Notes

Overview

1. For evidence from a variety of settings, see Thomas (1990, 1994); Lundberg, Pollak, and Wales (1997); Duflo (2003); and Ward-Batts (2008).
2. For example, see Miguel and Kremer (2004) on deworming and Gimnig et al. (2003) on insecticide-treated bednets. There is a large body of literature on externalities associated with immunization.
3. On Colombia, see Attanasio, Battistin, and Mesnard (2008); on Ecuador, see Schady and Rosero (2008); on Mexico, see Hoddinott, Skoufias, and Washburn (2000) and Angelucci and Attanasio (2008); and on Nicaragua, see Maluccio and Flores (2005) and Macours, Schady, and Vakis (2008).
4. On Brazil, see Yap, Sedlacek, and Orazem (2008); on Cambodia, see Filmer and Schady (2009c); on Ecuador, see Edmonds and Schady (2008); on Mexico, see Skoufias and Parker (2001) and Schultz (2004); and on Nicaragua, see Maluccio (2005). Exceptions are Attanasio et al. (2006), who find the Familias en Acción program has no effect on child work in Colombia (although the program does appear to have reduced the amount of time dedicated to domestic chores); and Glewwe and Olinto (2004) who find the Programa de Asignación Familiar has no effects on child work in Honduras.
5. On remittances, see Teruel and Davis (2000) and Albarran and Attanasio (2003) for Mexico, and Nielsen and Olinto (2007) for Honduras and Nicaragua. Stecklov et al. (2006) analyze fertility effects of CCT programs in Honduras, Mexico, and Nicaragua. Angelucci and de Giorgi (2008) study village-level general equilibrium effects associated with Oportunidades in Mexico. Medium-term effects of transfers are analyzed by Gertler, Martínez, and Rubio-Codina (2006) for Mexico, and by Maluccio (2008) for Nicaragua. For Mexico and Nicaragua, respectively, Skoufias (2002) and Maluccio (2005) study program effects on the extent to which recipient households can smooth income shocks.

6. The impact of CCTs on child nutritional status is analyzed by Morris, Olinto et al. (2004) for Brazil; by Attanasio, Gómez et al. (2005) for Colombia; by Paxson and Schady (2008) for Ecuador; by Gertler (2004), Rivera et al. (2004), and Behrman and Hoddinott (2005) for Mexico; and by Maluccio and Flores (2005) and Macours, Schady, and Vakis (2008) for Nicaragua.
7. CCT program effects on school attainment by adults are discussed in Behrman, Parker, and Todd (2005). The lack of impact on test scores, even among children who have received more schooling, is found by Ponce and Bedi (2008) for Ecuador; by Behrman, Sengupta, and Todd (2000) for Mexico; and most convincingly, from a methodological point of view, by Filmer and Schady (2009b) for Cambodia; and Behrman, Parker, and Todd (2005) for Mexico.
8. de Brauw and Hoddinott (2008) and Schady and Araujo (2008) exploit glitches in program implementation in Mexico and Ecuador, respectively. Filmer and Schady (2009c) analyze differences in effects across siblings for the CESSP program in Cambodia, in which transfers are conditional on the enrollment of only one sibling. Simulation methods and structural modeling also have been used to estimate the relative importance of income and price effects associated with transfers in Brazil (Bourguignon, Ferreira, and Leite 2003) and Mexico (Attanasio, Meghir, and Santiago 2005; Todd and Wolpin 2006a).

Chapter 1

1. Several programs that have most of the CCT design features transfer not cash but food stamps (the Dominican Republic's Comer es Primero program or Costa Rica's Supremos) or food (the Bangladesh Food for Education program). These programs might be expected to have effects similar to those of CCTs.
2. In Brazil, Bolsa Família is beginning to encourage more explicit links to social worker support services for families who are not complying with conditions and for especially vulnerable families. Colombia has developed the Juntos program, which provides social worker accompaniment similar to that of Chile Solidario and eventually might be linked to the CCT program. In El Salvador, the CCT program itself provides assistance to help families give birth. The government there also has designed parallel interventions in the same target municipalities to improve livelihoods for small farmers through small-scale productive projects and microcredit.
3. Most recently, CCTs have been created in New York City and Australia for use among indigenous communities. The New York City CCT built explicitly on the experience from developing countries. Staff from the office of Mayor Michael Bloomberg and a number of city agencies traveled to Mexico to learn about the program. Numerous informational meetings also were facilitated by the World Bank so that policy makers designing Opportunity NYC could learn from the experience in developing countries—an example of the North learning from the South.

