

Overview

CONDITIONAL CASH TRANSFERS (CCTS) ARE PROGRAMS THAT transfer cash, generally to poor households, on the condition that those households make prespecified investments in the human capital of their children. Health and nutrition conditions generally require periodic checkups, growth monitoring, and vaccinations for children less than 5 years of age; perinatal care for mothers and attendance by mothers at periodic health information talks. Education conditions usually include school enrollment, attendance on 80–85 percent of school days, and occasionally some measure of performance. Most CCT programs transfer the money to the mother of the household or to the student in some circumstances.

Countries have been adopting or considering adoption of CCT programs at a prodigious rate. Virtually every country in Latin America has such a program. Elsewhere, there are large-scale programs in Bangladesh, Indonesia, and Turkey, and pilot programs in Cambodia, Malawi, Morocco, Pakistan, and South Africa, among others. Interest in programs that seek to use cash to incentivize household investments in child schooling has spread from developing to developed countries—most recently to programs in New York City and Washington, DC.

In some countries, CCTs have become the largest social assistance program, covering millions of households, as is the case in Brazil and Mexico. CCTs have been hailed as a way of reducing inequality, especially in the very unequal countries in Latin America; helping households break out of a vicious cycle whereby poverty is transmitted from one generation to another; promoting child health, nutrition, and schooling; and helping countries meet the Millennium Development Goals. Do those and other claims make sense? Are they supported by

the available empirical evidence? What does all of this imply for the way in which countries that have CCTs should structure or reform the programs? What about countries that do not have CCTs but are considering implementing them, often in circumstances very different from those in which the programs were first introduced?

This report seeks to answer those and other related questions. Specifically, it lays out a conceptual framework that considers the economic and political rationale for CCTs; it reviews the very rich evidence that has accumulated on CCTs, especially arising from impact evaluations; it discusses how the conceptual framework and the evidence on impacts should inform the design of CCT programs in practice; and it considers where CCTs fit in the context of broader social policies.

The report shows that there is good evidence that CCTs have improved the lives of poor people. Transfers generally have been well targeted to poor households, have raised consumption levels, and have reduced poverty—by a substantial amount in some countries. Offsetting adjustments that could have blunted the impact of transfers—such as reductions in the labor market participation of beneficiaries—have been relatively modest. Moreover, CCT programs often have provided an entry point to reforming badly targeted subsidies and upgrading the quality of safety nets. The report thus argues that CCTs have been an effective way to redistribute income to the poor, while recognizing that even the best-designed and best-managed program cannot fulfill all of the needs of a comprehensive social protection system. CCTs therefore need to be complemented with other interventions, such as workfare or employment programs and social pensions.

The report also considers the rationale for conditioning the transfers on the use of specific health and education services by program beneficiaries. Conditions can be justified if households are underinvesting in the human capital of their children—for example, if they hold incorrect beliefs about the returns to these investments; if there is “incomplete altruism” between parents and their children; or if there are large externalities to investments in health and education. Political economy considerations also may favor conditional over unconditional transfers: taxpayers may be more likely to support transfers to the poor if they are linked to efforts to overcome poverty in the long term, particularly when the efforts involve actions to improve the welfare of children.

CCTs have led poor households to make more use of health and education services, a key objective for which they were designed.

Nevertheless, the evidence on improvements in final outcomes in health and education is more mixed. Thus CCTs have increased the likelihood that households will take their children for preventive health checkups, but that has not always led to better child nutritional status; school enrollment rates have increased substantially among program beneficiaries, but there is little evidence of improvements in learning outcomes. These findings suggest that to maximize their potential effects on the accumulation of human capital, CCTs should be combined with other programs to improve the quality of the supply of health and education services, and should provide other supporting services. They also suggest the need to experiment with conditions that focus on outcomes rather than on the use of services alone.

The CCT Wave

Interest in and the scope of CCT programs have grown enormously in the last 10 years. The maps shown in figure 1 reveal the expansion between 1997 and 2008.

Paralleling the rise in the number of countries with CCT programs has been an increase in the size of some programs. Mexico's PROGRESA started with approximately 300,000 beneficiary households in 1997, but now covers 5 million households. (This program was renamed Oportunidades in 2001. In this report we will refer to the program as Oportunidades.) Brazil started with municipal Bolsa Escola programs in Brasilia and the municipality of Campinas. Those programs led to replication by local governments, followed by formulation of sector-specific federal programs, and then their unification and reform. Today the federal Bolsa Família program serves 11 million families (46 million people). In other countries, the increase in size has been less explosive but still notable. In Colombia, for instance, the program's initial goal was 400,000 households, but it had expanded to cover 1.5 million beneficiary households by 2007.

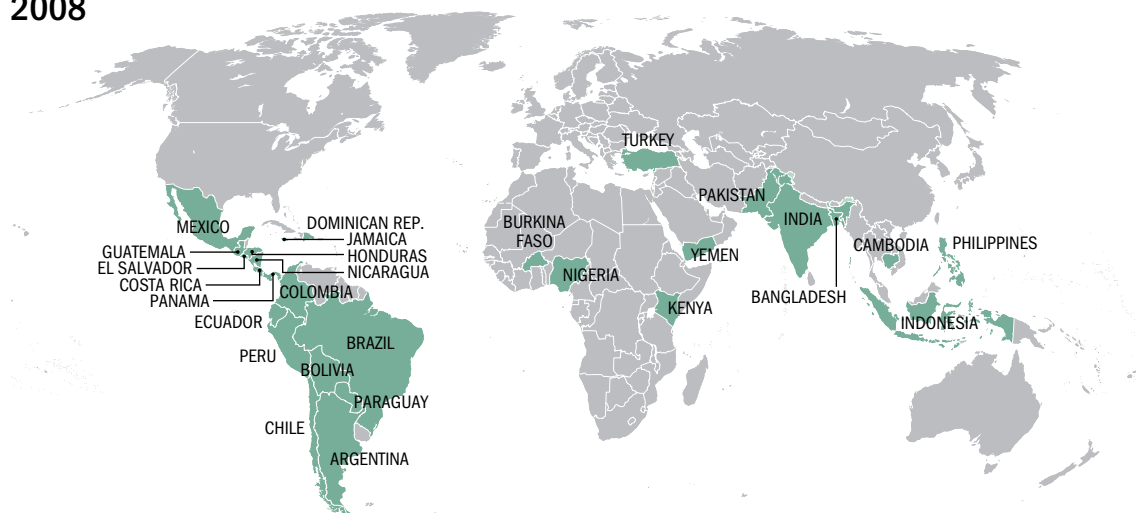
CCTs vary a great deal in scope. Some programs are nationwide, others are niche programs that serve a regional or narrow target population, and yet others are small-scale pilot efforts. Some programs require that households receiving transfers comply only with schooling conditions; others, especially programs in Latin America and the Caribbean, require that households comply with both schooling and

Figure 1 CCTs in the World, 1997 and 2008

1997



2008



Source: World Bank.

health conditions. Table 1 presents a partial list of the CCT programs considered in this report. The list is not exhaustive in that it does not cover all existing programs. There are additional programs in operation for which little information was available, and some programs fit the CCT label less well than do others.

