

# Benefiting Without Receiving Money?

## Externalities of Conditional Cash Transfer Programmes on Schooling, Health and the Village Economy

By Christian Lehmann

### I. Introduction

Although cash transfer programmes have been implemented and evaluated for more almost a decade, very little is known about how they affect households that are located in communities where the programme is implemented but that are not officially registered for the programme (either because they are ineligible or are unwilling to participate). The vast majority of evaluations focus on households that are officially registered. Cash transfer programmes, however, are likely to affect all households living in a community, even those that are not participating.

Why should we care about non-participant households? In many cases, those deemed “ineligible” for the programme are far from what we would consider “well-off”. Since government and donor budgets often only suffice to include the “poorest of the poor” into a programme, some degree of poverty persists even among programme-ineligible households (Lehmann, 2009a). If a cash transfer programme exhibits significant positive spillover effects on programme-ineligible households, then evaluations that focus solely on programme participants underestimate the overall impact on poverty.

Only very recently has more attention been devoted to filling the knowledge gap on how cash transfers affect ineligible households in the same community. This Policy Research Brief presents an overview of the mostly very recent and in part preliminary evidence for externalities on schooling, health and economic indicators such as consumption, access to credit, and asset holdings. The results suggest that when ineligible households are incorporated into the evaluation design, the overall impact of cash transfer programmes on poverty is much greater than previously recorded.

### II. Schooling Externalities

It is well known that most cash transfer programmes have a positive effect on the school enrolment of children from programme-participant households (in Cambodia, for example, such programmes increased secondary school enrolment by about 30 per cent). Do programme-ineligible households change their human capital investments as a consequence of the behavioural change of participants? Bobonis and Finan (2009) find a five percentage-point increase in secondary school enrolment among children from ineligible households in villages where a cash transfer programme is implemented. This increase is “pro-poor” in the sense that there is a higher increase in enrolment among children from poorer programme-ineligible families than among children from less poor ineligible families. For instance, among ineligible households whose level of poverty is above the median for ineligible households, secondary school enrolment increased by about six percentage points. On the other hand, no schooling externality could be found among ineligible households with a low incidence of poverty.

What are the mechanisms behind the schooling externality? Since poverty-stricken households often underestimate the future returns to investments in education, many cash transfer programmes seek to induce changes in the value that households attach to education by informing participant households (in workshops, community meetings and so on) about the pecuniary and



Photo by Tim Chesney.

non-pecuniary value of keeping their children in school. Through social interactions (extended family networks, going to church, markets, festivities and so forth), this information is likely to reach ineligible families as well, triggering behavioural changes with respect to human capital investments. Furthermore, cash transfer programmes often cause changes in the provision of educational supply-side resources, such as teachers and schooling materials. That is, additional supply-side resources are usually allocated to schools in localities that are included in the programme in order to prevent a deterioration of the quality of education. The latter may serve as an incentive for programme-ineligible households to keep their children in school.

Moreover, the increase in local demand induced by a cash transfer programme may increase the income of ineligible households (multiplier effects). The latter, for example, may sell more to programme participants and invest the additional income in paying school fees.

In many countries, cash transfer programmes start as small-scale pilot initiatives. Often, programme and non-programme villages are located fairly close together. In this setting, Gignoux (2009) finds that schooling externality occurs even across villages. That is, a cash transfer programme increases school enrolment in neighbouring non-programme villages. As in the case of the within-village schooling externality, imitation effects are also likely to occur across villages if there are extended family members or

