Seminario internacional. Políticas de tiempo, tiempo de las políticas

Conditional Cash Transfers and Time Poverty: An Example from Guatemala

Sarah Gammage
Conditional Cash Transfers and Time Poverty: An Example from Guatemala
Sarah Gammage, International Labour Organisation, Santiago

Introduction

Conditional Cash Transfer Programs are increasingly the instrument of choice in combating both current and intergenerational poverty in Latin America. There are presently 18 programs in operation in the region that provide conditional income transfers to poor households and require co-responsibilities of these households to secure investments in education and health-care for children and pregnant women and in some cases for the aged.

These programs have been universally regarded as successful in mitigating poverty and increasing investments in human capital (Cecchini 2009, Fiszbein and Schady 2009; Valencia 2008). The conditionalities imposed require that children and pregnant women attend medical check-ups regularly, that mothers participate in community training programs on a variety of health and hygiene-related topics, and that children and youth remain in school. Consequently, immediate changes in investment in health and human capital are secured in return for these transfers. Yet these changes are also being secured at the cost of reinforcing traditional gender roles and responsibilities in terms of who bears the caring responsibilities in the household and how these caring responsibilities are undertaken.

There are two channels through which time use is altered: directly, as the women who are the primary “beneficiaries” of the transfers attend health check-ups with their children, participate in training activities and attend school meetings, and indirectly as children reduce their time in both paid and unpaid work in the household. In spite of these potential changes in time and task allocation within the household, these programs have not yet been analyzed from a time use perspective.

This paper uses time use data from Guatemala to analyze the Mi Familia Progresa program from a gender perspective focusing on both time and income poverty. The paper concludes that although income transfers have been successful at reducing immediate income poverty they may contribute to increasing time poverty in many cases. The paper suggests a series of modifications that can be implemented to reduce time poverty and expand opportunities and capabilities for all household members as part of a broader anti-poverty initiative that takes a more multidimensional approach to poverty measurement and program evaluation.

Conditional Cash Transfers in Latin America and the Caribbean
Conditional cash transfer programs have become a key component of social protection strategies in Latin America over the last 10 years.¹ There are currently 18 programs in operation throughout the region which have received significant financial support and technical assistance from the World Bank, the Inter-American Development Bank. These programs link the construction of safety nets to human capital investment, making the receipt of the transfer conditional on school attendance and improved health-care and nutritional practices.

The popularity of these programs has been attributed to the success of two programs which have been extensively evaluated and acclaimed: Bolsa Familia in Brasil and Oportunidades in Mexico. Across the continent CCT programs have been evaluated and various authors have concluded that they increase investments in education and that health care indicators have improved (Handa and Davis 2006; Kakwani, Soares and Son 2006; Maluccio and Flores 2005; Fizbein and Schady 2009), they reduce dropout and failure rates in schools (Glewwe and Olinto 2006; Huerta 2006; Skoufias et al 2001), secure significant nutritional benefits, and reduce income and consumption poverty (Handa and Davis 2006; de la Briere and Rawlings 2006; Fizbein and Schady 2009, Maluccio and Flores 2005, Attanasio et al 2005). Moreover, the development literature affirms that CCT programs are well targeted: on average 80 percent of the benefits go to the poorest families (Coady, Grosh and Hoddinott 2004; Lindert, Skoufias and Shapiro 2006; Samson 2009).

The critiques of these programs have been slow to emerge in the policy literature. It is clear that for these programs to be effective, they require significant institutional capacity to target and administer as well as undertake their evaluation (Fizbein and Schady 2009). Additionally, investments have to be made in both the demand and the supply side to ensure that there are sufficient health-care centers, schools, nutrition clinics and medical professionals to respond to the conditionalities required by the programs.²

The gender critiques and nuances of these programs are beginning to be discussed (Molyneux 2006; Pautassi 2009; Gammage 2011). Many of these programs provide the cash transfers directly to women and female heads of household under the instrumental assumption that money in the hands of women is more likely to be spent