Table 1 Matrix of Program Size and Extent of Conditions

Program size/Target	Conditions	
	Education and health	Education only
Nationwide	Bolsa Família (Brazil)	Bolsa Escola (Brazil)
	Oportunidades (Mexico)	Jaring Pengamanan Sosial (Indonesia)
	Bono de Desarrollo Humano (Ecuador)	
	Familias en Acción (Colombia)	
	Program of Advancement through Health and Education (Jamaica)	
Niche (regional or narrow target population)	Chile Solidario	Female Secondary School Assistance Program (Bangladesh)
	Social Risk Mitigation Project (Turkey)	Japan Fund for Poverty Reduction (Cambodia)
		Education Sector Support Project (Cambodia)
		Basic Education Development Project (Yemen)
Small scale/pilot	Programa de Asignación Familiar (Honduras)	Subsidio Condicionado a la Asistencia Escolar–Bogotá (Colombia)
	Cash Transfer for Orphans and Vulnerable Children (Kenya)	Punjab Education Sector Reform Program (Pakistan)
	Atención a Crisis (Nicaragua)	
	Red de Protección Social (Nicaragua)	
<i>Source:</i> Authors' compilation.		

The role of CCT programs in social policy varies from place to place as a consequence of differences in both program design and the context in which they operate. Most obviously, CCT programs vary with respect to pertinent measures of size. In terms of absolute coverage, they range from 11 million families (Brazil) to 215,000 households (Chile) to pilot programs with a few thousand families (Kenya, Nicaragua). In terms of relative coverage, they range from approximately 40 percent of the population (Ecuador) to about 20 percent (Brazil, Mexico) to 1 percent (Cambodia). In terms of budget, the costs range from about 0.50 percent of gross domestic product (GDP) in such countries as Brazil, Ecuador, and Mexico to 0.08 percent of GDP (Chile). The generosity of benefits ranges from 20 percent of mean household consumption in Mexico, to 4 percent in Honduras, and to even less for programs in Bangladesh, Cambodia, and Pakistan.

Many of the CCT programs in middle-income countries have pursued an integrated approach to poverty reduction, balancing goals of

social assistance and human capital formation. They cover children from birth (or before) through the mid-teens, with conditions on health care use for children from birth to age 5 or 6 and with conditions on school enrollment thereafter. Programs usually are administered by ministries of social welfare or freestanding agencies under the presidency. Examples of that type of CCT include the programs in Brazil, Colombia, El Salvador, Jamaica, Mexico, Panama, and Turkey.

Mexico's Oportunidades is one of the iconic cases. The program started early, its evolution has been carried out thoughtfully, and it has been successful. What really makes Mexico's program iconic are the successive waves of data collected to evaluate its impact, the placement of those data in the public domain, and the resulting hundreds of papers and thousands of references that such dissemination has generated.

Brazil also is exemplary in its use of CCTs. It started early, its programs have evolved enormously, and the current program (Bolsa Família) is similar to Mexico's program in coverage and importance. In various respects, Brazil's Bolsa Família program provides something of an interesting contrast to the Mexican case—the issue of federalism is more in the forefront; it takes a softer, more gradual tack on conditions; and puts a shade more emphasis on redistribution than on human capital formation. Also, unlike Oportunidades, the Brazilian programs did not explicitly incorporate impact evaluations in their design; as a result, much less is known about the effect they have had on consumption, poverty, health, nutrition, and education.

Chile Solidario works in a very different way to fill a different niche. The program is targeted only to extremely poor people, about 5 percent of Chile's population. It differs notably from the classic CCT design by customizing conditions. Families initially work intensely with social workers to understand actions that could help them get out of extreme poverty. They then commit to action plans that become the household-specific conditions for receiving the benefit. The cash transfer itself really is intended only to motivate clients to make use of social workers' services. Thus far, Chile Solidario is a model unto itself, although other programs are moving to emulate it to a degree.

Another branch of the CCT program family focuses on education in low-income countries. The programs usually cover a more narrow segment of education—some only secondary (Bangladesh's Female Secondary School Assistance Program [FSSAP], Cambodia's Japan Fund for Poverty Reduction [JFPR], and Cambodia Education Sector Support

Project [CESSP]), some only primary (programs in Bolivia and Kenya and proposals in Nigeria and Tanzania), and occasionally both (Indonesia's Jaring Pengamanan Sosial [JPS] program). The genesis of these programs is rather varied. In Bangladesh, the FSSAP was part of a strategy to close a then-significant gender gap in education. In Indonesia, the JPS program was instituted following the East Asian financial crisis to prevent students from dropping out. In Kenya and Tanzania, the programs are geared especially to coping with the crisis of orphans and vulnerable children, a crisis that has burgeoned in the wake of HIV/AIDS.

CCT programs require the same systems as other transfer programs: at minimum, (1) a means to establish the eligibility of clients and enroll them in the program, and (2) a mechanism to pay their benefits. Strong monitoring and evaluation systems also are desirable. CCTs further require a means to monitor compliance with conditions and to coordinate among the several institutions involved in operating the program. In general, CCT programs have handled these systems rather well and, in some cases, they have been leaders in modernizing social assistance practice.

Almost all CCTs have tried to target their benefits rather narrowly to the poor through a combination of geographic and household targeting (mostly via proxy means testing). Moreover, many programs use community-based targeting or community vetting of eligibility lists to increase transparency. In many cases, CCTs have been the drivers for developing poverty maps or household targeting systems in their countries, or for upgrades to them. Indeed, it would not be an exaggeration to say that CCTs have moved forward the state of the art and standards for targeted programs generally.

A number of CCT programs have had unusually proactive management based on cutting-edge technical systems, especially with respect to monitoring and evaluation. Two features inherent to CCTs—the number of actors involved and the need for extensive information management to verify compliance with conditions—may have interacted in ways that have spurred creative development in monitoring and management. This excellence in systems, and the high degree of transparency in documentation and information that characterizes most programs, has contributed to the attraction of CCTs, although they are not inherent to them. The evaluation culture around CCTs is quite strong, well beyond traditional practice in social policy. Many programs have conducted impact evaluations with credible counterfactuals. Of those programs, a large share used experimental methods,

at least initially. This culture of evaluation is spreading not only from one CCT program to another, but also from CCTs to other programs within the same countries.

The role and design of CCT programs is evolving. Early successes with the basic model are prompting countries to address second and third rounds of challenges, including the following: Should the emphasis on expanding the supply of services be complemented with efforts to improve the quality of those services? Should the range or definition of conditions be changed, for example, to reward performance instead of, or in addition to, mere service use? What can be done to ensure that youth who are aging out of the school support provided by the program can get jobs or further training? What should be the balance between targeting younger and older children? In some countries, CCT programs themselves are addressing these challenges through adjustments to their basic design; in other cases, they are catalyzing changes in other programs.

The Arguments for CCTs

Although market-driven economic growth is likely to be the main driver of poverty reduction in most countries, markets cannot do it alone. Public policy plays a central role in providing the institutional foundations within which markets operate, in providing public goods, and in correcting market failures. In addition to laying the foundations for economic growth, policy can supplement the effects of growth on poverty reduction, and one of the instruments that governments can use to that end is direct redistribution of resources to poor households. Direct cash transfers have opportunity costs (in terms of forgone alternative public investments) and may have some perverse incentive effects on recipients, but there is a growing body of evidence that in some cases transfers may be both equitable and efficient.