Chapter 2

1. Demirgüç-Kunt and Levine (2008) have pointed out correctly that improving the functioning of financial markets in developing countries should be seen as the "first-best" response to failures that originate in those markets. The arguments to address these failures through redistribution instead should be seen as conditional on the first-best solution being too costly to implement, or be viewed as a temporary substitute.
2. The net effect of aggregate economic shocks on health and education investments varies substantially across countries, depending on the relative strength of substitution and income effects (Ferreira and Schady 2008). Severe idiosyncratic shocks often lead to investment pauses that can be costly.
3. The "true" private optimal is defined counterfactually by the absence of misguided beliefs, intrahousehold principal–agent problems, or hyperbolic discounting.
4. In an excellent survey of the theory and empirics of redistribution in kind and in cash, Currie and Gahvari (2007) note that "paternalism is intimately related to the idea of merit goods and merit wants, and may be a key reason for government intervention" (p. 6).
5. The concept of merit goods also is related closely to James Tobin's (1970) idea of *specific egalitarianism.* In the context of the United States in the late 1960s, Tobin argues that there are some instances, notably education and medical care, where "a specific egalitarian distribution today may be essential for improving the distribution of human capital and earning capacity tomorrow" (p. 277). Implicit in that claim is the notion that society would value a more egalitarian distribution of earning capacity in the future *above and beyond* the value placed by individual agents on their own (or their children's) improved capacity.
6. Das, Do, and Özler (2005) and de Janvry and Sadoulet (2006) discuss how some of those issues provide justification for CCT programs.
7. A third use of children's time—leisure—is ignored in this model. The three-way choice among education, child labor, and leisure is analyzed both theoretically and empirically by Ravallion and Wodon (2000). Those authors find that an enrollment subsidy in Bangladesh (an in-kind precursor to the CCTs) leads to increased enrollment, and that most of that increase comes from child leisure rather than from child work. The authors are careful to recognize that theirs is a very imperfect measure of child work, and that some of the time implicitly classified as leisure may be spent in homework or other cognitively important activities. The broad argument in Ferreira (2008), on which we draw here, will hold if child leisure and schooling are complements in the human capital "production function."
8. It is critical to remember that, although we do not consider other policy alternatives (such as investing in the quality of the supply of health or education services, or setting up a workfare scheme), it well may be that, in general equilibrium, those policies make more sense than either a UCT or a CCT.

9. See Piketty (1995) for the original model. Bénabou and Tirole (2006) show that stable multiple equilibria can arise in such models, with "incorrect" beliefs arising endogenously, being privately rational, and persisting.
10. There are many reasons why we should expect insufficient information in low-income settings. For example, if there is residential segregation by income, most poor households will observe very few high-education/high-income adults. Furthermore, if migration is correlated with ability so that high-ability people are more likely to migrate, and those high-education people who are left behind have low ability, the information problem may be more severe. Jensen (2006) discusses this possibility.
11. Dominitz and Manski (1996) start this line of research in the United States. They find no evidence that high school and college students underestimate the realized rates of return to schooling. In developing countries, information problems could be more severe for a variety of reasons because people have less education (and thus less ability to process information on the true returns), and less information may be available. There is also an extensive body of literature suggesting that education is particularly beneficial at times of economic disequilibria—such as times of significant technological change (see classics such as Nelson and Phelps [1966] and Foster and Rosenzweig [1996]). It is not clear that households would or could factor in these potential gains when making education decisions. Not only does education confer benefits now (the wage returns in equilibrium), but it also is likely to yield even larger benefits if things change rapidly.
12. Trang Nguyen (2007) finds that both the mean and the dispersion of perceived (by parents) and realized earnings are similar in Madagascar, a finding that suggests information is not that much of a problem. Nevertheless, an intervention in which students and their parents are informed of the mean realized returns does induce more effort (more attendance, higher test scores). Somehow, the information must (1) lead those parents who hold low-return beliefs to correct their beliefs—and therefore to exert more effort—without a countervailing effect on the effort of those who are overstating the expected returns; or (2) convey the (possibly incorrect) notion that the dispersion in returns is low—a notion that would lead risk-averse households to invest more in schooling (holding the average return constant).
13. This statement assumes that a child's education is seen only as an investment by the household. If education is at least partly seen as a consumption good (including as a source of status), there could be an income effect even under functioning credit markets.
14. As we pointed out in note 13, results change if schooling is seen, at least in part, as a consumption good. In that case, the effect of incomplete parental altruism will depend on who is seen as consuming schooling. If it is seen as the child's consumption, then the CCT will have an effect even under perfect markets. If it is seen as the consumption of the parents (for example, by affording higher status or providing child care), then the CCT is not needed.
15. An experiment whereby a specified amount is given to children rather than to adults would not solve the problem because it would be confounded

