes between eligible households in treatment and control localities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Households eligible for PROGRESA benefits in treatment localities</td>
<td>Households eligible for PROGRESA benefits in control localities</td>
</tr>
<tr>
<td><strong>Total caloric consumption</strong></td>
<td>2,033</td>
<td>-2.6</td>
<td>-9.1</td>
</tr>
<tr>
<td>per person per day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Calories from</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>1,458</td>
<td>-6.1</td>
<td>-13.6</td>
</tr>
<tr>
<td></td>
<td>(72%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit and vegetables</td>
<td>49</td>
<td>13.1</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>(2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal-source foods</td>
<td>129</td>
<td>7.8</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other foods</td>
<td>397</td>
<td>7.5</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of unique foods</strong></td>
<td>13.1</td>
<td>-3.9</td>
<td>-7.1</td>
</tr>
<tr>
<td>consumed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Percentages in parentheses refer to the share of total calories obtained from individual food groups.
mean difference-in-difference estimates of these changes between PROGRESA-eligible households in treatment and control localities. They suggest that although access to PROGRESA does in fact increase caloric acquisition, there are especially striking increases in the consumption of fruit and vegetables.

Figure 11.2 explores the distribution of caloric acquisition by household consumption level. Using the baseline data for all households (PROGRESA-eligible and ineligible households in both treatment and control localities), it maps out the density functions of caloric acquisition by consumption tercile. The vertical rule is placed at 1,900 kilocalories per person per day—the level of the daily per-person minimum dietary energy requirement for Mexico specified by the FAO (2007). As in the Honduran case, what emerges are significant differences in the likelihood of dietary adequacy in caloric terms between poor and rich households, again suggesting that even though the average levels were adequate, there was a significant proportion of households whose diets were not adequate.
Nicaragua

For Nicaragua we use data from an annual household panel data survey implemented in both intervention and control areas of RPS before the start of the program in 2000 (August–September) and 2002 (October), two years after the program began. The questionnaire was a comprehensive household questionnaire based on the 1998 Nicaraguan Living Standards Measurement Survey instrument, adapted for the purpose of program evaluation. The survey sample is a stratified random sample at the comarca (community) level from 42 comarcas in a relatively poor part of the rural central region of Nicaragua.

Questions on the frequency of food acquisition or consumption and the amount acquired or consumed were asked with reference to 59 different food items. This information was converted to daily quantities for each food item in the same way as for Honduras. The metric units for various sizes of bottles, bags, or cans needed for this process were indicated on the questionnaire for Nicaragua. For measurement units for which this was not the case (for example, a bag of tortillas or piece of fruit), the same conversion factors were used as for Honduras. Information on the dietary energy content of foods was again taken from the Guatemala Food Composition Table (or the USDA National Nutrient Database, if not available from the former source). Calorie data were aggregated into four food groups following the same classification as for Honduras, and a variable for the number of foods was also created.

Table 11.3 and Figure 11.3 provide some descriptive results using these data. Table 11.3 shows the consumption, in calories, of households in both treatment and control localities. The first column describes mean levels at baseline. As in Honduras and Mexico, mean per capita consumption was sufficient to meet dietary energy requirements. However, the diet of the average household was dominated by the consumption of cereals and to a lesser extent foods from the “other foods” category. Together, these accounted for 90 percent of the calories consumed by these households. If we disaggregate by food items, we find that 68 percent of calories were obtained from five food items: tortillas, corn, beans, sugar, and cooking oil. The second and third columns show, in percentage terms, how consumption changed between the August 2000 and October 2002 survey rounds. We observe increasing consumption levels for treatment and control localities and for all food groups, with the exception of fruit and vegetables in treatment localities. The last column provides unconditional mean difference-in-difference estimates of these changes between households in treatment and control localities. Households in the treatment localities experienced small increases in total calorie consumption, large increases in the consumption of animal products and other foods, but decreases in the consumption of fruit and vegetables.

Figure 11.3 explores the distribution of caloric acquisition by household consumption tercile, with the vertical rule placed at 1,820 kilocalories per person per day—the level of the daily per-person minimum dietary energy
TABLE 11.3 Descriptive statistics for the Nicaraguan Red de Protección Social (RPS)

<table>
<thead>
<tr>
<th></th>
<th>Mean values at baseline: Households eligible for RPS benefits in treatment and control localities</th>
<th>Percentage change between baseline (August–September 2000) and follow-up (October 2002) surveys</th>
<th>Unconditional difference-in-difference percentage changes between eligible households in treatment and control localities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Households eligible for RPS benefits in treatment localities</td>
<td>Households eligible for RPS benefits in control localities</td>
</tr>
<tr>
<td>Total caloric consumption per person per day</td>
<td>2,265</td>
<td>17.1</td>
<td>10.4</td>
</tr>
<tr>
<td>Calories from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>1,589</td>
<td>15.4</td>
<td>15.4</td>
</tr>
<tr>
<td></td>
<td>(70%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit and vegetables</td>
<td>72</td>
<td>-8.5</td>
<td>21.9</td>
</tr>
<tr>
<td></td>
<td>(3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal-source foods</td>
<td>155</td>
<td>53.2</td>
<td>16.9</td>
</tr>
<tr>
<td></td>
<td>(7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other foods</td>
<td>448</td>
<td>16.2</td>
<td>-10.3</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of unique foods consumed</td>
<td>11</td>
<td>46.9</td>
<td>7.0</td>
</tr>
</tbody>
</table>

NOTE: Percentages in parentheses refer to the share of total calories obtained from individual food groups.
FIGURE 11.3 Distribution of household caloric acquisition, by pre-program expenditure terciles, Nicaragua

Density

- - Poorest tercile
- - Second tercile
- - Third tercile

6.5 7.0 7.5 8.0 8.5

log total household kcal (per capita per day)

NOTE: The vertical rule is placed at 1,820 kcal per person per day—the level of the daily per person minimum dietary energy requirement for Nicaragua specified by the FAO (2007).

requirement for Nicaragua specified by the FAO (2007). As in the Honduran and Mexican data, there were significant differences in the likelihood of dietary adequacy in caloric terms between poor and rich households.

Desiderata

There are a number of reasons, common to all three surveys, that one should be careful in interpreting these data. First, these are rough estimates of calories "available" to be consumed rather than actual consumption data. Second, there can be considerable heterogeneity with broad food categories such as "chicken" or "rice," and such heterogeneity may be correlated with household characteristics. For example, a 100-gram serving of boneless chicken will have more calories than a 100-gram serving of boned chicken wing. In the Nicaraguan survey, this problem was further amplified by mixing a number of fruits within a single question; for example, a single question asked respondents about their consumption of apples, pineapple, watermelons, other melons, papayas, man-
goes, and *pitahaya*. Third, households may consume food outside the household, and such consumption is not reflected in these data. Ceteris paribus, if food consumption outside the home rises with income, this will bias downward the estimated impact of the program for relatively better-off beneficiaries. Fourth, as diets become more diverse, it becomes more difficult to recall the consumption or acquisition of all foods, especially when a recall period of one month or two weeks is used (as was the case in Honduras and Nicaragua, respectively). If diet variety is positively correlated with income, it has the potential to bias downward our estimates of impact on diet quality. Fifth, there is some evidence in the data to suggest that reported caloric availability falls dramatically in large (more than 10-person) households, suggesting that for these (few) households, measurement error may be a matter of considerable concern.

For Honduras, the way information on food consumption was collected introduced additional noise into the data. This was the case because the total quantity of a certain food item purchased during the past month has to be calculated from the quantity bought at last purchase and the frequency of purchasing this item. If the quantity purchased last time is unusually small or large, the “consumption” quantity derived for one month will be grossly inadequate, especially for foods that are frequently purchased. In a manner similar to that used for the calculation of food purchases, the quantities of food from households’ own production or received as a donation or in-kind payment have to be calculated from the frequency of consumption and the average quantity consumed each time. The accuracy of answers about average consumption each time during the past month may require a certain degree of numeracy on behalf of the respondents, which may not always be given. The same considerations apply to the data from Nicaragua, where the food consumption module had an almost identical structure.

The problem of increased variation in the data will make the identification of actual intervention effects more difficult. This is at least partly taken care of by dropping households with out-of-range values for calories per capita (<875 or >4,700 kilocalories per capita per day). Because the means of the outcome variables on food consumption should not be affected and the process of data collection was consistent in baseline and follow-up periods, we nevertheless expect unbiased parameter estimates in our regressions.

**The Relationship between Food Consumption and Income: Nonparametric Estimates**

In the introduction to this chapter we noted that any expectation that CCTs in these countries, and elsewhere, will increase caloric acquisition and cut hunger is predicated on the assumption of a meaningful relationship between income and food consumption. Figures 10.1, 10.2, and 10.3 give us some confidence in this regard, for they are suggestive of a positive relationship; the elasticities
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reported in the introduction are less reassuring. In light of all this, it is worth exploring this issue further.

Our starting point is the observation that many studies that estimate this elasticity impose a specific functional form on the data, such as a linear or log-log relationship (Hoddinott, Skoufias, and Washburn 2000). This is problematic for two reasons. First, it forces the elasticity of caloric availability to be constant irrespective of the level of household income. It is quite likely, however, that poorer households that have low incomes exhibit a higher income elasticity in caloric availability than do households with higher incomes. Second, at some point the relationship between incomes (or expenditures) and calories must become nonlinear. The reason for this is physiological. Food needs, expressed in terms of calories, are a function of three individual characteristics: basal metabolic rates (BMRs), activity levels, and body mass (Durnin 1996). BMRs are not uniform across populations, varying by age, sex, and body mass. BMRs are multiplied by a “physical activity level,” or PAL (Shetty et al. 1996) to obtain caloric requirements. For example, a young, heavy man (say a 25-year-old weighing 75 kilograms) engaging in strenuous agricultural labor has a caloric requirement of about 3,800 kilocalories. In fact, it is difficult to imagine that many individuals in a rural Honduran, Mexican, or Nicaraguan setting would have caloric requirements in excess of 4,000 kilocalories per day. Yet an implication of the linear relationship between income and calories is that intakes continue to rise and rise as incomes increase; the physiological considerations described here indicate that this makes no sense.

One way of addressing this problem involves specifying the relationship between income (or expenditures) and caloric intake as a quadratic. But such estimates are often strongly influenced by the presence of a few outliers in the data. An alternative, and more promising, approach is to start with a nonparametric relationship whereby the data determine the form of the functional relationship. There are only a handful of studies that do this: Strauss and Thomas (1995), Subramanian and Deaton (1996), and Gibson and Rozelle (2002). The Strauss and Thomas results indicate strong nonlinearities in the income–calorie relationship, with elasticities of 0.24–0.33 for households with per capita expenditures below the median. Richer households exhibit much lower estimates that fall toward zero. Subramanian and Deaton’s work indicates slightly higher elasticities, on average, between 0.3 and 0.5, but exhibiting less flattening out at higher values of per capita expenditures. Gibson and Rozelle (2002) also

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11. Basal metabolic rates are “the minimal rate of energy expenditure compatible with life” (Shetty et al. 1996, S11).

12. This notion of requirements needs to be treated cautiously. There is a certain degree of interindividual variability in BMR (Shetty et al. 1996). Activity levels can be adjusted so as to reduce requirements in a narrow sense. In the longer term, individuals may gain or lose weight as a consequence of changes in energy balances, and this will alter their energy needs.
found higher elasticities at low levels of expenditure but also found evidence of nonlinearities.\textsuperscript{13}

The nonparametric regression function—here the expectation of calories conditional on household per capita expenditures—can be written as

\[ m(x) = E(y|x), \]

where \( y \) is the logarithm of per capita calorie availability and \( x \) is the logarithm of per capita total household expenditures. Following Subramanian and Deaton (1996), we estimate \( m(x) \) using a smooth local regression technique. As Subramanian and Deaton explain, the procedure works as follows. At any given point \( x \), we run a weighted linear regression of the logarithm of calories per capita on the logarithm of per capita expenditure. The weights are chosen to be largest for sample points close to \( x \) and to diminish with distance from \( x \); they are also set so that, as the sample size increases, the weight given to the immediate neighborhood of \( x \) is increased so that, at the limit, only \( x \) is represented. Our main concern is to plot the regression function so that, instead of calculating local regressions for each point in the sample, we choose an evenly spaced grid of 50 points in the distribution of log per capita expenditure and calculate local regressions for each. The estimate of \( m(x) \) is the predicted value from the local regression at \( x \), and the local estimated slope coefficient, \( \hat{\beta}(x) \) say, is used as an estimate of the slope \( m'(x) \). Standard errors for the regression function and its slope are obtained by bootstrapping following the directions in Efron and Tibshirani (1993). We estimate this relationship using data from the ENCEL980 survey round.\textsuperscript{14} We begin with an analysis of the regression function using the sample of all (poor and non-poor) households in the control villages. The regression function estimated from the control villages provides an estimate of the relationship between calories and income before the introduction of the PROGRESA program and thus an estimate of the “counterfactual” regression function in the absence of the program. The results are shown in Figure 11.4.\textsuperscript{15} The line in the middle is the local regression estimate, while the confidence intervals around the lines show two standard errors on either side for the unclustered bootstrap.

\textsuperscript{13} An additional benefit of this nonparametric approach is that it allows us to derive an estimated range of how much per capita caloric availability could increase if household incomes were increased. This expected range of impact can be used as a measure against which the estimated impact of a CCT on caloric availability can be gauged.

\textsuperscript{14} Where there is a suspicion that the relationship being examined is nonlinear, it is particularly important to reduce the size of the bandwidth. In small samples, this is tricky and can lead to biased estimates (Deaton 1997). Sample size considerations constrain us to only estimate these nonparametric regressions for the Mexico.

\textsuperscript{15} These nonparametric results were estimated jointly with Emmanuel Skoufias (see Hoddinott, Skoufias, and Washburn 2000), and it is a pleasure to acknowledge his contribution to the discussion in this section.
Inspection of Figure 11.4 reveals that the estimated "curve" is quite close to a straight line similar to that estimated by Subramanian and Deaton (1996) and Gibson and Rozelle (2002). In contrast to the curve estimated by Strauss and Thomas for Brazil, the households in the PROGRESA control sample are generally poorer than the sample of households used in the Brazil study, and that is why even those households at the top of the income distribution exhibit a nonzero income elasticity of caloric availability.

Figure 11.5 displays the slopes of the "curve" in Figure 11.4, along with bootstrapped confidence intervals. From this figure we can see more clearly the slope of the curve in Figure 11.4, or in other words how the income elasticity of per capita caloric availability varies with income. The income elasticity is generally higher for poorer households with lower levels of per capita expenditure and lower for richer households. Moreover, it seems that the decline is not steady. At the lowest level of expenditures, the income elasticity of caloric
FIGURE 11.5 Elasticity of calories with respect to per capita consumption

Elasticity of calories

NOTE: The figure displays the slopes of the "curve" in Figure 11.4, along with bootstrapped confidence intervals.

availability is around 0.3. As expenditures increase, the elasticity seems to follow an inverted U-shaped pattern, first increasing to reach the maximum value of 0.5 where the log value of per capita expenditures equals 4.8. From that point on, the elasticity seems to decline slowly and steadily.16

One reason we observe this pattern is that at the margin, people select foods for reasons beyond their caloric value. Behrman and Deolalikar (1987) suggest that food variety itself may be valued, so that as incomes increase, individuals purchase a wider variety of foods, even though this may not affect their caloric intakes very much. This desire for variety is derived from the many characteris-

16. Two caveats. As noted in footnote 9, measurement error in food consumption will accentuate this positive relationship. These regressions do not control for other factors that will affect demand for food and are based on cross-sectional data. Richer households have, on average, higher levels of education and are more likely to limit calorie intakes than are less educated households. They also tend to have lower calorie requirements due to lower levels of physical activity (which would suggest that elasticities become negative at a certain point). These two factors might contribute to falling elasticities when incomes rise, but they do not apply when incomes are raised via cash transfers.
tics, apart from calories, that different foods possess. These include attributes such as food texture, status value, appearance, taste, aroma, and preparation.

Mindful of all this, consider Figure 11.6, taken from Behrman (1988). The vertical axis refers to calories obtained from a single staple, say maize tortillas. The horizontal axis refers to calories derived from all other foods. Household preferences for the consumption of the staple and all other foods are given by the curved lines, convex to the origin, denoted by $U_1, U_2,$ and so forth. Consistent with basic microeconomic theory, welfare increases are associated with moving out from the origin. There is a subsistence constraint—denoted by $S-S'$—that denotes the minimal number of calories needed to survive. Below the subsistence constraint, there is no trade-off between these foods, so preferences collapse onto the line $S-S'$ (in the absence of this constraint, we would have the curves denoted by the dashed line below the subsistence constraint).

Suppose that a household is initially at a point like $A$. Given these preferences, additional income is spent on purchasing increased dietary diversity, not additional calories. Consequently, we slide down the subsistence constraint to a

**FIGURE 11.6** Demand for food variety as income rises

\[ \text{Calories from staples} \]

\[ \text{Calories from other foods} \]

**NOTE:** $U_1, U_2,$ and so on denote household preferences for the consumption of the staple and all other foods. $S-S'$ denotes a subsistence constraint in the form of the minimal number of calories needed to survive. Points $A, B,$ and so on denote points on a household's income–calorie expansion path.
point such as B. A further increase in income causes the household to move off this constraint to a point such as C, where both calories and dietary diversity increase. For the reasons described earlier, there is a limit to the increase in caloric consumption that one might expect, and so, at some stage, the elasticity of caloric consumption with respect to income begins to fall. This income-calorie expansion path is denoted by the thick black line in Figure 11.6. This process is consistent with relatively low income-calorie elasticities. In fact, it suggests that the relationship might be nonlinear, with elasticities first rising and then falling as incomes increase, which is what we observe in the nonparametric estimates.

This exploration reveals several useful findings. First, the expected impacts will clearly depend on where households fall in the distribution of household consumption. A CCT program focused on households with consumption levels found at the right-hand side of Figure 11.5 is likely to have minimal effect on caloric acquisition. Second, there may well be heterogeneity of impact among program participants, given that elasticities appear to vary by consumption levels.

The Impact of PRAF, PROGRESA, and RPS on Food Consumption

Methods

We estimate difference-in-difference intent-to-treat effects. Let

$$\text{CAL}_{ict} = \text{a measure of caloric availability of household } i \text{ in community } c \text{ at time } t;$$

$$T = 1 \text{ if the household is observed after the intervention has begun;}$$

$$= 0 \text{ if observed at baseline;}$$

$$P = 1 \text{ if the household is resident in a community receiving program benefits;}$$

$$= 0 \text{ if the household is resident in a community not receiving benefits;}$$

$$\mu_{ic} = \text{ all (observed and unobserved) household- and community-level time-invariant factors;}$$

$$X_{ict} = \text{ all observed household and community time-varying factors; and}$$

$$\nu_{ict} = \text{ unobserved idiosyncratic household (or individual) and time-varying error.}$$

We have the following relationship:

$$\text{CAL}_{ict} = \alpha_0 + \alpha_3 T_{ct} + \alpha_4 P + \delta_{1c} PT + \beta X_{ict} + \mu_{ic} + \nu_{ict},$$

where all the $\alpha$, $\delta$, and $\beta$ are unknown parameters.

The parameter of interest is $\delta_1$, the "double-difference" estimator of the average program effect for the postintervention period relative to the baseline. Because for this analysis our samples consist only of households in treatment
The Impact of CCT Programs on Food Consumption

and control localities that are eligible to receive benefits, $\delta_1$ tells us the impact of being in a treatment locality after the intervention has commenced, taking into account time trends common to both treatment and control localities. The program effects are identified by the randomized design; with randomization of $P$, it (and any interactions involving it) means that it is uncorrelated with the disturbance term, so the $\delta$s are consistently estimated. We use household fixed effects, which accounts for all fixed characteristics at the household and community levels. In so doing, we eliminate $P$, which is time invariant. Our estimates also account for changes in time-varying characteristics such as local food prices (for Mexico) and changes in household demographic composition; excluding these does not change our findings.

Results

Our basic results are reported in Table 11.4. Overall, PRAF, PROGRESA, and RPS have only small effects on caloric acquisition at the household level. There are no statistically significant effects of PRAF or RPS, and PROGRESA raises caloric acquisition by only 3.6 percent. However, in line with the discussion found in the previous section, there are larger and statistically significant effects on dimensions of diet quality. In Mexico and Nicaragua, there are statistically significant increases in the consumption of fruits and vegetables. The magnitudes of these effects are large—12.3 percent in Mexico and 52.5 percent in Nicaragua. There are similarly large effects when we look at calories obtained from animal products. Finally, in Nicaragua we observe increases in diet diversity, as measured by the number of foods eaten.

Our exploration of elasticities suggested, however, that the magnitudes of these effects might differ by household income levels. In Table 11.5 we exploit this observation and assess the impact of eligibility for these programs by baseline expenditure terciles for households eligible to receive benefits in treatment and control localities. Here there are several striking features. For the poorest terciles in all three countries, the CCT programs we are studying significantly raise per capita caloric availability by between 5.8 (Mexico) and 12.7 percent (Nicaragua). However, apart from the middle tercile in Mexico, this effect is found for no country expenditure tercile.

There are also some differences across terciles in terms of improved dietary quality, although, unlike in the case of total caloric acquisition, the pattern across countries is slightly less well defined. In Honduras, improvements in dietary quality are found only in the poorest tercile. In Mexico, they are found in the poorest and middle terciles but not in the richest. In Nicaragua, improvements in dietary quality are found across all terciles.17

17. Note that the sample sizes for Nicaragua are much smaller than those for the other two countries, which leads to somewhat more imprecise estimates.
**TABLE 11.4** Impact of exposure to a program on food consumption, by source

<table>
<thead>
<tr>
<th></th>
<th>Calories from</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Number of foods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Cereals</td>
<td>Fruit and</td>
<td>Animal</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>calories</td>
<td></td>
<td>vegetables</td>
<td>products</td>
<td>foods</td>
<td></td>
</tr>
<tr>
<td><strong>Honduras</strong></td>
<td>0.017</td>
<td>-0.008</td>
<td>0.093</td>
<td>0.137</td>
<td>0.044</td>
<td>0.508</td>
</tr>
<tr>
<td></td>
<td>(0.72)</td>
<td>(0.23)</td>
<td>(0.73)</td>
<td>(1.37)</td>
<td>(1.28)</td>
<td>(0.77)</td>
</tr>
<tr>
<td><strong>Mexico</strong></td>
<td>0.036</td>
<td>0.037</td>
<td>0.123</td>
<td>0.125</td>
<td>0.008</td>
<td>0.356</td>
</tr>
<tr>
<td></td>
<td>(2.56)**</td>
<td>(1.93)*</td>
<td>(2.64)**</td>
<td>(2.96)**</td>
<td>(0.42)</td>
<td>(1.49)</td>
</tr>
<tr>
<td><strong>Nicaragua</strong></td>
<td>0.045</td>
<td>-0.019</td>
<td>0.525</td>
<td>0.620</td>
<td>0.298</td>
<td>3.868</td>
</tr>
<tr>
<td></td>
<td>(1.24)</td>
<td>(0.24)</td>
<td>(1.80)*</td>
<td>(2.42)**</td>
<td>(3.73)**</td>
<td>(4.22)**</td>
</tr>
</tbody>
</table>

**NOTES:** For Honduras: The sample consists of households in treatment and control localities. The sample size is approximately 3,300. The sample excludes 14 percent of consumption records with caloric availability per person per day of less than 875 kcal or greater than 4,700 kcal. Controls included but not reported: log household size; proportions of children 0–2, 3–5; boys 6–7, 8–12, 13–18; girls 6–7, 8–12, 13–18; women 19–54; men 55 and older; women 55 and older; characteristics of the household head (education, age, occupation, literacy, marital status, gender). Postbaseline information on locality-level prices was not available. For Mexico: The sample consists of households eligible for PROGRESA benefits in treatment and control localities. The sample size is approximately 13,200. The sample excludes 10 percent of households with per capita caloric availability per person per day of less than 875 kcal or greater than 4,700 kcal. Controls included but not reported: log household size; proportions of children 0–2, 3–5; boys 6–7, 8–12, 13–18; girls 6–7, 8–12, 13–18; women 19–54; men 55 and older; women 55 and older; characteristics of the household head (education, age, occupation, ethnicity, marital status, gender); locality-level prices of tomatoes, onions, leafy vegetables, oranges, tortillas, corn, milk, white bread, local bread, rice, beans, chicken, eggs. For Nicaragua: The sample consists of households in treatment and control localities. The sample size is approximately 800. The sample excludes 16 percent of consumption records with caloric availability per person per day of less than 875 kcal or greater than 4,700 kcal. Controls included but not reported: log household size; proportions of children 0–2, 3–5; boys 6–7, 8–12, 13–18; girls 6–7, 8–12, 13–18; women 19–54; men 55 and older; women 55 and older; characteristics of the head (education, age, occupation, literacy, marital status, gender). Information on locality-level prices was not available. Standard errors are clustered at the locality level. Absolute values of t-statistics are in parentheses. ** significant at the 5 percent level; * significant at the 10 percent level.