Conditional cash transfers make payments to poor households on the condition that those households invest in the human capital of their children in certain prespecified ways. Because attaching a constraint on the behavior of people one is trying to help is an unorthodox approach for economists, this report reviews the conceptual arguments for making cash transfers conditionally.

There are two broad sets of arguments for attaching conditions to cash transfers. The first set applies if private investment in children's

human capital is thought to be too low. The second set applies if political economy conditions show little support for redistribution unless it is seen to be conditioned on “good behavior” by the “deserving poor.”

Under the first group of arguments, private investment in human capital can be “too low” in two different senses. First, it can be below even the *private* optimal level for the individual children in question if household decision makers hold persistently misguided beliefs about either the nature of the process of investments in child education and health or the subsequent returns to these investments. For instance, parents may believe that earnings respond to education less elastically than they actually do. In practice, there is some evidence of this from developing countries. Among 15- to 25-year-olds in Mexico, the expected returns to schooling (calculated from questions asked of respondents) are substantially lower than the realized returns (the Mincerian returns calculated from a household survey), especially among children of fathers with low education levels (Attanasio and Kaufmann 2008). In the Dominican Republic, eighth-grade students estimate the rate of return to secondary school to be only one quarter to one third of the rate derived from an income survey (Jensen 2006).

Parents also may discount the future more heavily than they should, perhaps especially with regard to the returns on investments in their children—a case of “incomplete altruism.” A slightly different but equally plausible version of this problem is a conflict of interest between the parents themselves as opposed to, or in addition to, one between parents and children. Mothers’ objectives may be more closely aligned with those of all her children or, perhaps, especially with those of her daughters.¹ That alignment often is given as a justification for giving the cash transfer to the mother rather than to the father, as is common practice in most CCT programs. In many countries in South Asia, girls’ schooling lags well behind that of boys, even though the returns to female education—both in wages, and in terms of child health—are at least as large as those for males. Low levels of investment in girls’ schooling may be rational from the viewpoint of parents who are thinking of their own welfare (either because girls are more costly in terms of dowries or because boys are more likely to take care of their parents than are girls who move to their husbands’ homes upon marriage), but they are *prima facie* evidence of a socially inefficient outcome. CCTs that compel parents to send their daughters to school are one way to address inefficient and inequitable gender disparities.

In general, these informational, principal-agent, or behavioral arguments can be seen as providing microfoundations for much older paternalistic arguments for redistribution in-kind or with strings attached.

The second sense in which private investments in children's health and education can be "too low" is that the private optimal level may be below the *social* optimal level. That situation could occur if there are positive externalities from education and health across households. Empirically, many health investments have important external benefits.² In the case of education, externalities might arise if there are increasing returns to skilled labor in production, at the aggregate level, or if education lowers crime.

How large these externalities are and whether (conditioned) cash transfers are the most effective instruments to correct for them, however, remains to be determined. In most countries, education and health services are already heavily subsidized. In many cases, they are publicly provided free of charge. To argue for an additional subsidy that compensates households for some of the indirect or opportunity costs of using these services, on the basis of the externality alone, would require showing that those externalities are quite large.

The political economy family of arguments centers around the notion that targeting tends to weaken the support for redistribution because it reduces the number of beneficiaries relative to the number of those who are taxed to finance the program. Whereas the response most commonly considered in the literature is to establish broad-based redistribution that includes the middle class, an alternative is to appeal to the altruistic motive of voters: the same people who object to targeted transfers as "pure handouts" might support them if they are part of a "social contract" that requires recipients to take a number of concrete steps to improve their lives or those of their children.

The notion that CCT programs constitute a new form of social contract between the state and beneficiaries is apparent in the use of the term *co-responsibilities* (instead of conditions) in a majority of programs, at least in Latin America. When conditions are seen as co-responsibilities, they appear to treat the recipient more as an adult capable of agency to resolve his or her own problems. The state is seen as a partner in the process, not a nanny. This latter interpretation is particularly plausible when the counterfactual to a CCT is not an automatic, transparent, unconditional cash grant seen as a citizen's entitlement (which is close to the textbook concept of an unconditional transfer), but is instead a myriad of ad hoc and mostly in-kind transfers intermediated through

various service providers, nongovernmental organizations, and local governments. Under those circumstances, conditioning the transfers on “good behavior” *may* be perceived as less paternalistic than the alternative of conditioning transfers on say, voting for a certain party or belonging to a given social organization.

Moreover, the fact that the conditions are focused on building the human capital of children (rather than simply supporting parents) adds to CCTs’ political acceptability as an instrument to promote opportunities; after all, it is hard to blame children for being poor. In that sense, using public resources to support the human capital development of poor children makes a CCT a poverty reduction program rather than a social assistance one. Making payments to mothers also resonates with well-accepted beliefs (mostly supported by evidence, as shown above) that women will tend to put funds to better use than will men.

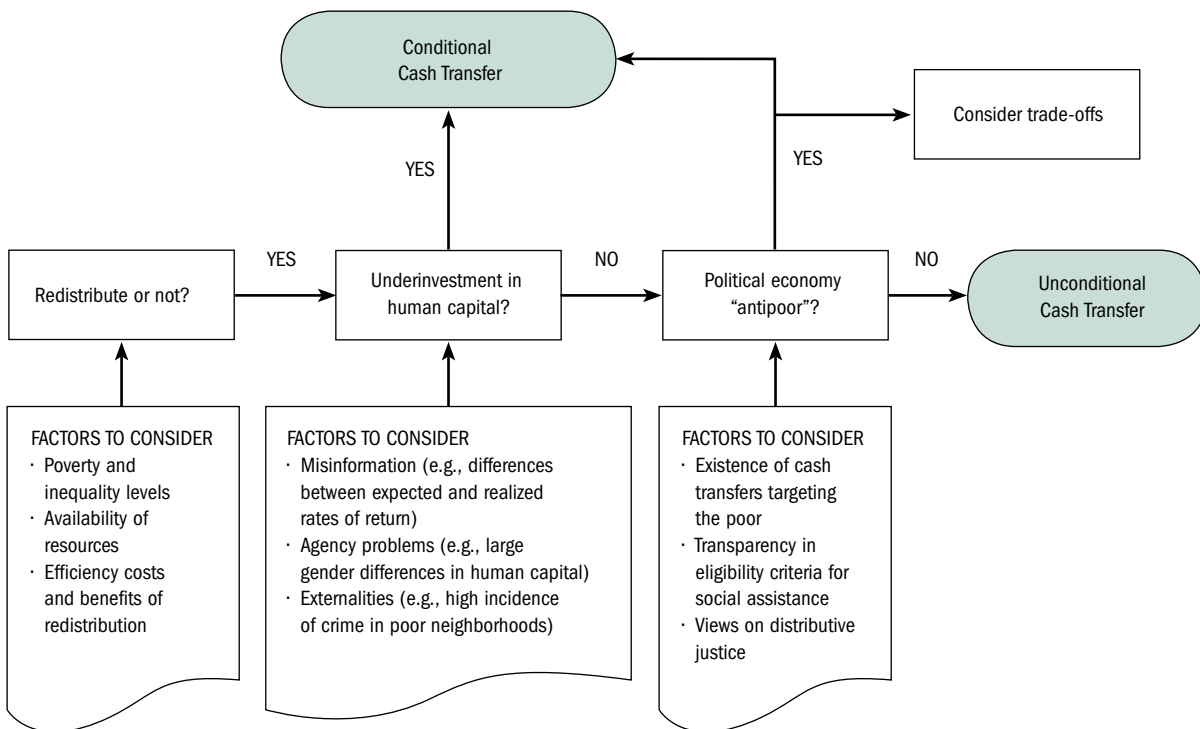
The conclusion is that even in situations where a narrow technical assessment might suggest that an unconditional transfer is more appropriate than a CCT (say, because there is no evidence of imperfect information or incomplete altruism in poor families), conditions might be justified because they lead to a preferable political economy equilibrium. The political process may make significant cash transfers to the poor close to impossible unless those transfers are tied somehow to clear evidence of beneficiaries’ “positive behaviors.” The Latin American experience suggests that in the absence of dramatic political shifts, the increasing trend toward cash-based redistribution schemes has been associated with the use of some form of conditioned grants.