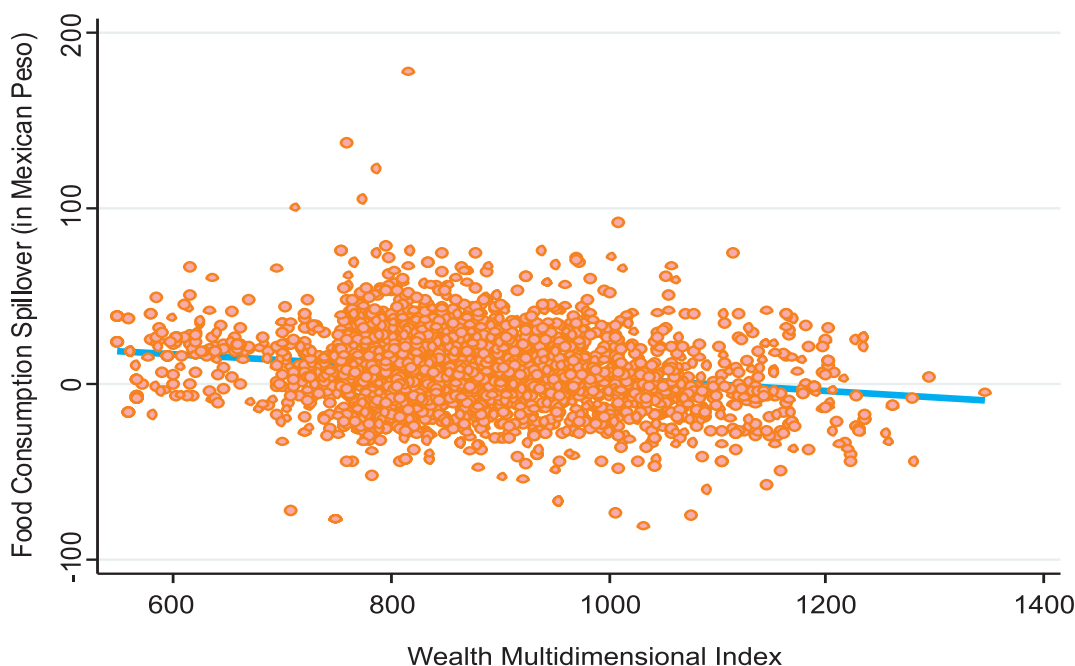
friends in the neighbouring village, or if children attend school in a neighbouring village. Another possible channel generating externality across villages is that households in non-programme villages anticipate a cash transfer programme in their own village, and thus act in favour of their future eligibility. For example, if cash grants are conditional on school attendance in the upper secondary grades and the household anticipates that the transfer programme will be implemented in its village in the future, then the household has an incentive to keep teenagers enrolled in secondary school in order to receive the cash grant when the programme reaches the village.

### III. Economic Externalities

*Inequality.* Poverty and inequality are closely linked. Unequal societies frequently have higher crime rates, a higher probability of violent conflict, and a higher incidence of poverty than equal societies. A positive externality on programme-ineligible households thus arises if a cash transfer programme reduces inequality in the community. Handa et al. (2000) analyse changes in inequality for Mexico's *Progresa* cash transfer programme. Using different measures of inequality, they find a 5–12 percentage-point decline in inequality induced by the programme.

*Food consumption.* Angelucci and De Giorgi (2009), again looking at *Progresa*, find that ineligible households in

**Figure 1**  
**Per Capita Food Consumption and Poverty**



Source: Lehmann (2009a).

villages where the programme is implemented can increase their food consumption by a magnitude close to that of households receiving the transfer. Lehmann (2009a) shows that the increase in food consumption for poorer ineligible households is considerable (that is, it is “pro-poor”), as Figure 1 illustrates.

The figure visualises the relationship between the increase in ineligible households’ monthly per capita food consumption and their level of pre-programme poverty. The latter is represented by a wealth multidimensional index. The lower the index, the higher the level of poverty. Each dot represents the increase in food consumption for a programme-ineligible household in our sample (non-recipients of transfers) due to the existence of a cash transfer programme in the village.

The downward-sloping line shows the trend. Note that poorer ineligible households benefit more from the existence of a programme in their village. Their increase in food consumption is, on average, higher than that of “better-off” ineligible households in the same village.