**Conclusion**

At the outset of this chapter, we argued that the analysis of the impact of PRAF, PROGRESA, and RPS on food consumption needed to be nuanced. Because the mean levels of access to food at the time of program initiation were above the minimum recommended levels (in the case of Mexico, considerably above these minima according to FAO estimates) and because the existing literature suggested that the income–calorie elasticity was small, a focus solely on the mean impact of these programs on caloric acquisition would be unlikely to be especially revealing. Given this, the focus of this chapter has been on assessing this impact by disaggregating within the sample of beneficiaries and considering the effect on diet quality as proxied by dietary diversity and calorie availability by food group. Our nonparametric analysis suggests that the effect of these programs is likely to be highest for the poorest households, and this is indeed true in all three countries, even Honduras, where the transfer levels were consider-
TABLE 11.5 Impact of exposure to a program on food consumption, by source and baseline expenditure tercile

<table>
<thead>
<tr>
<th></th>
<th>Calories from</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Number of foods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total calories</td>
<td>Cereals</td>
<td>Fruit and vegetables</td>
<td>Animal products</td>
<td>Other foods</td>
<td>of foods</td>
</tr>
<tr>
<td>Poorest tercile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>0.069</td>
<td>0.054</td>
<td>0.200</td>
<td>0.477</td>
<td>0.056</td>
<td>1.139</td>
</tr>
<tr>
<td></td>
<td>(2.30)**</td>
<td>(1.28)</td>
<td>(1.13)</td>
<td>(3.07)**</td>
<td>(1.24)</td>
<td>(1.59)</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.058</td>
<td>0.058</td>
<td>0.211</td>
<td>0.174</td>
<td>0.045</td>
<td>0.572</td>
</tr>
<tr>
<td></td>
<td>(2.90)**</td>
<td>(2.17)**</td>
<td>(3.03)**</td>
<td>(2.93)**</td>
<td>(1.63)</td>
<td>(2.06)**</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.127</td>
<td>0.108</td>
<td>0.492</td>
<td>0.881</td>
<td>0.459</td>
<td>3.454</td>
</tr>
<tr>
<td></td>
<td>(1.87)*</td>
<td>(1.18)</td>
<td>(1.23)</td>
<td>(2.43)**</td>
<td>(4.24)**</td>
<td>(2.89)**</td>
</tr>
<tr>
<td>Middle tercile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>-0.001</td>
<td>-0.040</td>
<td>0.079</td>
<td>0.051</td>
<td>0.085</td>
<td>0.815</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.79)</td>
<td>(0.51)</td>
<td>(0.53)</td>
<td>(1.88)*</td>
<td>(0.93)</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.045</td>
<td>0.055</td>
<td>0.135</td>
<td>0.117</td>
<td>-0.019</td>
<td>0.477</td>
</tr>
<tr>
<td></td>
<td>(2.48)**</td>
<td>(2.23)**</td>
<td>(2.57)**</td>
<td>(2.19)**</td>
<td>(0.75)</td>
<td>(2.01)**</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.011</td>
<td>-0.057</td>
<td>0.613</td>
<td>0.651</td>
<td>0.197</td>
<td>4.155</td>
</tr>
<tr>
<td></td>
<td>(0.14)</td>
<td>(0.53)</td>
<td>(1.75)*</td>
<td>(1.91)*</td>
<td>(1.54)</td>
<td>(4.83)**</td>
</tr>
<tr>
<td>Richest tercile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>0.022</td>
<td>-0.005</td>
<td>0.087</td>
<td>0.053</td>
<td>0.033</td>
<td>0.339</td>
</tr>
<tr>
<td></td>
<td>(0.70)</td>
<td>(0.14)</td>
<td>(0.76)</td>
<td>(0.64)</td>
<td>(0.84)</td>
<td>(0.44)</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.014</td>
<td>0.005</td>
<td>0.053</td>
<td>0.110</td>
<td>0.011</td>
<td>0.198</td>
</tr>
<tr>
<td></td>
<td>(0.90)</td>
<td>(0.21)</td>
<td>(1.10)</td>
<td>(2.16)**</td>
<td>(0.44)</td>
<td>(0.84)</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.039</td>
<td>-0.096</td>
<td>0.694</td>
<td>0.514</td>
<td>0.294</td>
<td>4.637</td>
</tr>
<tr>
<td></td>
<td>(0.51)</td>
<td>(0.66)</td>
<td>(1.79)*</td>
<td>(1.46)</td>
<td>(2.62)*</td>
<td>(3.21)**</td>
</tr>
</tbody>
</table>

NOTES: Sample sizes are approximately 1,100 (Honduras), 4,380 (Mexico), and 270 (Nicaragua) per tercile. Standard errors are clustered at the locality level. Absolute values of t-statistics are in parentheses. ** significant at the 5 percent level; * significant at the 10 percent level. All models are estimated with controls listed in Table 11.4.

ably lower than in Mexico or Nicaragua. Our intent-to-treat estimates indicate that exposure to these CCT programs raises caloric acquisition by households in the poorest terciles by 5.6 percent in Mexico, 6.9 percent in Honduras, and 12.7 percent in Nicaragua. As suggested by economic theory, there is also likely to be an improvement in the diversity of recipients’ diets. In all three countries, these programs led to improvements in the composition of beneficiaries’ diets, and again, this was most pronounced among the poorest households.

References


12 Women’s Status, Gender Relations, and Conditional Cash Transfers

MICHELLE ADATO AND TERRY ROOPNARaine

Conditional cash transfers (CCTs) are targeted at households as a unit and are aimed primarily at benefiting children through improved health, nutrition, and education, but there are many ways in which gender is recognized and women’s status is promoted through the programs’ designs. Girls’ schooling, women’s health, and other aspects of “women’s empowerment” are explicit or implicit objectives of these programs.

The concept of “women’s empowerment” evolved from the “gender and development” analysis that emerged in the late 1970s and the 1980s, which looked at the dynamics and structures of gender relations and gender inequalities, how they shape the constructs of development analysis (households, labor markets, or the informal sector), and how they structure people’s access to economic and social assets and affect women’s conditions with regard to their physical situations, health, sexuality, education, means of livelihood, and other aspects of their lives (Feldman 1992; Rowlands 1998). Power relations are embedded in relationships between women and men, in other social relationships in which women are involved, and in institutions that affect women’s lives, including households, the state, markets, and other domains of civil society. Women’s empowerment thus implies a shift in these power relations in favor of women. Empowerment can be defined as “processes by which those who have been denied the ability to make choices acquire such an ability,” particularly in the areas of strategic life choices, such as choice of livelihood, whether and whom to marry, and whether and when to have children (Kabeer 1999, 437). Empowerment can be reflected in decisionmaking, rights, economic security, participation in the public domain, and beliefs and perceptions (Rowlands 1998).

CCT programs are concerned primarily with increasing the basic well-being of poor families, particularly in the areas of education, health, and nutrition. Such programs put women at the center because it is through them that the welfare of children and the family as a whole is seen to be best impacted. In this sense, the program is not primarily concerned with women’s empowerment in the broad dimensions in the preceding paragraph but rather with how women can facilitate the achievement of the main health, nutrition, and education goals.
of the program. However, as Kabeer (1999) points out, there is an association between poverty and disempowerment because the inability to meet one's basic needs often rules out the exercise of meaningful choice. In this sense, the primary focus on reducing poverty in the short and long term can be seen as a means of empowerment. Access to assets does not necessarily imply other forms of exercising power, however. For example, a woman's access to cash transfers does not necessarily mean that she can make choices about how to spend those resources, which raises questions as to whether and how CCTs do empower a woman: does she decide, act more freely without permission, negotiate, or give up the resources to her husband? Likewise, her ability to decide how to spend these resources does not automatically translate into better outcomes in terms of her physical welfare, her bargaining power, or her relationship with her spouse. These are empirical issues, some of which are examined in the research discussed in this chapter.

CCT programs do, however, potentially contribute to women's empowerment in some of the dimensions identified earlier. CCT programs put money in women's hands and encourage them not to turn it over to their husbands; they provide and require women's participation in training in health, nutrition, and family planning; and they often provide higher grants for girls' school attendance and explain why to parents, daughters, and sons. CCT programs are more likely to contribute to what Rowlands (1998) calls “personal empowerment” and “empowerment in close relationships” than they are to “collective empowerment,” an issue taken up in Chapter 13 of this volume. Furthermore, even changes in intrahousehold relationships are most often subtle. As we try to determine the extent to which CCT programs cause women to act differently, it is important to keep in mind that there are structural constraints that affect their “choices.” Women may “choose” to conform to certain gender norms and hierarchies because of the culturally specific status such choice brings or because they decide that the cost of the alternative is too high. For example, we found that in Mexico's CCT program Programa de Educación, Salud, y Alimentación (PROGRESA, now Oportunidades), women left the house as needed for their CCT program responsibilities but also prepared their husbands' meals and did all their other housework before leaving. This increased their time burden but was a price they were willing to pay. It was also a strategic choice in the sense that if they did not do this they would be unlikely to be able to leave the house as needed.

As this chapter will show, there is a perceptible change in the way women in CCT programs see themselves and certain conditions in their lives as women, and this change has the potential to translate into the other forms of empowerment. Even if “measurable” changes in empowerment are small, they are a start: “The availability of alternatives at the discursive level, of being able to at least imagine the possibility of having chosen differently, is thus crucial to the emergence of a critical consciousness, the process by which people move from a position of unquestioning acceptance of the social order to a critical perspective
on it” (Kabeer 1999, 441). One of the features of CCT programs is the discourse they promote at many levels—from program printed materials to informal conversation—on women’s value to their families, their responsibilities, and their priority in the program. As with other dimensions of CCT programs, probably the greatest empowerment they offer is to girls for their futures; they can grow up with more education, better health, and more options for participation in the labor market.

Women’s Status in CCT Program Design

The most prominent design feature of a CCT program promoting a woman’s status in her household is that, except under rare circumstances, the mother of the family is designated as the official “beneficiary,” the person registered to receive the cash transfer. The idea of giving the cash to women was based on an accumulation of research showing that when resources are controlled by women, they are more likely to translate into the improved health and nutrition of children than when those resources are controlled by men (Thomas 1990; Hoddinott and Haddad 1995; Haddad, Hoddinott, and Alderman 1997; for evidence of the impact of this research on PROGRESA’s design, see Behrman 2007). Program communications often reinforce the message that women should not give this cash to their husbands but rather should manage it themselves. Beyond this common design feature, the extent to which promoting women’s status is emphasized, explicitly or implicitly, varies considerably across programs in different parts of the world. Some countries, such as Mexico and Turkey, provide higher transfers for girls’ school attendance than for boys’ and higher transfers for girls in secondary school than for girls in primary school. The former recognizes that parents often prioritize boys’ education over girls’, the latter that girls are more likely to be withdrawn from secondary school than from primary. Other countries, such as Nicaragua, provided equal transfers for boys and girls in primary school, reflecting less discrimination at that young age (Nicaragua did not have benefits for secondary school participation). In Bangladesh and Cambodia, where discrimination is a particular program target, transfers are provided only for girls’ schooling.

Other gender-specific dimensions of a CCT program are the means of promoting women’s health and nutrition. Health services often include antenatal, childbirth, and postnatal care; cervical cancer tests; and family planning, and many programs include health and nutrition workshops for beneficiaries (mostly women) as a conditionality. Another aspect of a number of programs that empowers some women is the system of promotoras, beneficiaries elected by the others to serve as their liaison with the program, who take on leadership responsibilities and organize activities for the beneficiaries. This system engages the broader group of women in collective activities and provides opportunities for dialogue and sharing of experience. In Chapter 13,
women describe how this system has increased their confidence, knowledge, and self-esteem.

There are other potential indirect impacts, reflecting dimensions of power related to individual and collective agency. A means of gauging the impacts of CCT programs on women’s status is by looking at intrahousehold relations—whether the woman is going out of the house more often, making spending and other decisions, or otherwise expressing changes in her status within the household—related to her role in the program. A second approach is to consider changing attitudes toward girls’ education among women, girls, men, and boys. A third way is to assess the extent to which beneficiaries understand the program—the degree to which they seem to be active agents versus passive “beneficiaries,” although this is a more difficult assessment. A fourth way is to look at collective activities in which women engage as beneficiaries and how this engagement affects them.

At the same time, there are concerns that a CCT program that gives cash to women increases their autonomy and requires a considerable amount of their time, which may have unintended negative consequences. These include increased time burdens on women and intrahousehold tensions as women balance home and program demands on their time and spend more time out of the home for program activities. Tensions may also derive from the program’s challenge to traditional gender roles in that money is given directly to women, challenging men’s masculinity, dignity, and identity as family breadwinners.

In both PROGRESA and the Nicaraguan CCT program Red de Protección Social (RPS), a beneficiary was elected by her peers to serve as a promotora.2 This is a nonremunerated but critical role within the context of CCT programs. Formally, the promotora (almost always a woman) is a liaison between the community and the program; in practice, this work usually consists of encouraging beneficiary families’ compliance with the conditionalities of the program; encouraging the uptake of program health, nutrition, and education messages; explaining the program to community members as a first (sometimes only) port of call when doubts or questions arise; and communicating with program managers at the regional level about issues that arise. Each promotora is responsible for a catchment area of beneficiary households and organizes the beneficiaries from these families into a group in which they participate in a range of activities, some of which are formal parts of the program, such as picking up their transfers, participating in training (pláticas in Mexico, talleres in

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1. Time demands come from formal program activities such as traveling to the municipal center to collect transfers, regular visits to clinics for their own appointments as well as those of children, and attendance at health and nutrition training workshops, regular meetings organized by promotoras, and parent–teacher meetings. Informal activities may include community improvement work and collective shopping trips.

2. Oportunidades later expanded this to a system of vocales and comités de promoción comunitaria, whose functions are described in Chapter 13.
Nicaragua), and attending regular meetings with the *promotora*. Some are informal initiatives such as shopping trips and community improvement days. *Promotoras* thus potentially play a role in promoting the skills, education, experiences, and self-confidence of the women who fall into their groups, and how the *promotoras* interpret these roles affects these outcomes for beneficiaries. The *promotora* herself also manifests perhaps the strongest evidence of "women's empowerment" caused by the program in that she is endowed with responsibilities and training beyond those of the ordinary beneficiary and—as will be seen later in this chapter—sometimes engages in decisionmaking and activities beyond her formally defined role, in ways that are unintended, sometimes even discouraged, by the program.

This chapter examines all of these issues—how women and men receive program messages and respond to the program's gendered design and the intended and unintended impacts of CCT programs—using research conducted with Mexico's PROGRESA and Nicaragua's RPS. The research in Mexico was conducted in the states of Guerrero, Hidalgo, Mexico, Michoacán, Puebla, Querétaro, and Veracruz. The primary research methods used were focus groups with beneficiaries, nonbeneficiaries, and *promotoras* and semistructured key informant interviews with school directors and doctors. The research in Nicaragua took place in the two departments where RPS was first implemented, Madriz and Matagalpa, in communities located in or near the municipalities of Ciudad Dario, Esquipulas, La Dalia, Terrabona, and Yalaguina. This study primarily used ethnographic methods, including household case studies, semi-structured and key informant interviews, and participant observation. Further description of the research design and methods of both studies is found in Maluccio, Adato, and Skoufias in this volume.

**Gender Relations and Women’s Status in PROGRESA**

The initial design of PROGRESA was explicit in promoting women's well-being and empowerment as a program objective. An early government policy document issued by the program stated: "PROGRESA seeks to improve the condition of women and empower the decisive role they play in family and community development. The aim in this regard is to satisfy their healthcare and nutritional needs, while providing them with information and skills to

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3. For additional information on methods and additional findings from the PROGRESA and RPS studies of gender issues, see Adato et al. (2000) and Adato et al. (2004), respectively.

4. The qualitative research team in Mexico was led by Michelle Adato and Dubravka Mindek; focus groups were carried out by Minerva Garibaye and Soledad Rojas; key informant interviews were conducted by Dubravka Mindek and Haydee Malca Quiroz. The qualitative research team in Nicaragua was led by Michelle Adato and Terry Roopnaraine; fieldwork was carried out by Fabiola Alvarado Alvarez, Leticia Böttel Peña, and Gladys Meléndez Castrillo.
promote their advancement. The focus in all cases is to ensure that mothers are the depositories and holders of all economic benefits for their households” (PROGRESA 1997, 3).

The PROGRESA research set out to explore two possible types of effects on women. The program had the potential to contribute to women’s empowerment through new resources, training, and discourse. On the other hand, these same features had the potential to introduce or exacerbate tensions between women and men in the household if men did not respond well to the program’s role for women. Past social assistance programs in Mexico had not given cash to women; many, such as programs offering food subsidies, were accessible to the household as a whole; others, such as the Programa de Apoyos Directos al Campo (PROCAMPO), an agricultural assistance program, gave the resources mainly to men, while parts of the Programa Nacional de Solidaridad transferred resources to community entities. Concerns were raised that altering deeply embedded gender relationships might end up inflaming intrahousehold tensions or even domestic violence (CIESAS 1998; World Bank 2003; Espinosa 2006; Maldonado, Nájera, and Segovia 2006; Rivera, Hernández, and Castro 2006).

We thus set out to explore how women and men perceived the program’s stipulation that women would receive the PROGRESA transfer. Beneficiaries and promotoras interviewed in our research were almost all supportive of this aspect of program design. They explained that the money goes to women because they are more responsible with it: “Men go around and say, I’m going to drink a soda, but the women don’t, because they think if I drink it, maybe I won’t have enough money for shoes, clothes. Women don’t eat. But the man on Saturday, he receives money, he takes it and if he finds his friends, he doesn’t care, he is capable of finishing all this money. To come home again without anything. So the worry is with the mother” (promotora, Querétaro).

In this category of responses, almost three-quarters specifically mentioned male use of family resources on alcohol. About half of the comments also expressed the belief that women have greater knowledge of what a household needs: they know when the house is out of a particular food, when the children’s shoes wear out. This response cannot be entirely attributed to a discourse introduced by the program, and about a quarter of this category of comments came from nonbeneficiaries; however, PROGRESA reinforced the message that women are better at spending money on their children through the training of the promotoras, who passed it on to beneficiaries. According to a promotora in Veracruz: “We were told at the beginning, that women know better how to

5. Note that the qualitative research on PROGRESA used mainly focus groups, and the reported proportions of response categories refer to the proportion of comments by focus group members making the specified point. This is not intended to imply a percentage of the 230 study participants (because some people may have repeated a point) but rather to suggest the strength of a particular response among the 230 study participants.
spend money—what we are going to buy for our children—and men don’t.” It is also likely that PROGRESA’s designation of women as beneficiaries caused people to think and talk about why the government did this, providing state recognition of and “reward” for women’s responsibility. This message reached nonbeneficiaries as well. A nonbeneficiary in Querétaro said: “[The government] took women into consideration because she is the one who thinks about what the family needs, about food. And because PROGRESA seems to be for the family, the children will have better nutrition.”

Women also reported that men largely supported women’s role in the program, mainly because it brought needed money to the family.6 A promotora in Michoacán claimed: “For us who have children at school, the truth is that the fathers like PROGRESA very much, because it is help for them, because the truth is their salary is very small.” This is consistent with research conducted on Mexico’s CCT program Oportunidades by Maldonado, Najera, and Segovia (2006), who found that the program provided men with a source of support that lifted some pressure off of them. Men were not threatened by the program because it was viewed as providing money for children, not primarily for mothers, even if the mothers controlled it. Men’s perspectives on women’s participation in program activities reflected preexisting gendered relations and attitudes.

We also explored this other potential area of contention—the program’s requirements that kept women out of the home—to attend monthly meetings, traveling to pick up the transfer, visits to the clinics, and the health pláticas (workshops). Many responses indicated that this did introduce some tensions but was manageable: given the additional resources brought into the household, the time was permitted without too much discord. A beneficiary from Michoacán said: “Sometimes I tell him, look, I am busy and like now, there is an announcement [the focus group] and I’m busy. . . . And he says to me, ‘If you won’t be here to give me the meal it’s O.K. You just prepare it and you go.’ But he never says to me, ‘Today you can’t go.’” Note that this comment implies that the woman still needs to take care of her household responsibilities, which means the program increases her time burden.7 Some women said that including men in PROGRESA general meetings at the program’s outset was helpful so that when the women needed to leave the house to participate in program activities, the men would understand why.

6. Men’s attitudes were explored in the focus groups with women. In Nicaragua, men were interviewed directly as part of the household case studies.

7. When this question was explored—whether women felt that PROGRESA’s requirements increased their time demands significantly, and if so, whether this was a problem for them—about an equal number of women said that this was and was not a problem. The question did generate a lively discussion, suggesting that this was a relevant issue. However, everyone preferred to receive the benefit despite any additional time burden.
Some households did experience conflict. A promotora in Querétaro explained that men did not mind when women left the house to get their payments, but some did mind when their wives attended other program-related activities: “Husbands get angry when women go to pláticas, or when we come here, or when they spend a lot of time out. Men get angry only when women go to faenas or pláticas. But when they go for the money, even if they go the whole day, they don’t get angry” (promotora, Querétaro). Promotoras sometimes helped beneficiaries to deal with these problems at home, letting them out of the faenas, although they were unable to release them from the pláticas requirement.

We found little evidence of domestic violence associated with the program. Focus groups are not good forums for discussion of domestic violence, except under carefully planned circumstances. Women in the groups mentioned domestic violence only nine times, speaking of it as something experienced by others, not themselves. A few referred to violence in connection with PROGRESA, but there was no evidence that it started with PROGRESA; rather, the program may have introduced additional provocations where this type of relationship already existed. A promotora in Veracruz described how in her community “it happened that women went to receive the money and the husband got drunk, and when she came back, he told her that she had to give him the money. But the woman didn’t want to give [it to] him, so he hit her.” During the research, conversations with local authorities revealed additional incidents of domestic violence in communities in Hidalgo and Veracruz. One local official said: “You see that woman, her husband hits her because he wants the money,” and “You see the other one, he gets angry because he doesn’t want her to go here and there” (both comments paraphrased). The official said that he assisted by speaking to the husband to explain why his wife had to go where she did.

In a later study of Oportunidades, Rivera, Hernández, and Castro (2006) found that the program was associated with less total domestic violence, less psychological violence in particular (controlling for women’s participation in household decisionmaking and women’s level of freedom). Violence was lower in Oportunidades communities as well, even for nonbeneficiaries, possibly indicating a wider community-level impact (although the authors also noted that the study may not have been able to detect the differences between beneficiaries and nonbeneficiaries on this issue). Domestic violence was also negatively associated with other indicators of women’s empowerment, such as decision-making and household spending, suggesting that the program could be reducing violence via increasing women’s empowerment and access to cash. However, the research was able to indicate only associations, not causality, because little was known about pre-program conditions. Another study of Oportunidades (Maldonado, Nájera, and Segovia 2006) explored the relationship between money

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8. Faenas were work parties of beneficiaries informally organized by health staff or sometimes by promotoras to clean the community, the clinic, and so forth.
and family tensions and found that domestic violence was driven by the nature of authority in the household and by the man’s perspective on gender roles, impulsivity, and alcoholism. However, these and other authors all point to the need for better research on the relationship between the program, intrahousehold relations, and violence.