In sum, when there is a strong rationale to redistribute, a CCT can be justified under two broad sets of conditions: first, when private investment in human capital among the poor is suboptimal from a social point of view and, second, when conditions are necessary for political economy reasons (that is, redistribution is politically feasible only when conditioned on good behavior). This framework can be extended by identifying critical questions that can guide the decision whether to have a CCT program, as depicted in figure 2.

The Impacts of CCT Programs

Beginning with the Mexican program Oportunidades, an important feature of CCT programs has been strong emphasis on credible evaluations of their impact on various outcomes. This report draws heavily

Figure 2 Decision Tree Approach to Identifying CCT Programs as the Right Policy Instrument



Source: Authors' illustration.

on those evaluations. Indeed, it would not have been possible to write the report without the efforts of the program administrators themselves, international donors, and academics around the world to ensure the high quality of many of the evaluations. The accumulating evidence of positive impacts has been instrumental both in sustaining existing programs and in encouraging the establishment of similar programs in other developing countries.

Most CCTs seek both to reduce consumption poverty and to encourage investments in the education and health of children. The report carefully considers the evidence of programs' impacts on those two dimensions of well-being.

The Impact on Consumption, Poverty, and Labor Market Participation

By and large, CCTs have had positive effects on household consumption and on poverty (as measured by the headcount index, the poverty gap, or the squared poverty gap). Tables 2 and 3 summarize the evidence.

Table 2 Impact of CCTs on per Capita Consumption, Various Years

	Brazil 2002	Cambodia 2007	Colombia			Ecuador			Honduras			Mexico			Nicaragua		
			2002	2006	2007	2003	2005	2006	2000	2002	1998	Jun. 1999	Oct. 1999	1999	2000	2001	2002
Median daily per capita consumption of control households (current US\$)	0.83	0.89	0.85	1.19	1.12	1.12	1.13	0.68	0.79	0.68	0.59	0.58	0.59	0.63	0.53	0.52	
Daily per capita transfer (current US\$)	0.06	0.02	0.12	0.13	0.08	0.08	0.08	0.06	0.06	0.12	0.12	0.14	0.13	0.16	0.15	0.15	
Ratio of transfer to consumption (%) ^a	8	2–3	17	13	8	7	9	11	21	20	29	31	30				
Impact on per capita consumption for the median household (%)	7.0**	B	A	10.0**	A	B	A	7.0*	B	7.8**	8.3**	A	29.3**	20.6**			

Source: Authors' calculations for all countries in the table except Colombia. For Colombia, see Institute for Fiscal Studies, Econometría, and Sistemas Especializados de Información (2006).

Note: The estimated impacts presented here are not always equal to the unconditional double difference estimates because some regressions control for other correlates. The impact for Honduras was obtained from 2002 regression only. The impacts for Mexico are all for single equation cross-sectional regressions for each year. The lack of impact in 1998 is likely the result of the fact that this survey was carried out just a few months after the start of the program. Figures are in US\$ obtained through the official exchange rates observed at the time of the surveys. In the case of Oportunidades in Mexico, the 1998 figures are for a few months after the start of the program. In the case of Bolsa Alimentação in Brazil, per capita consumption figures are for more than a year after the start of the program.

a. The transfer amounts as a proportion of per capita expenditures (or consumption) are not the same across all tables in the report because of differences in the surveys used, including their coverage and year.

A. Baseline, before households in CCT treatment group received transfers.

B. No significant impact on consumption.

* Significant at the 10 percent level.

** Significant at the 5 percent level.

Table 3 Impact of CCTs on Poverty Measures, Various Years

Poverty measure	Colombia			Honduras		Mexico			Nicaragua		
	2002	2006	2000	2002	1998	1999	Jun. 1999	Oct. 1999	2000	2001	2002
Headcount index	Control Impact	0.95 A -0.03*	0.90 A	0.88 A	0.91 B	0.89 0.02**	0.93 -0.01**	0.94 0.00	0.84 A	0.91 -0.07**	0.90 -0.05**
Poverty gap	Control Impact	0.58 A -0.07**	0.54 A	0.49 A	0.54 -0.02*	0.47 0.01*	0.55 -0.03**	0.56 -0.02**	0.43 A	0.50 -0.13**	0.50 -0.09**
Squared poverty gap	Control Impact	0.53 A -0.02**	0.43 A	0.30 A	0.36 -0.02*	0.28 B	0.35 -0.03**	0.36 -0.03**	0.26 A	0.32 -0.12**	0.32 -0.09**

Source: Authors' calculations.

Note: We exclude Cambodia and Ecuador from this table because the CCT did not have an effect on median consumption in those countries and so it is not surprising that it did not reduce poverty. We also exclude the Brazilian Bolsa Alimentação program because the evaluation sample is not representative of the program's target population, which makes the analysis of the impact on poverty less informative. For Honduras, Mexico, and Nicaragua, calculations were done via regression of household level Foster-Greer-Thorbecke indicator on treatment dummy and other explanatory variables. Using the evaluation sample of each program, we compute $P(i,t,a) = (z - y(i,t) / z)a * \text{Poor}(i,t)$, for $\alpha = 0, 1$, and 2 ; and for each household, where $y(i,t)$ is household i 's level of consumption per capita at year t , z is the country-specific poverty line, and $\text{Poor}(i,t)$ is an indicator function that equals 1 if the household is poor and equals 0 otherwise. For Honduras, the poverty line used was Lps 24.6 per capita per day in 2000 lempiras. Expenditure values for 2002 were deflated to 2000 lempiras. For Nicaragua, we used C\$13.87 per capita per day in 2000 córdobas. Expenditure values for 2001 and 2002 were deflated to 2000 córdobas. For Mexico, we used the value of the Canasta Básica of 1997, which was M\$320 per capita per month. We inflated this value of the Canasta Básica for 1998 and 1999 using the Canasta Básica Price Index found at: <http://www.banxico.org.mx/polmoneinflacion/estadisticas/indicesPreciosConsumidor.html>. Therefore, for October 1998, we used M\$320 \times 1.134. For June 1999, we used M\$320 \times 1.280. For October 1999, we used M\$320 \times 1.314. For Colombia (see Institute for Fiscal Studies, Ecometría, and Sistemas Especializados de Información 2006), the estimated impacts presented here are not equal to the unconditional double difference estimates because regressions control for other correlates. The impact for Honduras was obtained from 2002 regression only. The impacts for Mexico are all for single equation cross-sectional regressions for each year.

