AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The Experience of Conditional Cash Transfers in Latin America and the Caribbean

Sudhanshu Handa and Benjamin Davis

ESA Working Paper No. 06-07

May 2006

Agricultural and Development Economics Division

The Food and Agriculture Organization
of the United Nations

www.fao.org/es/esa

ESA Working Paper No. 06-07
www.fao.org/es/esa

The Experience of Conditional Cash Transfers in Latin America and the Caribbean

May 2006

Sudhanshu Handa
Associate Professor
Department of Public Policy
University of North Carolina
e-mail: shanda@email.unc.edu

Benjamin Davis
Economist
Agricultural and Development
Economics Division
Food and Agriculture Organization
Italy
e-mail: benjamin.davis@fao.org

Abstract

This paper discusses the experience of six conditional cash transfer programs in Latin America, a model of social safety nets which have grown to dominate the social protection sector in the region over the last 10 years. We find that while conditional cash transfer programs have generally been successful in terms of reaching their core objective, it is still not clear whether they constitute the most cost efficient or sustainable solution to the development bottleneck they seek to adress. Further, the almost exclusive focus on human capital accumulation of children leads to missed opportunties in terms of impact on household welfare and the broader rural development context.

Key Words: Conditional cash transfer programs, Social protection, Latin America.

JEL: I38, O15, O19.

Thanks to John Farrington, Benedicte de la Briere, Carol Watson-Williams, Carola Alvarez, Amanda Glassman, David Coady, John Maluccio, Marcelo Cabrol and Ferdinando Regalia for useful discussion and comments on different versions of the paper. This paper will appear in a forthcoming issue of *Development Policy Review*.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever of the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The Experience of Conditional Cash Transfers in Latin America and the Caribbean

1. Introduction

This paper discusses the experience of conditional cash transfer programs (CCTs) in Latin America and the Caribbean. These programs link safety nets directly to human capital development, by making receipt of the transfer conditional on school attendance and health care checkups. In most cases, conditional cash transfers are provided directly to mothers under the assumption that they are more likely to use the resources to benefit their family and children.

Conditional cash transfer programs have grown to dominate the social protection sector in Latin America and the Caribbean over the last 10 years, and at this point virtually all countries in the region are either implementing such a program or are in various stages of discussion on the relative merits of implementing such programs. Further, conditional cash transfer programs are increasingly being promoted as best practice in the social sector for developing countries in other parts of the world and have spurred debates over the relative merit of cash versus food based transfers. Finally, the fiscal and policy weight given these cash transfer programs has likely had a significant impact on the composition and funding of rural development policy in general.

The popularity of these programs can be attributed to the success of the Bolsa Escola (as of 2003 merged into Bolsa Familia) and PROGRESA (as of 2001 renamed OPORTUNIDADES) programs in Brazil and Mexico respectively in the late 1990s, and the subsequent overwhelming support from the Inter American Development Bank (IDB) and World Bank to finance such activities as human capital investment loans alongside the physical investment that typically dominates the portfolio of these lending agencies. In 2001 the IDB approved the largest loan in its history to support the expansion of Mexico's OPORTUNIDADES program into urban areas.

The discussion is based primarily on a comparison of six conditional cash transfer programs currently being implemented in the region. Besides OPORTUNIDADES and Bolsa Familia, these include the Programa de Asignación Familiar II (PRAF II) in Honduras, Red de Protección Social (RPS) in Nicaragua, Program for Advancement Through Health and Education (PATH) in Jamaica, and Familias en Acción in Colombia.

Keeping in mind that the specifics—and success—of any program will depend on national objectives, institutional capacity and financing constraints, the discussion in the paper revolves around three key topics: program origins and objectives; program parameters and targeting; and monitoring and evaluation strategies and results. We do not review the programs in detail[1]; instead, we contrast design choices across programs and comment on their appropriateness, their operational success or weaknesses, and draw out implications for the implementation of future social safety nets within the context of rural development.

2. Origins and objectives

[1]See Ilahi et al. (2000), Rawlings (2004) and Rawlings (2005) for more general discussions of conditional cash transfer programs in Latin America.

Origins: Table 1 provides information on the size, origins, and coverage of the CCTs currently in operation in the region as well information on country GDP and poverty. The conditional cash transfer programs under discussion vary greatly in terms of scale of operation. Brazil and Mexico have by far the largest programs, reaching approximately 8 million and 5 million households, respectively and budgets of over 2 billion dollars a year. Nicaragua has the smallest program, reaching over 21,000 families with a budget of over $6 million a year.

Most CCTs have the same dual objectives, combining long run human capital development with short term poverty alleviation, yet the origins of the programs are different. In only two cases (PROGRESA/OPORTUNIDADES and Bolsa Escola, the predecessor of Bolsa Familia) can the programs be considered indigenous in the sense that they were initially designed and financed without the help of the development banks. However in both these cases subsequent expansion was financed through loans.. PROGRESA represented a fundamental shift from universal food subsidies to targeted transfers, while Bolsa Familia brought together a number of separate conditional cash transfer programs, the origins of which derive from state level initiatives.

In Jamaica, Honduras and Nicaragua the introduction of CCTs is clearly linked to external financing and forms part of a broader objective to consolidate the social safety net and to strengthen its administrative and implementation capacity. Colombia's program was partially in response to that country's economic crisis. The IDB/WB loan that financed Familias en Acción also sought to establish a coherent safety net to replace an existing fragmented array of programs.

Is there a development bottleneck? A key question is the extent to which the education and health components of conditional cash transfer programs respond to a fundamental development bottleneck, particularly in the poorer countries such as Nicaragua, Honduras and Colombia where administrative capacity and financing is low and poverty widespread. In these three countries primary school net enrolment rates hover around 85% and are lower for poor families and in rural areas. The demand side subsidy has proven unable to bring all the remaining 10-15 percent of this age group into school since these are the most marginalized and unlikely to even have access to a school. A demand side transfer is more likely to make a difference on attendance (and hence achievement) as well as age of entry. In these and other countries (Brazil, Mexico) delayed entry is a widespread phenomenon among the poor and in rural areas. One exception is Jamaica where basic schooling is universal across the country (although quality of service does vary by region). However school attendance (as opposed to enrolment) in rural areas is inconsistent and linked to economic factors. In this case the argument for a CCT would be to address the attendance problem in rural areas and urban ghettos.

On the basic health side the same general pattern of inequalities in child nutritional status, pre-natal care and preventive health check-ups exist as they do in primary education. The poor and rural families are less likely to use health services and have lower birth and child nutritional outcomes. In theory therefore, a development bottleneck existed in these countries that the programs sought to address.

Is this development bottleneck demand or supply driven? When thinking about the applicability of a CCT, however, the key question is whether observed inequities in health and education are due to demand side constraints (income, preferences) or supply side constraints. Could adequate universal supply of quality primary health and education erase the observed disparities in the region? We have found no *ex ante* analysis that directly tests the proposition that inequities in schooling and health are primarily due to demand side factors relative to supply side ones. The common observation that poor children attend school and health check-ups less frequently is not sufficient evidence to conclude that a demand side intervention will solve the problem. Income is highly correlated with access to and quality of schooling and health care, making it just as plausible that differences in outcomes are driven by the unequal distribution of access and quality of services. Even if both supply and demand side factors are shown to be important, the question remains as to which is the more cost-effective option for the government to pursue.