---

¹ See http://www.ipc-undp.org/ for an updated map of conditional cash transfer programs in operation in Latin America and the Caribbean.
² For example, the program Tekopora in Paraguay was designed as a conditional cash transfer but in poor and outlying rural areas where there are few schools and health-care centers it has been reduced to an unconditional cash transfer because of the absence of sufficient infrastructure and capacity to deliver services (Barrios and Gammage 2010).
on household and child wellbeing. In giving money directly to women this has the potential to increase their leverage over household resources, control of household expenditure and may improve their social standing in the community. Molyneux (2007) reports that the evidence from evaluations of Oportunidades confirm these generalities: although the mothers enjoyed some increased financial autonomy, this did not necessarily translate into increased empowerment in the community or household since this depends on a host of factors in addition to control over cash resources and their expenditure. The qualitative analysis of the Oportunidades program reveal that women do feel that their self-esteem and financial security was enhanced as a result of the transfers (Escobar Latapí and González de la Rocha 2004); they also felt that they had acquired more status in their neighbourhoods, with shopkeepers treating them with more respect as they became creditworthy (Molyneux 2007). Moreover, they appreciated the program’s education and training projects (including health and community leadership) where these were well organized, but they also wanted more access to education and training (Adato et al. 2000; Molyneux 2007).

The coresponsibilities or conditionalities required by these programs, however, typically cluster in the sphere of household reproduction, building on the caring responsibilities that women assume as part of their role as mothers, wives and daughters. As a result, these programs do little to challenge the existing gender division of labor within the household. Additionally, the coresponsibilities can include community work, cleaning, reforestation, and painting and improving community assets such as schools and community centers. Molyneux (2007) reports that some of the women she interviewed expressed a sense of resentment that they had been obligated to undertake community activities while other community members had not been required to make the same investment of time in community service.

What is clear, however, is that receipt of CCT benefits is likely to alter time and task allocation, particularly for women in the absence of concerted efforts to involve men in the coresposibilities. Time and task allocation is altered directly by requiring women to undertake the coresponsibilities stipulated in the program. Additionally, time and task allocation is likely to be altered indirectly as other household members (mostly children) reduce their time in both paid and unpaid work. There may also be indirect benefits as child and adult health improves and caring responsibilities for the sick or infirm are reduced. Unfortunately, there have been no evaluations to date that directly analyze the time “cost” of benefit receipt. This article attempts to provide a framework for a time cost or time poverty evaluation of CCT programs, appealing to the use of the time use survey instruments that exist in the region.

**Time Poverty and its Relevance for CCT Programs**
This article explores the context for the development and implementation of CCT programs in terms of existing incidence and severity of time poverty. Time poverty can be understood in terms of the lack of adequate time to sleep and rest. As Bardasi and Wodon (2006) highlight, and in direct contrast to consumption or income measures of wellbeing, where economists assume that “more is better”, time is a limited resource – both across the life of an individual and in a given day. The greater the time dedicated to remunerated or unremunerated work, the less the time available for other activities such as rest and recreation. Consequently, a person who lacks adequate time to sleep and rest, lives and works in a state of “time poverty”.

Time poverty is a concept that is increasingly being integrated into traditional analyses of income and consumption poverty (Vickery 1977; Blackden and Wodon 2006; Bardasi and Wodon 2006, 2010; Harvey and Mukhopadhyay 2007; Burchardt 2008; Gammage 2010). Both time and money can be used to secure consumption and time can be used to generate home produced goods and services as well as income. As Vickery (1977:29) underscored in her seminal work on time poverty, attaining the poverty threshold requires that the household have “a minimal input of time regardless of the amount of money available, and a minimal input of money regardless of the time available”. Similarly, Harvey and Mukhopadhyay (2006:60) observe that “families who are working to earn a wage income at the poverty threshold level need additionally to devote a substantial amount of time in non-market (household) production in order to maintain the consumption standard intended by the threshold concept”. The inclusion of time in the poverty threshold is essential if individuals are constrained in the labor market particularly for those individuals who have to work long hours at low wage rates to earn a living.