A. Baseline, before households in CCT treatment group received transfers.

B. No significant impact on poverty measure.

* Significant at the 10 percent level.

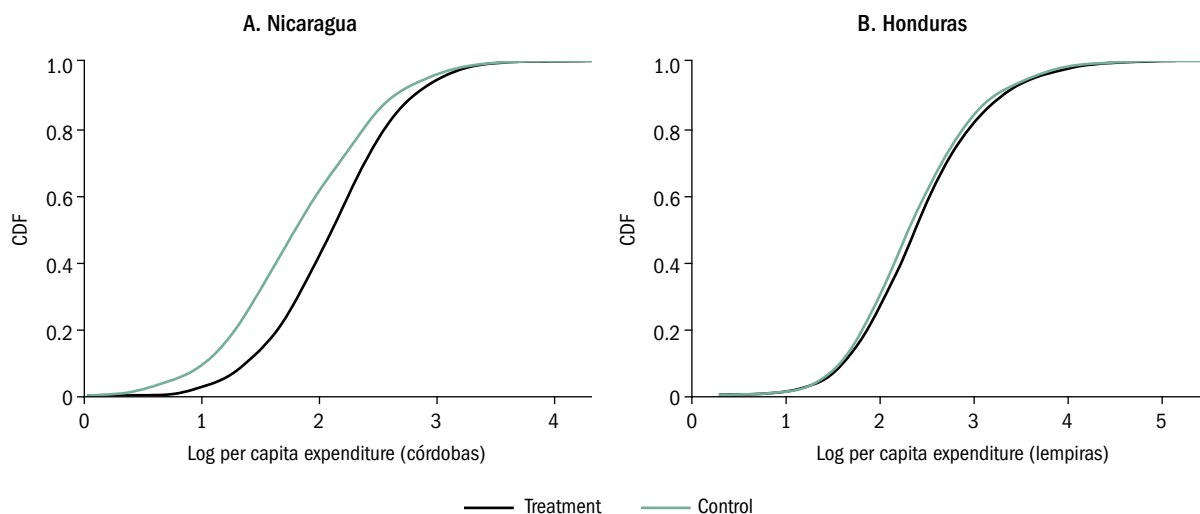
** Significant at the 5 percent level.

Table 2 shows that the largest consumption impacts are found when the transfer amount is generous (as with the Red de Protección Social [RPS] program in Nicaragua). Moreover, because transfers generally are well targeted to the poor, the effects on consumption have translated into impacts on poverty, as is shown in table 3. Some of the reductions in poverty are quite large. In Nicaragua, for example, poverty fell by 5–9 points (using the 2002 data).

Another way of measuring the impact of CCTs on welfare is to compare the cumulative distribution of consumption per capita between those who receive the transfer and those who do not. The advantage of this method is that it does not rely on the selection of a poverty line, which can be somewhat arbitrary. If the cumulative distribution for recipient households lies completely to the right of the distribution for control households—so-called first-order stochastic dominance—current welfare is unambiguously improved by CCTs. That is clearly the case for RPS beneficiaries in Nicaragua, as shown in panel A of figure 3. Panel B shows an improvement that is much smaller for Honduras—a finding that is not surprising given the smaller magnitude of the transfer.

Moreover, CCTs have affected not only the overall level of consumption, but also the *composition* of consumption. There is a good deal of

Figure 3 Impact of CCTs on the Distribution of Consumption, Nicaragua and Honduras, 2002



Source: Authors' calculations.

Note: CDF = cumulative distribution function.

evidence that households that receive CCTs spend more on food and, within the food basket, on higher-quality sources of nutrients than do households that do not receive the transfer but have comparable overall income or consumption levels.³

An important concern when CCTs first were launched was that they would result in large reductions in the labor market participation of adults—either because beneficiaries would choose to consume more leisure at higher income levels or because they would cut back on work in order to continue to appear to be “poor enough” to be eligible for transfers. In practice, CCTs appear to have had at most modest disincentive effects on adult work. Research on Cambodia, Ecuador, and Mexico shows that adults in households that received transfers did not reduce their work effort.

Although CCTs generally have not resulted in reductions in the labor market participation of adults, they have led to substantial decreases in child labor—as was intended by many of the programs. Reduced child work by CCT beneficiaries has been found in Brazil, Cambodia, Ecuador, Mexico, and Nicaragua. In some cases, the reductions are quite large. In Cambodia, for example, the average child receiving the transfer was 10 percentage points less likely to work for pay.⁴

In addition to possible reductions in labor market participation, a number of behavioral changes by households could have blunted the impact of CCTs on consumption and on poverty. In practice, all of these offsetting adjustments to transfers appear to have been small. Thus CCTs generally have not crowded out remittances and other transfers; they have had only small impacts on fertility, at least in the short run; and they have not had substantial local general equilibrium effects, such as increases in prices or wages. Finally, there is some evidence that CCT program beneficiaries invest part of the transfer, that the returns to these investments can result in higher consumption levels in the medium term (in Mexico, but not in Nicaragua), and that transfers made by CCT programs help households smooth consumption during adverse shocks.⁵

The Impact of CCTs on Education and Health Outcomes

In country after country, CCTs have led to significant and, in some cases, substantial increases in the use of services (tables 4 and 5). School enrollment rates have increased among program beneficiaries, especially

among those who had low enrollment rates at the beginning. These impacts are found in the middle-income countries where CCT programs were first implemented (for example, Mexico); in lower-income countries in Latin America (for example, Honduras and Nicaragua); and in low-income countries in other regions (for example, Bangladesh, Cambodia, and Pakistan). CCT programs also have had a positive