On the schooling front there is substantial research that attempts to estimate the impact of school access and quality on various schooling outcomes.[2] From an economic point of view the observed high rates of return to even basic schooling does not square with the need to provide monetary incentives for families to send their children to school in rural areas. An explanation for this apparent contradictory phenomenon is the importance of school quality, which is typically unobserved (and hence not controlled for) in rate of return studies (Behrman and Birdsall, 1983). Given the existing distribution of school quality in LAC, the implication is that if school quality (including access) were improved significantly the poor would take advantage of educational opportunities without the assistance of direct monetary transfers. Indeed Bedi and Marshall (2002) show that perceived school quality does significantly increase enrolment in rural Honduras. Of course even public schooling does involve some direct out of pocket costs which poor credit-constrained families may not afford. Again, the relative importance of these direct costs versus the (low) expected future benefits due to low quality schooling is not known. On efficiency grounds, the existence of very large direct costs of schooling would seem to be the primary justification for CCT type programs.

Two recent studies have directly tried to estimate the relative cost effectiveness of supply versus demand side interventions in improving schooling enrolment in developing countries. Coady and Parker (2004a) find that with PROGRESA demand side interventions are more cost effective. The study, however, is hampered by little change in supply side variables, thus possibly leading to an underestimation of the impact of supply side factors. A second study (Handa, 2002) is based on data from Mozambique which has poverty rates comparable to Honduras and Nicaragua but much lower primary school enrolment rates andless school infrastructure. This study finds that the demand side intervention is the least cost-effective. While this result may not necessarily be relevant to Latin America, the study points to questions of the cost-effectiveness of supply versus demand side interventions which have not yet been rigorously studied in the region.

The arguments regarding supply versus demand side factors influencing health care utilization are similar up to a certain point. The key difference between schooling and heath utilization is the issue of information and knowledge regarding returns to investment, as well as cultural

[2]See Hanushek (1995) and Kremer (1995) for an interesting discussion of the role of school quality on student achievement in developing countries.

attitudes towards modern medical care. For healthcare there are two types of problems: one is lack of knowledge concerning the economic returns to health care check-ups, pre-natal care treatment and other types of preventative health care. The other is information asymmetry – the providers of healthcare have much greater knowledge of options and their likely costs and benefits than do the users. These problems are further compounded by fear of and hesitation towards modern health practices that are not easily understood. For these reasons the market failure for basic primary health care may be significantly greater than it is for schooling, thus implying a greater need for intervention on efficiency grounds. The demand for quality health care is difficult to model because it is hard to measure (and control for) the exogenous price of different alternatives, but there is evidence that both quality and access are important determinants of utilization.[3]

Is the focus of CCTs too narrow? A common criticism of conditional cash transfer programs is the almost exclusive focus on human capital accumulation for children, which takes years – sometimes a generation – to develop. These programs tend to ignore building human capital or productive capacity for adults who are past school age, or for the accumulation of productive capital for the here and now; that is, capital, such as land or non-agricultural assets, which would have both long and short term effects on poverty alleviation. Through CCTs children will be better prepared for the labour market when they are older, but productive investment of the transfer would allow the family to sustain the impact of the cash transfers, which cannot continue indefinitely.[4]

While it is not clear whether human capital goals and productive capital accumulation goals should coexist within the same program, the design could benefit from considering what role cash transfers can play in this regard. Indeed, the results from research (Davis et al., 2002; Gertler et al., 2005) show that even the extreme poor receiving PROGRESA transfers spend some part of their transfer on productive activities. On the other hand, results from Davis et al. (2005) suggest that a higher shadow price of time among agricultural households facing credit and/or labor market imperfections mutes the impact of the PROGRESA program. Thus there would be some merit in considering how to maximize the indirect productive effect of conditional cash transfer programs, and minimize constraints, when designing the program. At a more broad level, conditional cash transfer programs in rural areas constitute a substantial infusion of liquidity among poor households and their communities. The poverty alleviation and development impact could be maximized by better considering the local economic context in which households and their communities operate.

Reducing poverty now. Another important objective of conditional cash transfer programs is the reduction of incidence and depth of poverty. While the theoretical impetus for the design of these programs is long term reduction in poverty, primarily for political reasons reductions in the current or short term incidence of poverty are frequently stated as policy objectives. While it is relatively easy to find increases in beneficiary welfare, actually linking changes in the national incidence of poverty with expenditures on conditional cash transfer programs is difficult, as many other factors—particularly economic growth—play a determinant role. An economic

[3]See Akin et al. (1985) for a discussion of the issues and an example; Jensen and Stewart (2000) report that service quality is an important determinant of utilization in the Philippines.
[4] For a general discussion of social protection and household economic activities, see Farrington et al. (2004).

downturn can obfuscate any improvements in the overall incidence of poverty, even though beneficiaries of the program are better off then if they had not received the program. Further, as we will see in the discussion of the different components of program parameters in the next section, the twin objectives of long term reduction in structural poverty and reduction in the current incidence of poverty lead to contradictions in program design.

A safety net in times of crisis. One possible justification for conditional cash transfer programs is their potential role as short term safety nets during times of crises. One feature of recessions is that the poor become poorer, thus increasing their poverty gap. Since these are families that already qualify for the CCT the response here is a relatively straight forward short-term increase in the size of the benefits.[5]

Another feature of short term recessions is that a sizable number of 'near poor' or lower middle class families drop into poverty. These are families that otherwise would not be eligible for a CCT. Conditional cash transfer programs, as currently implemented, are less capable of serving the needs of the transitional poor. Most household level targeting mechanisms measure structural poverty via long term indicators of well being and are not suited for measuring transitional poverty. Further, the information gathering systems of most CCTs are not designed to incorporate new beneficiaries on little notice, or to drop households that have moved out of poverty, for that matter.

Even conditional cash transfer programs designed to address structural poverty can play a role in terms of mitigating the effects of a crisis. Davis, Handa and Soto (2004) simulate the headcount and poverty gap in Mexico in 1996 (during the tequila crisis) had PROGRESA been operating at that time, and find that these indicators would have been 17 and 23 percent lower. Maluccio (2005), using the RPS evaluation data in Nicaragua, shows that while both treatment and control households suffered negative welfare shocks from the coffee crisis the decline was less among treatment households, and that the RPS played an important part in the risk coping strategies of directly affected households. Finally, de Janvry et al. (2006) find that the PROGRESA program protected children from leaving school in the event of a shock, though the program was unable to prevent children from working more.

[5]A response on the monitoring side might also be considered given the risk of poor families pulling children out of school to meet short term economic needs.

Table 1: Basic Information on Programs and Countries				
	GDP per capita	Poverty Headcount	Budget/Coverage	Origin
Brazil – Bolsa Familia	2700	35 (2004)	$2.1 billion 8 million households (2004)	Merger of several federal and state programs (Bolsa Escola, Bolsa Alimentação, Auxilio Gas and Cartão Alimentacao) into one in 2004. Merger and strengthening financed by IDB and WB investment loans.
Colombia – Familias	2100	55	$125 million 400,000 families (2004)	IDB Loan 2000; Part of broader safety net reform and consolidation
Honduras – PRAF II	800	64 (2004)	$ 25 million 411,000 families (2005)	PRAF was established in 1991 and distributed cash coupons as an income supplement to improve food security. An initial IDB loan supported coupons and the Social Fund; CCTs (PRAF II) were introduced in 1998 as part of a sector wide modernization and strengthening initiative financed through IDB loan; IDB follow-on loan approved in 2004.
Jamaica – PATH	1600	18 (2001)	$ 16 million 220,000 individuals (2005)	Part of wider sector reform and consolidation of cash transfer programs and food stamps. Financed by IDB sector loan and World Bank investment loan in 2001.
Mexico – PROGRESA/ OPORTUNIDADES	6500	32 (2000)	$2.8 billion 5 million households (3.5 million rural) (2004)	Federal government stand alone program began in 1997, coinciding with removal of some general food subsidies; IDB financed urban expansion in 2002.
Nicaragua - RPS	500	46 (2001)	$ 6.37 million 21,619 families (2004)	IDB multi-phase loan 2000; part of comprehensive social safety net for poverty reduction. Initially executed by FISE, later moved to Ministry of the Family. IDB second phase approved in 2002.