by other factors, such as the likely higher discount rate of children and possibly irrational behavior among children. For example, Bettinger and Slonim (2006) find that children's choices are consistent with hyperbolic discounting: 25 percent of children in their experiment do not make rational intertemporal choices within a single two-period time frame.

16. The nonwage returns to more education are likely to be at least as large for girls as for boys—for example, in terms of health investments.
17. There is also some evidence that women and men may value boys and girls differently, with women investing more on girls than on boys (Thomas 1994; Duflo 2003). In those circumstances, conditions can act as a means to ensure "equal treatment" regardless of who receives the transfer payment.
18. The only exception to this pattern is the social assistance transfer to the elderly poor and poor disabled (known as the *Benefício de Prestação Continuada da Loas*), which is not conditioned. It should be noted, though, that the target groups (elderly, disabled) often are considered "deserving poor" because of who they are and not because of what they do.
19. See Kooreman (2000) for evidence on child benefits in the Netherlands, and see Schady and Rosero (2008) for evidence from Ecuador.

Chapter 3

1. For recent reviews of the general literature on design and implementation of social assistance programs, see, for example, Samson, van Niekerk, and MacWuene (2006); and Grosh et al. (2008).
2. To date, only Bolivia's Juancito Pinto program is targeted broadly to all first-graders in public schools.
3. Coverage is the portion of a population group (for example, decile of per capita expenditure [PCE] net of the CCT transfer) that receives the transfer. Coverage rates reflect the time at which the data were collected. Some programs have expanded rapidly since the years of the surveys used in this study. For example, Brazil's Bolsa Família program has expanded from 5.0 million households in 2004 to 11.1 million in 2006, and its coverage in figure 3.2 is therefore underestimated.
4. The CCT programs included Chile Subsidio Unitario Familiar (SUF) and Chile Solidario; Brazil's Bolsa Escola, Bolsa Alimentação, Auxílio Gás, and PETI; the Dominican Republic's Tarjeta de Asistencia Escolar (TAE); Mexico's Oportunidades; and Argentina's Jefes y Jefas.
5. Carrillo and Ponce (2008) also estimate that reducing travel time by 60 minutes to the closest town with a payment agency would increase the value of the transfer by about 4 percent—a modest amount.
6. Originally, stipends provided by the FSSAP amounted to $18–$45 per student per year, but they were reduced to $5–$16 by 2001 (World Bank 2003). Because the amount of the stipend was fixed in nominal terms, the current transfer is even lower in real terms after adjusting for inflation.
7. In Brazil, for example, costs of food and housing are nearly double in São Paulo compared with rural areas. More formally, the Laspeyres price index

based on food and housing is 1.000 for São Paulo, 0.797 for metropolitan Brazil, 0.633 for urban areas excluding metropolitan Brazil, and 0.568 in rural areas (World Bank 2007). Even in small, more geographically homogeneous Honduras, the cost of living in Tegucigalpa is 12 percent higher than in rural areas. The Laspeyres index is 1.000 nationally, 1.081 in Tegucigalpa, and 0.967 in rural areas (World Bank 2006b).