Table 4 Impact of CCTs on School Enrollment and Attendance, Various Years

Country	Program	Age/Gender/ Grade	Baseline enrollment (%)	Impact ^a	Transfer (% of PCE) ^b	Evaluation method	Reference
<i>Latin American and Caribbean countries</i>							
Chile	Chile Solidario	Ages 6–15	60.7	7.5*** (3.0)	7	RDD	Galasso (2006)
Colombia	Familias en Acción	Ages 8–13	91.7	2.1** (1.0)	17	PSM, DD	Attanasio, Fitzsimmons, and Gómez (2005)
		Ages 14–17	63.2	5.6*** (1.8)			
Ecuador	Bono de Desarrollo Humano	Ages 6–17	75.2	10.3** (4.8)	10	IV, randomized	Schady and Araujo (2008)
Honduras	Programa de Asignación Familiar	Ages 6–13	66.4	3.3*** (0.3)	9	Randomized	Glewwe and Olinto (2004)
Jamaica	Program of Advancement through Health and Education	Ages 7–17	18 days ^c	0.5** (0.2)	10	RDD	Levy and Ohls (2007)
Mexico	Oportunidades	Grades 0–5	94.0	1.9 (25.0)	20	Randomized	Schultz (2004)
		Grade 6	45.0	8.7*** (0.4)			
		Grades 7–9	42.5	0.6 (56.4)			
Nicaragua	Atención a Crisis	Ages 7–15	90.5	6.6*** (0.9)	18	Randomized	Macours and Vakis (2008)
Nicaragua	Red de Protección Social	Ages 7–13	72.0	12.8*** (4.3)	27	Randomized	Maluccio and Flores (2005)

continued

Table 4 continued

Country	Program	Age/Gender/ Grade	Baseline enrollment (%)	Impact ^a	Transfer (% of PCE) ^b	Evaluation method	Reference
<i>Non-Latin American and Caribbean countries</i>							
Bangladesh	Female Secondary School Assistance Program	Ages 11–18 (girls)	44.1	12.0** (5.1)	0.6	FE	Khandker, Pitt, and Fuwa (2003)
Cambodia	Japan Fund for Poverty Reduction	Grades 7–9 (girls)	65.0	31.3*** (2.3)	2–3	DD	Filmer and Schady (2008)
Cambodia	Cambodia Education Sector Support Project	Grades 7–9	65.0	21.4*** (4.0)	2–3	RDD	Filmer and Schady (2009c)
Pakistan	Punjab Education Sector Reform Program	Ages 10–14 (girls)	29.0	11.1*** (3.8)	3	DDD	Chaudhury and Parajuli (2008)
Turkey	Social Risk Mitigation Project	Primary school	87.9	–3.0* n.a.	6	RDD	Ahmed et al. (2007)
		Secondary school	39.2	5.2 n.a.			

Source: Authors' compilation.

Note: DD = difference-in-differences; DDD = difference-in-difference-in-differences; FE = fixed effects; IV = instrumental variables; n.a. = not available; PCE = per capita expenditure; PSM = propensity score matching; RDD = regression discontinuity design. This table contains unweighted means for the coefficients for Colombia ages 8–13 and 14–17, Chile ages 4–5 and 6–15, and Mexico grades 0–5 and 7–9. The standard errors in each case are the square roots of the averaged variances of these estimates.

a. The column for “impact” reports the coefficient and standard error (in parentheses); the unit is percentage points, with the exception of the Jamaican PATH program, where the unit is days.

b. The transfer amounts as a proportion of per capita expenditures (or consumption) are not the same across all tables in the report because of differences in the surveys used, including their coverage and year.

c. Impacts were measured in Jamaica only for student attendance over a 20-day reference period. The baseline enrollment rate prior to PATH was 96 percent.

* Significant at the 10 percent level.

** Significant at the 5 percent level.

*** Significant at the 1 percent level.

effect on the use of preventive health services, although the evidence is less clear-cut than with school enrollment.

Moreover, because CCT program effects on utilization are concentrated among households who were least likely to use services in the absence of the intervention, CCTs have contributed to substantial

reductions in preexisting disparities in access to education and health. In Bangladesh, Pakistan, and Turkey, where school enrollment rates among girls were lower than among boys, CCTs have helped reduce this gender gap. In Cambodia, the JFPR program eliminated sharp socioeconomic gradients in enrollment among eligible households—although the coverage of the program was quite small. And in Nicaragua, the CCT impact on both school enrollment and growth monitoring was largest among extremely poor households, as shown

Table 5 Impact of CCTs on Health Center Visits by Children, Various Years

Country	Program	Outcome	Age range (years)	Baseline level (%) ^a	Impact ^b	Transfer (% of PCE) ^c	Evaluation method	Reference
Chile	Chile Solidario	Regular checkups	0–6	17.6	2.4 (2.7)	7	RDD	Galasso (2006)
Colombia	Familias en Acción	Child taken to growth and development monitoring	0–1	n.a.	22.8*** (6.7)	17	PSM, DD	Attanasio et al. (2005)
			2–4	n.a.	33.2*** (11.5)			
			4+	n.a.	1.5* (0.8)			
Ecuador	Bono de Desarrollo Humano	Child had growth control in last 6 months	3–7	n.a.	2.7 (3.8)	10	R	Paxson and Schady (2008)
Honduras	Programa de Asignación Familiar	Child taken to health center at least once in past month	0–3	44.0	20.2*** (4.7)	9	R	Morris, Flores, et al. (2004)
Jamaica	Program of Advancement through Health and Education	Number of visits to health center for preventive reasons in past 6 months	0–6	0.205	0.278*** (0.085)	10	RDD	Levy and Ohls (2007)
Mexico	Oportunidades	Number of visits to all health facilities in past month	0–2	0.219	–0.032 (0.037)	20	R	Gertler (2000)
			3–5	0.221	0.027 (0.019)			
continued								

Table 5 continued

Country	Program	Outcome	Age range (years)	Baseline level (%) ^a	Impact ^b	Transfer (% of PCE) ^c	Evaluation method	Reference
Nicaragua	Atención a Crisis	Child weighed in last 6 months	0–6	70.5	6.3*** (2.0)	18	R	Macours, Schady, and Vakis (2008)
Nicaragua	Red de Protección Social	Child taken to health center at least once in past 6 months	0–3	69.8	8.4 (5.9)	27	R	Maluccio and Flores (2005)
		Child taken to health center and weighed in past 6 months	0–3	55.4	13.1* (7.5)			

Source: Authors' calculations.

Note: DD = difference-in-differences; n.a. = not available; PCE = per capita expenditure; PSM = propensity score matching; R = randomized; RDD = regression discontinuity design. This table contains weighted means for the coefficients for Chile, combining rural and urban estimates. The standard error in this case is the square root of the averaged variances of these estimates.

a. The unit for baseline level corresponds to the proportion of children who have been taken to the health center, with the exception of Jamaica and Mexico, where the unit corresponds to the number of visits.

b. The column for “impact” reports the coefficient and standard error (in parentheses); the units are percentage points, with the exception of Jamaica, where the unit is the number of visits to the health center in the past six months, and Mexico, where the unit is the number of visits to the health center in the past month.