Placing time poverty in a Sen framework of capabilities and opportunities, it is clear that individual capabilities can be greatly affected by time poverty (Sen 1999; Gammage 2009). If an individual is time poor this affects not only their contemporaneous functionings but their future functionings – it limits their ability to rest, to enjoy leisure and recreation, and to invest in expanded capabilities and opportunities acquiring new or more abilities such as formal education. Moreover, experiencing time poverty can contribute to the loss of human capital, compromising an individual’s health and undermining their wellbeing. Given these concerns, we incorporate the dimension of time poverty in the array of functionings relevant to individual and collective wellbeing.

It is important to note, however, that there are trade-offs between the different dimensions of poverty or wellbeing. As Bardasi and Wodon (2006) ask in their article: Can we consider someone poor in the dimension of time if their decision to allocate
their time means that they have more income in exchange for having less time for unremunerated activities including leisure? These authors argue that we can. Time poverty applies to those individuals who by working longer hours face reduced time for other activities such as leisure, and rest. Notwithstanding this claim, being time poor does not imply that these individuals are in worse conditions in other relevant dimensions of poverty and wellbeing—just in the time dimension, which may be one of many dimensions chosen to reflect individual wellbeing.

**Time Poverty in Guatemala**

To develop a measure of time poverty, this paper uses the national household survey of living conditions ENCOVI for Guatemala for 2000 which includes a module on time use. The ENCOVI is a nationally representative multi-purpose sample of 11,170 households in urban and rural areas. Because of the number of questions and detail required, the survey was undertaken in two rounds. Round one includes modules on household composition and fertility, health, education, migration, time-use, economic activities, as well as information about housing, social capital, adverse events, and participation in organizations. Round two includes household-level information on expenditures, consumption of home produced goods, income from sources other than employment, ownership of durable goods, household enterprises, agricultural activities, savings and credit as well as individual-level data on anthropometrics.  

The time-use module was administered to all households in round one and collected information on time-use for all persons in the household over 7 years of age. Information was collected directly from those persons over 12 years of age. The time-use survey recorded time-use the previous day dedicated to paid and unpaid work, household maintenance, education, rest and recreation, the time allocated for household payments and purchases, and collected information on simultaneous activities for all of these tasks, allowing for up to 4 tasks to be undertaken simultaneously ranking the importance of these tasks. Regrettably, the recording of simultaneous tasks was inconsistent and, as a result, the codes developed for multitasking cannot be used to weight these activities.

Reproductive work is defined as unremunerated work within the household according to the categories outlined in Table 1. The time dedicated to each activity in the ENCOVI was collected for each person over the age of seven. Unfortunately, the list of activities in table one does not include all relevant unremunerated activities; for

---

example, caring services are limited and do not include the case of the aged or the sick. Furthermore, this definition of reproductive work does not include social services rendered to the community.  

Table 1

<table>
<thead>
<tr>
<th>Domestic Tasks</th>
<th>Caring Tasks</th>
<th>Unremunerated Production in the Household</th>
<th>Other Unremunerated Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearing the house</td>
<td>Caring for children</td>
<td>Unremunerated activities on the household farm</td>
<td>Repairing and maintaining the house</td>
</tr>
<tr>
<td>Cooking and washing dishes</td>
<td></td>
<td>Sewing, weaving and making clothing for the family</td>
<td>Purchasing goods for the household</td>
</tr>
<tr>
<td>Washing and ironing</td>
<td></td>
<td>Caring for domestic animals</td>
<td>Making payments</td>
</tr>
<tr>
<td>Waste disposal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hauling water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collecting fuelwood</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Bardasi y Wodon (2006) observe establishing a time poverty line can be quite arbitrary. In the literature on income and consumption there are some fundamental guidelines about the lack of income and consumption that translates into the lack of adequate nutrition or the inability to purchase a basket of basic goods deemed essential for survival. Yet it is important to note that these lines are typically based on the potential for each individual to achieve the array of goods required for survival without actually determining whether they are in fact acquired by each individual. When we refer to time poverty the arguments that motivate poverty or insufficiency are even less clear, especially if we consider the importance of time allocated to recreation and rest above that considered strictly necessary from a health perspective.  

4 The failure to include community work is likely to contribute to underestimating total unremunerated work—particularly in indigenous and rural communities in Guatemala. Moreover, in rural communities where women have limited access to cash income, it is also likely that women engage more frequently in unpaid collective work and exchange services through social and kinship networks in order to secure their wellbeing and that of their families and to invest in and maintain their social capital.