3. Program parameters: Benefit size and structure, conditionality, targeting and exit rules

Benefit size and structure: The benefit structure is a particularly complex aspect of CCTs relative to other safety net programs because it tends to vary with the characteristics of the beneficiary family and usually involves more than one component. Table 2 summarizes the structure and level of benefits in the sample of programs in US dollars at prevailing exchange rates as well as in relative terms, either to the poverty line or the average income or consumption of beneficiary households.[6] An international rule of thumb is that a poverty motivated cash or in-kind transfer should represent between 20% and 40% of the per capita total poverty line in order to be meaningful to the beneficiary. This standard is generally met on the low end by all programs except for Brazil and Honduras where the fractions are significantly lower than 20 percent.

Most benefits structures have a family level cap and are composed of a fixed family level transfer which is conditional on health check-ups, plus an educational transfer which is given on a per child basis conditional on school enrolment and minimum attendance. The exception is PATH, where the transfer is strictly an individual one; each eligible individual[7] in an eligible family is given the benefit and there is no family cap. One implication of the PATH structure is that benefits can be lost for non-compliance with any of the health or schooling conditions while in other programs families can comply with health and not schooling. In both cases families can specialize by sending some children to school and not others and still collect the per child subsidy for the child in school.

Several different approaches can be used to set the theoretical level of transfers. The simplest method is to work backwards: calculate 20-40 percent of the poverty line on a per person basis which will represent the minimum or target total level of transfer to be delivered to the typical beneficiary family. A two-part transfer requires an additional calculus since the total (targeted) transfer must be partitioned into a flat transfer per family plus a per child component. In some cases the per child benefit has been set with reference to the opportunity cost of child schooling, as in Honduras and Mexico.[8]

Another approach is to consider the depth of poverty when designing the transfer level. The Bolsa Familia flat transfer is set at one-half the minimum wage per person (although only one transfer per family is permitted so that effectively the transfer is one-eighth of a minimum wage for a family of 4). This is only given to families farthest away from the poverty line (the extreme poor); the moderate poor are not given a flat subsidy but are eligible to receive the per child subsidy conditional on school enrolment and attendance.

The flat per family subsidy has typically been linked to the low cost food basket with the objective of providing enough money for poor families to purchase adequate nutrition. In both

[6]These latter calculations require knowledge of the average transfer to beneficiaries, a figure which not available in all cases. When not available, we use an average family size of 2 adults and 2.5 children and assume that each child receives the average child subsidy if there is variation in this subsidy by sex or age.
[7]Unlike other programs, PATH includes specific target groups such as the elderly and handicapped.
[8] See Coady (2001) for a study of the distributional impacts of the two part transfer in Mexico.

Mexico and Colombia the family benefit is linked to the average gap between the income of the poor and the cost of the basic needs food basket. In PRAF II on the other hand the subsidy is strictly related to the opportunity cost of fulfilling the health and other program related requirements to earn the subsidy. In Jamaica the per person subsidy was calculated with reference to the poverty line and the average expected number of beneficiaries per eligible family. While most programs require some health related condition to qualify for the family subsidy, in no case does the subsidy level itself seem to take into consideration the time cost of compliance, which can be substantial. On the other hand the PRAF II experience demonstrates that both factors should be considered and not just the time cost, since this may end up being too low to induce participation.

A separate but related issue to the benefit structure is the overall benefit cap that is typically imposed on participant families. One theoretical rationale for capping is economies of scale in household consumption, but this is not consistent with the per child subsidy which is presumably linked to the opportunity cost of attending school. The existence of the cap may then be linked to the desire to spread program benefits over as many different families as possible, or/and to avoid fertility related incentives. Of these two reasons the second is the most compelling, especially in cases where proxy means tests are designed to give families with young children extra points. However, this could lead to perverse incentives, as initially occurred in PRAF.[9] PATH is the only program without a cap, while the RPS takes the other extreme and proves US$9 per month regardless of the number of school aged children in the family, which clearly favors smaller families.

Another dimension along which benefits may vary is age and sex of school age children. The most notable examples are in Mexico and Colombia where the per child subsidy almost doubles between primary and junior secondary school, a stage where drop-outs rates increase sharply (or continuation rates decrease sharply). The opportunity cost of time for these older kids may be higher and direct costs are also reported to be higher due to increased school supplies and additional transportation costs since the coverage of junior secondary schools is not as widespread as that of primary schools. The transition from primary to junior secondary is arguably the most important transition in the school career of a child from a poor family; this is one of the first moments when the family decides on the future trajectory of the child in terms of work versus school and for this reason emphasis has been placed on ensuring a successful transition by increasing the school subsidy.[10]

OPORTUNIDADES also provides a larger subsidy to girls over boys, presumably in response to the higher drop out rates observed for girls. Yet while direct costs are the same for boys and girls, opportunity costs may actually be higher for boys so if anything the response on economic efficiency grounds would be to increase the relative subsidy for boys. Behrman, Sengupta and Todd (2000) claim that in fact the higher enrolment rates of boys at older ages in Mexico is partially due to the slower progression of boys through the system rather than early drop-out of girls, implying that the transfer level should actually favor boys over girls at the junior secondary

[9]Stecklov et al. (2006) show that this design flaw—later corrected—led to an increase in fertility among PRAF II beneficiary households. They find no impact on fertility from PROGRESA or RPS.

[10]Indeed some have argued that the school subsidy should only be given at this stage and be large enough to induce the family to have the child finish primary school in order to then take advantage of the subsidy.

level. The variation by sex in the benefit structure thus requires additional understanding of the reason for the apparent higher female drop-out rate and if in fact there are underlying differences in direct or indirect costs that work against females.

Conditionality. The conditional aspect of CCTs is one of the most attractive features of the program and is also one of the most complicated to execute. The potential administrative burden of monitoring conditionality, particularly in countries with weak institutional structures, leads to the obvious question of whether conditionality is necessary, and if it is, what type of monitoring mechanism is best given costs and institutional structures and capacity. There is some recent theoretical work on the issue of conditionality[11] but serious empirical analysis that tries to disentangle the income and substitution (or price) effects has yet to be done.

Other aspects of conditionality may incur an additional impact. Hoddinott and Skoufias (2004) analyze the impact of PROGRESA on total calorie availability and find overall large impacts of the program on calories derived from vegetables and animal products. They find that the impact on food consumption goes beyond a simple income effect and also includes what they call a 'platica' effect—behavioral change induced by participation in health and nutrition talks.

The question of whether conditionality is necessary for school enrolment has not been established empirically but it seems unlikely that a simple cash transfer made without even a tacit expectation of school enrolment would induce such behavior.[12] While schooling is a normal good so the income effect should in principle induce some human capital investment behavior, the overall level of the grant is likely to be too small to make a difference. More importantly, the serious issues of school quality in communities served by these programs will keep overall net benefits to school investment too low to induce major behavioral change without explicit expectations in this regard.