**Intrahousehold Decisionmaking on Expenditures**

The impact of PROGRESA on intrahousehold decisionmaking was examined using survey and qualitative methods. De la Brière and Quisumbing (2000) used the data from the baseline Encuesta de Características Socioeconómicas de los Hogares in 1997 and three successive Encuesta de Evaluación de los Hogares surveys conducted in March 1998, October 1998, and June 1999 (see Maluccio, Adato, and Skoufias in this volume on the PROGRESA research design). Their study included a subsample of the 24,077 households in the evaluation sample with intact husband–wife couples during the panel surveys. It found that individual characteristics of spouses, including their relative education levels, work experiences before marriage, and whether they spoke Spanish or an indigenous language, had the greatest explanatory power with respect to intrahousehold decisionmaking. In comparison, residing in a PROGRESA locality had neither a predictable nor a strong effect on intrahousehold decisionmaking. However, household receipt of income from the program did have an effect on decisionmaking patterns, over and above the rest of the program’s effects. Husbands were less likely to make decisions on their own, rather than jointly with their wives, in several areas related to household and children’s expenses, and women were more likely to decide on the use of their “extra income” by themselves (de la Brière and Quisumbing 2000).

The qualitative research results were largely consistent, finding that PROGRESA did seem to have had some influence on decisionmaking, although not a strong one. The main point that emerged was that by giving women the transfers, the program put them in a position to decide how to spend the PROGRESA money and thus additional household income. Respondents also said that receiving this income gave them more confidence that there was enough to spend on items they identified as necessary; otherwise they did not feel in a position to judge whether the income generated and held by their husbands was sufficient to cover these expenditures. The following comment was made by a beneficiary in Querétaro about her husband: “Let’s suppose that yesterday we didn’t have PROGRESA. So I tell him we have to buy some clothes for the children. If I tell that to him, it is because I know that we do have what we received. But if we didn’t have PROGRESA, how could I tell him that? That

9. If the woman’s education and work experience were lower and she spoke an indigenous language, it increased the man’s likelihood of making decisions on his own. Decisionmaking categories were related to children and to expenditures, as suggested by Gómez de León and Parker (1999).
is why I am telling you that now we have more confidence. . . . He is the one who is going to work, and if the money doesn’t reach far enough, then how can I tell him, ‘Let’s go shopping’?” A few women said that the program also enabled women to buy things without having to first ask their husbands for money: “Now we don’t demand, every moment, ‘Give me for shoes, give me for that.’ Now we take the money from PROGRESA and we buy from that money. Now we don’t bother them so much” (beneficiary, Michoacán). This behavior has potentially contradictory implications, however; if women are spending program cash on items that used to be purchased by men, the net benefits to the women are reduced.

With respect to control of decisions on household expenditures, women generally claimed that the man was the ultimate authority in the family; if the man objects to something, the woman cannot do it. However, there was also a consensus that women make most decisions about small household expenditures, particularly food purchases. There was little difference in the comments of beneficiaries and nonbeneficiaries, suggesting that this hierarchy of intrahousehold decisionmaking preceded PROGRESA. Most comments on women’s spending decisions revolved around shopping at the market and making food purchases for children, because the mother knows best what they need. Promotoras were the ones who most often mentioned decisionmaking on issues other than food and other small household expenditures, which is consistent with the survey findings that higher education levels give women greater roles in decisionmaking and with the qualitative findings that the greatest empowerment processes occur among the promotoras who are given leadership roles and responsibilities.

If women are permitted to decide how to spend CCT money because it is seen as their money, and if the CCT means there is more money available for families to spend on food (which is part of women’s domain), the implication is that women receiving transfers make more decisions about such expenditures even if the types of decisions had not changed. There was also some evidence that PROGRESA money might have increased women’s domain of decisionmaking in that purchases of clothing and shoes were mentioned as areas of joint decisionmaking, and PROGRESA encouraged spending some of the transfers on these items. In households where men previously had to give permission for clothing purchases, PROGRESA turned over some of these decisions to women. A promotora from Michoacán said: “When they give [the transfer] to me, sometimes [my children] have shoes and clothes, then I save it for food. And if I see that my children need a pair of pants or something like this, I buy a pair of pants for my children. But it is always for them. I am the one who makes the decision about the money they give me, because I am the one who knows what they are needing.”

Questions in the 1998–1999 quantitative surveys on who makes expenditure decisions on children’s clothing, food, durable purchases, and house repairs indicate the hierarchy of norms among beneficiary and nonbeneficiary households in PROGRESA localities; roughly 62–75 percent of the respon-
students said these decisions were made by “both spouses,” and 15–34 percent said they were made by the “husband only.” “Wife only” responses varied considerably, from about 2–3 percent on decisions about house repairs and durable goods to 5 percent on those about children’s clothing to 19 percent on those about food purchases. From October 1998 to June 1999, in these program localities the “husband-only” category decreased for purchases of food and children’s clothing, and the “wife-only” category increased for spending the wife’s “extra income” (de la Brière and Quisumbing 2000, 30). These changes, which tend to reflect women’s increased decisionmaking ability, occurred as the program was in place longer, although it has not been established that the program caused these changes. The focus group responses were fairly consistent with the survey on most issues except food expenditures; the focus groups presented a much stronger view that women made these decisions on their own.

One way to interpret this discrepancy, as well as all of these answers on decisionmaking, is by recognizing that although there are formal categories and hierarchies of decisionmaking, there are also many shades of gray. A woman may strategically choose to say publicly that a decision is made by her husband or jointly because this is what is supposed to happen according to the norms of the community, even if in practice she makes these decisions.10 In a study by Silberschmidt (1992) in Kenya, women said that men should be consulted on all issues, but in reality women made many of the decisions themselves. This is strategic in the sense that the women get their own way while avoiding confrontation. Kabeer (1999, 447) cautions that statistical perspectives on decisionmaking “tell us very little about the subtle negotiations that go on between women and men in their private lives. Consequently, they may underestimate the informal decisionmaking agency which women often exercise.” Changes in power relations within the household are “often precisely about changes in informal decisionmaking, with women opting for private forms of empowerment which retain intact the public image, and honor, of the traditional decisionmaker but which nevertheless increase women’s ‘backstage’ influence in decisionmaking processes” (Kabeer 1999, 447–448; see also Chen 1983; Basu 1996; and Kabeer 1997). A more in-depth, ethnographic research effort would be needed to accurately understand these subtle patterns of decisionmaking and other manifestations of intrahousehold power relationships, as well as a CCT program’s effects on them. Still, the survey and focus groups together provide some insights into patterns for further investigation.

An important issue is whether men take women’s CCT income, or part of it. In the focus groups, few women spoke out on this issue, but those who did

10. Another possible explanation for the survey results is that the question “Who decides on food expenditures?” could be interpreted differently by the husband and wife, and sometimes it is men who answer the survey. The husband may decide on the total amount of money to be spent on food, while the wife decides what to buy (de la Brière and Quisumbing 2000).
said that men do not take this income. Following are several responses from a
discussion among a group of *promotoras* from Guerrero when asked whether
men take their PROGRESA income.

*PROMOTORA 1:* There are some [women] who get asked, but they don't give them
[their husbands] any.

*PROMOTORA 2:* They ask for bread and they don't get any [a line of a song]:
“piden pan, no les dan.”

*PROMOTORA 3:* I would say that they don't get asked for it. Or at least in my case,
my husband never tells me “Give me the money for me.” I tell him, “I don't
earn this money,” and we talk, and he knows they gave it to me for eating,
right? I tell him, “This money is for nourishment, and the other is for the
students, and this is for here [home],” and we buy everything, and we all
eat together, and he doesn't say, “Give it to me, give me some of it.”

It is important to note that most comments in this category were made
by *promotoras,* who are more likely to stand up to their husbands than are
other beneficiaries. Doctors interviewed said that one of their concerns with
PROGRESA is that men take the income from their wives (see Adato, Coady,
and Ruel 2000). Given the importance of this issue to understanding the gen-
der dynamics of the program, and given the likelihood that beneficiaries may
not be candid when they know their spouses are not supposed to take the
money, this is another area for research using qualitative methods better suited
to understanding and observing sensitive social relationships.

*Self-Confidence*

When asked whether participation in PROGRESA made the respondents feel
differently about themselves, gave them new confidence, or in any way changed
their relationships with their husbands, about three-quarters of the comments or
discussions generated implied affirmative answers. The remaining comments
implied that there had been no change. Most of these negative responses referred
to the women’s relationships with their husbands, suggesting that the program
had affected how women saw themselves but that affecting intrahousehold re-
lationships is more difficult. Two-thirds of the positive comments came from
*promotoras,* because first, they tended to better understand what we were get-
ing at with these questions, and second, there was greater scope for this type of
empowerment among *promotoras* than among beneficiaries given the leadership
responsibilities they take on. However, *promotoras* were also asked to respond
based on what they saw among beneficiaries in addition to their own experi-
ences, which many did, as will be seen in the comments that follow.

The first type of change reported, by *promotoras* in Michoacán, was that
the women leave the house more often, for meetings and *pláticas* and to collect
their benefits:
PROMOTORA 1: I have seen that for all mothers, like indigenous women that we are, things changed a lot.

PROMOTORA 2: I notice it because now women participate a lot, when there is an assemblea, or meeting, or plática. They participate a lot because they have this responsibility, in order for the support to come.

Some comments suggested that the program resulted in less male control of women's movements outside the home and a greater awareness among women that they should be able to leave the house. Although it is likely that in order to become a promotora a woman has more freedom of movement than the average woman, many promotoras described changes they observed in themselves through their involvement in the program: “It’s not the same. More than anything, in my case, now we [my husband and I] know each other a little bit more. We have more trust in each other. And the women, we know whom we have for a companion, like a friend, that we can treat as a husband and not as a rival. We won’t have with us a macho man. Like those that don’t give us permission to socialize with the others. Those are macho men that don’t understand their wives. Those that have them like slaves” (promotora, Michoacán).

Another comment from a Veracruz promotora suggested that the greater mobility of promotoras extended beyond their PROGRESA activities. She also made the point that designating women as beneficiaries gives them new status through the government recognition of their importance: “Now we see that they [government officials] are taking us into consideration, that the government cares about us, the women. It’s not like before when PROCAMPO came only to the men. And the husband used to tell us, ‘Today I will take you to Tantoyuca,’ so he took us to Tantoyuca, nothing more. Now with the money of PROGRESA, I go anywhere. I take my children visiting. At least every two months we take our children visiting. So they can see that what we receive, we share it with the whole family.”

The meetings promotoras held with beneficiaries, and how these were used, were also important for promoting women’s confidence and their “sense of self in a wider context” (Rowlands 1998, 23). A promotora from Guerrero explained:

Beneficiaries defend themselves better since PROGRESA . . . because they speak with each other . . . beneficiary with beneficiary, with other women who are in the program. For example, in my community I hold a meeting and we begin to talk, and they have more experience. Now they know how to speak more. Because they ask each other things . . . For example, here we are in the meetings, we have a chat, and we ask you, how do you handle something, how did you do it? That is how, one to the other, we open our minds. Well one thinks better, we guide each other more.

The importance of these meetings facilitated by the promotora is explored further in Chapter 13.
Adult Education

Another area in which a CCT program contributes to women's status is through the education that they receive in the health workshops, or pláticas. Although most CCT programs do not provide adult education such as literacy or numeracy training, beneficiaries do gain new knowledge and skills related to health and nutrition. The focus group responses were strong on the subject of the pláticas. Among these responses, the three most frequently raised topics were family planning and prevention of illness, primarily hygienic practices and illness detection, and care of children. None of the positive comments on family planning came from women in the two indigenous communities in the study, with the exception of one from a promotora in Hidalgo. The full range of topics that people mentioned were food preparation, feeding children with liquid salt solutions, vaccinations, pregnancy checks, mosquito protection, boiling water, boiling vegetables, washing vegetables and fruits well, using disinfectants or chlorine, cooking foods well, keeping foods covered from dust or flies, washing hands, pneumonia, digging holes to bury or burn garbage, AIDS protection, birth control, family planning, medicines for different illnesses, cancer detection, use and cleaning of latrines, and how to prepare baby food and juice, choose nutritious foods, monitor children's weight in relation to their age, grow their own vegetables, and select between organic and inorganic garbage. A Michoacán promotora said that since PROGRESA "it is not the same. Because before the women were more closed in their minds, and now they are more intelligent." A second type of comment refers to changes that have occurred in women's relationships with men as a result of what they have been taught in the clinics. For example, a promotora from Guerrero said, "It seems yes, the men give more place to the women because before PROGRESA they had one child every year, but now they allow them to grow up, they plan families now."

In asking women what other types of education they would find useful, we attempted to direct the discussion toward types of education that related to the objectives of PROGRESA. However, the women's discussions consistently veered toward skills that women would like to learn in order to engage in productive activities. This was revealing in terms of understanding women's aspirations and priorities and the types of government interventions that would respond to these. The women spoke highly of PROGRESA and the benefits it brought them in terms of extra money and health and education improvements. However, when asked what type of programs they most wanted, the women consistently spoke first of employment. After productive skills, the second

11. An increase in the use of contraceptives among PROGRESA beneficiaries was found by Steklov et al. (2006), as well as among Oportunidades beneficiaries in 2003 (Hernández Prado et al. 2005).
12. Because these respondents already had PROGRESA, this should be seen in terms of an additional program desired, not necessarily a preference over the CCT. However, this finding
largest category of responses included reading and writing. The women wanted these skills in order to sign papers, help their children with their studies and homework, and "defend themselves" (for example, to avoid being "tricked"). A *promotora* in Querétaro said: "I think in the community there are many people who in the first place can't write their names. At least [they should be able to learn] to write their name, to sign a paper." A beneficiary from Michoacán said she would like education: "More than anything to help my children, because sometimes they ask us, 'Mother, I don't understand in here,' and if I don't know, what can I say? And if one knows a little, then one can solve their problem, teach them wherever they can't solve."

In total, over 100 comments were made by women about new skills they would like to learn, implying that CCT programs could do more to incorporate adult education. The idea of helping people out of poverty through access to skills and opportunities for participation in the formal and informal economies was not entirely outside the vision of PROGRESA. Early policy envisioned coordination with other government departments in order to provide access to skills training and new economic opportunities, with an emphasis on productive activities for women. As an early policy statement declared:

> The struggle against extreme poverty by means of targeted actions should not only [involve] the development of capabilities of the members of poor households and greater access to basic social infrastructure, but also the opening of new income alternatives. Through coordination with various federal agencies and state governments, PROGRESA will seek to foster productive actions and projects in the areas where it is implemented . . . initiatives aimed at groups of the poor population that have traditionally only had limited access to options for carrying out productive activities, such as women, will also be emphasized. (PROGRESA 1997, 26–27)

In some states PROGRESA began efforts to link beneficiaries with opportunities to engage in productive activities, but the idea encountered diffi-

supports part of Molyneux's (2006) argument that criticizes CCT programs for fortifying and normalizing women's traditional motherhood roles and identities instead of providing them with opportunities for employment and securing sustainable livelihoods. We agree with the need for these types of opportunities, and our respondents did as well. We are less concerned, however, with the program's emphasis on motherhood roles, because women will assume these roles regardless of their employment opportunities, and a program that supports them in these roles is helpful, particularly where it also enables them to improve the health and education of their children. We also observed that the program's recognition of these roles gave the women we interviewed a considerable sense of pride and meaning. It is likely that a program that ignores the gendered nature of women's roles and the resulting specificities of their needs would also draw fire. However, the concern that CCT programs are in themselves an insufficient strategy for empowering women is a valid one.
culties and did not go very far. Given the complexity of the basic education, health, and nutrition CCT program, it could be argued that PROGRESA should focus on its core objectives and not take on responsibility for other development activities. Still, beneficiaries offered a compelling case for finding ways to develop linkages to other opportunities for them.

Another way to improve the adult education dimension of CCT programs is through attention to men’s education. Men’s attitudes toward women and girls and toward education and health affect the extent to which women are able to take advantage of the benefits that a CCT program offers: for example, whether women can keep their PROGRESA money and decide how to spend it, whether girls can go to school, and whether women can use the health services offered or put into practice what they learn in the health pláticas, such as the cervical cancer tests and family planning. Some women suggested that men are somewhat “abandoned” by the program because everything is aimed at women and their children. When asked what type of education that they would like for men, the weight of women’s responses were the reverse of how they answered for themselves. Although some comments suggested education that would promote income-generating skills for men, about twice as many referred to education that corresponded to what the women were learning in PROGRESA and other issues that affect how men behave in the household. Training proposed included how to treat women and the family, prevention of domestic violence, education for couples, and the importance of healthcare for the entire family, including men. Some answers were interesting in terms of what they revealed about intrahousehold social relations, suggesting aspects that women did not raise elsewhere in the discussions. For example, while women said little about experiences of domestic violence, several proposed education in domestic violence and “how to treat the family.”

Attitudes toward the Education of Girls

Although the cash incentive is the main tool to encourage girls’ schooling, supportive attitudes toward girls’ education among mothers and fathers is important to making the program work and making outcomes sustainable over time. Based on their 1998 study, researchers at the Centro de Investigaciones y Estudios Superiores en Antropologia Social raised the concern that families were sending their children to school in order to receive benefits, predicting that when the program ends, attendance would again decrease. We found similar

13. Oportunidades has since offered savings and investment opportunities for youth: Jovenes con Oportunidades is available for young people who finish high school and can be used for further study, starting and supporting a business, improving a home, or buying health insurance (see Yasmine and Orozco in this volume). More recently, there have been efforts to link CCT programs in Latin America with savings schemes (Edge Finance 2007).
concerns among some school directors we interviewed. Changes in parents’ attitudes toward girls’ education, in particular, should make it more likely that girls would stay in school over time rather than drop out once the initial enthusiasm about the program wore off, when the benefits were delayed, or if the program were to be withdrawn altogether (we say “more likely” because economic constraints may make school continuation impossible regardless of attitudes). We thus explored how the program’s school requirements for girls corresponded with the beliefs of mothers and fathers and how the program might have affected those beliefs.

In a socioeconomic environment in which most women do not work in formal employment and opportunities for using secondary education in the market are limited, one might expect attitudes toward girls’ education to be ambivalent—or negative if girls are needed to work in the home. However, we did not find this to be the case. Women’s aspirations for their daughters were reflected in their strong responses supporting girls’ education. About 90 comments or discussions gave reasons why it was important to educate girls. The main reason, stated in about half of these responses, was that education is important in terms of girls’ ability to obtain employment or better employment—higher-paying and less demeaning or exploitative jobs. The next most frequently stated reason reflected the concept of a better life generally, related to income, personal development, and position in the family. The third largest category of responses suggested that education allows girls and women to better defend themselves in their relationships with men and in the public sphere.

Interestingly, in the majority of responses mentioning the importance of work, this was explained not in terms of a woman’s contributing additional income to the family but rather in terms of the possibility that the marriage might fail—that the man might leave her or that the relationship will otherwise end badly and she will be left to support herself and her children. A promotora in Michoacán said: “Us women always should study more because sometimes when we get married we don’t know who we are marrying, we don’t know what responsibility he is going to have toward us, if they treat children well. Sometimes the husband leaves and us women keep the children. How are we going to maintain those children that stay under our care if we don’t have any study, if we don’t know how to earn something that is not working as a house maid, or that it’s not so little that it won’t be enough for the family?”

Many responses suggested that education permits girls to get not only employment but also better employment. Many women mentioned the importance of education in enabling girls to get work other than domestic work, although some pointed out that in some areas even maids need a secondary education.
The second theme that emerged in explaining why girls' education is valuable suggests that the educated girl would be in a better position in her marriage. An educated girl is seen as being able to “defend herself” better within the household (promotora, Veracruz); she is “better treated” (beneficiary, Michoacán); she is “not only waiting for her husband to give her everything, but she is working so they can help each other and they are a better family” (beneficiary, Querétaro). Education also means that women can “value themselves” more (beneficiary, Querétaro). When asked how a wife is treated who finished secondary school, promotoras in Michoacán said “better.” Following is part of a conversation between two promotoras.

**PROMOTORA 1:** Because she has better knowledge, he can't trick her so easily.

**PROMOTORA 2:** Trick her in the sense that “You stay cooking and I go to work, and you better finish cooking.” Then the one who studies, even preparatory, has more vocabulary, and she says, “You don’t have those rights, I also have my rights.” It’s supposed to be better because one who doesn’t study is always more narrow-minded, but those who study are more confident.

Other comments suggest that women who study marry later and that this makes their lives better.

Outside of their households, better-educated women were said to be given greater respect and to be able to function more easily in the public sphere. The following comments were made in a discussion among nonbeneficiaries in Guerrero:

**NONBENEFICIARY 1:** We go to Sinaloa, and we have seen people who don’t know how to speak with us; they only speak Mixteco. . . . The doctor passes by, and if he sees that you know, they attend you right away.

**NONBENEFICIARY 2:** They don’t understand, those poor people, they can’t read and they show them the paper or the doctor writes what he wants and they don’t know: “Look if you don’t know, move,” even when the son is dying in her arms. I’ve seen that many times. . . . For that reason, not only the man is going to [learn to] read, also the woman.

The implication is that the impacts of PROGRESA/Oportunidades on intra-household relationships are likely to be greatest in the long term, affecting, through higher levels of education, the next generation of women even more than it affects current beneficiaries.

These views on education suggest that the program supports the aspirations of women and their hopes for their daughters’ futures. It cannot be said that these attitudes resulted from the program, although the program reinforces them and promotes a discourse around these issues that includes beneficiaries, nonbeneficiaries, and men as well as girls and boys. If the education of girls
was valued before the program, the CCT program’s emphasis on educating girls (underscored by the higher transfers for girls’ attendance than for boys’) provides government reinforcement of these values, supporting the mothers’ views as valid, as well as the financial support to make it possible.

Nonetheless, when comparing the importance of girls’ education to that of boys, the women tended to favor boys, their explanations revealing less distance between their attitudes and those they attribute to men than was suggested by their discussion of girls alone. Their reasons were men’s responsibility as breadwinners and heads of households and the fact that girls get married. A smaller group of responses, mostly from promotoras, favored girls’ education over boys.

We did not receive responses suggesting that PROGRESA had influenced men’s attitudes toward girls’ education. Although we did not interview the men directly, the women said that the biases of men against girls’ education were still strong. The fact that men seem to be allowing their daughters to attend school should thus be viewed as a program accomplishment. Where government programs challenge sociocultural biases, they may succeed in changing attitudes by the de facto presence of girls in school, by generating discussion and awareness around the issue of girls’ education and denormalizing the bias against educating them, and by giving girls a chance to succeed and demonstrate the spin-offs of their education. That value will be less apparent, however, as long as there are few employment opportunities for women, and they appear not to “use” this education.15

CCT Programs and “Agency”: Beneficiaries’ Understanding of the Program

Discussions among beneficiaries and promotoras revealed that although they were aware of what the program requirements were, they had limited understanding of some of the reasons the program was structured as it was. One such area of limited understanding was the structure of the cash grant—why the grant was higher for girls’ school attendance than for boys’. Most of the women thought the reason the grant for girls was higher was that girls have higher expenses than boys, needing cosmetics and more expensive clothing. Surprisingly, almost half of these responses came from promotoras, who would be expected to have a better understanding of program structure. Some promotoras, however, explained that the higher grants for girls were to en-

15. This depends on the strength and nature of the bias, however. In Turkey, Adato et al. (2007) found that in some regions, the attitudes toward girls’ education, shaped by collective beliefs around gender roles, sexuality, and honor, were too powerful to be overcome by either cash or government urging. The findings of this study of gender and CCTs in Turkey were very different from those of these Latin American cases.
courage fathers to allow their daughters to keep studying, because men were harder to convince. Although the program is evaluated more on whether it is successful in keeping girls in school than on how well people understand the logic of the incentives, from an "empowerment" perspective, the latter would enable women to engage with the program from a position of agency, in which they were more active and informed participants. Oportunidades has stated the intent that beneficiaries are to be "active subjects in their own development" (Oportunidades 2003). The findings on PROGRESA suggest the value of forums for promotoras and beneficiaries to discuss these issues, both to increase understanding of the program and to provide a new channel for increasing women’s empowerment through collective activities. These issues are explored further in Chapter 13.