5 Zacharias (2011) and Zacaharias et al (2011) apply the concept of time déficits to the measurement of time poverty where an individual is in déficit if they do not have sufficient time for rest, sleeping, and personal maintenance.
As a result, Bardasi y Wondon (2006) choose a relative line that depends on the social context of the country in which the analysis is being conducted. They use time poverty lines that correspond to 1.5 or 2 times the median for the sum of total hours worked. In this example, we use a line of 12 hours a day dedicated to the sum of reproductive and productive work. These hours were adjusted to take into account the simultaneity of some activities. This line corresponds to a little more than 1.5 times the median and falls within the range of the number of hours suggested Bardasi y Wondon (2006).

Figure 1 reveals how time poverty varies by certain characteristics. Men are less likely to experience time poverty than women: slightly less than 15% of men experience time poverty as compared to almost 33% of women. Individuals who report speaking an indigenous language at home are slightly more likely to experience time poverty than those who report speaking a non-indigenous language at home. Interestingly, urban populations are more likely to experience time poverty than rural populations—reflecting the challenges of survival in urban contexts in developing countries and perhaps the expectations for achieving the type of lifestyle and income sufficiency that living in an urban context implies. This result may also reflect that gender roles and responsibilities are shifting in urban contexts as more women enter paid work. Unfortunately, even though women’s paid work increases their unpaid work does not appear to be reduced equivalently, contributing to greater time burdens, particularly for those individuals in lower income quintiles. Interestingly, even though women work far fewer hours in paid employment in rural areas and specialize disproportionately in unpaid work, men also report a higher number of hours in unpaid work in rural areas. The higher number of male hours in unpaid work in the household is also likely to be indicative of household survival strategies that require greater inputs of unpaid household labor to secure wellbeing.

---

Figure 1 Individual Time Poverty in Guatemala 2000 (Percentage)

![Bar chart showing Individual Time Poverty in Guatemala 2000](chart.png)

Source: Gammage (2010) based on análisis of the Módulo del Uso de Tiempo, Encuesta Nacional sobre Condiciones de Vida, Guatemala, ENCOVI, 2000

Figure 2 graphs the distribution of time poverty by household income quintile revealing that even though there are individuals in all the income quintiles who work in excess of 12 hours a day, that time poverty is greatest for women in the lower income quintiles. The opposite is true for men—indicating that as income rises, men are more likely to report working in excess of 12 hours per day. The figure also reveals that more women than men in each income quintile report working a total in excess of the time poverty line.
Mi Familia Progresa in Guatemala

In April 2008, Guatemala instituted a CCT program called *Mi Familia Progresa* (My Family Progresses). Like other CCT programs in the region, the *Mi Familia* program targets those municipalities in Guatemala with high rates of extreme poverty (using income per capita) and is proxy means tested subsequently using a questionnaire that identifies the most needy households in the municipality on the basis of housing materials, access to electricity, sanitation and potable water, as well as the number of children and infants in the household. Beneficiary households receive a lump sum of 150 Quetzales (US$18.40) on the condition that children aged 6 to 15 remain in school with no more than 20% of school time reported in absences each month. Additionally, households with children aged 0 to six or with pregnant women receive another lump sum of 150 Quetzales on the condition that the children attend regular health-care and nutrition check-ups. There are also training and capacity-building activities for recipient households to increase mothers’ knowledge of health and nutrition requirements for

*Figure 2 Distribution Of Time Poverty In Guatemala By Income Quintile (percentage of men and women in each quintile)*

Notes: Men and women aged 12-65.

Source: *Módulo del Uso de Tiempo, Encuesta Nacional sobre Condiciones de Vida*, Guatemala, ENCOVI, 2000
children. All beneficiary households sign an agreement with the authorities that administer the program to ensure that these “co-responsibilities” will be undertaken.