8. See chapter 4 of this report for a summary of CCT programs' impacts on fertility.
9. In Lindert, Skoufias, and Shapiro (2006), the computations are based on posttransfer welfare. In this research report, we principally present results based on welfare net of the program transfer. Thus the results for CCTs in figure 3.1 are not exactly the same as those shown in figure 11 of Lindert and her coauthors. The comparison with other programs, however, is valid.
10. For compliance, see Mutzig (2006) on Brazil, Roberts-Risden (2006) on Jamaica, and Government of El Salvador (2008) on El Salvador; for Mexico compliance information, see http://www.oportunidades.gob.mx/indicadores_gestion/main.html.

Chapter 4

1. Bolsa Alimentação is one of the pilot precursors of the larger CCT program now known as Bolsa Família. The analysis of impact in the first and second sections uses the evaluation data for Bolsa Alimentação because it included expenditure information and therefore is comparable to the other countries. In the third section, when we consider the impact of CCTs on the national level of poverty, we analyze Bolsa Família's impact on income poverty using less-robust methods.
2. These programs were chosen because (1) their evaluation studies collected consumption or income data, (2) the methods employed to measure impact are robust enough, and (3) we have access to the evaluation data and can carry out comparable analysis.
3. Two household surveys were conducted before the start of Oportunidades in Mexico. The first survey did not have a consumption module. The second one did have a consumption module, but problems in the implementation of this survey render the consumption data unusable. In 1998, a third survey with a consumption module was carried out a few months after the start of the program. The results presented in tables 4.1 and 4.2 are from that third survey and two follow-up surveys done in June and October 1999.
4. The lack of impact of Oportunidades in 1998 is not unexpected because the 1998 survey was carried out only a few months after the start of the program, and many beneficiary households had yet to receive their transfers.
5. A number of recent papers consider the impact of the Chile Solidario program on employment, consumption, and poverty. Carneiro and Galasso

(2008) use regression discontinuity techniques and report very large impacts. Their estimates suggest that Chile Solidario resulted in an increase of 11 percentage points in the probability that a head of household is employed, and a reduction in poverty of 8–11 points. However, Larrañaga, Contreras, and Ruiz Tagle (2008) use differences-in-differences techniques and find no significant impacts of the program on either employment or income. More research is needed to understand the difference between these two studies, particularly because of the innovative nature of the Chile Solidario program.

6. In the case of Brazil, we conduct this analysis for the newer Bolsa Família program. (Beginning in 2003, Bolsa Família incorporated the earlier and smaller Bolsa Alimentação program.)
7. This possibility of bias is especially the case for Brazil because there was no random assignment of program by location or individual households. Beneficiary households and poor areas were targeted purposefully. In the case of Mexico, although Oportunidades was allocated randomly at the village level, the randomization was carried out only within a set of preselected rural villages with high poverty levels. Thus, although estimates of poverty impacts within that set of preselected villages should be unbiased, that may not be true for estimations of poverty impact at the national level.
8. Encouraging effects of CCTs on national poverty are reported elsewhere. Brown and Agostini (2008) use census and survey data to estimate the extent to which Chile's success in reducing poverty results, at least in part, from a variety of cash transfer programs. The authors use the Elbers, Lanjouw, and Lanjouw (2003) methodology to combine census (a 2002 population census) and survey (the 2003 Caracterización Socioeconómica Nacional) data. On the basis of these calculations, they estimate income for every individual in the census with and without the transfers. They find that transfers significantly reduce the incidence of poverty, and that estimated headcount ratios fall by 5–68 percent, with considerable geographic variation.
9. In theory, increases in food consumption could be positive, resulting in reductions in child wasting or stunting, for example; or they could be negative, resulting in increases in obesity and adult diseases such as diabetes.
10. See Thaler (1999) for a general discussion; and see evidence in Fraker, Martini, and Ohls (1995), Kooreman (2000), Jacoby (2002), and Islam and Hoddinott (2009).
11. A similar pattern is reported by others. Averaging across the three survey rounds, Hoddinott, Skoufias, and Washburn (2000) find that the increase in monthly consumption of 151 pesos is substantially smaller than the average transfer of 197 pesos per month. Attanasio and Mesnard (2006) report that beneficiaries of Familias en Acción spend only 53,000 pesos out of an average transfer of 100,000 pesos per month.
12. Payment is made to students older than 16.
13. See also the discussion of the incentive effects of the Bolsa Alimentação program in Brazil in chapter 5.