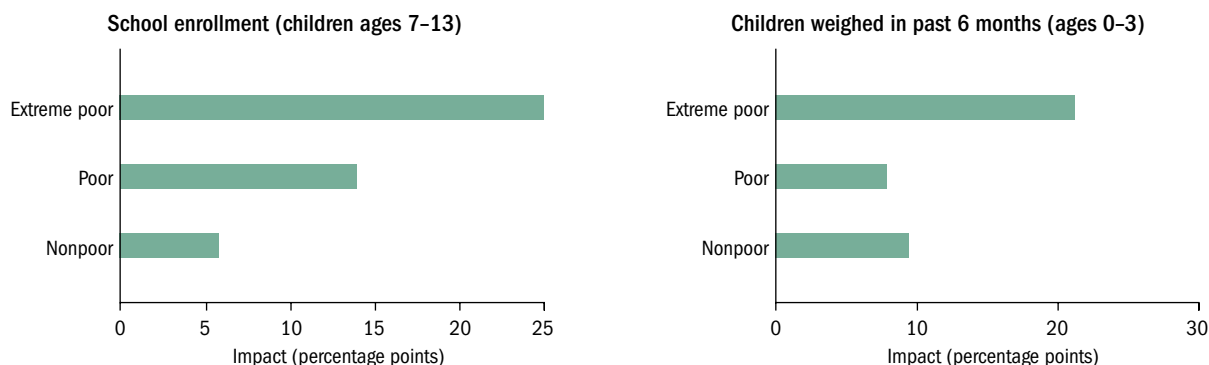
c. The transfer amounts as a proportion of per capita expenditures (or consumption) are not the same across all tables in the report because of differences in the surveys used, including their coverage and year.

* Significant at the 10 percent level.

*** Significant at the 1 percent level.

in figure 4. As Amartya Sen (1985) and others have noted, poverty takes many forms—including an inability to develop basic “capabilities” in education and health. Providing all citizens in a country with an equality of opportunities is an important policy goal, and CCTs have helped level the playing field between rich and poor, more and less favored.

Although there is clear evidence that CCTs have increased the use of education and health services, evidence on the impact of CCTs on “final” outcomes in education and health is more mixed. Some (but by no means all) evaluations have found that CCTs contributed to improvements in child height among some population groups; there is also some evidence that program beneficiaries have better health status.⁶

Figure 4 Heterogeneity of Impacts by Socioeconomic Status, Nicaragua, 2000

Source: Maluccio and Flores 2005.

Turning to education outcomes, adults with more exposure to the Oportunidades program in Mexico have completed more years of schooling than have those with less exposure; however, the likely increase in wages that can be expected to occur because of this added schooling is small. Also, a number of evaluations have concluded that the higher enrollment levels have not resulted in better performance on achievement tests, even after accounting for selection into school.⁷ This pattern of program effects—increases in enrollment, without more learning—is not particular to CCTs. Nevertheless, the results are sobering because they suggest that the potential for CCTs to improve learning *on their own* may be limited. The evidence is somewhat more encouraging regarding the impact of CCT programs on cognitive development in early childhood (Macours, Schady, and Vakis 2008; Paxson and Schady 2008). This suggests that very early intervention might produce larger payoffs than one would expect, for example, by looking at the pattern of program effects on school enrollment by age or school grade.

There are various reasons why CCTs may have had only modest effects on “final” outcomes in education and health. One possibility is that some important constraints at the household level are not addressed by CCTs as currently designed; these constraints could include poor parenting practices, inadequate information, or other inputs into the production of education and health. Another possibility is that the quality of services is so low, perhaps especially for the poor, that increased use alone does not yield large benefits.

Policy and Design Options

Earlier in this overview, we discussed the circumstances under which a CCT is desirable. Given that a CCT is put in place, how should it be designed? We now turn to questions of CCT program design, including the selection of beneficiaries, the monitoring of conditions, the size of the transfer, and the complementary interventions that are needed.

Defining the Target Population

Selecting eligible beneficiaries is the first question any policy maker considering a CCT must address. A CCT should be designed to target *poor households* (for whom there is a stronger rationale to redistribute) *that underinvest in the human capital of their children*.

In practice, selecting the target population for a CCT first implies defining the criteria for eligibility based on poverty. The challenges of selecting the “right” targeting method and setting cut-off points for eligibility (that is, who qualifies as poor) are similar to those faced in the design of any social assistance program.

Defining the second criterion for targeting (that is, households that underinvest in the human capital of their children) is more complicated. In general, when households have qualified based on poverty criteria, CCT programs continue to make transfers as long as those households have children of the “right” ages and send them to school and/or take them to a health center. In some cases, it may be worthwhile to use a more narrow demographic target to direct transfers to population subgroups that appear to have the largest human capital gaps. This more narrow approach could imply targeting poor households with children transitioning from primary to secondary school in some countries, and poor households with young children in regions with high rates of malnutrition in others.

There may be trade-offs between redistributive and human capital goals resulting from alternative targeting approaches. In a setting in which a large share of the poor population experiences significant and similar human capital gaps, trade-offs are likely to be small. On the other hand, when human capital gaps are highly concentrated on a relatively small proportion of the poor, designing a CCT to maximize impact on human capital accumulation may limit its ability to act as a redistributive mechanism.

Selecting the Appropriate Conditions and the Size of the Transfer

Is the increase in the use of education and health services that results from CCTs purely a result of the income effects inherent in the transfer? Answering this question has important implications for the extent to which conditions are implemented and monitored, and the degree to which noncomplying households are penalized. As it turns out, evidence from a variety of sources (including comparisons across programs or countries, accidental glitches in program implementation, intentional features of program design, and structural models of household behavior) suggests that the impact of CCT programs on service use cannot be explained by the cash component of the program alone.⁸ The conditions are thus important, at least in terms of increasing levels of school enrollment and the use of preventive health care.

However, service use is generally a means to an end. Thus the first step in selecting the “right” conditions is a review of the evidence on links between service use and the desired outcomes. Is getting children into health facilities the most effective way to improve their nutrition and health more broadly? Or is giving mothers nutrition and parenting information and training more effective?

Conditioning the cash transfer on the achievement of outcomes themselves is another possibility, particularly when links between such behaviors as service use and outcomes are unknown or complex, but outcomes are judged to be mostly within beneficiaries’ control. In the future, experimentation with alternative incentive schemes (through small-scale pilot programs, for example) should become increasingly important. This could be done by adding performance bonuses to the basic benefits households receive for satisfying attendance conditions.

A second question is how to set the appropriate transfer amount. As discussed above, larger transfers generally have produced bigger improvements in consumption (or income) poverty—a result that seems reasonable. In terms of education and health outcomes, the critical questions are (1) how income-elastic are the outcomes? and (2) do larger transfers result in bigger behavioral changes by recipient households? In terms of enrollment in Cambodia, the marginal return to transfers appears to diminish very quickly—even though the “baseline” transfer is quite small (Filmer and Schady 2009a). More

generally, however, the appropriate transfer amount for a CCT is likely to depend on the relative weight given to the program's redistribution and human capital goals, and is likely to vary across outcomes and settings. Structural modeling and small-scale experimentation can help policy makers identify and quantify the trade-offs (Bourguignon, Ferreira, and Leite 2003; Attanasio, Meghir, and Santiago 2005; Todd and Wolpin 2006a).

Entry and Exit Rules

The design of an effective program also requires careful consideration of rules for entry and exit. This is necessary to avoid confusion among prospective beneficiaries and to minimize the potential for manipulation and abuse. Entry and exit rules also are important because they can have unintended incentive effects, particularly related to labor force participation. To date, CCTs have used a proxy means rather than an income threshold to target benefits, and so the correspondence between program eligibility and labor supply is weaker than in many welfare programs in developed countries. However, the better a proxy means is at distinguishing “poor” from “nonpoor” households, the more highly it will be correlated with income and consumption—and the more likely it is to provide disincentives for adult labor market participation. Potential solutions include the use of time limits on benefits (as in Chile or in the United States under the Temporary Assistance for Needy Families [TANF] program), and the adoption of graduated benefits (whereby there is only a partial reduction of benefits after recertification shows households have ceased to be eligible under original criteria) in order to avoid “cliffs” and the associated negative incentive effects on labor supply.