Conditionality may also be considered necessary from a political economy perspective. Public support for safety nets in general and the provision of cash in particular is a function of the values of society as well as the characteristics of the poor. Support will be less in countries where citizens feel that poverty is due to individual lack of effort or responsibility, for example,[13] or in when the poor are easily identifed as "different". In Latin America the 'face' of the poor is typically very different from mainstream society, and the poor are often geographically marginalized. Conditional cash transfer programs respond to this political constraint by requiring the poor take responsibility for their actions and 'work' for their money.

Given that some form of conditionality (even if only on paper) is likely to be a part of these programs an important issue is the cost of monitoring compliance, which will be related to the complexity of the conditions and the degree of monitoring. Caldes, Coady and Maluccio (2004) review the cost structure of different activities related to program execution for

[11]See, for example, Martinelli and Parker (2003).
[12]This observation is consistent with results provided in Davis et al. (2002), who compare the impact of PROGRESA with the PROCAMPO program on school enrolment.
[13]Graham (2002) reports that the Latinobarometro poll finds that citizens in Latin America are remarkably similar to those in the United States in their attitude towards the perceived causes of poverty, feeling that it has to do more with individual failure than a lack of opportunity.

OPORTUNIDADES, RPS and PRAF II. In the first, the most mature of the three programs, monitoring conditionality represent about 18 percent of total program costs (net of transfers). In RPS and PRAF II these shares are much smaller mostly because these programs were still in the design and expansion phase at the time of the study; once when fixed costs related to expansion are excluded the share devoted to conditionality increases substantially. Moreover, when external impact evaluation costs are excluded (a one-time fixed cost) conditionality becomes an even larger (over 20%) share of activity costs. Clearly conditionality comes at a high price.

If conditionality is primarily viewed as a way of ensuring middle class support for the poverty budget, then that monitoring of compliance can be either eliminated altogether or be done in the least cost manner. This may be the Brazilian model—Bolsa Familia is advertised as a human capital development program that emphasizes beneficiary responsibility, which provides a degree of political support. Yet actual monitoring of compliance is left to the municipalities and is haphazard at best. On the other hand monitoring of compliance in PROGRESA was taken to such an extreme that the transfers of all beneficiaries were routinely delayed by several months until compliance was verified for everyone, despite the fact that program compliance was well over 90 percent among beneficiaries. Clearly some compromise between these two extremes is the most prudent approach, with the degree of diligence a function of both actual compliance among beneficiaries and the cost of monitoring.

Exit rules. The dual objectives of short term poverty alleviation and long term human capital development lead to conflictive policy recommendations with respect to exit rules. A program designed to alleviate short term poverty would remove beneficiaries from the program if they are no longer poor, or would have strict time limits (as in the U.S. welfare program) to reduce the risk of dependency. On the other hand, a program designed to enhance human capital among the poor ought to support families until the human capital cycle is complete, for example through middle school or lower secondary school. Graduation would be automatic, and would coincide with when the child completed the designated cycle.

Almost all CCTs have explicit term limits after which families are reassessed (PRAF, RPS and OPORTUNIDADES have an initial 3 year eligibility period followed by a recertification). This policy is clearly in conflict with the supposed long term human capital development objective of CCTs. Of course any long term commitment consistent with the human capital development objective raises serious concerns about financing and sustainability, particularly in the poor HIPC countries. In countries with high poverty rates, supporting 20 to 30 percent (or more) of the population for 10 years or more while children complete middle or lower secondary school is unlikely. Yet, if human capital development is the stated objective of CCTs, then it seems logical that families be supported through the education cycle.

Targeting: A key feature of CCTs is the emphasis on targeting transfers to the poorest segments of the population. The main targeting methods by CCTs include proxy means tests, means tests and geographic targeting, often in combination. For example, in Brazil means testing is combined with indicative targeting, where funds are earmarked to states and municipalities based

on estimates of potential beneficiaries derived from the census. In Mexico an initial round of geographical targeting is used in the rural PROGRESA program before the proxy means test. [14]

Geographical targeting is feasible when the poor are geographically concentrated and overall poverty levels are high, as occurs in most rural areas in Latin America. For example poverty rates among targeted communities in Nicaragua and rural Mexico are around 70 percent. In these situations the additional cost of individual targeting has been shown to yield little in terms of efficiency,[15] and other ways of discouraging the non-poor from participating should be considered. Moreover, individual targeting in small communities with high poverty rates can lead to social conflict within the community as is documented in the PROGRESA evaluation reports (Adato et al., 2000). However, a study on RPS (IFPRI, 2002) notes that as the program expands to less poor areas geographic targeting may no longer be viable and the relative benefit of household targeting will increase. Coady (2001) comes to similar conclusions in a study of PROGRESA. Further, Skoufias et al. (2001) find also for the case of PROGRESA that geographic targeting itself in rural areas loses robustness as communities become less marginal.

Coady, Grosh and Hoddinott (2004) provide a review of targeting experiences worldwide and find that work fare programs tend to perform the best according to the indicator[16] developed in the paper, social funds perform the worst, and cash transfer programs include some of the best and worst performers. The best performance outcomes are found for individual means tests, followed by characteristic (or categorical) targeting and then self-selection. However there is extremely large variation in performance within each type of targeting method, including the proxy means tests popular in Latin America, leading the authors to conclude that the most important determinant of targeting success is implementation capacity specific to the program.

Verification and effectiveness: A key issue in a household targeting scheme is the means of verification and the role of house visits. Home visits are an integral part of the application of PROGRESA in rural areas but are not carried out in Jamaica or Brazil. Of all conditional cash transfer programs Brazil's Bolsa Familia and its predecessors seem to be the most susceptible to beneficiary manipulation and measurement error. Selection into the program is based on unverified self reported income, and the questions on income are not well formulated in the Cadastro Unico, the information collection instrument. The Jamaican system is based on a proxy means test that entails over a dozen variables and is thus harder to manipulate. Individual proxy means tests are also used in Colombia through SISBEN.[17]

Castaneda et al. (2005), using the indicator developed in Coady, Grosh and Hoddinot (2004), compare the performance of the targeting mechanisms adopted by CCTs in the region. All programs perform extremely well, even Bolsa Familia despite problems in the application of the

[14]See de la Briere and Lindart (2005) for an in depth assessment of the targeting process in Brazil and Skoufias et al. (2001) for Mexico

[15]See IFPRI (2002) for the Nicaraguan RPS and Coady (2001) for PROGRESA.

[16]The indicator used is the additional amount of resources received by the target group relative to if there were no targeting.

[17]For a discussion in detail of the Brazilian system, see Castañeda et al. (2005) and de la Briere and Lindart (2005); for SISBEN in Colombia, see Castañeda (2005). Direct evidence on the degree of miss-reporting or manipulation by beneficiaries during the enrolment process is available from an evaluation of the urban expansion of OPORTUNIDADES in Mexico (Coady and Parker, 2004b), and in PATH (Mathematica Policy Research, 2004).

Cadastro Unico described above. The authors attribute this to a combination of regional quotas at the central level combined with effective geographic targeting at the municipality level where local knowledge about poverty is good. Research has shown that the different algorithms used in Latin America for proxy means do well at identifying the extremely poor but are not good at excluding the non-poor, especially those near the poverty line; this deficiency clearly becomes important as the overall proportion of beneficiaries (poor) in the population gets smaller.[18] These results suggest that the proxy means test itself is still a relatively blunt instrument with the potential for high errors of inclusion; it certainly does not eliminate the need for a verification process such as an obligatory (or random) home visit.

