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Conditional Cash Transfer (CCT) Programs : How Non-cash Components and Externalities Can Affect the Desired Outcomes

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1. CCT Programs : What we don't know

Much of the debate concerning conditional cash transfer (CCT) programs focus on the issues of targeting and conditionalities. Despite the number of initiatives led, mostly in Latin America, to assess the impact of CCT programs, there is little evidence as to the actual effect of the cash allocations per se, or the value added by the conditionality.

The **cash component** of CCT programs has, naturally, an *income effect* that allows families to consume more goods and services, including healthcare and schooling. The programs' **non-cash components**, however, can also induce a *substitution effect*, leading to changes in the way households spend their income - aside from those expected due to the release in budget constraints.

The question is whether the nature of these latter changes in behaviors tends to contribute to the programs' objectives and interests, or rather curtail the achievement of the desired outcomes. Indeed, if the programs' impacts were explained mostly by the additional income, then the other components would add unnecessary costs to a cash transfer program. But if monetary transfers were not enough to induce the desired changes, then the complementary effects of non-cash components may be necessary to achieve the programs' objectives.

Based on the case study of a conditional cash transfer program implemented in Paraguay (Tekoporã), a team of PEP Brazilian researchers sought to assess how non-monetary components of CCT programs may affect the consumption patterns and behaviors of beneficiary households.

2. Research issues: direct vs. indirect effects

One concern that arises when measuring the impact of CCT programs, or any other type of social programs, is the potential bias induced by externalities. Indeed, both beneficiaries and non-beneficiaries can be affected simply by the awareness of the existence of a social program and the presence of other beneficiaries in their community – e.g. changes in prices and opportunity costs, or in social interactions that can affect households' preferences and behaviors.

In this study, the researchers applied a recently developed methodology that makes it possible to decompose a program's impact into "**participation (direct) effects**" and "**externality (indirect) effects**". These effects were further decomposed into "income effect" (from the cash component) and "substitution effect" (from non-cash component).

3. Understanding the effects of conditionalities and externalities to better assess a CCT programs' outcomes

After decomposing the observed impact of the Tekoporã's program into individual (direct) effects and externality (indirect) effects across households, the authors found the latter to have a "negative" impact on several outcomes, as they have worked in opposition to (and thus offsetting) the potential individual direct benefits of the program.

For example they claim that, in the absence of externality effects, the program would have increased the level of consumption by 21 per cent, food consumption by 15 per cent and the share of adult clothing by 0.7 per cent among treated households. However, the externality effects of the program on these outcomes were sufficiently negative to offset the participation (direct) effect, resulting in the overall impact of the program on these outcomes being null or even negative.

The only outcome for which the externality effect was found to have boosted the direct participation effect is savings – with half of the program's total impact on the savings rate's increase (31 per cent) due to externalities. Indeed, Tekoporã's design included visits by social workers to help households plan their budgets. In a seasonal-agriculture economy, precautionary savings play a critical role in budget planning. The "saving message" transmitted by the social worker may have spilled over onto other poor households, leading to a reduction in their consumption.

The second decomposition shows that the participation (direct) effect on the consumption level is mainly due to the income effect, from the cash component of the program which, however, has had no effect on the "nature" of that consumption for treated households. The authors conclude that an unconditional cash transfers might be effective in increasing household consumption, but not in changing the consumption choices or preferences.

The externality effect, on the other hand, is not related to income changes. Whenever externality effects are significant, they are entirely due to behavioral change induced by non-cash components (*substitution effect*). It is thus to say that the cash transferred via the Tekoporã program has had no multiplicative effect on aggregate demand that would affect the beneficiary households' behavior, apart from the direct effect of the transfer.

In addition, the results show that non-cash components of the program have encouraged participating households to reduce relative expenditure on food and increase the share of income spent on child and adult clothing. After taking the externality effect into account, however, the only impact that remains is on the share of child clothing - which can be explained by the program's explicit (non-cash) incentive or conditionality to spend money in the best interests of children. The lack of an externality effect on child clothing means that the change in consumption preferences toward children, promoted by the program's conditionalities, was not emulated by other households.

In view of these results, it is clear that all components of CCT programs may have some effect on the desired outcomes. But knowing which of them are more effective in reaching specific targets, and through which channels, can help improve a program's design and implementation. Indeed, the study shows that understanding the impact of conditionalities and the existence of externalities is important to produce better assessments of a program's end results as initially stated from standard impact evaluations.

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