Gender Relations and Women's Status in Nicaragua’s RPS

The study of RPS in Nicaragua used household case study methods to explore intrahousehold social relations via observation, develop a rapport over the course of medium-term residential fieldwork, and speak with women, men, and children. We explored issues similar to those addressed in the PROGRESA study because the same interests in women’s empowerment and concerns over intrahousehold tensions were raised in the Nicaraguan context, and findings could then be compared with those from the Mexico study. In large part, our findings were similar to those from Mexico, perhaps because the rural context of Nicaragua shares some characteristics with that of Mexico (compared to, for example, findings on CCT programs and gender in Turkey and Bangladesh; see Adato, Feldman, and Karelin 2009).

Transfers to Women: Effects on Gender Relations and Women's Status in the Household

Most of the women and men in the case studies said that women control the spending of the cash transfer (called the bono in RPS), which is experienced by women as a new form of power. Men and women agreed that women tended to be better administrators of money and knew what foods the household needed. Some women said that because men controlled the money they earned, it was right that women should control the program money that was given to them. Many men cited men’s likelihood to spend money on vices such as alcohol, tobacco, or gambling. They pointed to their own weaknesses (or, more precisely, those of other men—never their own) as a reason that it was better for the family for the money to be given to women. There was also an awareness among women and men that the program expected women to control the spending of the bono. There were, however, cases in which men took program money from
women to spend on their own needs or vices. In four of the six study communities, a few women and men said that they knew of some cases of men who took part of the bono or women who gave it to them. It is hard to know whether individuals did not want to acknowledge such cases where they occurred. Nevertheless, the fact that women and men were acutely aware that the program expects women to control spending gave weight to their ability to do so.

Another factor that tended to associate the program with women was its association with the “domestic sphere” of food preparation and care for the home and children. This was widely cited by men as a key reason that the benefits should go to women and suggests another reason that men do not feel threatened by the women’s role as the cash recipients. As indicated by the husband of a beneficiary, programs that deal with men’s domain (for example, the fields) would be expected to give resources to men, but RPS was (appropriately) given to women: “I think it’s all right, it is women who know what is needed in the kitchen and the house. When it is about agriculture and crops, it is men who know better, because other organizations have come here with help for men. But when it is about the kitchen, it is good that women are the beneficiaries, because that avoids many problems” (ECH Julio G).16

Although the cash transfers were designed to be spent for the benefit of the household and especially for that of the children, the fact that they were given to women, and that it was women who made the bulk of the expenditures using this transfer, did give women a new form of power. Women noted that they no longer had to request money from their husbands to do shopping and that they now had a more equal relationship with men. One beneficiary said: “All of us mothers had a custom that it was men who ran things at home, that if they were the ones who earned the money they had to give us what we were allowed to spend. So we had to be asking for money all the time, but not any more . . . now since they see that we are the ones who get that transfer and we buy what we need for the house, they are getting used to that.” She continued by saying: “When they [the men] receive their weekly wages, they give them to the women, and now we are the ones who do the shopping. Before, you would see almost only men doing the shopping and taking the things home to women, not any more” (ES Amalia T). Another beneficiary, in discussing decision-making around expenditures, said that now she felt a greater sense of equality as a result of having her own money to spend, “because . . . maybe a woman wanted to have a job to help herself and her husband, but what happened, her

16. As in Mexico, in the Nicaragua study, community names and individuals are not identified to protect confidentiality. The names of “departments,” the equivalents of states, are not noted here because the study was located in just two of these. For identification purposes, a code is used: in this case, “ECH Julio G” indicates an adult male member of a household case study (EC), with pseudonym Julio G. Where “ES” appears in a code name, it indicates a semistructured interview rather than a household case study.
husband would tell her that she couldn’t work because she is a woman. But we are equal, the difference is very small” (ES Fatima U).

As in the case of PROGRESA, this study found few references by men or women to negative attitudes toward or conflict over women’s participation in the program, the places they went, or the time they spent on program activities. Men seemed to have adjusted to the program. One beneficiary said of her husband: “He always supported me; he never asked me why I was attending so many workshops, why they asked me so many questions, or why they took me to different places. We never had any problems” (ES Fatima U).

RPS and Women’s Self-Esteem

Across all six program communities, between half and nearly all respondents (usually the beneficiaries themselves but sometimes other members of the case study households) reported that beneficiaries’ self-esteem had improved since the program began. Women said that they felt more independent and that their husbands were more “respectful,” mainly because the women now had their own money and could make their own decisions as to how to spend it. As one beneficiary said, “That money we receive in our own hands is really ours” (ES Urania U).17 As in PROGRESA, beneficiaries reported that the time women spent together in program meetings with the promotora or in the workshops increased awareness of women’s issues such as women’s rights and gave them a chance to speak up in public and share their experiences with other women. In one community, a beneficiary said, “I feel different. I feel I have more rights and more capacity. I meet with friends and I have the right to speak and say everything I feel. I can express myself.” A woman from another community explained that “at the beginning, people were shy because they were just starting in this, but not any more. Now we have trust and we talk. We didn’t at the beginning because it was embarrassing. At least I felt embarrassed. They would never make me speak, but now I participate” (ES Ana D). Although a discourse around women’s equality in Nicaragua preceded RPS, the program’s focus on women appears to have increased it. The following comment was not at all typical, but it is worth noting to illustrate the effect the program can have through the discussions that can take place in workshops: “I tell him [my husband] that he is not the only one who rules in the house, that I also rule, that we have equal rights. He works outside the house, and I work inside. Before, men used to say that they were the only ones who ruled in the house because they were the only ones who worked; they didn’t see the work women do. But now I tell him that

17. This is an issue on which a notable difference was found between the intervention and comparison communities: in the latter, women were more timid, expressing more of an acceptance of women’s subordinate role. One respondent in a non-RPS community spoke about participation in community meetings there, where “some husbands don’t let them participate in the meetings we hold. . . . their husbands prohibit them. I think those things shouldn’t be happening any more” (ES Alba S).
we work the same. Now there is no machismo. Now it is different, because we have learned some things at the workshops” (ES Rosa M).

Men rarely spoke directly about women’s equality. Rather, they recognized women’s greater expertise when it comes to matters of the kitchen and the care of children, and also women’s better judgment with respect to spending. However, though not usually explicit, the focus on women in the program and the program discourse in the community had some effect on women’s status. For example, a beneficiary’s husband recognized a change: “Well, it’s true that men are the head of the family, that is what the Bible says, men are the heads of women. But now I have seen a change here, a big change for women since this project came” (ECH Roberto C). An open question is the extent to which such changes in the women or men would endure once the program was no longer there, putting women at its center and giving them their own money to spend. Although there might be some lasting impact, it seems likely that the power given to women by enabling them to spend independently could recede once these benefits were no longer available.

Social Impacts of the Health and Nutrition Component

Although the survey methods were better for determining the health impacts of RPS, qualitative methods were used to explore the social impacts of the health and nutrition components of the program. Women reported that they felt different in their relationships with their children. One beneficiary said: “I understand about their growth, and I know how to take care of them so they don’t get sick anymore” (ECT Nidia V). In addition to perceived improvements in their families’ health, beneficiaries also reported improvements in emotional well-being. Stress was reduced because people could count on new funds to buy food for the household and school materials for their children, and many beneficiaries reported being “happier.” There was also a satisfaction that came from feeling that they had succeeded at meeting the objectives of the program and that they were responsible for having improved the well-being of their children. One woman said: “Before, we used to take the children to the health center, but we didn’t pay attention to the child’s weight or his measurement to see how he grows. Now one knows that they weigh the child every two months, and one knows if the child gains or loses weight or if he grows” (ECT Carmen O). The research found that people perceived a change in attitudes toward health across all the communities, but mainly among women. The picture among men was more ambiguous, with some claims that there had been improvements in men’s attitudes toward family health, while others said that there had been none.

Another sign of the program’s impact on attitudes toward health was women’s efforts to spread knowledge about health issues to others. In two of the study communities, beneficiaries explained their attempts to transfer their knowledge to their children or daughters-in-law who were not beneficiaries so
that they could also put into practice all the lessons they were learning about health, home hygiene, and the preparation of new types of foods. More than half of the households said they shared information that they learned in the workshops, and this was occasionally observed by the fieldworkers. In two of the communities, some people said they would not share information because, for example, it was “only for the group” (ES Maria E) or because it might cause frictions if people did not like the information, for example, in the case of family planning or other practices that were new.

Family planning was a topic of the health training, and the research looked at how people were responding to these messages and found results that varied across communities and families. Beneficiaries had received services and education, and many agreed with the idea, but the degree of practice varied. Some women were older and did not need it; others were young and starting their families. Men were said to have become more understanding of family planning, and some were in agreement. One woman said: “Their husbands know; now they understand. So a woman just tells her husband that she is going to practice it, and he says yes” (ECT Martha A). Other women practiced family planning in secret, telling neither husbands nor friends, and some kept their family planning cards at the house of someone living near the clinic. There was generally less support in primarily evangelical communities, where many believed family planning was a sin. One woman said: “If God didn’t want to give someone a child, it is not hard for him to stop it from happening. . . . I have never tried not to have children; they even have begged me to do it but I have never liked that.” Others feared that contraception would give them cancer or make them sterile.

Steklov et al. (2006) found that CCT programs were associated with a rise in contraceptive use in Mexico and Nicaragua, likely attributable to the supply-side reproductive health services and education.18

**Beneficiaries’ Understanding of the Program**

As in the case of PROGRESA, beneficiaries had a general understanding of the health and nutrition objectives of the program and a good basic understanding of the main program requirements, but there were also some misunderstandings that call into question how well informed women were about the program. One example was the lack of beneficiary knowledge that a major element of the program design—a conditionality—had been canceled. This was the requirement

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18. It might be that a decrease in fertility is a sign of women’s empowerment, as suggested by a reviewer, although there are many reasons that fertility increases or decreases. However, most evidence to date indicates that cash transfer programs have little or no impact on fertility, probably because the reasons for fertility decisions are more complex than can be affected by a small cash transfer infusion, whether or not grants are given per child. No impact was found in Mexico or Nicaragua, though a small increase in fertility was found in Honduras (Steklov et al. 2006).
that children gain weight over a specified interval or be dropped from the program. Program officials quickly recognized that this was excluding children who might most need the program and dropped this requirement, but this was not adequately communicated, and mothers were going through considerable stress over whether their children were gaining weight, going so far as to stuff their children with food and liquids on the day of growth monitoring.

Another interesting set of findings, also related to program understandings and misunderstandings, show that promotoras can paradoxically empower themselves through a practice that, to some extent, disempowers beneficiaries. For the most part, beneficiaries understood that they were supposed to spend the transfers on food, children’s clothing and school supplies, and other basic household necessities. The program recommended how funds should be spent, but there were no sanctions associated with expenditures. The research found, however, that some promotoras had taken it upon themselves to monitor what beneficiaries bought, in many cases requiring that beneficiaries show them receipts for their purchases. This was reported in all six study communities, although in some communities promotoras had taken this task more seriously than in others. In most cases, beneficiaries were told to keep their receipts. In one community, the promotora actually went to the houses of the beneficiaries to check the receipts.

Some promotoras were also pressuring beneficiaries to buy in particular stores. One declared reason was that these stores gave receipts. One promotora actually told beneficiaries that they would lose their benefits if they did not shop in a particular place. In some cases, the promotora also monitored the shops for the protection of beneficiaries. In one community, she monitored purchases but also prices. In another, she monitored whether the shop owners were cheating her beneficiaries. In all cases, the promotoras had given themselves new responsibilities that were not intended by the program: “I go shop by shop in order to supervise things. Sometimes I ask the shop owners if people are buying in their shop and how the sales have been” (ICP Katia R). One beneficiary said that the promotora would be “next to you when you shopped because sometimes there were shops where they prepared the little bags with the product beforehand and gave you less than a pound. Now we don’t buy anything if they don’t show it on the scale” (ES Maria N).

This raises several issues. One is the importance of empowering beneficiaries to know the program structure and rules, in order to avoid stress over non-existent demands or unintended control of their choices. From a development perspective that values agency, this lack of knowledge is problematic. Yet the monitoring of receipts encouraged beneficiaries to buy foods that were likely to improve family nutrition. The paradox posed here is coupled with another one—that in requiring receipts, promotoras were exercising their own agency, shaping the program as they saw appropriate to achieve the program objectives. It is an indication that promotoras had a sense of ownership of the program and
its nutrition-improving objectives, even if they were subverting the centralized and well-reasoned program planning.

**Attitudes toward Girls' Education**

Although the primary objectives of the education component of RPS was to keep children in school and reduce child labor, there were secondary objectives aimed at how parents think about their children's education. One was to foster, via a small cash transfer given to parents to give to a child's teacher and school, a greater sense of co-responsibility for their children's education. Furthermore, the program needed to influence parents' attitudes toward their children's education in order to help ensure that children would stay in school once the benefits were withdrawn. Given the potential biases against girls, it was particularly important to see whether the program had changed attitudes toward girls' education.

The research found a strong commitment to children's education: parents and children interviewed across all study communities emphasized the importance of education. There was also broad support for equality in education: virtually all respondents said that girls' education was just as important as boys'. This is less surprising since RPS operated just at the primary school level, but is still significant. Although parents recognized that hardships lay ahead once the program finished and that contributions to the schools and teachers would be difficult without the teacher transfer, there was a widespread commitment to the value of education. One father said that he would continue to send his daughter to school even after she had outgrown the education transfers: "As long as God keeps me alive, even if I have difficulties, she won't stop going to school. Maybe, and if God permits it, she will be successful in her education, and I am getting old, so maybe she can help me in my old age" (ECH Nelson A). This was consistent with results from the quantitative evaluation of RPS, which found no significant differences between the enrollment rates of girls and boys at baseline or evaluation (Maluccio and Flores 2005, 48–49), and suggests that, as in the case of PROGRESA, these attitudes largely precede the program. Yet the survey also found that children who had started out receiving the education benefits but had stopped receiving them as they passed the maximum grade eligibility (grade 4) were continuing to attend school beyond grade 4 despite the end of the transfer (Maluccio and Flores 2005, 42).

**Conclusion**

The research in Mexico and Nicaragua had largely similar findings with respect to the impact of the CCT program on women's status and gender relations: women and men generally supported giving benefits to women, mainly because they saw women as more likely to make better expenditure decisions for the family. Women still adhered to cultural norms of securing the consent of spouses before making certain purchases, and also to general spending patterns that
were recommended by the program (for example, using the transfers to purchase food), but they were spending money independently, and this was experienced as a new source of power. Men’s acceptance of the women’s role as beneficiaries in both countries can be understood in part through people’s association of the program with the kitchen, home, family, and children—reducing the challenge to men’s traditional decisionmaking authority and control of resources. We found relatively little evidence in either country of increased tensions within the households as a result of the program; on the contrary, the programs were mostly said to have reduced the stress caused by insufficient resources. There was also little evidence that men were taking women’s transfers, although this was an issue difficult to explore conclusively.

In both countries, the health pláticas were an important source of education and skills training for women, where women learned about a wide range of issues related to health and nutrition, although in both countries improvements were needed in the quality of this training. Both programs revealed the need to improve communications with beneficiaries. (Oportunidades has since taken actions to improve the quality of the pláticas and communications.19) CCT programs can go much further to promote women’s empowerment through education: either directly or through linkages with other programs, women need literacy and numeracy training and access to skills and opportunities to engage in productive activities.

Collective activities such as beneficiary meetings at which women gather and discuss their experiences are an effective but underused means of contributing to women’s empowerment in CCT programs, an issue explored further in Chapter 13. Where they have been used for this purpose, the responses are striking. Whether, how, and to what extent a CCT program promotes “women’s empowerment” depends on program design—how much their empowerment is an objective of the program, how this is operationalized (i.e., how activities are interpreted and implemented by program officials and promotoras), and how these activities are received by the beneficiaries and their families and neighbors.

There is considerably more scope for improving women’s status than is embodied in the basic set of program benefits and conditionalities. Colombia’s Familias en Acción, for example, has an assembly (La Asamblea) of all beneficiary mothers that can make recommendations about program management and operation within the municipality, provides social connections and moral support, and engages in information sharing, consultation, and activity planning (Combariza 2006). La Asamblea elects a smaller group of leading mothers (similar to the promotoras) who are responsible for helping beneficiaries understand and meet program obligations and for communicating complaints, petitions, and updates to program officials. Leading mothers receive training

19. RPS has since closed (see Moore in this volume).
and plan "care get-togethers," forums in which mothers can gather and discuss health, education, and other important aspects of their lives and communities (Combariza 2006). Oportunidades has also strengthened the promotora system, increasing the training and roles of these women (these developments are explained in Chapter 13 of this volume). Efforts are under way in Latin America to link women in CCT programs with opportunities to join savings programs, modeled in part on successful popular savings programs for women in Peru (see Edge Finance 2007).

Other programs have offered fewer opportunities for women beyond the cash transfers, either because implementing the basic CCT program design already demands the maximum capacity they have available or because other program design features will not work in a given sociocultural context. For example, Turkey's Social Risk Mitigation Program was based on the Mexican model but has not had promotoras. An exploration of the potential for improving communications through a promotora system found a low level of confidence in its feasibility due to the specificity of social relations in the three regions where the research took place (Adato et al. 2007). Whether and how CCT programs empower women depends in part on the sociocultural context of the program communities. Social relations and beliefs and biases embedded in history, culture, and religion, as well as the role of women in the labor force, mediate the reception of these programs, affecting program participation and impacts. To be effective in improving women's status, CCT programs must do more than adopt a blueprint of gender-targeted design features, for example, assigning benefits to women and giving transfers to girls for schooling. As such programs move across the globe it will be key to pay attention to the specific constraining factors in each country and subregion—for example, in the case of indigenous populations—that explain education and health outcomes. If girls have nearly universal primary school enrollment, more funds should be directed to promoting secondary school enrollment. If graduating from high school is a problem, a graduation incentive (such as Oportunidades has offered) makes sense. If transportation or the location of schools is the problem because parents see risks to their daughters, tackling these supply-side issues may be more effective than a household cash transfer. In India, a CCT program is conditioned on delaying marriage to age 18 and school completion (Chaudhury 2007), while in Malawi and South Africa new studies are examining the effectiveness of a CCT program on reducing HIV risk among adolescent girls by keeping them in school (Baird et al. 2009; Pettifor and MacPhail 2009). Program design can

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20. These meetings may also result in the organization of campaigns, or days of incentives, addressing health, vaccination, environmental development, or literacy, among others, which are supported by municipal institutions (Combariza 2006). Note that these features are part of the program design, and the extent of implementation will vary across locations, as they do in the programs on which we have done research.
be creative with respect to what types of conditions respond to the nature of the
gender biases, the risks faced by women and girls of different ages and ethnic
origins, and the constraints on and aspirations for greater equality and status for
women and girls in the home and the wider society.

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Steering a different course than a generation of programs targeted at communities and implemented via local government and community organizations, conditional cash transfer (CCT) programs involve a direct relationship between central government and the household. In most CCT programs to date, national governments play the central role in targeting, monitoring conditionality, and administering benefits, with state and local governments and technical intermediaries in the private or nongovernmental sector in some cases providing assistance in aspects of implementation, delivery of cash, or health services. Nevertheless, CCT programs across Latin America vary widely with respect to levels of centralization or decentralization and mechanisms for incorporating community participation. This chapter reviews these differences, explores the relevance of participation in the context of CCT programs, and uses case studies in Mexico and Nicaragua to examine intended and unintended ways in which communities have mediated program reception, implementation, and impacts. It also poses the question of what role participation should play in a program designed to achieve measurable objectives related to health, nutrition, and education. Different countries have answered this question differently, reflecting in part their diverse histories and political economies, and ideas and mechanisms have also evolved over time.

There are several reasons for centralized administration in CCT programs. First, these programs tend to be administratively complicated, and centralization can be an efficient way of ensuring the capacity to deliver benefits and services in a consistent manner. Second, there are risks to community participa-
tion that CCT programs were in part designed to avoid. In Mexico, for example, the CCT Programa de Educación, Salud, y Alimentación (PROGRESA) was in part a response to the shortcomings of Programa Nacional de Solidaridad (PRONASOL), the previous government’s poverty alleviation program, in which community participation was a prerequisite and administration of funds was decentralized. That modality had reflected an international trend away from “top-down” development planning and toward a “bottom-up” approach, which prioritized values of democratization and local empowerment and recognized that participation could lead to better-run, more appropriate projects. Although there were some successes in PRONASOL, the program was not effective at targeting the poorest of the poor,\(^1\) and at worse had fallen prey to clientelism and political patronage (see Yaschine 1999). Because the improvement of health, nutrition, and education at the individual level were the primary objectives of PROGRESA and strict poverty targeting was a core principle, centralized targeting and program administration and a focus on households rather than communities were logical design features.

A large body of literature exists on the basis for and benefits of community participation, community-driven development, and related concepts. Theory and practice over the decades have suggested that development processes should incorporate beneficiaries as informed agents in these processes, that top-down approaches are disempowering and less effective, that collective action can lead to better outcomes for all in the collectivity and often the wider society, and that participation can reduce information problems; build institutions that strengthen poor people’s resilience, agency, and power; and increase the sustainability of an intervention through local ownership of program objectives, processes, and assets. Participation has also been shown to improve targeting, service delivery, and infrastructure design and maintenance and to reduce costs. Of course, these effects are highly contingent, and participation has been the subject of debate with respect to its meanings, value, and functionality.\(^2\)

If the main objective of CCT programs is to improve human capital, one must ask whether community participation is necessary to achieve this and how

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1. In a study of demand-driven community-based public works programs in South Africa, Adato and Haddad (2002) found that better-resourced or better-connected community organizations were best positioned to submit strong applications to obtain funds, while more poorly resourced groups most in need of funds were less able to obtain them.

2. For a range of perspectives, see Rahnema (1992), Long and Villarreal (1993), Rahman (1993), Tendler and Freedheim (1994), Chambers (1995), Nelson and Wright (1995), Hoddinott et al. (2001), Adato and Haddad (2002), World Bank (2004), and Adato, Hoddinott, and Haddad (2005). Cornwall and Brock (2005) caution us to examine how the terms participation and empowerment are used and appropriated: rather than referring to any shifts in power relations, they have been put into the service of mainstream development objectives that do not lead to meaningful change with respect to control over resources and institutions. However, “giving up on participation and empowerment . . . would be to give up on concepts that have been critical for decades in animating struggles for equality, rights and social justice” (Cornwall and Brock 2005, 18).
it can contribute. The institutional form through which different dimensions of a CCT program are best implemented is an empirical question on which there has been no direct comparative research. From one perspective, the “best” modality would refer to the most efficient means of achieving these human capital objectives. Participation may or may not be necessary to facilitate their achievement. As noted earlier, however, we know that in other program contexts participation has improved targeting, service delivery, and other outcomes relevant to CCT programs, but there are also important differences in potential roles and incentives. From another perspective, transparency, beneficiary and community satisfaction, and empowerment have intrinsic value that should be factored into any assessment of program impacts and “successes.” These can also lead to better reception of the program, which may translate into better human capital outcomes.

Whichever perspective we as outsiders may theorize, “the community” will affect and be affected by a CCT program. This is both because program architects have had a vision of a role for community-based forums in the program and because, regardless of official intention, the community will mediate reception of the program in various ways. The community is more than an aggregate of its constituent households; although CCT programs may envision a predominantly direct relationship between the household and the state, in practice this relationship will always be affected and to some extent redefined by existing sociocultural and political dynamics operative at the community level. Poverty alleviation programs exist as part of a context broader than the formally defined boundaries of the programs themselves, and it is important to direct attention to comprehending these dynamics. They are of interest with respect to the study of participation, power, agency, social capital, and related constructs. But an understanding of this broader reality is also fundamentally important to understanding local receptivity to a CCT program and its impacts and thus can inform policy and program decisions in ways that increase the likelihood of achieving program objectives.