Decentralization A final issue to consider is the degree of decentralization in the targeting process. Note that targeting can be centralized even if actual program administration is highly decentralized, and vice versa. In geographic targeting of the kind practiced in PRAF II and RPS community selection is done centrally using national data based on a poverty map or equivalent instrument. On the other hand the Brazilian program is highly decentralized, with local municipalities in charge of applying the Cadastro Unico, and with social control of monitoring exercised by a local committee.[19]

Community participation in beneficiary selection has been advocated on the grounds that local knowledge should be used to better identify the poor. Further, local institutions should be able to better carry out this targeting due to fewer layers of bureaucracy and more accountability to the citizenry (de Janvry et al., 2005). Proponents of more centralized targeting structures argue that community participation can easily result in elite capture of programs, and a recent review by Mansuri and Rao (2004) claims there is no clear evidence that community participation in targeting leads to better targeting outcomes. De Janvry et al. (2005) find significant variation in terms of the quality and impartiality of municipal level administration of the Cadastro Unico in Brazil. If anything the issue of centralized versus decentralized targeting is subject to the same observation made by Coady, Grosh and Hoddinott (2004)—there are good theoretical reasons for each approach, but the ultimate success depends on actual implementation.

[18]For Jamaica see Mathematica Policy Research (2004), for rural Mexico see Coady (2001), and for urban Mexico see Coady and Parker (2004b).
[19]See the description in de Janvry et al. (2005).

Table 2: Benefits

	Monthly Monetary Benefit	Average monthly transfer	Average transfer as % poverty line	% of household consumption
Brazil – Bolsa Escola	US$6-9 per child			
Brazil – Bolsa Familia	US$18 per extremely poor family; $5 per child up to 3 kids	US$24	12% (IPEA poverty line)	
Colombia – Familias	US$20 per family; $6 per child primary; $12 per child secondary	US$50		30%
Honduras – PRAF II	US$4 per family; US$5 per child	US$17	8%	10%
Jamaica – PATH	US$9 per eligible household member (child, elderly, disabled)	US$45	16%	20%
Mexico – PROGRESA/ OPORTUNIDADES	US$13 per family; US$8-17 per child primary; US$25-32 per child secondary; one time grant US$12-22 per child for supplies	US$20	23%	25%
Nicaragua – RPS	US$18 per family; additional US$9 per family with a school aged child; US$20 once per year per child for mochila	US$25	18%	20%

4. Monitoring and Evaluation

An impressive effort has been made to set-up monitoring systems and conduct independent evaluations of CCT programs. The early success of the PROGRESA social experiment showed that rigorous impact evaluations are feasible in developing countries, and can make a difference in ensuring program sustainability. The PROGRESA success spurred on the development banks to demand strong evaluation components as part of their support to CCTs. Apart from evaluation, strong monitoring systems for CCTs are directly related to the need for verifying program conditionality and adjusting transfers, while household level targeting has also increased the need to build strong information systems to support successful execution that responds to program objectives.

PROGRESA, RPS, PRAF II, PATH and Familias all employ a social experiment—that is, randomly selected control and treatment groups to measure changes in behavior over time.[20] This strategy exploits the fact that CCTs usually expand in phases so that data can be collected on eligible communities before they are scheduled to enter the program, thus serving as a legitimate counterfactual to measure impact. Note that even though control groups all eventually receive benefits, and that this temporary exclusion can be considered part of the normal phasing in of a project, this carries political risks for the government. After being accused of deliberately withholding benefits from poor families to conduct the evaluation, program managers in Mexico distributed benefits in control localities earlier than originally planned.

Table 3 reports some of the primary indicators or measures used in the evaluation of CCTs. Strictly speaking there is a very limited set of indicators that one can use to measure true impact as it relates to the stated objectives of these programs. The first stated objective is to ameliorate short term poverty or food insecurity, which can be measured by caloric or food availability. However the second stated objective, to improve human capital development and thus break the inter-generational cycle of poverty, cannot be measured in the short run although current nutritional status and cognitive achievement might be good current indicators of potential for eventual human capital accumulation and lifetime earnings.[21]

In terms of the short run objective of food consumption the results from PRAF II, RPS, Familias and PROGRESA have been very encouraging with all evaluations showing a significant boost in either food purchases and/or caloric availability.[22] This is a comforting result given that governments have historically preferred in-kind (i.e. food) transfers over cash for fear of misuse of cash.

It is too soon to pass judgment on the ability of CCTs to accomplish their second objective. The evaluation work on human capital investment has focused on outcomes such as school enrolment, health check-ups for growth monitoring and vaccinations. These have shown

[20]RPS, PROGRESA and Familias had qualitative studies as well.
[21]Early childhood nutrition has been shown to be an important determinant of later schooling outcomes, which in turn are important determinants of earnings and social mobility (Alderman et al., 2001; Glewwe et al., 2001).
[22]See Hoddinott and Skoufias (2004) for PROGRESA; Maluccio and Flores (2005) for RPS; and Attanasio and Mesnard (2005) for Colombia.

significant increases although there are some nuances to the results on school enrolment which are discussed below. The degree to which these increased outcomes translate into later life impacts as intended by the programs depends on factors outside the programs themselves, such as the quality of supply side services, access to higher levels of schooling and employment opportunities. This implies that CCTs by themselves cannot be expected to reduce inequality and overall levels of poverty; effort must continue to be applied to ensuring quality delivery of social services and an environment that fosters economic growth. One further complication is that in the long term, increasing human capital in rural areas may foment national and international migration in search of employment opportunities, and thus lure past beneficiaries out of the scope of follow up surveys.

One particular dimension of human capital development, child nutritional status, is known to be an important predictor of later outcomes such as school attainment and achievement. Long-term nutritional status (height for age, or stunting) has been tracked in all 4 programs that have been evaluated via social experiments. Both PROGRESA and RPS were successful in reducing stunting among the beneficiary population but not PRAF II, while in Colombia preliminary results show reduced incidence of stunting for the youngest children.[23]

School enrolment is the indicator that has received the most attention, and all programs following this indicator have shown impressive increases. However, caution should be used in taking these results at face value. First, increased enrolment is probably no more than a measure of program uptake since enrolment is a condition for participation. Second, enrolment itself does not guarantee learning. Evaluation results for Brazil show that increased enrolment tends to come from children moving from work only to school and work, instead of leaving work altogether, a situation which does not encourage learning (Cardoso and Souza, 2003) Third, the one evaluation of cognitive achievement (PROGRESA) does not indicate any improvement in learning among beneficiaries relative to non-beneficiaries.

However an encouraging result from the evaluations is the large increase in school transition rates among beneficiaries (from primary to middle school). In the case of RPS there are also strong transition effects from 4th to 5th grade even though children in 5th grade are no longer eligible for program benefits. Another interesting result is the larger impact on girls' schooling relative to boys' in PROGRESA, particularly at older ages when the difference in transfer levels becomes quite large. Schultz (2004) estimated an internal rate of return of 8 percent for increase in enrolment and transition to junior secondary school brought on by PROGRESA.[24] Finally, the RPS results indicate larger impacts among the poorest beneficiaries in terms of school enrolment.

Indirect impacts. The large scale of financial resources moved by CCTs, as well as conditionality on behavior, has the potential for influencing other aspects of the household, community and even region. Some of these 'unintended' consequences have been documented, and include changes in attitudes and intra household decision-making (PROGRESA), demonstration or spillover effects on non-beneficiaries (Handa et al., 2001 for PROGRESA, Maluccio and Flores,

[23] See Behrman and Hoddinott (2000) for PROGRESA; Maluccio and Flores (2005) for RPS; and Attanasio et al. (2005) for Colombia.