Chapter 5

1. Also see Ravallion and Wodon (2000) for an evaluation of the Food for Education program, which antedated the FSSAP program in Bangladesh.
2. For a sample of beneficiaries around the 20th percentile of the national distribution of the proxy means, treatment by the BDH was randomized; that is the basis for the estimates by Schady and Araujo (2008). The 40th percentile of the proxy means is the cut-off point for BDH program eligibility; Oosterbeek, Ponce, and Schady (2008) use regression discontinuity techniques to estimate program impacts around that threshold, and they compare the estimated effects to those found in Schady and Araujo (2008).
3. One exception to this pattern of larger CCT program effects among poorer households is found in Bangladesh. Khandker, Pitt, and Fuwa (2003) estimate larger FSSAP effects on girls in households with larger landholdings.
4. However, the fraction of women who reported five antenatal visits was 11 percentage points lower in the treatment group at baseline, and that raises the possibility that some of the observed changes may be the product of reversion to the mean.
5. Although children who benefit from CCT programs are more likely to be enrolled in school and to attend classes more frequently than they would have otherwise, the program effects on years of schooling could be muted for a variety of reasons. First, children receiving transfers may not always be promoted to the next grade (although some programs, including Oportunidades in Mexico and the RPS in Nicaragua, place limits on the number of times a child can repeat a grade before he or she is disqualified from receiving further transfers). Second, even in the absence of grade repetition, CCTs could increase enrollment and grade attainment in the short run without affecting long-term outcomes. Consider a scenario in which school enrollment is intermittent (for example, if enrollment is determined partly by conditions in the labor market) or one in which parents have a target grade they want their children to attain (perhaps completion of primary school) and that target is not affected by the CCT program. Under such circumstances, parents who are eligible for the CCT may choose to enroll their children in school now rather than later because transfer income now is preferable to more uncertain transfer income in the future. An evaluation that focuses on the short-run impact of the CCT program then would find positive program effects on enrollment and grade completion. On the other hand, an evaluation that focuses on the "medium-run" effects might find negative program effects on enrollment (as CCT-treated children drop out of school when they have attained their target grade, whereas control group children continue to be enrolled intermittently) and muted or no program effects on grade attainment. Finally, an evaluation that focuses on long-term effects might find that there are

no differences between treated and control households in school attainment. More generally, this example points to the advantages of revisiting CCT-treated and control children when they are old enough plausibly to have completed their schooling.

6. In practice, Behrman, Parker, and Todd (2005) find much larger differences in wage income between girls who started receiving transfers in 1998 and girls who started receiving transfers in 2000 (on the order of 25 percent), and they find no effects for boys. Those estimates are noisy, however, and arguably are too large to be credible.
7. Nevertheless, even in those countries, aggregate effects on poverty in the next generation may be lower than those estimated by simple back-of-the-envelope calculations for a variety of reasons. First, a large increase in the fraction of members of an age cohort who have completed a given school cycle is likely to depress the returns to schooling. (Card and Lemieux [2001] present results for Canada, the United Kingdom, and the United States; Manacorda, Sánchez-Páramo, and Schady [2008] report on five Latin American countries.) Second, the returns to schooling for the marginal child brought into school by the CCT may be lower than those for the average child.
8. Alderman and Behrman (2006), and Galiani (2007) present calculations in a similar spirit.
9. PRAF also envisioned a program to transfer resources to health centers to improve the quality of the supply, but the transfer of resources to local health units that had been envisioned was not implemented properly (Morris, Flores et al. 2004; Hoddinott 2008).
10. It is not clear exactly how the presence of the Hogares Comunitarios child care program may have affected the estimates of Familias en Acción program effects. Hogares Comunitarios is a community-based child care program. Participating children receive a nutritional supplement, among other things. Because parents are not allowed to enroll their children in the Hogares Comunitarios program and also receive transfers made by the Familias en Acción program, participation in Hogares is lower in the municipalities where the Familias program has been implemented than in the comparison communities. That situation could introduce biases—for example, the estimates of Familias program effects in Attanasio et al. (2005) could be biased downward if Hogares Comunitarios has a positive effect on child nutritional status.
11. No baseline measures of adult health status are available, so the identification relies on comparisons between the two groups at follow-up.
12. The results for obesity and hypertension are significant at the 1 percent level, whereas those for diabetes are insignificantly different from zero, perhaps because of the relatively small number of adults who were tested for diabetes in the study.
13. A third study (Fernald, Gertler, and Neufeld 2008) assesses the impact of receiving larger Oportunidades transfers on cognitive outcomes in early childhood. The authors conclude that doubling the magnitude of the