The role of participation in CCT programs has been recognized in international forums on CCTs. At the First International Conference on Conditional Cash Transfers, organized by the World Bank, participation was a theme, with the following recommendations emerging in the conference report (Ayala Consulting 2003): (1) Obtain the highest amount of participation from local and in-

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3. For example, Fox (2008, 271) notes that the World Bank’s (2004) promotion of “client power,” whereby beneficiaries directly interact with their service providers to monitor and demand better quality, runs into a contradiction in the institutional incentives of CCTs—what he calls the “cross-institutional disconnect.” This refers to the disincentive that beneficiaries have in challenging service delivery agents, who are responsible for monitoring beneficiaries’ compliance with conditions and could thus potentially penalize them. However, we have not seen any evidence that service providers actually act in this way, and Fox notes that only about 1 percent of beneficiaries in Oportunidades have been dropped from the roles. Still, this calls attention to the need to carefully consider institutional incentives in program design.
institutional actors; (2) create transparency, participatory processes, and political will to achieve the participation of local actors early in the program design phase; and (3) advance the decentralization process, because it offers more advantages than disadvantages.

In 2005 the World Bank held a conference titled Voice and Accountability in Transfer Programs in Latin America, and the Second and Third International Conferences on Conditional Cash Transfers (in 2004 and 2006, respectively) included a few sessions on this theme, although it had a low profile. Despite its recognition, participation does not appear as a high priority in the design of many CCT programs. Where participation is stronger, national governments have promoted their own unique design features. As this chapter shows, this promotion of participation varies widely from country to country.

Program designs with forms of decentralization or local participation include, for example, such features as local government or community review of beneficiary selection or targeting; a system of elected beneficiary representatives or program liaisons; beneficiary meetings and other forums for promoting social connection and support, information sharing, and activity planning; other mechanisms for obtaining beneficiary feedback; parent–teacher associations; other committees for monitoring services; and community-based and municipal committees to address program issues. The extent to which these features appear in program designs—as well as how far they are implemented—varies considerably across programs.

The next sections of this chapter describe the main ways in which participation was intended to function in the four countries that are the focus of this book. In the first two sections that follow, on Brazil and Honduras, the relevant design features are described, followed by some findings from evaluations of these features.4 The next sections, on Mexico and Nicaragua, outline the design features in which participation was envisioned, then present findings of our research as part of the evaluations of PROGRESA and the Nicaraguan CCT program Red de Protección Social (RPS) conducted by the International Food Policy Research Institute (IFPRI). The chapter concludes with some arguments as to why a higher degree of community participation—if well designed with respect to where, when, and how it occurs—can contribute to achieving a CCT program’s main human capital objectives and provide additional benefits.

Brazil’s CCT Programs: Bolsa Alimentação, Cartão Alimentação, Bolsa Escola, and Bolsa Familia

CCT programs in Brazil, including Bolsa Alimentação, Cartão Alimentação, and Bolsa Escola—later merged into Bolsa Familia—have instituted a greater degree of decentralization than most CCT programs. This can be understood

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4. These findings are limited, however, unlike in the Mexico and Nicaragua cases presented, which were the subjects of research by the authors and the main focus of this chapter.
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within the context of the political economy of Brazil, where an agenda for fiscal and administrative decentralization began in the 1980s and deepened in the 1990s (see Pero and Szerman in this volume). One of the main features of the CCT programs that involved a significant role for municipalities was the targeting system. In Bolsa Escola, for example, the central government determined the allocation of budgets across municipalities based on estimated need, but municipalities were then responsible for the selection of beneficiary households, using national guidelines (Ayala Consulting 2003, 6; Morley and Coady 2003, 28). Municipalities gathered the data needed by the Caixa Econômica Federal, a large federal bank and the operating agent for the Bolsa programs, to determine eligibility (Morley and Coady 2003, 33). The Caixa then delivered a beneficiary list, ordered by income or wealth, to the municipal-level official in charge of the program, who determined who would receive benefits. A further process of community review would then take place: the official passed the list on to the Conselho de Controle Social (CCS), a local advisory committee created by the municipality. The CCS was required to draw at least 50 percent of its members from the nongovernmental sector in order to provide oversight and a voice for civil society (de Janvry et al. 2005, 3, 26). The CCS approved the registry of eligible families selected by the municipality to be in the Cadastro Único, Brazil’s beneficiary registry database serving all social assistance programs (Ministério da Educação, Brasil 2004a, 2004c, 2004d; Lindert et al. 2007, 35).

The Bolsa programs involved other forms of decentralization. In Bolsa Escola, the municipality assumed responsibility for creating a municipal law institutionalizing the program and approving municipal ordinances for it, creating and designating the CCS, selecting and registering beneficiary families, promoting socioeducational activities, and providing a means for monitoring school attendance (Ministério da Educação, Brasil 2004d). In addition to monitoring compliance with conditionalities, municipal mayors were also responsible for sanctions for noncompliance (that is, the withholding of benefits) (Ayala Consulting 2003, 52; de Janvry et al. 2005, 3).

The CCS was in charge of assessing and conducting quality control of the program at the municipal level. In addition to approving the registry of eligible families, it verified beneficiary school attendance records. Anyone with complaints or problems was to go to the local CCS for mediation (Ministério da Educação, Brasil 2004d). The CCS was also intended to assess municipal program execution, evaluate socioeducational activities promoted by the program, promote community participation, and play other roles agreed upon by the com-

5. Until 2001, when the federal government constructed the Cadastro Único, each program had been operating its own system for targeting. Under the Cadastro Único, data collection and maintenance of the beneficiary registry were decentralized to the municipalities, but operation and maintenance of the database were centralized at the federal level, with oversight provided by the Ministry of Social Assistance and system management and operation conducted by the Caixa Econômica Federal (de la Brière and Lindert 2005, 6).
committee. In its evaluation of socioeducational activities carried out by the municipality, the CCS was to ensure that the activities promoted staying in school, that all children had access to the program activities, and that there were proper facilities and infrastructure available for these activities. The CCS was also meant to provide a forum for receiving feedback from the community (parents, teachers, students, and so forth) regarding socioeducational activities (Ministério da Educação, Brasil 2004a, 2004b). The schools also had certain limited responsibilities keeping track of beneficiaries' school attendance, and extending the school day to accommodate more students, in cooperation with municipality-level committees (Ministério da Educação, Brasil 2004d).

Upon the combination of Bolsa Escola, Bolsa Alimentação, Cartão Alimentação, and Auxílio Gás into Bolsa Família in 2003, the program was restructured, but many aspects of the earlier forms of decentralization were maintained. In 2005, the Ministry of Social Development (MDS, in charge of program policy and supervision), required all municipalities to sign formal joint management agreements that clarified the various roles and responsibilities in program implementation and established minimum institutional standards for municipal-level program operation. Municipalities had to agree to register potential beneficiaries in the Cadastro Único, establish social control councils (SCCs), maintain a local program coordinator or point of contact, monitor compliance with health and education conditionalities, and prioritize Bolsa Família beneficiaries for other complementary services, such as income generation, literacy, and professional training services (Lindert et al. 2007, 14, 25).

Unlike in Bolsa Escola, in which municipalities determined eligibility and selected beneficiaries, under Bolsa Família the MDS was responsible for determining eligibility based on spatial poverty map information from census and household surveys and using income and family composition data. The MDS was then to apply these criteria, verify the relevant information, and establish the monthly list of beneficiary families. In order to improve the quality of the Cadastro Único, municipalities were to recertify all potential and existing program beneficiaries every two years and identify inconsistencies in the registry via a data program. The MDS also established a Decentralized Management Index to address the heterogeneous quality of program implementation across municipalities. The index was to award a score to each municipality based on the share of families with complete information with respect to registration and compliance with conditionalities. However, the index has been limited by the quality of the information reported and lack of attention to other elements of municipal responsibility, such as the existence and performance of SCCs or the ability to connect beneficiaries to complementary services (Lindert et al. 2007, 26, 41–44).

Although the Bolsa programs have been extensively evaluated, few studies have looked at the systems for community participation. One study of beneficiary targeting in nine municipalities in the states of Bahia, Ceará, and Paraíba
found substantial variation in the manner of beneficiary selection and the transparency of the process. In one municipality, for example, teachers enrolled all eligible families, a social council verified the households’ information and made the selections, and recipients’ names and selection criteria were published in the local newspaper. Single mothers and distant rural inhabitants were prioritized. In another municipality in a different state, the community did not know how the selection was made: although it was actually made by the mayor, people assumed it was made by the federal government. These municipalities also differed with respect to the transparency of their budgeting process, the degree of nepotism in the local administration, and other aspects of local governance (Finan 2004).

Another evaluation of the targeting found various problems with the Cadastro Único. These included lack of clarity of objectives, distortions due to the use of a priori registry quotas, distortions due to the use of self-reported income, lack of a system for auditing and quality control, problems with the identification of households, lack of data access by potential users, and software and implementation problems. Recommendations to address the problems included universal and ongoing access to the registry, better outreach to the poor, and more transparency of the procedures both for entry into registry and for entry into Bolsa Família (de la Brière and Lindert 2005, 15–17). Brazil’s socio-political environment necessitates decentralization and forms of local participation that many other CCT programs do not have. The challenge is how to improve the operations, transparency, and ability of a complicated decentralized system to reach the poorest households.

According to a 2007 report on Bolsa Família, the program’s targeting has been more effective than that of pre-reform programs, with the poorest quartile receiving 80 percent of all benefits (compared to 64 percent of benefits received by the poorest quartile under Bolsa Escola, Bolsa Alimentação, Cartão Alimentação, and Auxílio Gás combined). Although 20 percent of the Bolsa Família benefits “leaked” to the non-poor, 85 percent of this leakage went to the next-poorer quartile, considered the “near poor” (Lindert et al. 2007, 46). Targeting improvement has been attributed to efforts to boost the quality of the Cadastro Único and to increased use of geographic targeting within municipalities. Still, according to Lindert et al. (2007), the targeting process could be further improved with additional training for state and municipal authorities to build data collection and management capacity; stronger communication among municipalities, the MDS, and the Caixa; and expanded review and cross-checks of the data.

Programa de Asignación Familiar–Fase II (PRAF-II) in Honduras

In Honduras, geographic targeting was based on height-for-age z-scores at the municipality level, which were based on school census data. All households in
geographically targeted areas with children in grades 1–4 were eligible (Morley and Coady 2003, 117–118). At the community level, households were selected with the assistance of school directors and nurses at the health centers. Those responsible for selection were supposed to involve the community at large in the approval process. The reported advantages of this system were that beneficiary selection was done at the local level where people could most accurately identify those most in need, costs were minimized, and the same people were responsible for selection and monitoring compliance with the conditionalities. There were also perceived disadvantages. One was that the system caused problems for the school directors and nurses when the demand for the program exceeded the funds available. The system was seen as creating personal and political pressure and could result in selection based on partiality for personal or partisan reasons rather than on need. According to PRAF, these potential problems could be minimized by increasing the awareness among school and health staff of the importance of widespread community involvement, ensuring this wider involvement, using communication channels to ensure that all are aware of the selection criteria and monitor implementation, and strengthening PRAF’s supervision and monitoring (Government of Honduras n.d.).

PRAF had several other mechanisms for community participation. One was through the provision of funds to school-based parents’ organizations through local nongovernmental organizations to improve the provision of educational services (the Learning Development Initiative), part of the supply side of the program (Morley and Coady 2003, 117). Furthermore, the local population had the responsibility to monitor and denounce any abuses of the program at the local level. Teachers were also to ensure that nonbeneficiaries did not collect benefits. PRAF did not have an elected beneficiary representative (a promotora) but trained some selected mothers to work with the local population on health and nutrition. The role of local government was to provide information to PRAF, suggest ideas, and provide logistical support (Ayala Consulting 2003, 51–52).

Local quality improvement teams (QITs) were also set up in 69 rural health centers where PRAF was implemented, focusing on maternal and child health. The coordination of QITs with PRAF was called the Incentive for Quality in Health (ICS).6 ICS was intended to include (1) the formation of QITs for each of the health centers or posts in beneficiary areas; (2) extensive training in “principles of quality assurance, effective teamwork, and methods for problem diagnosis and priority setting”; (3) the assignment of a budget to each health center or post; (4) technical assistance in developing a mission statement, strategic and work plans, and a detailed budget; and (5) assistance in procurement (Morris et al. 2001, 9–10). QITs were supposed to have real control over substantial budgets. The members of the QITs were to be nominated by nurses and

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6. As explained later in the chapter, this participation scheme was not implemented as intended.
volunteers from each health center as well as town mayors after they had attended an introductory workshop. Members were to be selected from among people working in the health centers (professionals, support staff, and/or volunteers) as well as people from other related organizations: "external users with leadership roles in the community, ... who would be able to communicate their concerns about the quality of the health services provided" (Morris et al. 2001, 9–10). Nevertheless, this component was largely unsuccessful because a legal means of transferring resources to the community-based teams could not be found. Only 17 percent of the first year’s transfers were disbursed (through central procurement), and only introductory training in quality assurance was provided (Morris et al. 2004). This experience provides a hard lesson in the institutional challenges of facilitating community participation and improving services.

Programa de Educación, Salud, y Alimentación (PROGRESA) in Mexico and the Red de Protección Social (RPS) in Nicaragua

Findings on Participation in PROGRESA and RPS

Mexico’s and Nicaragua’s CCT programs were primarily centralized at the national level. However, they had some features intended to promote local participation, reflecting an appreciation for community input at certain stages. The rest of this chapter examines these features, which were largely similar in the two countries. These include (1) a community-based review of the household targeting (targeting is also emphasized in this chapter because it emerged as a significant issue in the research in both countries), 7 (2) an elected community promotora serving as the liaison to communicate between beneficiaries and program officials, and (3) formal and informal opportunities for collective activities among beneficiaries. Later we discuss features for participation introduced into PROGRESA’s successor program, Oportunidades. The empirical research presented in this section is based primarily on qualitative research methods used in the studies of PROGRESA and RPS described by Maluccio, Adato, and Skoufias in this volume and also draws on the survey data where available. 8 The study of PROGRESA used focus groups with promotoras, ben-

7. In addition to the examples from Latin American CCT programs given earlier, community-based targeting is found in transfer programs in Africa and elsewhere, for example, public works in South Africa (Adato and Haddad 2002) and unconditional cash transfers in Kenya, Malawi, and Zambia (Alviar and Pearson 2007; Schubert et al. 2007). For other examples, see Isham and Kevane (2001).

8. For additional results from these studies, see Adato (2000) and Adato et al. (2004). There were relatively few survey data on the issues explored in this chapter, and yet there would be much value to including questions on these issues in program evaluations. These could include questions on forms of participation, information sharing, empowerment, collective social and economic activities, social solidarity, transparency and accountability, and beneficiary perceptions of these processes.
eficiaries, and nonbeneficiaries, involving approximately 230 people from 70 communities across six states, and semistructured interviews with doctors and school directors in 17 communities across four states. The study of RPS included 59 household case studies using in-depth, semistructured interviews and participant observation with beneficiary and nonbeneficiary families taking an ethnographic approach. Additionally, 66 semistructured interviews were conducted in these communities with additional beneficiaries. In total, 125 households were interviewed across six communities in the qualitative study, as well as 21 key informants, including promotoras, health personnel, teachers, religious leaders, and local RPS personnel.

Targeting in PROGRESA and RPS

PROGRESA used a combination of geographic and household targeting, employing a state-of-the-art statistical process for identifying the poorest localities and poorest households. Localities were selected using a marginality index. Other criteria were then applied, including geographic location, distance between localities, and initially the existence of health and school infrastructure (this last feature was dropped during the program’s second phase, although it was maintained where access was not possible). Geographic and other statistical data were then used to further identify areas of greater marginality. Within localities, household-level targeting followed using a household census with a number of variables. Per capita income was constructed and compared to the Standard Food Basket, equivalent to an average aggregate income of approximately two minimum wages. A statistical technique was then used (separately for each geographic region) to identify the characteristics that best discriminated between poor and non-poor households, and an index was developed. Households were then identified as poor or non-poor, and the poor selected as beneficiaries (PROGRESA 1997; Skoufias, Davis, and de la Vega 2001).

In the first stages of program design, a third step was envisioned: a community review of the accuracy of the selections. This was seen as part of a broader “social comptrollership” conceived as a broad if not clearly specified pact between citizens and government to monitor mutual obligations in the course of the program. This community review of the beneficiary list was to help verify the accuracy and quality of the procedure followed to ensure that assistance was reaching those who most needed it. The policy clearly envisioned a role for community, stating that “the Program contains strict criteria and objectives to define priority regions and beneficiary families, while making sure in all cases that communities themselves are in agreement as to whom the recipients should be and approve some aspects of its operation” (PROGRESA 1997, 3). After the beneficiary list came out, a local assembly was held as part of the induction process. There claims were supposed to be registered concerning households that were seen to be erroneously excluded or included. For these households that were not selected because their members were absent on the day of the lo-
cality census, their relevant socioeconomic characteristics were to be subsequently collected and the same selection methodology applied. For households whose members were present, the analysis was to be conducted again and, if they were close enough to the poverty line, their case could be reviewed. In practice, however, the system was not working in this way. At the time of the IFPRI evaluation of PROGRESA, policy envisioned that beneficiaries were actively informed of the general assembly but the nonattendance of beneficiaries was not discouraged. The local assembly came to be used mainly for the beneficiary induction process, not for review of the beneficiary list. Instead, excluded individuals could file appeals with PROGRESA; however, at least in the early years, this option was not widely advertised, nor were appeals regularly addressed when received. In 2002 Oportunidades introduced a vastly improved system for receiving beneficiary feedback and appeals (the mechanisms, strengths, and weaknesses of this system are discussed later in this chapter).

In the first phase of Nicaragua’s RPS, the program was piloted in 2 out of 17 of Nicaragua’s “departments” (Madriz and Matagalpa), with beneficiaries selected on the basis of poverty (80 percent of the population was poor) as well as on their capacity to implement the program. Within these departments, six municipalities were selected based on governance criteria, but 78–90 percent of the population was also extremely poor or poor. Within these municipalities a marginality index further selected the poorest local areas or comarcas, where all but 6 percent of households were included (Maluccio and Flores 2005). In a smaller number of comarcas where poverty rates were lower, household eligibility was assessed using a proxy means test that identified households above and below the poverty line. In these the average poverty rate was 75 percent, so 25 percent of households were excluded, although the children of these households were offered access to the program’s health services.

As in PROGRESA, RPS’s targeting process included formal meetings called Asambleas de Incorporación (Assemblies of Incorporation). The main purpose of the assemblies was to explain the program structure and benefits, formally induct beneficiaries into the program, and elect promotoras. A process of validating the beneficiary list was also to take place, whereby community members could raise objections to the list of selected households and nominate deserving households for inclusion if they had not previously been selected. In at least the six localities where the qualitative study was conducted, no one reported having taken part in a validation process. The assemblies were held long before the study, so it is possible that people may not have remembered accurately. Interview material suggested that people in the study communities did

9. Census comarcas are administrative areas within municipalities that typically include between one and five small communities averaging 100 households each. They are determined by the National Institute of Statistics and Censuses and sometimes do not coincide with locally defined areas also referred to as comarcas (Maluccio and Flores 2005).
not feel that they were in a position to participate in the targeting process. A program manager at the national level said that in most cases this process of consultation did occur at the assemblies but that certain problems were encountered in making the system work as intended. With respect to mentioning errors of inclusion, although people were offered the opportunity to do so, they were afraid to speak up and identify such households, which tended to include wealthier and more powerful people in the communities. Errors of exclusion were also difficult to identify because, although lists of potential errors could be generated in a meeting, the centralized computer system used in targeting recognized only divisions between comarcas censales rather than between communities. This resulted in a situation in which it proved unfeasible to determine whether excluded households belonged to the intervention comarcas or not. Furthermore, it sometimes happened that the lists generated in the assemblies were mislaid or simply “put away” (either at the local or the national level).

In both countries it is likely that, faced with the challenge of implementing a technically complex targeting system, community review of the beneficiary list and administrative responses to it were not among the highest of priorities. There were also reasons for not carefully explaining the targeting system to communities: first, the formula was complex, and second, too much information about the poverty criteria might encourage people to understate their resources. As a result, people largely did not understand the basis for the targeting and often did not agree with the outcomes, and this had some impact, as discussed later.

**Targeting and Community Responses in PROGRESA**

In an early qualitative study of PROGRESA in 1998, researchers asserted that rural and indigenous communities had egalitarian systems of redistribution related to mechanisms of social control and that PROGRESA’s targeting was altering these systems, leading to social fragmentation and conflict between extended families, between families within communities, and between promotoras and nonbeneficiaries (CIESAS 1998). This was a small study, and the IFPRI evaluation set out to examine this issue with representatives from the 60 communities included in the qualitative study.

The quantitative analysis of PROGRESA’s targeting system found that its accuracy level was high with respect to selecting the poorest localities and the poorest households within them. However, this accuracy diminished when it came to distinguishing between localities and households at a moderate marginality level, proving more effective at levels of extreme poverty (Skoufias, Davis, and de la Vega 2001). In the qualitative research, targeting errors were reported to have occurred for two main reasons: (1) people were not home when surveyed, and the enumerators did not return, and (2) people gave incorrect information, overstating their resources because they were ashamed to admit that they were very poor, did not know the household conditions, or miserab-
stood questions because of language differences. Some did not want to answer the questions because of rumors circulating about what the government would do with the information.10

A second finding was that although the targeting used sophisticated statistical methods for identifying who was “poor” and who was “non-poor,” most people in PROGRESA villages did not perceive these distinctions. Rather, in the eyes of beneficiaries and nonbeneficiaries, as well as promotoras, everyone was poor: “Here we are all poor. We all have nothing.”11 Even where they acknowledged differences, everyone was still seen as poor enough to need the benefits: “Well there are no rich here. Maybe less poor, but we all need.” Many were not aware that selection was based on poverty levels or, if they did, how the selection was determined. Some attributed the selection to luck, a lottery, or God.

The reaction to the targeting indicated a type of social solidarity in these communities, one that does not correspond with the manner in which often subtle socioeconomic distinctions are rendered visible and operative by the process of household targeting. As explained by a beneficiary, “It hurts us that others don’t have it because we feel we are one family.” Many comments also seem to imply that in these communities, a higher value is placed on being treated “equally” than on “equity” in the sense underlying the logic of targeting. According to another beneficiary in Michoacán, “I think that even though [the benefit] is little, let us be equal. In order that the others don’t feel [bad], because . . . we that receive are satisfied, but the others that don’t receive are upset.” Promotoras were particularly vocal about this problem in their communities: A promotora in Hidalgo said: “In my community those women do need it, because there are many [who don’t have it], and they just look at us when we go to [pick up the benefit]. And then children say, ‘Mom, why don’t I have PROGRESA?’ And some women come to me and tell me, ask me, ‘Why doesn’t my boy have PROGRESA?’ And to tell you the truth, I don’t know what to tell her.” Nonbeneficiaries expressed a sense of being subject to two forms of exclusion: one in being poor and unable to access benefits, the other in being treated differently. A nonbeneficiary from Michoacán explained this using the soda distributed at the focus group as an example: “Now that you distributed soda between us, you give me, and you also give one to my sister-in-law, and those two are not going

10. See Adato (2000) and Adato, Coady, and Ruel (2000) for more detail. Hevia de la Jara (2007) and Fox (2008) report that PROGRESA had hired private surveyors who were paid per household visited, reducing the incentive for them to travel to harder-to-reach households and excluding households where no one was home. Oportunidades later resurveyed communities to enroll eligible families that had been missed.

11. Quotations from the PROGRESA research come from focus groups with beneficiaries, nonbeneficiaries, and promotoras, except where it is noted that they are from key informant interviews. Quotations from the RPS research are from semistructured interviews with beneficiaries, nonbeneficiaries, and key informants.
to get one. How would that feel? Well, it would feel bad. There is one drinking her soda and the others are only watching.”