[24] His estimates do not include social benefits related to increased schooling, implying that the societal rate of return may be even higher.

2005, for RPS), reduced international migration in the short term (Stecklov et al., 2005, for PROGRESA) and spending on productive activities that has the potential for generating multiplier effects on income (Davis et al., 2002 and Gertler et al., 2005 for PROGRESA). As mentioned earlier, Maluccio (2005) and de Janvry et al. (2006) find an important risk coping role for RPS and PROGRESA, respectively, in times of crisis or shocks.

The impact on child labor is more ambiguous. While results from RPS (Maluccio and Flores, 2005) show that the percentage of working children aged 7 to 13 declined by 5.6 percentage points, results from Bolsa Escola (Cardoso and Suaza, 2003) indicate that the overall reduction in the incidence of any child work is small.[25] Results from PROGRESA are more encouraging, where it appears that for boys at least, most of the increase in school enrolment comes from a reduction in work. For girls, the observed increase in schooling comes at the price of reduced leisure because girls' work, primarily non-market, is more compatible with schooling (Skoufias and Parker 2001). Similar results are found for Familias en Acción (Attanasio et al., 2006), where for both boys and girls increased time at school comes from reduced domestic work and leisure, with no effect on time spent on wage earning activities.

What kind of an evaluation? As new programs are designed and implemented the issue of whether and how to implement an impact evaluation needs to be addressed. In a general sense there is always a need for accountability of program design and use of funds, but evaluation, especially through social experiments, is costly and so its objective and purpose should be clearly defined at the outset. In Honduras and RPS for example, social experiments were launched as part of pilot schemes to ensure effectiveness and inform subsequent expansion.[26] In Mexico the evaluation helped the program survive a regime change; the experiments in Colombia and Jamaica were not designed to inform the subsequent expansion of pilots so it is assumed their objective is to ensure accountability of program design to protect future funding.

The existence of a rigorous impact evaluation can have an important effect on program reputation and perceived 'seriousness' of purpose. In Mexico for example, the PROCAMPO agricultural cash transfer program is as large in size as rural PROGRESA but does not have the reputation of technical rigor and transparency as PROGRESA, mostly due to the latter's external evaluation.[27] Given that new programs are likely to be mounted with technical and financial support from development banks, impact evaluations of some kind are likely to be in the cards, leading to the issue of the type of evaluation that should be considered and the indicators to be measured.

A key issue to be resolved is whether or not to design a social experiment. While experiments are the most technically defensible evaluation strategy they are also the most costly. Results in Caldes, Coady and Maluccio (2004) show that while the external evaluation of PROGRESA was a mere 5 percent of total activity costs, it was 35 and 22 percent of these costs in PRAF II and

[25] Another separate conditional cash transfer program in Brazil, the Child Labour Eradication Programme, or PETI, had the specific objective of reducing child labor. As in Bolsa Familia children must attend school, but in addition they must attend an after-school programme. A quasi experimental design impact evaluation found mixed results for the program (Yap, Sedlacek and Orazem, 2002).

[26] The fact that these are localized pilots raises concerns about the external validity of the evaluation results.

[27] See the extended discussion in Davis (2003).

RPS respectively. These large cost shares are due in part to the small size of the two programs; the exceptionally high cost share in PRAF II is because of that programs rather low implementation success. Clearly a social experiment will be more cost effective the larger the program[28], but what are the benefits, especially given the existing state of knowledge on the success of the already established programs? In particular can cheaper, non-experimental methods deliver similarly robust estimates?

Recently one non-experimental method, propensity score matching (PSM), has become very popular in the evaluation literature, and has been proposed for the upcoming evaluation of Bolsa Familia. Diaz and Handa (forthcoming) test whether PSM replicates the impact estimates of PROGRESA's social experiment. They find that in fact PSM is capable of replicating the results for school enrolment and child labor, but not for food consumption because food consumption is measured differently in the national household survey relative to the PROGRESA data sets. They conclude that PSM may be a viable alternative to experiments in cases where good household surveys exist within the relevant time period, and when survey instruments are comparable.

Indicators such as health care utilization and school enrolment, are better characterized as outcomes rather than impacts. For these types of variables, a monitoring system that tracks beneficiary compliance coupled with beneficiary household surveys could be compared to national changes to make inferences about program effectiveness. Handa and Huerta (2004) have shown that the use of administrative data plus a good understanding of the beneficiary selection process can give managers a reasonable idea of program impact. Beneficiary household surveys and information collected during program enrolment could also be used to assess targeting efficiency.

Some unanswered questions. There are several key unanswered questions about CCTs that need to be considered for future evaluations. The first among these is whether CCTs can achieve their stated long term objective of human capital development and future poverty alleviation. This requires following the initial cohort of beneficiaries through school and into the labor market, an effort that is complicated and costly, particularly given national and international migration, and unlikely to be financed by governments (with the exception of Mexico). Given the international public good nature of this information there is a clear role for the development banks and other international development agencies (including bilateral aid agencies) to provide financial support.

Another unanswered question is the quality of schooling and the general role of supply side factors in ensuring eventual program success. Ideally we would like to link program participation with school enrolment, cognitive achievement and then eventual labor market outcomes (earnings) in order to fully understand the full impact of CCTs. Increased enrolment (and attainment) may not lead to future poverty reduction if there is no actual learning, and while CCTs cannot necessarily be held accountable for learning outcomes, clearly the utility of investing in CCTs is seriously undermined if learning is not accomplished due to low schooling quality.

[28]Note that a social experiment is probably only feasible for a new program where a true control group can be constructed.

Table 3: Evaluation indicators and summary of significant impacts

Outcomes	Bolsa Escola	Familias	PRAF II	PROGRESA	RPS
School enrolment	√*	√		√*	√*
Preventive health check-ups		√*	√*	√*	√*
Vaccinations		√*	√*	√*	√
Pre-natal care			√*		√
Impacts					
Food availability		√*		√*	√*
School achievement				√	
Nutritional status (height)		√	√	√*	√*
Anemia			√	√*	√
Indirect effects					
Child labor	√	√		√	√
Women's status		√		√*	
Spillover				√*	√*
Investment spending				√*	

√ indicates the indicator was evaluated; * indicates an unambiguous impact in the expected direction. In Colombia some impacts were only found among urban beneficiaries or it is too soon to identify impacts—these do not classify as unambiguous. For Honduras the evaluation results have not been officially released although health related results were presented at a conference in 2003.

5. Lessons from the Latin American experience

Within the short span of less then 10 years, conditional cash transfer programs have become the social protection/social safety net intervention of choice in Latin America, and increasingly are being looked at as an example to emulate in other parts of the developing world. In this paper we have highlighted and brought up for discussion a number of the key policy issues and choices involved in the design and implementation of conditional cash transfers.

Despite reshaping the social protection paradigm in Latin America, a number of questions remain regarding the future direction of CCTs in the region. First, the political future of these programs in the countries where they are currently being implemented is not assured. In Brazil and Mexico the programs have a high degree of political backing, having survived changes in presidential administration, translating into a very high probability of being sustained over the medium run. PATH in Jamaica is also likely to be sustained beyond its current World Bank loan, given its strong government support and that it has replaced a set of previously longstanding welfare programs.