transfer would result in substantial improvements in motor development, cognitive development, and receptive language acquisition. The paper exploits the facts that program benefits vary for girls and boys and that there is a cap on the total amount of benefits that a household can receive, regardless of the number of children it has. This feature of program design generates variations in the amount of transfers received by program-eligible households. However, it is not clear that the identification strategy is robust to the presence of economies of scale or "quantity-quality" trade-offs in child outcomes, which is a source of concern. Some specifications directly control for household size and composition. In those specifications the program impacts appear to be identified off nonlinearities in the effect of household size and composition on the amount of transfers for which a household can be eligible.

14. In Nicaragua, 82 percent of households in the sample live on less than $1 per capita per day, compared with 34 percent in the sample of households in the Ecuador evaluation
15. Lundberg, Pollak, and Wales (1997) conclude from their analysis of a British transfer program that the identity of the recipient matters—when transfers are made to women, for example, a larger fraction is spent on child clothing than when the transfers are made to men. Also see the results in Thomas (1990, 1994) and Duflo (2003).
16. For evidence on the importance of social marketing in the allocation of expenditures, see Fraker, Martini, and Ohls (1995), who show that when there are food stamp "cash-outs" (whereby food stamps are replaced with income transfers), families continue to spend a disproportionate share of their food stamp income on food in the United States; in the Netherlands, spending on children's clothing out of child benefit income is much larger than out of other sources of income (Kooreman 2000).
17. As a validation exercise to test their identification strategy, de Brauw and Hoddinott (2008) show that there are no differences in the acquisition of calories between households that did and did not receive the forms. Because both groups received the same cash transfer, and because there is no obvious reason why caloric intake should have been affected by schooling conditions attached to transfers, this exercise suggests that unobserved differences between households that did and did not receive the forms are not the main reason for the measured differences in their school enrollment behavior.
18. Specifically, local elected leaders (the heads of the *Juntas Parroquiales*) were encouraged to hold townhall-style meetings in which the BDH was presented as a compact between the state and beneficiaries: the state agreed to transfer resources to poor households, and those households in turn agreed to send their children to school; for a brief period, the BDH program aired a series of radio and television spots that explicitly linked transfers with school enrollment; some BDH administrators also appear to have stressed the enrollment requirements when they signed up households for transfers.
19. See box 6.3 for a discussion of the methods used.

Chapter 6

1. It should be noted that CCT programs can be justified also in the absence of redistributive objectives. Indeed, when private investment in human capital is socially suboptimal, monetary incentives may be needed to change behaviors—even if those incentives are not large enough to have any measurable effect on short-term poverty. Our focus, however, is on those cases in which redistribution is part of the rationale for a CCT.
2. Grant and Behrman (2008) examine a number of demographic and health surveys and find that gender differences in schooling attainment generally do not favor boys. Boys apparently fail and repeat grades a lot more often than girls do. As a result, although enrollment rates are higher for boys, attainment rates are not.
3. Miguel and Kremer (2004) find positive spillover effects of deworming both within and across neighboring schools in Kenya. They also find that simply informing parents and students of the benefits of deworming (through health education) led to no changes in behavior, and that user fees led to the collapse of the program. On that basis, and given the positive spillover effects, they argue there is a strong justification for the subsidized provision of deworming drugs. Although the free provision of drugs may be sufficient in the case of children in school, other cases may require further incentives (for example, in the form of a CCT). The presence of externalities is not a proof that a CCT is needed, but it does provide the basis to consider if one makes sense.
4. A full description would consider less than full take-up among group B households. For simplicity we do not consider it here. In essence, the extent of take-up among group B is a function of the size of the transfer.
5. It would be incorrect, however, simply to extrapolate those estimates and assume that average effects among the extremely poor would remain unchanged as a result of the retargeting, particularly because that would not be a marginal change in coverage.
6. For rural areas, Duarte Gómez et al. (2004) find that program beneficiaries have better knowledge on health practices, but the authors cannot test whether that is the result of the health education sessions. For urban areas, they are able to compare knowledge among people attending and not attending the sessions, but they must rely on propensity score matching for those comparisons. They also use qualitative methods to complement their analysis.
7. The extent to which conditions are likely to affect beneficiaries' behavior depends on a combination of implementation factors that vary from country to country. First is the frequency with which compliance with conditions is verified. Second is the speed with which information on compliance becomes available to trigger sanctions—often a function of administrative capacity. As shown in chapter 3, even in a relatively high-capacity environment like Mexico, the benefit amount paid reflects the compliance or noncompliance of the beneficiary household four months