Exploring the 1998 finding that the targeting was leading to social fragmentation and conflict, the IFPRI research found mixed results. In some communities, respondents said there was no jealousy between families because it was not the beneficiaries’ fault that they had been selected. As a nonbeneficiary in Guerrero stated: “We shouldn’t feel envious, because people do not [make the decision]. We don’t know from where [the decision] comes that we don’t get it.” Some who had been selected suggested pooling their benefits to provide for those excluded, as did this beneficiary in Michoacán: “The day they pay us, why don’t we cooperate between all of us, some with some soup, others with soup, and we make bags and we give them to the ones who are not in PROGRESA.” Another suggestion was a scheme whereby beneficiaries would donate parts of their cash transfers to nonbeneficiaries on a rotating basis. The size of the transfer was too small to enable people to feel that they could share much, but a small amount was seen to potentially protect community solidarity. A promotora in Michoacán proposed: “Even 50 cents; the goal would be to not make her [a nonbeneficiary] feel that she is excluded, but to all of us who are inside [the program] to accept the others and make them get closer to us.” In practice, though, few people appeared to be sharing. The 1998 survey found that, at least at the start of the program, only 5 percent of households had shared resources in the past month. The expressions of a desire to redistribute indicate how people felt about the exclusions and their response suggest solidarity rather than conflict. In the survey, only 2 percent of respondents said that since the introduction of PROGRESA there had been “more problems with the neighbors.”

The impulse toward equality seen in our research was said to be institutionalized in the form of local indigenous political structures whereby, in some indigenous communities, PROGRESA benefits were collected and redistributed. This was reported at a workshop on community impacts by a senior PROGRESA official familiar with operations nationally (IFPRI 1999), although our research did not include communities where this occurred. We did learn of cases in which the benefit is shared among family members, who may or may not be living in the same house.

Despite these manifestations of solidarity, there were also reports of social tensions involving resentment and envy, raised in approximately 90 comments or discussions in all 17 focus groups. The large amount of data supporting this finding indicates its strength, though an equally large number of comments in-

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12. As will be seen later, the qualitative data provide convincing evidence that there were problems around the targeting. The survey responses may represent interpretations of this issue that are different from those of people who discussed the issue in the focus groups or different ways in which people respond to different types of research methods.
indicating unchanged relationships emanated from the same communities, implying that these dynamics existed simultaneously. An example from Estado de México indicating the kind of tensions that arose comes from a beneficiary who explained: “One woman got very upset with me, and I hadn’t realized that until one day that she talked too much and she told me in my face that why do I have a grant and she doesn’t?” Doctors were also a source of information on community impacts, because they observe community dynamics and sometimes organize community members around collective activities in the village, such as community clean-up days, or “faenas.” When asked about the household targeting, a doctor in Veracruz replied: “Yes, they speak about it, saying bad things; they even have stopped talking to each other, those that were friends or godmothers of each others’ babies. . . . Many problems have arisen because of this distinction of ‘Because I got it and you did not.’” The problems appeared to surface more often around the times when beneficiaries went to collect their payments. They were also reduced once a community formally petitioned for nonbeneficiaries to be included or were told that they would be included soon. As a promotora in Guerrero said: “Now, as they saw that we were making applications, they calmed down. They are waiting to see if they get it.” Of the doctors interviewed across 17 localities, 13 said there were problems in their communities related to the program’s designation of beneficiaries and nonbeneficiaries, though about a quarter of these said that the problems were not serious. Many of the doctors’ concerns centered on nonbeneficiary nonparticipation in activities that they believed should be for everyone, such as the faenas and the health pláticas. The faenas were not part of PROGRESA, but beneficiaries provided a group that could be organized for this purpose, and doctors perceived that there were significant health benefits from these clean-up activities. The impact of the program on community faenas was frequently raised in the focus groups as well. Promotoras explained that nonbeneficiaries sometimes do not want to participate, asking, “Why should I work . . . if the government is not supporting me?” (promotora, Querétaro). In other communities, however, people said that the program had no impact on community work: “In here we all are always united, not only the beneficiaries, since a long time ago we always have been used to [working together]” (beneficiary, Querétaro). One promotora from Michoacán said that she persuades nonbeneficiaries to participate by telling them: “If we get an epidemic, it’s not only going to attack beneficiaries from PROGRESA, it is going to affect all of you, all of us. And that’s how I unite people, whether they have or don’t have [PROGRESA], because they are conscious.” A doctor from Querétaro conveyed a more pervasive division brought on by nonbeneficiaries’ exclusion from several formal and informal aspects of the program:

The problems . . . between the ones that have and those that don’t is that—as I started working with them in projects and giving pláticas on community health, they think that the beneficiaries are the ones that have to do the work, even
though it is for all the community. And the ones that don’t have [PROGRESA],
don’t do it, because no one is supporting them. The problem is envy, the
problem is rage because no one is supporting them, and the problem is of a lack
of resources to get near the health services. . . . On what concerns to the health
pláticas, they also think the obligated ones to go are those of PROGRESA. I
have to take other measures to assure their presence, telling them that the health
pláticas are for everybody, that the community is of everybody, so it has to be
clean. . . . but they say, “While I don’t get the support, I don’t participate.” . . .
There is a division between PROGRESA and non-PROGRESA.

Doctors and promotoras worked on resolving this division by inviting non-
beneficiaries into beneficiary activities, in particular the health pláticas, which
could include nonbeneficiaries without a cost to the program. A promotora
from Veracruz explained that at the start of PROGRESA, only beneficiaries at-
tended the pláticas, but “we saw that that wasn’t right, and we told the doctor
who came to give us the pláticas that we were being divided and we didn’t like
it. . . . and if it was supposed to be a help, it should be for everybody, not only
for the ones who [get the money], because we all need it.” The doctor began to
include the nonbeneficiaries, and now “it seems that the nonbeneficiaries
haven’t had any problem. They are being tended in the clinic . . . people from
PROGRESA and people without PROGRESA. Then we are more united.”

School directors also raised the issue of divisions, citing instances in which
nonbeneficiaries did not want to participate in cleaning the schools or pay fees
to the parents’ associations, although these reported cases were few. From a sur-
vey of 320 schools, approximately 30 percent of primary school directors and
20 percent of secondary school directors reported some negative effects of the
program, such as families’ being more divided or having increased problems
as a result of PROGRESA (Adato, Coady, and Ruel 2000).

One of the impacts of the program with respect to increasing the human
capital of adults—strengthening individual capacities via self-esteem and
confidence—was in the form of collective activities such as monthly meetings
that the promotora held with beneficiaries (see more on this later). Paradoxi-
cally, however, the creation of a group of “PROGRESA women” engaging in
these activities provided a new collective identity that was empowering for
members but simultaneously exclusionary for others.

It is possible that in some communities there had been preexisting tensions
and that the program only provided a new medium through which they were
expressed or deepened. Preexisting divisions and different cultural, political, or
demographic (for example, size of community) factors may be articulated in re-
sponses to household targeting in diverse ways, explaining different outcomes
across communities or households. It is also the case that the findings reported
here were from research conducted in 1999–2000, before or during densifica-
tion processes incorporating a higher proportion of households in the various
localities, processes that were likely to reduce the number of people erroneously
excluded as well as those who were excluded by a lower poverty threshold. Oportunidades also resurveyed communities at a later point, resulting in the addition of 1.7 million new families, mainly between 2002 and 2004 (Hevia de la Jara 2007). Furthermore, as the program has grown and aged, people have likely come to better understand the targeting system, resulting in less confusion and frustration than characterized the earlier years. The research is relevant, however, in showing how programs can have unintended social impacts, that household targeting can have social costs that should be taken into account in a cost-benefit analysis of targeting systems, and that community participation in targeting processes could potentially reduce these social costs.

The relation between household targeting and community social cohesion, and the need to attend to social impacts more generally, has been recognized by Oportunidades. Its policy strategy emphasizes the central role of community social cohesion and solidarity in promoting development and sees the need to contribute to strengthening the social fabric in order to be more effective. However, this is viewed as a challenge to be achieved without losing “the advantage of household targeting” and the co-responsibility principle at the level of each household (Oportunidades 2003, 57). To address this challenge and otherwise expand spaces for participation, the program has developed the systems of vocales (a new name for promotoras that can be translated as “representative”) and Comités de Promoción Comunitaria. These are intended to serve as links to existing spaces for participation, such as health committees, parents’ associations, and other development programs and organizations that specifically promote participation and mutual assistance and cooperation.

It should also be noted that the program views the household-level targeting system and its centralization as an integral part of its transparency objective. One way in which the program pursues transparency and fairness is through the use of “objective criteria and rigorous and impartial procedures, homogenous at the national level, that are verifiable” and efficient with respect to reaching those who need them most (Oportunidades 2003, 56). This is intended to reverse past experiences of manipulation of resources for political purposes. Our PROGRESA research indicated that the program was successful in this objective. We found some examples of efforts by parties to gain votes by creating the impression that a party or candidate could influence the program (for example, by showing up or campaigning at a pay point). But these cases were few, and in practice the centralized system meant that it would be difficult for them to deliver on such a promise. This outcome argues strongly in favor of

13. This is mostly consistent with the findings of Fox (2008), who cites some evidence of efforts at political manipulation around the 2000 and 2004 elections but reports that these do not appear to have been widespread and were more a case of trying to appear to be able to influence the program rather than of actually possessing the ability to do so. Curiously, in a survey conducted among vocales (formerly promotoras) in 2006, only 22 percent said that support from Oportu-
the centralized system, but an effective system of checks, reviews, and appeals can be an important accompaniment to such a system.

**Targeting and Community Perceptions in RPS**

Based on the quantitative survey, RPS was considered well targeted. In *comarcas* where geographic targeting was used among poor households, the rate of undercoverage was found to be 3 percent, while that of leakage was 14 percent. In household-targeted *comarcas*, these figures stood at 10 percent and 6 percent, respectively, again among poor households (Maluccio 2009). The targeting results illustrate a fundamental difference between surveys and qualitative approaches to data collection: although the qualitative findings do not conflict with the numerical results, they do help us better understand that behind these percentages lie individuals and families who live the impact of statistically small targeting problems. The targeting process as a whole was poorly understood at the community level in both geographically and household-targeted communities. Some understood that there was a survey, while others attributed their selection to other causes, from divine intervention to a lottery, or sometimes a combination, as in this beneficiary’s explanation: “Some people wonder why they were not chosen, even though they live in this same area. So we tell them that the Bible says that many are called but few are chosen. They went all around the community; I don’t know why these people are not in the list of beneficiaries. But we cannot solve that because it does not depend on us, it depends on the organization that did the survey” (ES Rosa R).

A common explanation of the targeting was that it involved a map, including beneficiary households within its boundaries and excluding those households unfortunate enough to have fallen “outside the line.” In some future targeting exercise, it was hoped, the map would be expanded and the boundary line shifted to include more households. This was a mostly accurate interpretation of the fact that the targeting was based on a “segmento censal” (census segment), not a locality or community, and the former was often not coextensive with the latter. This meant that even in geographically targeted areas, not all households in a particular locality were included. This result was particularly difficult for people to understand and probably worked to obscure the more important poverty assessment dimension of the targeting process. Respondents in all the communities studied made the same point that emerged in the PROGRESA study, essen-

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14. In the Nicaraguan study, locality and household names were changed to protect confidentiality; quotations are referenced here using only pseudonyms for individuals. The names of “departments,” the equivalents of states, are not included because the study was located in just two of these. Interview codes starting with “ES” indicate semistructured interviews; those starting with “EC” indicate case studies; “IC” refers to key informant interviews.
tially "We are all poor here." Given this assumption, it is understandable that people sought other ways of making sense of the exclusion of apparently needy households from the program; if "we are all poor," distinguishing households on the basis of economic situation (as in the household-targeted communities) was hard to understand. It should be noted that, as in Mexico, the program’s targeting achieved independence from partisan politics. Nowhere in the interview data was it suggested that the program was used to gain votes by the actual or perceived ability of politicians to allocate benefits. In the highly polarized Nicaraguan political climate, this was a significant achievement.

There were several reasons that errors of exclusion occurred or were perceived, even if the numbers were proportionally small: the use of the segmentos censales, a misappaisal of economic status by the proxy means test or enumerator, the purposeful exclusion of better-off households that took place (that is, some degree of household targeting) even in geographically targeted areas, and the missing of residents who were away from home during the census. Missing the census team was mentioned by respondents in all the communities studied; labor migration is a common practice in rural Nicaragua, and people often spend time away from their homes, working as day laborers in the agricultural sector. In 84 out of 125 households studied across the six communities, someone felt that there had been errors of exclusion in their community.

As seen in Mexico, one of the potential outcomes of a system that is either not understood or perceived as unfair is that it can create tensions between those who are perceived as lucky enough to benefit and those perceived as unlucky and excluded. In the Nicaraguan communities studied, nonbeneficiaries did not blame beneficiaries and tended to interpret their exclusion as their own bad luck that they had to accept; most said that it had not caused tensions between them. One reason the targeting may have been less of an issue than in the Mexican case is that either the Nicaraguan communities were geographically targeted or the household-targeted communities were generally poorer than those in Mexico, so there were relatively few nonbeneficiaries in Nicaragua. Nevertheless, in four of the six study communities there was evidence of social tensions related to the targeting, which was described in different cases as envy, disagreements, annoyance, and gossip. One beneficiary said: "Some of them get very angry when they give us the money because they say that they only give it to us and not to them. . . . they see that there is nothing to do now, they shut up" (ES Ana D). A promotora from another community said that there had been a change in relations between households because "there is something like envy because there are some households with many children that weren’t selected. Some people really need that because there are no jobs here in the community" (ICP Katia R). In two of the communities, tensions arose over errors of inclusion whereby some better-off households were included initially and then later determined to be non-poor and removed. Contrary to the common concerns about targeted programs that “stigmatize” beneficiaries, being in RPS appeared
to confer a type of status, and "sometimes people feel upset because maybe you have been selected and they haven't. They think that we were considered more important than them" (ES Gladys R). In some communities exclusion was said to cause a loss of self-esteem. Another factor is simply the differentiation between people that occurs when a large group is now participating together in common activities, traveling together to get their cash transfers or shop, and attending workshops, meetings, and activities organized by the promotoras, with a small group (of nonbeneficiaries) excluded. In some of the communities, people said that social ties between those included and those excluded had weakened because they now had less in common.

However, as in Mexico, there was also solidarity between the included and the excluded; for example, beneficiaries explained why nonbeneficiaries should get resources, because they needed them and because it was important for their relationships within the community. The majority of respondents said there were no direct problems between people, and our interviews and observations suggest that on the whole, nonbeneficiaries understood that the beneficiaries were not to blame, and so "they don't say anything." The larger problem is one of frustration, not with beneficiaries but at their situation of being excluded.

A related issue was the effect of the targeting on children in school because beneficiary children were receiving assistance for uniforms, backpacks, and supplies and nonbeneficiary children were not. Although in theory nonbeneficiary households should have enough resources to buy these items for their children, in practice they may not, either because they were nonbeneficiaries by error or because they did not have the resources or the inclination to buy these items. Although nonbeneficiaries complained little about their own situation, they were more expressive about how this affected their children. One mother from a nonbeneficiary household said: "One day my son told me that a boy told him, 'Look, I have a new backpack and you don't,' and he started showing him all the new things he had in his backpack" (ECN Mariana Z). A mother in another community said that her son "gets sad" because "he says, 'Look mom . . . if you were a beneficiary you could perhaps buy me some shoes,' because right now he has no shoes . . . so I tell him, 'If I were a beneficiary, of course you would have your shoes and your clothes already, but you know the reality, not all the women here are beneficiaries, but maybe we become beneficiaries soon. Let's not lose our faith' " (ECN Aracely G). Children also revealed these problems directly, as in one case study household where a child said: "I do worry, because how am I going to buy the uniform, the shoes, and all that. All the kids will have new things except me" (ECA Efrain T). Another child in a beneficiary household said that children not in the program dressed "shabby, with patches on their pants" (ECA Ernesto J). In two of the six study communities, a collection had been taken up and beneficiary families had all been asked to contribute some funds for the purchase of school supplies for nonbeneficiary families. As one promotora described
this: "The other day we made the agreement that as promotoras and beneficiaries we would contribute C$5 each to buy uniforms and shoes for the non-beneficiary children so that they can come to school looking the same as the beneficiary children" (ICP Marisol A). Some combination of social solidarity and social pressure led people to give up part of what was already a very small benefit. Following this study, we recommended that nonbeneficiary children also be given the school supplies benefit. The government did not take up this recommendation; however, it did extend to nonbeneficiary households the bono de oferta, the small cash grant given to households to give to the teachers and the school.

People did not feel that they could influence the beneficiary selection process or other aspects of program decisions because, as one said, "Those decisions are made at the central office where the money comes from; we cannot change anything" (ECT Berta T). The research in Nicaragua explored the question of beneficiaries' relationship with the program from their perspective, in particular, their sense of "ownership." Of the 120 beneficiaries interviewed across the six study communities, just over one-quarter believed that it was possible to express dissatisfaction with the program; of these, a few had at one point or another expressed concern about some aspect of the program. The responses broke down into three different findings: (1) beneficiaries understand in theory that they have the right to express concerns about the program but do not know how to do so; (2) beneficiaries know how to raise issues and concerns but, based on past experience or speculation, do not feel that it will have an impact; and (3) beneficiaries know how to raise issues and concerns but do not do so out of fear of losing the benefits. One beneficiary implied that because the cash is a grant, beneficiaries did not have an ability to assert their rights: "It would be different if this was a credit organization where I have the right to complain if it is doing a bad job and it is not trying to help women. But in this case I think there is no right to complain because the money is given as a gift." When asked if she knew what her rights were with respect to the program, she replied, "Yes, my right is to comply with what the RPS says" (ECT Mary M). Earlier in the chapter we posed the question as to whether participation matters to a CCT program; the same can be asked regarding "ownership." The intention of the program was to reduce poverty and increase health, nutrition, and education; ownership was never part of the design. Nevertheless, it is likely that a well-advertised and responsive system for registering complaints and concerns, even within a centralized design, would improve beneficiaries' satisfaction with the program and increase their sense of agency, a different but arguably important dimension of human capital.

The Promotora and Collective Activities in PROGRESA

The main vehicle for beneficiary representation in PROGRESA (and continuing in Oportunidades) has been the promotora, the beneficiary elected by other
beneficiaries to serve as their liaison with the program. At the start of program operations in her community, she received training and materials to support her work. Her main responsibilities were to collaborate in giving information and training to beneficiaries related to their program rights and responsibilities, to answer questions, and to respond to their problems. Promotoras were expected to hold a beneficiary meeting once per month. They also were expected to communicate issues that arose in their communities to program offices. In serving as government–community liaisons, facilitators, educators, and problem solvers, they have been a key link in the operational process. They were also the voice of beneficiaries; to the extent that beneficiaries were able to communicate questions, concerns, and complaints and obtain information, this was done via the promotoras. This representation system is limited by the fact that promotoras do not have any formal upward authority vis-à-vis program decisions. But as agents of communication, they represent a vital program institution.

The overall findings of the qualitative research with beneficiaries, doctors, teachers, and the promotoras themselves indicated that the promotora system was a very important one, that they were meeting their main responsibilities, and that the system was generally working well, with some locally specific exceptions. In IFPRI’s quantitative evaluation of PROGRESA, several survey rounds found that about 75 percent of beneficiaries said they met the promotora at least once a month as intended. The most common type of information received from the promotora concerned the date of receiving benefits followed by information on how the program works and program requirements, with a small number reporting having received information on the composition of transfers. Almost all beneficiaries turned to the promotora with questions about the program (Adato, Coady, and Ruel 2000). Although promotoras received good assessments from beneficiaries and doctors in terms of how they performed their jobs, promotoras and doctors alike said that promotoras needed more training than they were receiving. PROGRESA was demanding in terms of the complexities of beneficiary rights and responsibilities, as well as the human and social issues confronted in the course of doing community work. Promotoras lacked an understanding of how some aspects of the program worked and were unable to explain some things to beneficiaries, such as reasons for delayed or deducted payments or why nonbeneficiaries were not in the program. Doctors also said that promotoras did not have sufficient information about the program and stressed that it was important that they receive updated information in a timely manner. Promotoras and doctors proposed that promotoras receive more health training, along with skills training to help them deal better with people. Oportunidades has since offered more specialization and training for promotoras (now called vocales). Training continued to be cited as an area in need of improvement in subsequent evaluations but was stepped up in 2006 (Hevia de la Jara 2007).
The *promotora* system can also be seen as a new form of women's leadership in communities. Although their role is limited to program functions, they develop leadership and other skills (this may lead to wider community roles later on). Although this form of empowerment is limited to a relatively small group among beneficiaries, it is nonetheless significant for them, and as Oportunidades expands the numbers and types of *promotoras*, this impact increases. Adato, Coady, and Ruel (2000) found that, with some notable exceptions, PROGRESA *promotoras* were elected and popular. Espinosa (2001; cited in Fox 2008) and Hevia de la Jara (2007) are more critical of the *promotoras'* roles, finding cases of top-down selection and abuse of their power, which they see as part of the motivation for the move toward *comités de vocales*.

We found that *promotoras*, as both community members and the representatives of a program that introduced resources as well as new tensions, were vulnerable to social pressures and had to absorb some of the frustrations of people in their communities, for example, when transfers were late or less than expected or when they were blamed for nonbeneficiary exclusions. With this new form of power comes new potential resentments and suspicions, an issue that emerged in the context of some resentment over *promotoras'* charging small amounts of money for their transportation and expenses (this was found during our research on PROGRESA; Oportunidades documents stress that beneficiaries are not to be charged). Notwithstanding, beneficiary attitudes toward *promotoras* presented a solid picture of the *promotora* system as fulfilling a crucial role and doing so effectively. Doctors were also very positive about the *promotoras*, who facilitated beneficiaries' participation in the health services and *faenas* and kept doctors informed of the problems of beneficiary families.

An aspect of the *promotoras'* work pertaining to the theme of this chapter was the collective forums they organized for beneficiaries. Monthly beneficiary meetings and collective trips to pick up their benefits were opportunities for collective activity. Although the primary planned as well as actual use of the monthly meeting was to convey basic program information, it was also potentially a space for beneficiaries to raise questions, concerns, and suggestions that might make their way up to program officials. Additionally, beneficiaries said that *promotora* meetings were sometimes a forum for women to talk to each other, learn to speak more, share problems, and offer each other solutions. As a *promotora* in Guerrero explained, “Now we are in a better position. . . . Now we can speak about everything. Some speak more, some less. And those that almost didn’t speak, now they speak more. . . . Now they feel more comfortable. This serves us to civilize ourselves a little bit—to wake up, to be more open. Because also some women didn’t leave their houses, and now they do it a little bit more.” The health *pláticas* were also an opportunity for women to learn and to communicate in groups. A *promotora* in Michoacán explained how women benefit from the program “because of *pláticas*, because they speak with
each other . . . beneficiary with beneficiary, with other women who are in the program. For example, in my community I hold a meeting and we begin to talk, and they have more experience. . . . Now they know how to speak more. For example, here we are in the meetings, we have a chat, and we ask you, how do you handle something, how did you do it? That is how, one to the other, we open our minds.” The types of interactions described here were not typical of the promotora meetings, however. Most meetings were limited to a basic exchange of information on program requirements, and the registration of complaints was infrequent. In response to a question on what takes place at the meetings, a 1999 household survey found that only 15.5 percent of beneficiary respondents chose “sharing experiences with other women” and 10.4 percent chose “discussing problems with PROGRESA.” However, it is likely that some informal discussion and building of camaraderie took place even in the meetings that focused on program requirements. But the benefits described earlier by promotoras that came from meetings that were used as broader discussion forums suggest that there is significant scope for enhancing the ability of the program to increase women’s capacities through collective experience (see Chapter 12 of this volume).

Another type of collective activity facilitated by the program, although not formally part of it, were the faenas mentioned earlier. Faenas are community-level work activities that are common throughout Mexico. They were not part of the program, but beneficiaries, promotoras, and key informants indicated ways in which faenas and the program were being associated. Doctors and teachers both said that promotoras were helpful in organizing beneficiary participation in the faenas.15 Doctors felt that there were environmental, health, and social benefits to encouraging beneficiary participation. Some people conveyed a sense of the communal spirit among beneficiaries that faenas helped to foster, as did a promotora from Michoacán, who said: “It is very nice to be all united, all sweeping together, and even having fun, because sometimes we are all full of dust.”