Under the *Mi Familia* program the money is transferred directly to mothers through BANRURAL a rural financial institution that operates in all the departments in question. In 2010, 814,625 households and 2,264,305 children received benefits. In order to fulfill their corresponsibilities, community committees are organized and there are a number of *vocales* or “spokespersons” in each community. In 2010, 91,433 vocales were organized distributed across three different areas: education, health and transparency. Additionally, beneficiary families were trained in nutrition, health, family planning, community development, community organization, literacy, productive projects and citizenship. The program reports increased school enrollment and retention during the year and improved health care indicators (Consejo de Cohesión Social 2010).

Applying estimates from previous studies of the value of unpaid work in the household (Gammage and Orozco 2008) and Gammage (2010) it is possible to compare the value of the transfers to secure behavioral changes to the value of unpaid work potentially displaced directly and indirectly as a result of the program. If, following Skoufias et al (2001) in their analysis of *Oportunidades* in Mexico, the participation of boys and girls in paid and unpaid work is significantly reduced, then the adult labor reallocated to compensate for the reduction in child labor is not trivial. If children reduce time in unpaid work by between 10 to 15 percent (an estimate in line with Skoufias 2000 and Parker and Skoufias 2000), then this would correspond to about 3.33 hours per week in unpaid work per child. If approximately 3 children in a household with an average number of 4.6 children are attending school between the ages of 6 and 15, then this corresponds to a little less than 10 hours of unpaid work previously undertaken by children in a week. Even if the adult taking on these additional tasks is more efficient than a child or a teenager we may assume that time use will increase for the adult in question. Gammage (2010) observes that applying a service and opportunity cost estimate of the value of unpaid work in the household the transfer would not exceed the value of time reallocated as a result of the program unless they also receive the second transfer of 150 Quetzales.

We cannot assume, however, that the reallocation of time will automatically result in some household members experiencing time poverty. It very well may be that the positive benefits from improved health and nutrition in terms of reduced time spent

---

7 See [http://mifamiliaprogresa.gob.gt/](http://mifamiliaprogresa.gob.gt/).
8 The service cost estimate applies average wages for the different services rendered for food preparation, child care, care for the sick, cleaning and repair and maintenance of the dwelling. The opportunity cost approach uses Heckman adjusted wages estimated for each individual (Gammage 2010).
in caring for the sick or in seeking medical care exceed any increment in time burdens as a result of the redistribution of time in paid and unpaid work. But certainly, we would be particularly concerned about the potential for increasing time burdens in households where some individuals were both time and income poor—since these individuals are most likely to remain time poor even after the income transfer through *Mi Familia Progresa*.

We do not have time use and household survey data currently available that would allow us to explore the impact of *Mi Familia Progresa* on time and income poverty. However, we can look at the profile of households that could be potential beneficiaries in 2000 and see which of these households are both time and income poor. We define a household as being time poor if at least one member is time poor in that household. Table 2 reports these values for households that are likely to be beneficiaries in urban and rural areas. Although the *Mi Familia Progresa* benefits are not means tested, the selection criteria correlate closely with income poverty—hence we can assume that those households that are income poor with children under 15 are most likely to be similar to potential beneficiaries of the program. We observe that 55 percent of urban and 52 percent of rural households are time poor and that 12.6 percent of all urban households and 36 percent of all rural households are both time and income poor. Households with children under 15 are also households that are more likely to have a greater number of children and, as a result, it is not surprising that they are more likely to be time poor. Overall, time and income poverty rates are higher for households with children under 15 years of age that for households with children in lower age groups. Interestingly, households with persons over 65 years of age are not more likely to be poor or time poor and, consequently, are less likely to be both time and income poor. This may be because these adults are also undertaking household activities and play a key role in mitigating both the time and income poverty of other household members.

Table 2 also includes certain household characteristics that can be used for targeting such as whether the household has access to electricity or not, whether the household is connected to piped water, whether the household uses fuelwood, or whether the household has a gas or electric stove. It is clear that households with better infrastructure (electricity, piped water, connected to sewerage, a gas or electric stove and a washing machine) are less likely to be both time and income poor—particularly in rural areas.