*Assets.* Livestock is essential to sustain livelihood in developing countries. Livestock serves not only as source of food (such as chicken eggs and goat milk) but also as risk insurance against shocks (for example, smoothing consumption in the event of drought, medical expenses in the event of disease, funeral costs). Barrientos et al. (2006) find that the asset holdings of programme-ineligible households in villages where a cash transfer programme is implemented are significantly higher than those among ineligible households in villages where there is no programme.

The former have a 10.7 per cent higher probability of owning livestock after the first year of the programme, and a 16.7 per cent higher probability after about two years. These results indicate not only externality effects of a cash transfer programme on asset holdings, but also that these effects take some time to manifest themselves.

*Loan availability.* The availability of credit is a key instrument to alleviate poverty. The Nobel Peace Prize awarded to Muhammad Yunus, founder of the famous Grameen Bank (which gives loans to impoverished families), shows the importance attached to credit as a means of alleviating poverty. Do cash transfer programmes exhibit externality on ineligible households’ access to credit? Lehmann (forthcoming) finds that credit availability increases only for the “better-off” among ineligible households. They are perceived as more creditworthy and eventually possess more assets that may be leveraged as collateral. Increased credit availability not only enables the household to smooth consumption when hit by shocks (such as

medical expenses in the event of disease, or funeral costs), but also to invest in income generating activities such as agricultural inputs, livestock and so on.

#### IV. Social Externalities

Macours and Vakis (2008) find large social externality effects on human and physical capital accumulation and aspirations, depending on the proximity of households to female community leaders who participate in the cash transfer programme (that is, women with leadership responsibilities in the community). Exposure to a community leader is likely to trigger imitation effects by both participant and non-participant households, the result of admiration for or loyalty to community leaders.

Macours and Vakis find a school enrolment externality of six percentage points on beneficiaries who are exposed to community leaders. The impact on total consumption almost doubles. Moreover, the higher the share of female leaders, the more likely are beneficiary households to engage in productive activities. Proximity to female leaders also affects the attitudes of programme participants.

The higher the share of female leaders, the more likely are participants to express optimism about the future and have lower indicators of depression. Those effects are then likely to spill over to non-participants—taking into account the findings of Bobonis and Finan (2009) and Angelucci and DeGiorgi (2009), described above.

#### V. Health Externalities

The results presented by Miguel and Kremer (2004) suggest that cash transfer programmes with complementary deworming activities in schools have positive externality effects on programme-ineligible children. They evaluate a Kenyan experiment in which deworming drugs were distributed to a certain number of children per school, but not to all children.

They observe not only lower absenteeism due to illness among programme-ineligible children attending the same school who did not officially receive the deworming drugs, but also among children enrolled in non-programme schools close to programme schools. Improved health outcomes among programme participants is likely to have inspired other households to let their children take deworming drugs as well.

In many cash transfer programmes, a cash supplement is given on condition that programme-participant families with small children have regular nutritional checkups. Several studies confirm that visits to health clinics (nutrition surveillance) rose for programme-participant households. Handa et al. (2000) analyse externality effects on ineligible households created by the increase in healthcare sought by participant households.

Their results point to important externality effects in terms of the healthcare behaviour of ineligible households.

One year after the programme began there was an estimated seven percentage-point difference in nutrition surveillance rates between ineligible children in programme villages and ineligible children in non-programme villages.

Bobonis, G. and Finan, F. (2009) find that the average number of days of reported illness among poorer ineligible children declines. The same is true for days of difficulty with daily activities due to illness, days of no activities due to illness, and days in bed due to illness.

## VI. Conclusion

This Policy Research Brief has presented the little and in part preliminary evidence of the positive externality effects that cash transfer programmes have on non-participants. Existing studies suggest positive externality on schooling, health, food consumption and economic indicators (inequality, assets, loan availability and so on). Hence current and past evaluations that focus entirely on programme participants are likely to underestimate the overall impact on poverty.

In order to accurately assess and eventually predict *ex-ante* the impact of a cash transfer programme, it is essential to incorporate non-beneficiaries in the evaluation design.

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*The views expressed in this brief are the authors' and not necessarily those of the Government of Brazil or the United Nations Development Programme.*

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