Fiscal sustainability remains an issue in the poorest countries where CCTs have been implemented through loans. Colombia's program is financed through IDB and World Bank loans and the potential for sustainability is less clear. In Honduras, PRAF II will likely continue to be supported through soft loans from the IDB which will only postpone the eventual decision to fund the program permanently. Surprisingly, RPS, one of the better executed programs with solid evidence of impact, is also at risk due to a lack of strong government support.

Second, it is not clear that the CCTs are the most cost efficient or sustainable solution to the development problem facing low-income countries. The two main efficiency justifications for CCTs are the existence of direct costs of human capital investment that are not affordable by credit constrained households, and the social benefits of these investments. While conditionality

may be justified exclusively on political economy grounds as a way to obtain public support for poverty alleviation, there is little evidence that CCTs are a more cost-effective way of improving human capital outcomes and reducing inequities relative to supply side interventions.

While many CCTs have been seen as a way to harness supply side resources, this is very much a case of 'the tail wagging the dog'. Indeed the biggest potential concern with the implementation of CCTs is that their success in raising outcomes may make them appear able to solve completely the problem of inequities in human capital, thus taking resources and/or attention away from essential investments in health and education which may be the only way to sustain the long term investment in human resources required to reduce poverty. Further, any long term commitment consistent with the human capital development objective raises serious concerns about financing and sustainability, particularly in the poor HIPC countries.

Third, the contradiction between the dual objectives of short term poverty alleviation and long term human capital development lead to internal contradictions within the program. These contradictions are most evident in the targeting and exit rules for CCT programs, that is who should be included as beneficiaries, and when can they be considered as graduates of the program. These contradictions tend to lead to a bias against the elderly and families without young children in targeting, which would have to be compensated by specific safety net programs for these segments of the population. Further, these contradictions may undermine the commitment to the cycle of human capital accumulation in the exit rules.

Fourth, the exclusive focus on human capital accumulation by the younger generation misses the broader context of poverty alleviation programs within rural development. This is exhibited on a number of different levels. First, CCTs in general miss the opportunity for maximizing synergies with agricultural and non agricultural productive activities at the household level, and conversely, the rural household's participation in certain types of economic activities may mute program impact. Second, ignoring the human capital accumulation of parents (with the exception of health) and asset accumulation within their economic activities weakens the household level sustainability of the transfers beyond when either the transfers have been terminated and/or the children have left home. Third, CCTs in most instances represent a substantial influx of financial resources into marginalized, and often isolated, communities. Little attention has been paid in terms of how to maximize the impact of the resources on local economic development.

Finally, given the fiscal, policy and institutional weight of CCTs in the public spending of governments throughout the region, the results from existing and pending evaluations should be used to derive estimates of the cost effectiveness of CCTs. These estimates need to be compared with similar estimates from other, competing programs in order to judge the usefulness of CCTs within the poverty alleviation toolbox. More broadly, the large financial and institutional resources dedicated to the implementation of conditional cash transfer programs in Latin America, in rural areas in particular, have inevitably crowded out alternative rural development initiatives. The differential returns in terms of poverty and economic development also need to be compared across alternatives.

Bibliography

Adato, Michelle; Coady, David and Ruel, Marie (2000) "An Operations Evaluation of PROGRESA from the Perspective of Beneficiaries, Promotoras, School Directors, and Health Staff", Final Report, IFPRI, Washington, DC.

Akin, J.S.; Guilkey, David and Denton, E. Hazel (1995) "Quality of services and demand for health care in Nigeria: A multinomial probit estimation", *Social Science and Medicine* 40(11): 1527-1537.

Alderman, Harold; Behrman, Jere; Levy, Victor and Menon, Rekha (2001) "Child Health and School Enrollment: A Longitudinal Analysis", *The Journal of Human Resources* 36(1): 185-205.

Attanasio, O., E. Fitzsimons, A. Gomez, D. Lopez, C. Meghir and A. Mesnard (2006) "Child education and work choices in the presence of a conditional cash transfer programme in rural Colombia", IFS Working Papers, W06/01, London.

Attanasio, O., L. Gómez, P. Heredia and M. Vera-Hernandez (2005) "The short-term impact of a conditional cash subsidy on child health and nutrition in Colombia", Report Summary, IFS, London.

Attanasio, O. and A. Mesnard (2005) "The impact of a conditional cash transfer programme on consumption in Colombia", Report Summary, IFS, London.

Baker, Judy and N. Schuler (2004) "Analyzing Urban Poverty: A Summary of Methods and Approaches", World Bank Policy Research WP 3399, Washington DC.

Behrman, Jere and Hoddinott, John (2000) "An Evaluation of the Impact of Progresa on Pre-School Child Height", Final Report, IFPRI, Washington DC.

Bedi, A.S. and J. H. Marshall (2002) "Primary School Attendance in Honduras", *Journal of Development Economics* 69: 129-153.

Behrman, J., P. Sengupta and P. Todd (2000) "The Impact of Progresa on Achievement Test Scores in the First Year", Final Report, IFPRI, Washington DC.

Behrman, Jere and Birdsall, Nancy (1983) "The Quality of Schooling: Quantity Alone is Misleading", *American Economic Review* 73(5):928-46

Cardoso, E. and A.P.Souza (2003) "The Impact of Cash Transfers on Child Labor and School Attendance in Brazil", Department of Economics, University of Sao Paulo, Brazil.

Caldes, N., D. Coady and J. Maluccio (2004) "The Cost of Poverty Alleviation Transfer Programs: A Comparative Analysis of Three Programs in Latin America", FCND Discussion Paper 174, IFPRI, Washington DC.

Castañeda, Tarciscio (2005) "Targeting Social Spending To The Poor With Proxy–Means Testing: Colombia's SISBEN System", The World Bank, Social Protection Discussion Paper Series No. 0529.

Castañeda, T., K. Lindert, B. de la Brière, L. Fernandez, C. Hubert, O. Larrañaga, M. Orozco, and R. Viquez (2005) "Designing and Implementing Household Targeting Systems: Lessons from Latin American and The United States", The World Bank, Social Protection Discussion Paper Series No. 0526.

Coady, David; Grosh, Margaret and Hoddinott, John (2004) "Targeting outcomes redux.", *World Bank Research Observer* Vol 19(1).

Coady, David and Parker, Susan (2004a) "Cost effectiveness analysis of demand and supply side education interventions", *Review of Development Economics*, Vol.8(3).

Coady, David and Parker, Susan (2004b) "Una Evaluación del Mecanismo de Focalización de Oportunidades en Zonas Urbanas", Report submitted to OPORTUNIDADES, Mexico City.

Coady, David (2001) "An Evaluation of the Distributional Power of Progresa's Cash Transfers in Mexico", FCND Discussion Paper 117, IFPRI, Washington DC.

Davis, Benjamin; Handa, Sudhanshu; Ruiz, Marta; Stampini, Marco and Winters, Paul (2002) "Conditionality and the impact of program design on household welfare. Comparing the effects of two diverse cash transfer programs on the rural poor in Mexico", ESA Working Paper 07-02, (Rome: FAO).

Davis, Benjamin (2003) "Innovative Policy Instruments and Evaluation in Rural and Agricultural Development in Latin America and the Caribbean," in Davis, Benjamin, ed. *Current and Emerging Issues for Economic Analysis and Policy Research—II: Latin America and the Caribbean*. (Rome: FAO).

Davis, Benjamin; Handa, Sudhanshu and Soto, Humberto (2004) "Crisis, Poverty and Long-Term Development: Mexico in the 1990s", *CEPAL Review*, Vol 82 (April).