---

9 Approximately 88 percent of beneficiaries of *Mi Familia Progresa* in 2010 were located in rural areas.
10 Very few of these households are comprised of people only over the age of 65 in both urban and rural contexts. Households with members over the age of 65 are typically extended households with members of all ages. This is likely to reflect traditional systems of elder care where parents and grandparents live with their children.
Table 2
CHARACTERISTICS OF HOUSEHOLDS
(Percentage of all Households)

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
<td>Time Poor</td>
</tr>
<tr>
<td>Children under 3</td>
<td>19.9</td>
<td>54.8</td>
</tr>
<tr>
<td>Children 3 to 5</td>
<td>11.5</td>
<td>26.6</td>
</tr>
<tr>
<td>Children under 15</td>
<td>10.6</td>
<td>21.0</td>
</tr>
<tr>
<td>Personas older than 65</td>
<td>18.5</td>
<td>45.7</td>
</tr>
<tr>
<td>Without connection to piped water</td>
<td>4.5</td>
<td>7.2</td>
</tr>
<tr>
<td>Without connection to electricity</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Dirt floor</td>
<td>10.6</td>
<td>12.2</td>
</tr>
<tr>
<td>Connected to sewerage</td>
<td>10.7</td>
<td>40.3</td>
</tr>
<tr>
<td>Uses fuelwood</td>
<td>17.2</td>
<td>28.1</td>
</tr>
<tr>
<td>Has a gas or electric stove</td>
<td>8.8</td>
<td>44.5</td>
</tr>
<tr>
<td>Has a washing machine</td>
<td>0.1</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Note: Income poverty is defined at the household level hence all members of the households are assumed to be income poor.

Source: *Módulo del Uso de Tiempo, Encuesta Nacional sobre Condiciones de Vida, Guatemala, ENCOVI, 2000*

Analyzing the data, we may conclude that for a non-trivial portion of potential beneficiary households, time and income poverty poses a serious constraint. Since CCT programs intend to tackle the multidimensional nature of poverty and reduce intergenerational poverty by improving health, education, nutrition and promoting social cohesion through citizen engagement, this may also pose a problem for the effective implementation of the program. Without a doubt, it would be helpful, both programmatically and distributionally, to explore the nature of time and income poverty among program beneficiaries and undertake adjustments to the program to reduce the incidence of time and income poverty. Additionally, there is scope to consider providing household capital such as stoves and washing machines and increasing the availability of piped water and connections to the electric grid as a means of reducing the time
burdens associated with household work and making household work more efficient. Such household capital could be small and technology appropriate—with low energy use and maintenance requirements. Finally, given that there is a higher incidence of time poverty for women, efforts should be made to distribute the tasks associated with the conditionalities of the program more equally between men and women.

Conclusions

Cash transfers, conditional or otherwise, can be particularly effective in reducing income poverty. The evidence to date for the evaluation of CCT programs is that they have reduced income poverty and promoted investment in human capital securing improvements in education, health and nutrition. The evaluations, however, focus only on income poverty and human capital indicators of wellbeing and not on time poverty. Since both time and income are required to ensure household wellbeing it would behoove evaluators to also include a time dimension in their analysis. This may be particularly important in the implementation of CCT programs that have the potential to increase time burdens for some members of the household. Adding the dimension of time to the evaluation can help with the redesign of programs to ensure income poverty reduction without increasing time poverty. Moreover, focusing on both time and income poverty may shed light on complementary interventions to reduce time poverty that can better able women to work outside the household, if they so choose, and can make household work more efficient and less burdensome.
Bibliography


Barrios, Federico and Sarah Gammage. 2010. “Análisis del Sistema de Protección Social en Paraguay a través de los Programas de Lucha contra la Pobreza”, report to the International Labour Organisation, Santiago, Chile.


Cuadragésima sexta reunión de la Mesa Directiva de la Conferencia Regional sobre la Mujer de América Latina y el Caribe

CEPAL (Comisión Económica para América Latina y el Caribe) 2007a. El aporte de la mujer a la igualdad en América Latina, artículo para la Decima Conferencia Regional sobre la Mujer de América Latina y el Caribe, Unidad de la Mujer, Santiago de Chile.

___ 2007b. Panorama Social de América Latina, Santiago de Chile.


Floro, Maria and Marjorie Miles. 1998. “Time use and overlapping activities: An econometric analysis,” Department of Economics, American University, Washington, D.C.