Oportunidades has enhanced the promotora system, increasing the functions of the promotora and the number of people involved. Now referred to as a vocal, she remains the main focal point of responsibility at the community level. The number and responsibilities of vocales have increased, now divided into four types: vigilancia, health, education, and nutrition. The vocal vigilancia is responsible for informing beneficiaries of the dates of their payments and of the Mesa de Atención y Servicio (discussed later), reporting abuses and de-

15. Although survey data found that most faenas remained communitywide activities involving men and women, at a PROGRESA workshop (IFPRI 1999) PROGRESA operations staff made the points that faenas were gradually becoming more of a female activity because local leaders were more easily able to convince PROGRESA women to participate and that the program created a group of “PROGRESA women” who shared information, activities, and support.
livering complaints and petitions to program personnel, and ensuring that beneficiaries know their rights—that the money they receive matches their receipts; that they are well treated by health, school, and program personnel; and that no politically or other non-program-related conditions are placed on their receipt of benefits. Health and education vocales encourage and help beneficiaries to comply with program requirements, to complete their paperwork, and to spend their benefits as intended. The nutrition vocal teaches families about the preparation and consumption of the nutrition supplements and about the importance of food hygiene, makes home visits to reinforce these lessons, and follows up with households where children are suffering from malnutrition or health problems. Groups of vocales at the local or sublocal level work as a team in the Comité de Promoción Comunitaria. Vocales still also hold regular meetings with their beneficiaries, where beneficiaries can raise questions and efforts are made to resolve them (Oportunidades 2005, 2006).

The Promotora and Collective Activities in RPS

RPS, drawing on PROGRESA’s design, also facilitated beneficiary participation through the elected promotora and the monthly meetings she organized. Apart from the monthly promotora meetings, no formal collective activities were organized by the program; however, in all six communities, people reported some activities informally associated with the program. As in PROGRESA, one activity involved cleaning up common areas: the streets, the clinic, the church, or the cemetery. Although not formally part of RPS activities, these clean-up sessions were often seen this way: “With the other members of the RPS we go and clean. We do it together so we can all help” (ES Jacinta T).16

In most of the research communities, some beneficiaries said that it was easier to organize women since the arrival of the program. Beneficiaries constitute informal groups of women, led by women who can easily be called upon to participate. Some women cited the benefits, such as improved self-esteem, that came from the opportunity for women to work together; they felt part of a group and had a sense of identity with the program. There was variation among communities: this benefit was expressed strongly in some and little if at all in others (the reasons were not clear, though these findings might reflect pre-existing community conditions). Participation in the health workshops (called talleres in Nicaragua) also seemed to have created some camaraderie or some new outward manifestations of it. According to a health worker involved with conducting the talleres, “At the workshops we teach them that . . . it is impor-

16. RPS introduced one unique mechanism that can be seen as a form of “participation”: the bono a la ofierta, or teacher transfer. This was a small sum of cash given to parents for them to give directly to teachers. The cash was subsequently split between the teachers and the school. The purpose of this money was to give teachers an extra incentive for teaching (this was a preexisting custom), provide the school with extra cash for expenses, and give parents a sense of involvement in the education of their children.
tant to hug their friends, to hug their children, that they have to demonstrate that they care for their friends, their husbands, and their children. So now they hug each other, they hug me, now they don’t feel so shy. Those social and emotional aspects have changed a lot” (IC health worker, Ana C). As in PROGRESA, beneficiaries said that the time women spent together in program meetings with the promotoras or in the talleres increased their awareness of women’s issues such as women’s rights and family planning and gave them a chance to speak up in public and share their experiences with other women (see more on this in Chapter 12 of this volume). In one of the study communities, promotoras also organized adult education groups.

Economic cooperation was another type of collective activity. In all of the study communities, beneficiaries had formed informal buying groups in which to do their shopping after they received their benefits. These were usually organized by the promotoras, in part so that they could monitor purchases but sometimes to help negotiate better prices.17 Each community was different with regard to these activities; often the women organized for travel rather than purchasing, sometimes beneficiaries joined in and other times they shopped alone, and some did not participate at all. Sometimes they walked to town together and traveled back individually, or they organized to rent a vehicle collectively but, once in town, purchased separately. Finally, in some communities unique activities were organized; for example, in one, “fifteen mothers got together and decided to buy a small first aid kit. Every time we need something, we get together and buy it” (Isabel A). In another community, a group of women joined together to share the costs of raising a pig, then sold and shared the piglets. There was no link here to RPS even informally, such as encouragement from the promotora or other program officials, nor was there any direct suggestion that program money enabled them to do this. Of course it is possible that it was the extra program resources that enabled these purchases, and the fact that women were meeting more regularly for program activities could have led to these initiatives.

The program thus has the potential to encourage cooperation in ways that can strengthen social capital, and in some ways it was doing this. This type of cooperation seemed to be mainly dependent on the initiative and organizing abilities of the promotoras. The variation across communities also suggests that preexisting experience with collective activity may have influenced what the CCT program enabled. These examples also suggest how a CCT program or another program working in conjunction with a CCT program might facilitate new livelihood activities that could simultaneously promote cooperation and build economic opportunities for women (such as a microenterprise program or a popular savings program).

17. The research found that some promotoras were monitoring the receipts of beneficiaries to be sure that they were primarily buying food with their cash transfers. See Chapter 12 in this volume.
Citizenship and Participation in Oportunidades

Oportunidades has placed considerable emphasis on issues of transparency, citizenship, and participation with a certain amount of regard for practicality. Many of these values were also present in the original conception of PROGRESA, but they have since been given much more attention and developed into a number of concrete mechanisms. Mexico’s National Development Plan of 2001–06 emphasized transparency in public service, and Oportunidades operationalizes this through efficient use of resources, targeting, evaluation, the Controlaría Social, and the Rules of Operation, which eliminate discretion and guarantee certainty (Oportunidades 2003, 56). The program’s policy strategy document for 2002–06 emphasizes citizenship, participation, and the agency of families, involving two main dimensions: (1) the overall framework of transparency and information and (2) conditionality. With respect to the former, “The program promotes citizen participation through distribution of regular and sufficient information about the mechanisms and Rules of Operation to the beneficiaries.” It is hoped that this will produce an “attitude of vigilance and active involvement” in improving program operations (Oportunidades 2003, 56). The program envisions promotion of citizenship through “co-responsibility”—the families’ agreement to participate in the improvement of their human capital and be active contributors to an integrated development process:

Although some see conditionalities as undermining people’s agency (Samson 2006; Schubert and Slater 2006), Oportunidades sees conditionality as promoting agency, as does the cash transfer: cash gives people the choice to make their own decisions about what they need (Oportunidades 2003, 58).

This agenda with respect to citizenship is ambitious and the argument more theoretical than verifiable. However, with respect to transparency and information exchange, Oportunidades has instituted an impressive array of mech-

18. The Controlaría Social is a mechanism to incorporate citizen participation and government accountability. It is not specific to Oportunidades but has existed in various forms and with different meanings in Mexican government programs for about 15 years (Hevia de la Jara 2006).
Efforts include the diffusion of program information by the government in various forms, the distribution of a “citizen’s charter” to beneficiaries during their incorporation into the program, and “transparency days” around election time in which stakeholders commit to not using any part of the program as a political tool. The primary accountability mechanism is the Sistema de Atención Ciudadana (Citizen Attention System), through which beneficiaries are encouraged to submit problems and appeals to Oportunidades by letter, in person, in earmarked boxes, via a toll-free phone number, or by the Internet. There is also the Mesa de Atención y Servicio; every two months Oportunidades staff visit the local area, where the vocales and beneficiaries can ask questions and resolve issues. Beneficiaries are also convened for other types of program activities. The significance of these developments, and the effort that Oportunidades has put into outreach, is seen in the 319,060 contacts made with the Sistema de Atención Ciudadana between 2003 and 2006, including information requests, applications to join the program, and complaints. A survey by the Secretary of Public Administration found that between 2003 and 2005 the percentages of beneficiaries who reported having received information on “how to present complaints and denunciations” and the “functions of the Community Promotion Committee” had doubled, though they were still limited to 37 percent and 29 percent, respectively (Fox 2008). Research reported in Hevia de la Jara (2007) and Fox (2008) concluded that the Sistema de Atención Ciudadana was successful at resolving information requests and payment problems, though not at dealing with more serious problems and complaints.19 Another survey found that Oportunidades earned high marks with respect to people’s receipt of information and their confidence in and satisfaction with the information received (well over 90 percent gave positive responses). Only 3 percent said they had submitted suggestions or complaints, which could indicate satisfaction with the program or lack of awareness of or comfort with using the system. Among those who did, 57 percent said they were satisfied (SFP/SEDESOL 2005).

Conclusion: Why Participate in CCT Programs?

This chapter argues that CCT programs operate on a different logic than a community-driven development program that privileges participation for instrumental and intrinsic reasons. CCT programs, in fact, often steer away from decentralization and local participation for instrumental reasons related to administrative complexity and avoidance of clientelism. Nevertheless, CCT pro-

19. Fox (2008) concludes that Oportunidades has made substantial efforts to address a major need for upward communications but that understaffing and several structural factors limit its effectiveness. One of these is the fact that there was no institutional mechanism to assure beneficiaries a seat at the table or clout to achieve their objectives, which he contrasts with the Mexican antipoverty program Diconsa, which has formal structures that give citizens that seat.
grams across Latin America involve widely varying levels of decentralization and participation for a number of functions. Furthermore, research in Mexico and Nicaragua has revealed ways in which communities are affected by the program and local dynamics mediate program reception and outcomes regardless of design. It has also suggested that a system for greater local involvement in some issues could improve satisfaction with the program. This is well illustrated by the case of the household targeting system, which emerged as a source of stress with respect to an otherwise popular program. Brazil’s CCT programs show how targeting can include a level of decentralization, and community-based targeting mechanisms used elsewhere in the world could be examined for ways to introduce community review (improving both accuracy and satisfaction) but under careful checks and balances.

The research in Mexico and Nicaragua also found that in both programs collective activities were either planned or emerged through informal local initiatives and that these provided a number of social and economic benefits for participants. Because CCT programs operate through a direct relationship between government and the household, there are fewer opportunities for collective action and organizational development than in programs using demand-driven or community development approaches that operate via local organizations such as community or women’s groups. The benefits that came from informal activities in PROGRESA and RPS, as well as other country initiatives such as those in Colombia, El Salvador, Honduras, and elsewhere, suggest avenues for strengthening social as well as individual human capital via a CCT program and generating new possibilities for sustainable impacts.

Whether or not forms of decentralization and participation in CCT programs would increase the achievement of the programs’ primary objectives with respect to improving health, nutrition, and education is an open question. Evidence from other programs showing the benefits of participation in service delivery, targeting, and other areas suggest that they could. In addition to functionality, program officials are concerned with “beneficiary satisfaction” (which is usually included as an evaluation question), and increasing social capital, beneficiary empowerment, and citizenship may be objectives as well; some countries have made the choice to pursue them. At a minimum, a CCT program should ensure that people have regular access to information, an understanding of program design and objectives (beyond the conditionalities), and a reliable and responsive system through which to register appeals, problems, and con-

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20. In a study of Mexico’s supply-side-oriented Compensatory Education Programs and the CCTs, Gertler, Patrinos, and Rubio-Codina (2006, 4) found that the component of the compensatory education program that had the greatest impact on school failure and repetition rates, even after controlling for the CCT program, was the support to school management (Apoyo a la Gestión Escolar) involving empowering parents’ associations. They conclude: “This gives suggestive evidence that supply-oriented interventions should be redirected towards decentralizing school management.”
cerns. All of this is still far from influencing program design or operational decisions. Forms of participation in CCT programs will need to be guided by local historical, political, and social contexts; \(^{21}\) some countries may need to de-centralize more, whereas others may have good reasons for centralizing certain functions. Exploring country-specific options could lead to programs that achieve a wider range of social and human capital outcomes.

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\(^{21}\) For example, Adato et al. (2007) found significant problems with respect to communications between the program and beneficiaries and examined whether and how a promotora-type system might work in Turkey, where the CCT program did not have this function. Most respondents believed that the Latin American model would not work in this respect.
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PART IV

Conclusion
At the start of this book we asked whether the high hopes set out for conditional cash transfer (CCT) programs were merited—are they a “magic bullet” for reducing poverty? They are not, but they can make significant contributions toward the reduction of poverty. In this book we have provided evidence of their strong positive impacts on a wide range of education, health, and nutrition indicators, including school enrollment, attendance, and grade progression; clinic visits for preventative healthcare and growth monitoring; diet quality; and child stunting. However, some indicators, such as antenatal care, show much less improvement, and there are others that CCT program designs need to focus on more, such as the period surrounding childbirth. The fact that the CCT programs reviewed in this book have not demonstrated impacts on school achievement is significant given the implications for long-term goals of using education to improve future income-earning capabilities. Although these programs will certainly have some of the intended long-term effects in the areas in which CCT programs perform well, in the next decade both program and evaluation designs need to focus on how to build on the successes thus far, and on the lessons learned, to improve their impacts.

Other significant questions remain. These relate to knowledge gaps in understanding the pathways through which CCT programs actually affect these indicators, the extent to which conditionality plays a role, the relative importance of the cash incentives versus improving services, and the relative importance of cash versus changes in knowledge and attitudes. And although these programs may push up school enrollment or healthcare use, significant gaps remain even in these indicators. This indicates that other factors are at play that current program designs do not sufficiently address and that are not well enough understood. Although some studies have shed light on these questions, more focus is needed, using quantitative and qualitative methods; the latter have been partic-
ularly informative on these types of issues but have been underutilized in program evaluations (Adato 2008). Finally, CCT programs do not address constraints of a structural economic, social, or political origin. For some families and in some regions, these programs will not break the intergenerational transmission of poverty, regardless of whether children are educated and healthy. One of the looming questions in countries that have invested heavily in CCT programs is whether there will be enough jobs to employ people who are now employable due to the investments in nutrition, health, and education that their parents made for them. The remainder of this concluding chapter raises some key policy and institutional issues confronting CCT programs by asking a series of questions and considering the new frontiers for CCT programs in their second decade.

Are the Impacts Sustainable?

Increasingly the question is raised whether the impacts of CCT programs will still be found in the later years of these programs or after people stop receiving transfers. How long does behavior change last; that is, does it occur in the short term as a direct response to a cash incentive, and will indicators revert back to their initial levels when cash is no longer part of the picture? Or is there a change in people’s knowledge and attitudes toward human capital that endures even after the cash is gone? Are there multiplier effects through investments made with the cash?2

With regard to the first question, the best evidence thus far comes from Mexico, because the Mexican CCT program Programa de Educación, Salud, y Alimentación (PROGRESA, now Oportunidades) is the oldest national program, and it has continued to commission quantitative evaluations and qualitative studies. In this volume Behrman and Parker review many studies on the impact of PROGRESA/Oportunidades on schooling attainment. In terms of long-run effects, a particularly noteworthy finding comes from data collected in 2003, which traced participants in the earlier 1997–2000 evaluation surveys. Boys aged 9–12 pre-program (i.e., observed in 1997) achieved about 0.9–1.0 grade of additional schooling (when observed again in 2003), and girls aged 9–12 pre-program attained about 0.7–0.8 additional grade compared with similar children not receiving the program. These estimates imply an increase in overall schooling attainment of about 12–15 percent for boys and 9–10 percent for girls after 5.5 years of program benefits (Behrman, Parker, and Todd 2010).

2. Another issue relates to general equilibrium and spillover effects. In Mexico, Coady and Harris (2004) used a computable general equilibrium model to show that in a general equilibrium context the introduction of PROGRESA led to welfare gains because it entailed a switch from poorly targeted universal food subsidies to targeted transfers. With respect to spillovers, Angelucci and deGiorgi (2006) have found few impacts, which are mostly positive, such as the facilitation of local informal credit markets.
Behrman, Parker, and Todd (2009) also explored the medium-term impact of the program package, including the nutritional components, for infants and young children on subsequent school performance. They found that those aged 1–2 years in 1997 (7 years in 2003), and thus exposed to the *papilla* supplement, entered school at an earlier age. This finding is consistent with evidence from other Latin American countries showing that early-life nutrition interventions convey life-long cognitive benefits (Maluccio et al. 2009). Many evaluations of Oportunidades have been conducted since 2001 and have continued to find substantial program impacts on education, health, and nutrition over time. Households that had entered the program in different years were compared at a given period of time, and those that had entered the program earlier were found to have experienced significantly greater impacts on a number of education, health, and nutrition outcomes. These results can be found in a series of studies, including Parker (2003, 2005), Gutiérrez et al. (2005), Hernández and Hernández (2005a, 2005b), Neufeld et al. (2005), and Cruz, de la Torre, and Velázquez (2006).

With regard to behavior change, the Red de Protección Social (RPS) in Nicaragua provides the best available evidence. In its evaluation of school continuation rates, measured as grade advancement for two consecutive years, the program’s effect was 7.3 percentage points on average. An unexpected impact was a large effect on students making the transition to the fifth and sixth grades; fifth-grade and higher enrollment was not a program requirement. This could have been a result of confusion over the requirement or an income effect, but it could reflect a change in attitudes toward education (Maluccio and Flores 2005). Qualitative research found that the program had an influence on attitudes toward education (Adato et al. 2004). Additional insight on the sustainability question was also provided by a follow-up survey two years after households were rotated out of the program, which found an enrollment drop of 12.5 percentage points. However, enrollment in this group no longer in the program remained 8 percentage points higher than at baseline, suggesting that the program impacts were sustained in this group (Maluccio and Flores 2005). After the transfers ended, health service use remained very high 8–10 months later (IFPRI 2004). Regalia and Castro (2007) attribute this effect to the continuance of the supply-side interventions. The concern with sustainability underscores the importance of an often underemphasized feature of CCT programs, the health and nutrition training that women receive. Although it is normally a program condition and thus not seen as unimportant, this training is often not given the attention merited with respect to quality of design and implementation, evaluation, and its role in impact pathways. Training for beneficiaries as well as mothers’ meetings at which aspects of the programs are discussed are potentially important mechanisms that the program uses to sustain its impact after the cash is gone.

On the third question—whether cash is used for productive investments that sustain impacts in this way—there is little evidence. Gertler, Martinez, and Rubio-Codina (2006) found that the Oportunidades transfers increased invest-
ment in microenterprise and agricultural activities at an average rate of 12 cents for each peso received (88 cents were spent on consumption goods and services). The investments improved the households’ income-generating ability, with a rate of return of 17.5 percent. In Nicaragua, Maluccio (2007) explored a similar question and found less evidence of investment. The last RPS demand-side transfers were delivered in late 2003, and survey work in 2004 provided a way to look for productive investments. Maluccio found limited evidence that the program had led to an increase in ownership of consumer durables or agricultural investment goods or in entrepreneurial activities.

How Important Is Supply of Services?

Among the many institutional issues facing CCT programs, that with probably the most direct effect on human capital outcomes and the functioning of the essential CCT concept relates to service delivery, often referred to as the “supply side.” CCT programs are largely designed around the assumption that there is a “demand” constraint, that is, that families need incentives to participate in services. However, the services need to be available, offered at reasonable distances, and of sufficient quality for the programs to work as intended. Inadequate quantity and quality of health and education infrastructure, staff, and supplies—and how to improve them in order for the program to work better—have challenged most governments that have undertaken CCT programs. On the one hand, these programs can serve as an impetus to improve the supply of services; a country wanting to undertake a CCT program cannot impose conditionalities where services do not exist. More complicated are instances in which infrastructure and services exist but are far from people’s homes or their quality is low. A CCT program may proceed, but the quality of service is such that it cannot deliver results as intended. Possible scenarios are that people do not attend because of distances or poor quality, and thus lose their transfers, or that they attend but program outcome objectives are not achieved because learning does not take place or health services are not received as intended. A third possibility is that improvements are found in some key indicators, but not as great as they would be in the presence of better supply.

Many countries with CCT programs have initiated or accelerated supply-side interventions that were either part of or preceded or accompanied the CCT program. Supply-side interventions in education have been undertaken in Bangladesh, Cambodia, El Salvador, Honduras, Jamaica, Mexico, and Nicaragua, either in association with the CCT program for beneficiaries or as broader-based reforms that also included beneficiary communities (Fiszbein and Schady

3. The supply constraints and the challenges of overcoming them will be particularly significant as CCTs are explored in Sub-Saharan Africa, with significant debates on conditionality emerging there (discussed later in this chapter).
Research that attempts to disentangle demand- and supply-side effects is important because it speaks to the question of whether one approach alone or both yield the highest impact on human capital—as well as which side in a given program needs to be improved.

In Mexico, education reforms undertaken since the early 1990s have included supply-side interventions; some have been undertaken since Oportunidades, such as the Programa Escuelas de Calidad, which began in 2001. Interventions have included investments in physical infrastructure and school rehabilitation, the hiring of teachers, teacher incentives, supplies, training, and grants to parents' associations, among others (Levy and Rodriguez 2004; Coady and Parker 2005; Gertler, Patrinos, and Rubio-Codina 2006; World Bank 2006). Parker (2003) found that despite the increases in secondary enrollment resulting from participation in Oportunidades, student–teacher ratios were similar to those in non-Oportunidades schools, indicating that education officials responded well to the increased demand by contracting more teachers. However, in “educación media superior” (vocational secondary education), large increases in enrollment were not met with an increase in new teachers and significantly increased the number of students per teacher. A World Bank (2006) study concludes that, largely due to the success of Oportunidades and compensatory education programs in improving quality at the primary level, there is substantially increased demand for lower secondary education, and quality has not kept pace with enrollment. As Behrman and Parker discussed in this volume, the program has not demonstrated an impact on achievement test performance, although they note that it was not possible to control for pre-intervention achievement scores. Lack of impact on achievement could reflect school quality factors.

With respect to health supply interventions, some of these preceded PROGRESA; the Program for Extension of Coverage (Programa de Ampliación de Cobertura, or PAC), begun in 1995, was a resumption of the devolution of healthcare provision to the states and involved providing conditional transfers to providers associated with the delivery of a package of basic services. PAC was later adapted as the health component of PROGRESA (González-Pier et al. 2006).

Some research has attempted to determine the difference that supply makes. In Mexico, Behrman, Parker, and Todd (2009) found that the impacts on grades of schooling attained by students who attended general or technical schools were twice as great as on those of students who received telesecundaria (schooling transmitted by video, with fewer and less specialized teachers). They

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4. The Secretaría de Educación Pública's Compensatory Program is a supply-side intervention that provides additional resources to schools that have the lowest performance levels and are located in highly disadvantaged areas. In 2006 it was reported to be serving about 5 million students in initial, preschool, and primary education and about 300,000 students in telesecundaria education (Gertler, Patrinos, and Rubio-Codina 2006).
also found that students in classes with lower student–teacher ratios (under 20 students per teacher) had greater impacts than those with high ratios. As noted by Behrman and Parker in this volume, Behrman et al. (2006) found that greater impacts of PROGRESA/Oportunidades were generally achieved when students and parents had access to schools with more resources, better-educated teachers, and more extensive facilities. A reduction in student class size of 30 percent would increase the positive enrollment effect of the program by about 1 percentage point. Schools with a computer room had greater program impacts than schools without. The implication is that parents are more likely to enroll their children when schools are of better quality. The study also found that the larger the annual budget per student, the greater the impact of Oportunidades: for each increase of 300 pesos per year, there was about an additional 0.025 year of schooling. When there is only one telesecundaria in a community, the impacts are smaller than if there were more. A study by Gertler, Patrinos and Rubio-Codina (2006) found that, after controlling for the effects of the CCT, Mexico’s supply-side compensatory education program did not have a statistically significant independent impact on schooling outcomes; however, individual components, specifically the support to school management (the Apoyo a la Gestión Escolar) and provision of supplies components reduced failure and grade repetition. The fact that the impacts increased the longer the school had benefited from the school supplies component suggests that it may take time for the supply-side interventions to take effect (World Bank 2006).