prior to the payment. Third, although all CCT programs specify a schedule of sanctions in the case of noncompliance with conditions, both the type of sanctions and the degree of enforcement vary quite substantially from one program to another. Moreover, as explained in chapter 3, conditions are not always viewed as "hard."

8. It could be said that, in fact, the program is operating as two separate cash transfers using the same targeting mechanism and administrative procedures. Moreover, to the extent that the conditions must be satisfied in order to receive the per-child benefit, the base benefit could be interpreted as an additional UCT.
9. *Telesecundaria* schools rely on videos shown by satellite and have fewer teachers, whereas general secondary schools have more infrastructure and more specialized instructors.
10. The cost to build a *telesecundaria* school is estimated to be 1.38 million pesos, and to build a technical secondary school 2.4 million pesos. Annual personnel and operating costs are $170,000 for *telesecundaria* and $427,000 for technical secondary schools. See Coady and Parker (2004) for a cost-effectiveness analysis of these supply-side investments.
11. See Regalía and Castro (2007) for an analysis of how the Nicaraguan Ministry of Health outsourced the delivery of health care services while it retained supervision over the providers through management agreements that were intended to align health service providers' incentives with better health care and health outcomes.
12. Most of these programs were influenced by a community nutrition model known as Atención Integral de la Niñez en la Comunidad, first established in Honduras (see Van Roekel et al. 2002; Griffiths and McGuire 2005). Typically, other primary health services have been added.
13. The earlier RPS program relied instead on nongovernmental providers.
14. Preliminary results by Leite and Olinto (2008) suggest that in Brazil, as coverage of CCT programs increased, local governments adapted the supply of education services (consolidating smaller schools, increasing the number of secondary schools and teachers, and so forth).
15. For example, Banerjee et al. (2007) argue that without changes in curriculum and pedagogy that recognize the different needs of poor/excluded children, additional educational inputs are not effective in improving learning outcomes. They evaluate two experiments that follow that approach through remedial education and find positive results on learning outcomes.
16. There are different approaches to social pensions: some countries (Bolivia, Botswana, Mauritius, Namibia, Nepal) follow universal schemes, whereby all elderly people are eligible. The cost of those programs either makes them too expensive or forces them to pay very low benefits, with correspondingly limited effects on poverty. A larger number of countries have adopted targeted schemes instead (usually through some form of proxy means test) as a way to provide meaningful support at an affordable cost. The OAP program in South Africa costs approximately 1.4 percent of GDP.

17. In principle, CCTs, like other social assistance programs, could crowd out participation in (contributive) insurance schemes. This implies there is a separate but equally important demand on coordination with social protection programs, especially with regard to the relationship between CCTs and social insurance programs (see Levy [2008] for Mexico).
18. We thank Harold Alderman for bringing this point to our attention.

Appendix B

1. Also see Filmer and Schady (2009a) for a discussion of the possible effects of selective transfers in Cambodia.
2. In particular, see the discussion in Parker, Rubalcava, and Teruel (2008).
3. One obvious check for that kind of manipulation is to test for an unusual concentration of mass in the density of the proxy means right below the eligibility cut-off—a clear indication of a problem.