Davis, Benjamin; Handa, Sudhanshu; Ruiz, Marta; Stampini, Marco and Winters, Paul (2004) "Agricultural Subsidies, Human Capital Development and Poverty Reduction: Evidence from Rural Mexico", Manuscript, Department of Public Policy, UNC-CH.

de Janvry, A. F. Finan, E. Sadoulet, and R. Vakis (2006) "Can conditional cash transfer programs serve as safety nets in keeping children at school and from working when exposed to shocks?", *Journal of Development Economics* X(X):xxx-xxx.

de Janvry, A. F. Finan, E. Sadoulet, D. Nelson, K. Lindert, B. de la Brière and P. Lanjouw (2005) "Brazil's Bolsa Escola Program: The Role of Local Governance in Decentralized Implementation", Social Protection Discussion Paper #0542, The World Bank, December.

de la Brière, B. and K. Lindert (2005) "Reforming Brazil's Cadastro Único to Improve the Targeting of the Bolsa Família Program", The World Bank, Social Protection Discussion Paper Series No. 0527.

Diaz, J.J. and S.Handa (Forthcoming) "An Assessment of Propensity Score Matching as a Non Experimental Impact Estimator: Evidence from Mexico's Progresa Program", *Journal of Human Resources*.

Farrington, J., Slater, R. and Holmes, R. (2004) 'The Search for Synergies between Social Protection and the Productive Sectors: the Agriculture Case', Working Paper 232, London: ODI.

Gertler, P., S. Martínez, and M. Rubio (2005) "El efecto de Oportunidades sobre el incremento en el consumo de los hogares a partir de inversiones productivas en microempresas y producción agrícola", in B. Hernández Prado and M. Hernández Ávila, eds., *Evaluación externa de impacto del Programa Oportunidades 2004. Tomo IV: Aspectos económicos y sociales* (Cuernavaca: INSP).

Graham, C. (2002) "Public Attitudes Matter: A Conceptual Framework for Accounting for Political Economy in Safety Nets and Social Assistance Policies", Social Protection DP No.0233, World Bank, Washington DC.

Glewwe, Paul; Jacoby Hanan and E. King (2001) "Early Childhood Nutrition and Academic Achievement: A Longitudinal Analysis", *Journal of Public Economics*, Vol 81: 345-368.

Handa, Sudhanshu (2002) "Primary School Enrolment in Developing Countries: The Relative Importance of Supply and Demand", *Journal of Development Economics*, Vol. 69(1).

Handa, S., MC Huerta, R. Perez and B. Straffon (2001) "Poverty, Inequality and Spill-over in Mexico's Education, Health and Nutrition Program", FCND Discussion Paper 101. International Food Policy Research Institute, Washington DC.

Hanushek, E. (1995) "Interpreting Recent Research on Schooling in Developing Countries", *The World Bank Research Observer*, Vol.10(2):227-246.

Hoddinott, John and Skoufias, Emmanuel (2004) "The impact of PROGRESA on food consumption", *Economic Development and Cultural Change*. October: 37-61.

IFPRI (2002) "Sistema de Evaluación de la Fase Piloto de la Red de Protección Social de Nicaragua: Evaluación de Focalización." Informe Final, IFPRI, Washington DC.

IFPRI (2001) "PRAF/IDB Phase II: Analyses of the Situation before the Beginning of Distribution of Vouchers and Project Implementation." IFPRI, Washington DC.

Ilahi, N., G. Sedlacek and E. Gustafsson-Wright (2000) "Targeted Conditional Transfer Programs in Latin America: An Early Survey." Office of the Chief Economist, LAC Region, The World Bank, Washington DC.

Jensen, E. and F. Stewart (2000) "The Impact of Health Facilities on Child Health." Measure Evaluation Working Paper 00-21, University of North Carolina at Chapel Hill. www.cpc.unc.edu/measure.

Kremer, M.R. (1995) "Research on schooling: What we know and what we don't - A comment on Hanushek." *The World Bank Research Observer*, Vol.10(2):247-255.

Maluccio, John (2005) "Coping with the "Coffee Crisis" in Central America: The Role of the Nicaraguan Red de Protección Social." FCND Discussion Paper No. 188. IFPRI, Washington DC.

Maluccio, John and Flores, Rafael (2005) "Impact Evaluation of a Conditional Cash Transfer Program: The Nicaraguan Red de Protección Social." Research Report No. 141. IFPRI, Washington DC.

Mansuri, G. and V. Rao (2004) "Community-Based and –Driven Development: A Critical Review." *The World Bank Research Observer*, Vol.19(1):1-39.

Martinelli, Cesar and Parker, Susan (2003) "Should Transfers to Poor Families be Conditional on School Attendance? A Household Bargaining Perspective." *International Economic Review*. Vol.44(2):523-545.

Mathematica Policy Research (2004) "Evaluation of Jamaica's PATH Program: Targeting Assessment." Mathematica Policy Research, Washington DC.

Rawlings, Laura (2004) "A New Approach to Social Assistance: Latin America's Experience with Conditional Cash Transfer Programs," The World Bank, Social Protection Discussion Paper Series No. 0416.

Rawlings, Laura (2005) "Evaluating the Impact of Conditional Cash Transfer Programs." *The World Bank Research Observer*. 20(1):29.

Schultz, Paul (2004) "School Subsidies for the poor: Evaluating the Mexican Progresa Poverty Program." *Journal of Development Economics*. Vol.74(1): 199-250.

Skoufias, Emmanuel; Davis, Benjamin and de la Vega, Sergio (2001) "Targeting the Poor in Mexico: An Evaluation of the Selection of Households into PROGRESA," *World Development* 29(10), October.

Skoufias, Emmanuel and Parker, Susan (2001) "Conditional Cash Transfers and Their Impact on Child Work and Schooling: Evidence from the Progresa Program in Mexico." *Economia*. Vol.2(1): 45-96.

Stecklov, Guy; Winters, Paul; Stampini, Marco and Davis, Benjamin (2005) "Do Conditional Cash Transfers Influence Migration? A Study Using Experimental Data From the Mexican PROGRESA Program," *Demography* (42)4, November.

Stecklov, Guy; Winters, Paul; Todd, Jessica and Regalia, Fernando (2006) "Demographic Externalities from Poverty Programs in Developing Countries: Experimental Evidence from Latin America." American University, Department of Economics Working Paper Series No. 2006-1.

Yap, Y., Sedlacek, G. and Orazem, P (2002) "Limiting child labor through behavior-based income transfers: An experimental evaluation of the PETI program in rural Brazil", June. (mimeo).

ESA Working Papers

WORKING PAPERS

The ESA Working Papers are produced by the Agricultural and Development Economics Division (ESA) of the Economic and Social Department of the United Nations Food and Agriculture Organization (FAO). The series presents ESA's ongoing research. Working papers are circulated to stimulate discussion and comments. They are made available to the public through the Division's website. The analysis and conclusions are those of the authors and do not indicate concurrence by FAO.

ESA

The Agricultural and Development Economics Division (ESA) is FAO's focal point for economic research and policy analysis on issues relating to world food security and sustainable development. ESA contributes to the generation of knowledge and evolution of scientific thought on hunger and poverty alleviation through its economic studies publications which include this working paper series as well as periodic and occasional publications.

Agricultural and Development Economics Division (ESA)
The Food and Agriculture Organization
Viale delle Terme di Caracalla
00100 Rome
Italy

Contact:
Office of the Director
Telephone: +39 06 57054358
Facsimile: + 39 06 57055522
Website: www.fao.org/es/esa
e-mail: ESA@fao.org