Analysis of data from RPS by Maluccio, Murphy, and Regalia (2006) found that supply-side conditions substantially influenced program performance with respect to education outcomes. The program was more effective in areas with autonomous schools, those with more flexibility to respond to changing demand conditions. The program was also more effective in areas with poor initial supply as measured by grade availability and distance to schools, because these areas had the lowest starting points and thus the greatest room for improvement. In areas with poor initial supply, the program was more effective in improving supply in terms of grade availability, sessions per day, and number of teachers. The study also concluded that RPS increased the supply of services, especially in the most underserved parts of intervention areas. It was not sufficient to prevent a marginal increase in the student–teacher ratio in the most overcrowded schools. The researchers also concluded that initial supply conditions are not insurmountable for CCT implementation if constraints are identified at the planning stage and responsive mechanisms are instituted during program implementation. They point to the importance of considering these integrated demand and supply issues in program design and impact evaluation. The evaluation of the Honduran Programa de Asignación Familiar reported on in this book was designed to compare demand only, supply only, and demand plus supply interventions but could not do so because of the low implementation of the supply-side intervention.
The Nicaraguan government recognized that without a major intervention for supply of healthcare interventions, households could not comply with the conditions. Because the government could not expand its healthcare capacity quickly enough, it contracted and trained private providers to provide services, including nongovernmental organizations (NGOs) and for-profit agencies. The greatest impact occurred during RPS’s expansion to the remote and less accessible Atlantic Coast, where the municipality of Wiwili went from 9 rural health centers in 2004, when the program entered, to 325 locations in which services were provided. Providers in all program areas were paid based on their performance against target achievements (Regalia and Castro 2007). As noted earlier, after the cash transfers ended in 2004, the supply and pay-for-performance system was continued, and Regalia and Castro (2007) attribute the continued high rate of health service participation, despite the absence of cash, to these supply-side interventions. It is worth noting, however, that the supply-side improvements were not an uncomplicated negotiation with the Ministry of Health (discussed more under institutional issues).

Honduras planned a more elaborate supply-side intervention. As noted in Chapter 13 of this volume, this was to include local-level quality improvement teams (QITs) trained and tasked with developing work plans for minor repairs, purchase of equipment and supplies, and money for lay assistants. The package also included a community-based nutrition program for children under age 2, involving training of lay nutrition promoters. Unfortunately, the QIT intervention could not be implemented as intended because of legal complications with transferring resources to community-based teams. This is in itself an important finding, because it demonstrates one of the complications to be anticipated in finding mechanisms to improve service supply (Morris et al. 2004).

Although not a focus of this book, the government of El Salvador’s CCT program is a recent example of an ambitious supply agenda accompanying its CCT program (Comunidades Solidaria Rurales, formerly Red Solidaria)—not just for education and health service delivery but also for the provision of basic infrastructure—on the theory that this also contributes to households’ ability to benefit from the CCT programs and to the quality of the clinics and schools. This intervention was to include the provision of basic sanitation infrastructure, potable water, and electricity in schools and health centers, as well as improvements in roads and transportation, though implementation has been slow. Supply-side improvements in the education sector include the Redes Escolares Efectivas (REE) in the poorest municipalities, established with the aim of guaranteeing access to education services at all levels from preschool to sixth grade, and literacy programs for adults and young people. Schools falling within the REE are guaranteed a trimestral transfer of $54 per child, as well as an extra contribution toward the costs of participation in network projects. Health sector inputs include the extension of vaccination, child growth and development monitoring, maternal care, and family planning programs. Health
services are delivered by either the government or government-contracted NGOs. Services may be offered at health clinics or, where these do not exist, through mobile health teams (Government of El Salvador 2008).

Addressing supply and quality of services involves resources but also good program designs. One aspect is having the right incentives in place to facilitate cooperation and commitment. One possibility is to provide financial incentives to delivery agents for improving quality, as in the case of RPS’s bono a la oferta, the small cash grant given to beneficiary families to give to their children’s teachers and schools. This was to be used for classroom supplies or small upgrades and was intended to improve quality through direct expenditures and teacher motivation. As mentioned in Chapter 13 of this volume, Fox (2008) suggests that the wrong incentives are currently in place for encouraging beneficiaries to demand quality services, because providers monitor and sign off on beneficiaries’ compliance with conditions (though we have not seen evidence that this is a problem in practice). Other design issues involve providing the right incentives for interagency cooperation. For example, interinstitutional tensions over service delivery were experienced in Nicaragua, where the Ministry of Health (MOH) initially opposed the model of outsourcing health services and only reluctantly agreed to it. Tensions related to the MOH’s increased workload related to planning and distribution of inputs, increased referrals for curative services, lower pay for MOH personnel than for their private provider counterparts, and budgets for the private providers that did not go through the MOH. Although these tensions were never entirely resolved, interinstitutional communication and working relationships improved through an increasing integration of systems that increased the incentives for cooperation. As of 2007, however, the low buy-in resurfaced as the MOH cut back budgetary allocations in former RPS localities (Regalia and Castro 2007).

**What Are the Other Key Institutional and Design Challenges?**

Most CCT evaluations have focused on identifying the impacts of the programs on the indicators specified as program goals. Far less attention has been given to operations evaluations and analysis of institutional issues, and even less well understood is how institutional issues (apart from supply) affect program outcomes.

A core set of institutional issues with a high degree of relevance to program outcomes revolves around institutional arrangements: where to locate a program, who should run it, levels of centralization versus decentralization, autonomy versus integration. A program can be located within a line ministry with responsibility for social development, an office under the president or prime minister’s office, a special government agency, or a social investment fund (Vermehren and Okunmadewa 2006). Some programs have straddled these lo-
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cations. These choices have implications for ownership and commitment; political support, conflict, and influence; efficiency; and capacity for delivery. The earlier-cited instance of Nicaragua’s interministerial tensions over outsourcing health services provides one example. Other such interinstitutional and political issues were analyzed in Chapters 3–5. A rare and insightful account of the policy process surrounding the introduction and design of PROGRESA is given by Levy (2006), who details consensus building within the cabinet, budgetary considerations, and interagency coordination, among other issues. At the local level, choices revolve around roles for the local government, NGOs, and communities and how these are integrated with government roles at higher levels. These choices have implications for accountability (some of these issues were taken up in Chapter 13). Few studies have focused on these institutional issues, and Fox (2008) notes that these evaluations need to disaggregate geographically and look for the causes of the problems to be of use. Greater systematic use of qualitative research can achieve this.5

A topic that has received considerable attention is targeting. Although not a focus of this book, targeting methods and outcomes do feature in the discussion of community issues in Chapter 13 and are reviewed in detail elsewhere (Coady, Grosh, and Hoddinott 2004; Fiszbein and Schady 2009). Nevertheless, a few additional points should be raised here, because getting the targeting right directly affects the magnitude of programs’ economic as well as social impacts. The ability of CCT programs to structure incentives in order to target girls, secondary school–age children, or children at the key transition from primary to secondary school is powerful, but is sometimes insufficiently considered. Primary school enrollment has been targeted by El Salvador, Mexico, and Turkey, where starting levels were already high and thus impacts were small, raising questions as to whether resources could be better used if targeted at older children. There are yet-unexploited opportunities to design programs to target specific groups, gaps, and indicators by sex, age, and ethnicity.

Furthermore, the choices around geographic and household targeting remain contested. These systems are important tools for affecting poverty, using resources efficiently, and generating political support. But household targeting is also subject to error, sometimes involves questionable or borderline efficiencies, and generates tensions within communities. A study of PROGRESA’s system of household targeting found that it performed better than alternative

5. Some institutional issues at the local level in Mexico are examined by Adato, Coady, and Ruel (2000) and more extensively in El Salvador by Adato et al. (2009), though not at the national level. Most government-commissioned evaluations are concerned with documenting impacts on beneficiaries and not on investigating their own institutional processes. However, Levy (2009, 24) notes that in Mexico the incentive problems in agency coordination were underestimated and that bureaucratic issues have limited program effectiveness: “Future programs need to incorporate this issue as an essential element of program design. This is an area where more research is necessary and would be extremely valuable.”
methods tested in reducing the poverty gap and the severity of poverty, even accounting for costs. However, the reduction in the higher-order measures of poverty, beyond that achieved by geographic targeting, were small, leading the researchers to conclude that whether these marginal improvements are worthwhile depends on their noneconomic (social and political) costs (Skoufias, Davis, and de la Vega 1999, 20). These costs are considered in Chapter 13 of this volume. Cautions about household targeting are also raised by Fox (2008), who noted that private surveyors hired by PROGRESA had reduced incentives to travel to harder-to-reach households. This is consistent with the findings of Adato (2000) and Adato, Coady, and Ruel (2000), who found a number of problems with the census involving enumerators who did not return when no one was home the first time or did not go to remote areas, as well as incorrect answers from respondents because of lack of knowledge, language barriers, distrust of or fatigue with government surveys, or shame over revealing their poverty. On the other hand, once people understand the targeting system, there is a risk that they will underreport their resources. Oportunidades responded to census problems by resurveying communities, resulting in the addition of 1.7 million new families, mainly between 2002 and 2004 (Hevia de la Jara 2007).

Concerns over potential errors or inefficiencies of household targeting may lead to a decision to target geographically (as in the Nicaraguan program’s second phase and in El Salvador), but they do not have to. In countries, regions, or localities with large populations and substantial variations in poverty and wealth, the efficiencies inherent in household targeting are likely to prevail. Several safeguards can avoid many of the problems reported: first, using better-trained and properly incentivized enumerators; second, giving better information to beneficiaries as to the basis of the targeting and providing some form of community review or local cross-check as originally envisioned; third, developing a systematic, reliable appeals process that issues responses; and fourth, implementing a rational reassessment and new mechanisms for incorporation after a certain period.

A gauntlet of other institutional issues confronts current and would-be CCT program designers and managers, from horizontal and vertical institutional arrangements to budgeting processes to methods for cash distribution to systems for monitoring conditionalities to whether, when, and how families exit the program, and many more. These are beyond the scope of this book; for an introduction to them, see Adato, Coady, and Ruel (2000); Samson, van Niekerk, and MacQuene (2006); Fiszbein and Schady (2009); and Garrett, Bassett, and Marini (2009).

How Important Is Conditionality?

Conditionality is fairly well accepted in Latin America; as countries have followed the lead of Mexico and Brazil, there has been little debate over whether
the grants offered should be conditional or not. This is not the case in Africa, particularly in those countries in East and southern Africa that are currently expanding cash transfers as part of their efforts to increase social protection for the poor and respond to the AIDS crisis. Objections are largely based on, but not limited to, concerns over inadequate services. More generally, legitimate questions are raised as to what difference conditionality makes and under what circumstances.

There are several issues to consider in debating, and designing, conditionality. The first is the appropriateness of the program design—what are the objectives that the conditionality is targeting? Conditionalities are designed to target particular human capital indicators; these need to be clearly defined and the incentives structured logically to affect them. If securing short-term consumption is what is principally or urgently needed, as in communities hard hit by HIV and AIDS, a conditional program is not necessary and could be counterproductive, denying benefits to people who most need them. If an indicator is already high (e.g., school enrollment), it is unlikely that conditioning benefits will have a meaningfully large effect on that outcome. Finally, it is important that conditions respond to the reasons for the gaps. Are they due to a cash constraint? A supply constraint? Or have they resulted from a lack of knowledge about, or an under-valuing of, preventive healthcare or girls’ education? The answers are likely to lead to different design features or to necessary complementary programs.

The next question is this: is the conditionality necessary to meet the objective, or would cash alone achieve the same impacts? An unconditional transfer can provide cash to compensate for lost child labor income and to pay for food purchases, school fees, and transportation. Training can influence attitudes and practices with respect to education, health, and nutrition. When the issue is seen in this light, it is not obvious that conditioning transfers is necessary. But as de Brauw and Hoddinott (2008), Behrman and Skoufias (Chapter 6 of this volume), and others note, conditionality may be appropriate where

6. In Turkey, Adato et al. (2007) found that although cost was a major constraint on children’s schooling and thus a cash transfer responded to this problem, in some regions other concerns were as important to schooling decisions or more so: inadequate supply of nearby schools, inadequate transportation, unsafe schools, lack of perceived value of education (value to work for boys, value to marriage for girls), and other gender issues revolving around sexuality and threats to family reputation and honor.

7. Studies of unconditional cash transfer programs in Sub-Saharan Africa have shown positive impacts on human capital, including South Africa’s large-scale programs for children and the elderly (Duflo 2000; Case 2001; Case, Hosegood, and Lund 2005; Agüero, Carter, and Woolard 2007) and small but expanding unconditional cash transfer programs in Malawi (Miller et al. 2010) and Zambia (Tembo and Freeland 2008). Thus far, the number of large-scale, rigorous impact assessments is limited but growing, because governments in southern and East Africa see cash transfers as an important and viable means of social protection for their poorest citizens, particularly because HIV and AIDS decimates livelihoods and threatens the human capital of children (Adato and Bassett 2009).
there are "externalities" associated with certain types of human capital investments. For example, when making decisions about their children's care—say decisions about girls' schooling or about vaccinating their children—parents often do not take into account the benefits that society derives from educated girls or eradication of a disease, and, as a result, they may underinvest in these areas relative to optimal levels from a societal perspective. Conditionality thus influences parents' decisions in society's favor by altering their cost-benefit equation.

Therein also lies the source of some of the objection to conditionality—the concern that the state takes away people's freedom to choose whether or not to participate in services and does not trust them to make good judgments (Samson 2006; Schubert and Slater 2006). Although CCT programs do have an air of paternalism, a household is not a homogenous unit with a unified expression of autonomy. Sociocultural norms often restrict people's freedom to make these decisions; for example, girls are often not free to go to school even when they want to, children are not free to choose whether to get vaccinated against lifelong debilitating diseases, and women are not always free to go to clinics or workshops to learn about family planning methods. As in other cases of policies that enforce women's rights or protect them from violence, conditionality can be seen as a state-incentivized challenge to social norms, increasing some people's choices from this perspective. At the same time, there are also rational reasons that parents make decisions that are perceived by others as suboptimal, for instance, in cases in which additional years of education do not provide returns because employment opportunities are absent or schools are far away and transportation is inadequate or perceived as unsafe. There are also reasons that poverty, culture, and historical processes of social exclusion and discrimination may prevent people from participating in services regardless of the benefits. In these cases, it can be the very people most in need of cash transfers who are excluded by conditions.

Regardless of one's perspective on this question, the costs and administrative demands of monitoring conditions are enough of a reason to better understand whether conditions make a difference to outcomes. There is a need for evaluations that test conditional and unconditional programs (some are currently under way in Africa). Some evidence has begun to emerge, from simulations and "accidental experiments." In Brazil, simulations of the impacts on school enrollment of Bolsa Escola and an unconditional transfer found that the main enrollment impact was due to the conditionality (Bourguignon, Ferreira, and Leite 2003). Using a model for analyzing Mexico's PROGRESA, Todd and Wolpin (2006) find a mean increase due to an unconditional transfer, but only about 20 percent as large as the attendance-based transfer. Also using data from Mexico, De Janvry et al. (2006) report that one dollar of CCT income is about eight times more effective in inducing enrollment than is a dollar of unconditional transfer income at the mean income of the poor.
Two studies in Latin America took advantage of accidental experiments to test conditionality where widespread implementation errors enabled the construction of "unconditioned" control groups based on whether transfers were actually conditioned or on people's misunderstanding as to whether they were or were not. In Mexico, de Brauw and Hoddinott (2008) found that for all age groups who had completed grades 3–8, the enrollment rate for the "unconditioned" group was 5.4 percentage points lower than for the "conditioned" group. The greatest impact was for children who had completed grade 6, the crucial year of transition to secondary school, when many drop out: for them, children in the unconditioned group were 18–20 percentage points less likely to enroll in school, whether or not the parents knew of the conditionality. For other grade levels, the differences were smaller and not always statistically significant or the unconditioned groups were slightly more likely to enroll. Schady and Araujo (2006) found that the effect of Ecuador's Bono de Desarrollo Humano program on enrollment for conditioned households was 7.3–13.0 percentage points, while the effect on enrollment for unconditioned households was 1.4–2.1 percentage points. On the other hand, the only evidence thus far available from Africa questions the value of conditionality. An experimental pilot program giving cash transfers to girls in Malawi found substantial positive impacts on school attendance, but the effects did not vary substantially across conditional and unconditional treatment arms. This suggests that, at least in this context, the impact is more of an "income effect" than a "price effect" (Baird, McIntosh, and Özler 2010).

There are political economy considerations as well. Where poverty is seen as related to a lack of effort or responsibility, or the public perceives a risk of generating dependency on government "handouts," reciprocal obligations make programs more palatable to policymakers and taxpayers and can increase budget size and sustainability (see Handa and Davis 2006). Where politicians may be evaluated by performance indicators such as changes in school enrollment or use of health clinics, CCT programs provide a clear way of measuring these impacts.

The last and perhaps most significant consideration in conditioning relates to the availability and quality of services, discussed earlier in this chapter. This has been the main objection to trying conditions in the context of Sub-Saharan Africa, where services are very poor. Schubert and Mwiinga (2005, citing findings by Care International) reported that in Chipata, Zambia, there was an excess demand for schooling of about 20 percent beyond capacity. If cash transfers in Africa are conditioned, the program could end up in areas where there are services—not in the poorest areas. On the other hand, as seen earlier in this chapter, CCT programs can provide an impetus to improve supply through government departments or NGOs, an impetus that is needed. Program designs can be adapted to supply constraints by making transfers unconditional where services are inadequate, an idea proposed in Uganda (Government of Uganda
Another major consideration is that of the capacity to administer the conditionality. In the African context, Schubert and Slater (2006) point to limited administrative skills, low salaries, lack of guidance and supervision, and little experience with results-oriented management. The current lack of capacity, however, does not mean that it is impossible to build the capacity through government entities or NGOs (which deliver many of the health services already).

**CCT Programs in Their Second Decade: New Frontiers**

When we reflect on lessons learned and the knowledge gaps that remain, a number of issues emerge as critical as CCT programs move into their second decade. Some of these are persistent problems from the programs' outset, but others are new challenges. They touch on program design and evaluation design. Those that would improve on the original programs include influencing indicators that have thus far been elusive, such as learning, illness, and micronutrient status; improving supply to keep up with demand and learning how to design programs in areas with inadequate and undependable quantity and quality of services; and improving the quality of health, nutrition, and other adult education. Others represent largely new objectives that CCT programs can start to tackle: addressing early childhood development, reducing the risk of sexually transmitted infections, encouraging savings and investment, developing new institutional arrangements to promote participation and accountability, integrating CCT programs with complementary programs that address constraints to human capital investment that are less influenced by a cash incentive, and integrating CCT programs with other programs for asset building into which families can “graduate” from the CCT program.

Other areas for future focus pertain to improving evaluations and the state of knowledge: increasing the understanding of impact pathways by disaggregating the roles of conditionality, demand, supply, cash, food consumption, health and nutrition education, program discourse, and other factors in producing or limiting impact; determining outcome sustainability in the medium and long term and ultimately whether cash transfers do break the cycle of poverty; improving the integration of qualitative and quantitative research, using each method to inform the questions and analysis of the other; and providing more institutional evaluation, with attention given to supply-side effects, institutional and political roles and relationships inside and outside of government, and policy processes.

New geographic frontiers also await CCT programs in the next decade, from rural Africa to the urban United States, and CCT programs will have to adapt to new political, economic, ideological, social, and cultural contexts. Africa, as noted earlier, has not yet embraced CCT programs and will pose particular challenges that bear some similarities to, but are also different from, those of the Latin America experience. Africa’s largest cash transfer programs,
in South Africa, are unconditional and generally considered to work. South Africa’s rights-based approach to social protection has also made conditional-ity controversial, particularly if it might interfere with the current programs, though in late 2009 the government announced plans to condition the main grant for children. Other unconditional programs rolling out in Kenya, Malawi, and Zambia are thus far relatively small, though expanding. Until service delivery and program administration improve, unconditional transfers are likely to remain the norm; currently only Kenya is testing a conditionality, and this involves minimal sanctions. Fiszbein and Schady (2009) report that conditional programs are planned or are being piloted in Burkina Faso, Morocco, Sierra Leone, and Tanzania, though these vary with respect to how closely they resemble a “traditional” CCT program.

Another frontier involves new program designs and with them new evaluation designs. A growing area of interest is the use of conditionality to reduce the risk of HIV and sexually transmitted infections (STIs). Responding to recent evidence on the negative association between higher levels of education and HIV risk (Hargreaves et al. 2008; Pettifor et al. 2008), studies are under way in Malawi and South Africa that provide cash transfers for adolescent girls and their families, conditioned on the girls’ school attendance. These studies examine the impact of these interventions on schooling, as well as on sexual activity, pregnancy, other risk-related factors, and HIV incidence. Early evidence available from the Malawi study shows significant positive impacts of the intervention on risk factors (Baird et al. 2009), as well as on schooling, although no impact is attributed to the conditionality (Baird, McIntosh, and Özler 2010). Another set of studies tests the use of monetary incentives to influence behavior more directly linked to risk reduction, such as participation in HIV and STI education and counseling, adherence to medication, retrieving test results, and staying free of curable STIs. Such interventions evoke a number of practical and ethical questions, but they are modeled on “contingency management” therapeutic approaches that have had some successes in clinical trials and demonstrate some of the new directions that conditionality may take in Sub-Saharan Africa (Medlin and de Walque 2008; Thornton 2008; Özler and de Walque 2009).

Other CCT plans under way include expanding the roles of community organizations in service delivery; comparing conditional with unconditional programs; testing “soft” (less enforced or severe) conditionalities; testing transfers to men versus women; disentangling the effects of the health and nutrition education; testing for impacts on “final outcomes” such as cognitive development.

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8. The first large-scale impact assessment was just getting under way at the time of this writing. Results of smaller studies showing some positive impacts are cited in footnote 7.

9. In January 2010, the government published new regulations requiring children receiving the Child Support Grant to have proof of school attendance, though many implementation questions remained, and it appeared unlikely that grants would be withheld for noncompliance.
school achievement, and nutritional indicators; and evaluating second-round, long-run, and spillover impacts and what happens to children after they leave the program (Fiszbein and Schady 2009). Another approach under way or under consideration in several Latin American countries is the connection of existing or new CCT programs with popular savings initiatives with the aim of including the poor in the banking system, assisting them with asset building and risk reduction, and providing access to education related to their enterprises and activities (Edge Finance 2007).

These innovations reflect an important lesson of the first decade: that as CCT programs migrate to new countries and regions, they should not be introduced as a blueprint. Rather, they represent a concept: how incentives can be used to achieve objectives related to processes of poverty reduction and development, combining resource transfers, service provision, and education. This concept has proven itself to be remarkably adept at promoting investments in human capital. There are many things CCT programs, and even the concept, cannot achieve; they are not a magic bullet to reduce poverty. They will need to be undertaken flexibly, in conjunction with other programs and strategies—and sometimes they should not be undertaken at all. Even in achieving their more modest human capital objectives, they need to progress with respect to magnitudes and types of impacts. These lessons appear to have been learned in the first decade through evaluations, extensive sharing of experience between countries, and a considerable amount of enthusiasm among donors and governments for pushing CCT programs through their next decade. The plans ahead portend an interesting future.

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“Over a decade ago, various Latin American countries launched a new generation of poverty reduction programs, associating investments in the human capital of poor households with monetary income transfers; positive results to date have led to their adoption in other regions. Adato and Hoddinott have gathered a notable group of researchers to assess issues of program design and evaluation, together with broader topics of political economy. The work draws on the extensive involvement and experience of the International Food Policy Research Institute with these programs. The quality and relevance of the essays, and the mix of quantitative and qualitative techniques, ensures that this book will be very valuable and useful for all concerned with poverty alleviation, in Latin America and beyond.”

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“This state-of-the-art study brings together a refreshing combination of quantitative, institutional, and qualitative social analyses, including an especially original focus on gender dynamics. The editors ask: Are conditional cash transfer programs indeed a “magic bullet” for dealing with poverty? While their answer is clearly “no,” this book offers a nuanced look at what CCTs have accomplished and where they fall short. The book demonstrates, for example, that CCT programs do increase the poor’s use of education and health services, but the under-supply of quality, accessible health care and education remains a constraint on the strategy’s potential impact. The book’s editors rightly see these gaps as CCTs’ challenge for the ‘second decade.’”

Jonathan Fox, Professor, Latin American and Latino Studies Department, University of California at Santa Cruz