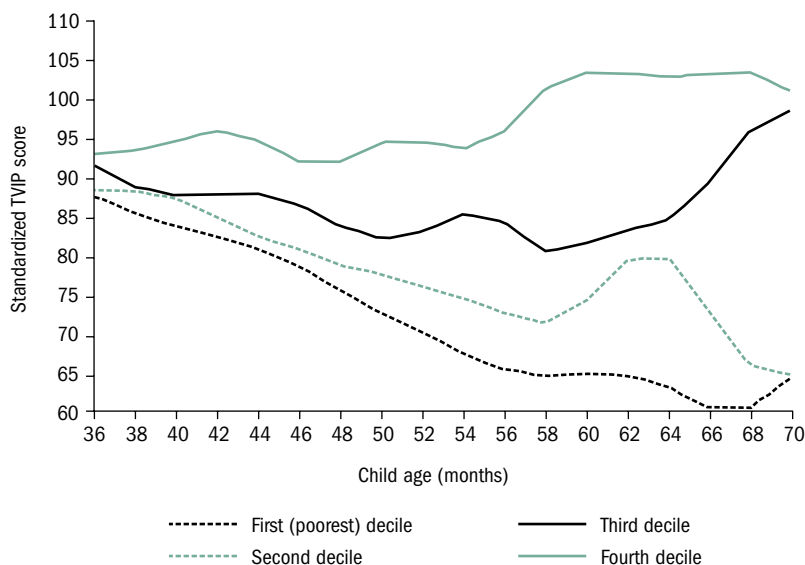
Complementary Interventions

In many developing countries, the delivery of education and health services is dysfunctional. Poor infrastructure, absenteeism, and lack of adequate supplies are not unusual problems in schools and health centers. Achieving the human capital goals of CCT programs will require adaptation of the supply of services. In some countries, this adaptation may require governments or other actors to provide services where none existed before. Improving quality is perhaps an even greater challenge, and

some governments have attempted to address this by offering monetary incentives to providers of health and education services for good performance. Reforms to increase access and the coverage of services frequently have been undertaken in parallel with or as an integral part of the CCT program.

In addition to the poor quality of services, other constraints at the household level may make it difficult for CCTs to improve final outcomes in health and education. Figure 5 makes this point for Ecuador. The figure shows the scores of children on a test of cognitive development in early childhood. At age 3, most children in the Ecuador sample are only modestly behind the reference population. By age 6, the age when they enter first grade, children in the two poorest deciles of the national distribution of wealth are almost three standard deviations behind where they should be. The implication is clear: a CCT by itself or even in combination with high-quality schools is unlikely to remedy such disadvantages. This is particularly important because recent theoretical and empirical research suggests that the returns to investments

Figure 5 Cognitive Development by Wealth Decile in Ecuador, 2003–04



Source: Paxson and Schady 2007.

Note: TVIP = Test de Vocabulario en Imágenes Peabody. Each line corresponds to one decile from the national distribution of wealth, from the first (poorest) decile, to the fourth. The test is coded so that a score of 100 corresponds to the average performance in a reference population, and the standard deviation is 15.

later in the life cycle will be limited if children do not have adequate levels of cognitive, social, and emotional development in early childhood (Cunha et al. 2006; Knudsen et al. 2006).

Under these circumstances, interventions that seek to improve parenting practices and the quality of the home environment are likely to be particularly important. Oportunidades and some other CCTs attempt to expose parents to new information and practices by conditioning transfers on participation in talks (known as *pláticas*). The conditioned cash helps ensure that parents attend and participate in the *pláticas*. However, the cash-condition package offered by CCT programs may not be enough, and a comprehensive program that relies on more active participation by social workers and others may be needed.

CCTs in the Context of Social Protection Policies

CCT programs are just one option within the arsenal of social protection programs that can be used to redistribute income to poor households. They *cannot* be the right instrument for all poor households—for example, they cannot serve the elderly poor, childless households, or households whose children are outside the age range covered by the CCT. Redistribution to those groups is better handled through other means. In the case of the elderly poor, the potential labor supply disincentives from cash transfers are likely to be low, and the justification for further investments in human capital is questionable. As a result, social (or noncontributive) pensions often are the preferred instrument used by both developed and developing countries to provide assistance to elderly poor people.

Also, a CCT is unlikely to be the best instrument for social risk management. CCTs have been used to help cushion the negative impact of various types of crises on the poor. But their focus on long-term investments in human capital and their reliance on administrative targeting mean that CCT programs generally are not the best instrument to deal with transient poverty. Transfer programs that do not involve long-term commitments (such as those implicit in CCT conditions), that are self-targeted (and thus do not involve complex administrative decisions for entry or exit into the program), and that involve beneficiaries in activities that can help address the source of the shock (for example, job-related activities) appear to be better suited than are CCTs as instruments for managing risk.

Thus in most country contexts, CCT and other cash transfer programs are likely to coexist and should be seen as complements, rather than substitutes, addressing different household characteristics and the nature of the poverty those households experience. It is not surprising that policy makers and program managers for CCTs in Latin America, the region where such programs have the longest tradition and the most established status, increasingly are casting CCTs as part of a broader system of social protection. Doing so requires making the basic design features of programs compatible—for example, the transfer size in a CCT must be set in relation to that of other cash transfers to limit distortions, ensure horizontal equity, and make programs politically acceptable.

Finally, the potential administrative synergies across cash transfer programs are large. Perhaps the most obvious examples are common systems for administrative targeting and common systems to make payments to beneficiaries (such as with electronic cards). Numerous countries also are considering or experimenting with a common outreach and service platform—one-stop shops that beneficiaries of all social protection programs can use to access benefits and interact with program administrators.

Conclusion

CCT programs often are described in both extremely positive and negative terms. Our review of the CCT experience so far confirms that the programs have been effective in the sense that there is solid evidence of their positive impacts in reducing short-term poverty and increasing the use of education and health services. Those achievements should not be minimized because they are powerful proof that well-designed public programs can have significant effects on critical social indicators. CCTs also have had positive institutional externalities—most notably, through their emphasis on monitoring and evaluation, whereby they have helped strengthen a results culture within the public sector, at least within social policies. That strengthening is clearly a legacy worth sustaining. At the same time, our review provides ample reasons to be cautious and avoid transforming the obvious virtues of CCTs into a blind advocacy campaign in support of them.

Fifty years ago, Albert Hirschman (1958) argued that development is a “chain of disequilibria” whereby the expansion of one sector creates

backward or forward pressures that can provide the necessary stimulus for the expansion of another sector, which is still underdeveloped. Those links operate not only through the standard motivation for profit, but also by building political pressure for government action. CCT programs have increased poor people's demand for services and have the potential to unleash a broader process to transform health, education, and social protection services. It is still too early to tell whether the current wave of CCT programs will produce those results, but the experience so far provides room for hope.