

## **Do Cash Transfers Deter Migration?**

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### **Abstract**

Conditional Cash Transfers are increasingly used by development aid agencies to reduce the incentives for migration from low-income countries. The evidence to date suggests that such transfers typically *increase* the rate of migration when they are *conditional* on *investment*, such as investment in education. They do this primarily by facilitating acquisition of human capital and by lowering capital constraints—increasing both migration aspirations and the means to achieve them. But with certain design features, particular transfer programs have reduced the incentive to migrate. Broadly speaking, migration can be deterred by transfer programs that are *conditional on presence* in the origin country—provided that the condition is strict, targeted, and lengthy.

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Development agencies across the world use Conditional Cash Transfers (CCTs) to provide assistance to the poor. These typically involve period cash payments conditional on investments in human capital, such as school attendance, nutrition programs, or clinic visits. CCTs originated simply as a means to deliver social assistance in a way that is effective and politically popular, not as a tool to shape households' migration decisions. An extensive research literature documents that CCTs do, however, shape migration behavior (surveyed by Hagen-Zanker and Himmelstine 2013; Adhikari and Gentilini 2018).

This note summarizes two lessons from the evidence to date. The first is that the effect of a CCT on migration depends on the precise conditionality of the transfer. Consider two broad categories of CCT:

- Conditional on Investment: From the start, the majority of CCTs have been conditional on forms of long-term human capital investment by poor households. This often takes the form of halting the transfer if households do not meet certain criteria for school attendance by children, use of nutritional supplements, or primary health care. The research literature broadly finds that CCTs of this kind increase the tendency for recipient households to engage in international migration. This happens both because the transfer increases the means for migration in the short run, and because it increases the aspirations for migration in the long run.
- Conditional on Presence: A small number of CCT programs have been designed in a fundamentally different way. These provide cash conditional on physical presence in their current place of residence. Such programs have the potential to reduce migration rates, but only with three particular design features: 1) They must strictly require the recipient's physical presence—at high frequency, such as monthly—or require a high-stakes commitment to remain present. 2) The condition for presence must be targeted to the potential migrant, not other household members. 3) The duration of the condition on presence must match the intended duration of the migration disincentive.

In other words, Conditional Cash Transfers that are conditional on presence can, and often do, reduce the incentive for migration provided that the condition is strict, targeted, and lengthy. If any of these conditions fail, or the transfer is not conditional on presence at all, CCTs typically cause higher rates of migration among poor beneficiaries. Two broad categories of CCTs that often contain a condition on presence that is strict and targeted, but not often lengthy, are humanitarian Cash and Voucher Assistance (CVA) during emergencies, and Cash for Work (CfW) programs.

A second general lesson of the evidence to date is that there is no substitute for ongoing, rigorous impact evaluation for the migration effects of CCTs when these relate to program goals. Any given program could in principle raise or lower the incentive to migrate in a specific setting. The evidence on other CCT programs, however, does inform the design of new programs that seek to affect migration behavior, and should shape the standard of proof that is required prior to scaling up. The rest of this note surveys the evidence and resulting policy lessons in more detail.

## Typical cash transfers increase the probability of migration

Around the world, rigorous evaluations of the impact of CCTs find that they typically produce a rise in rates of international migration from beneficiary households or communities. These studies are unusually rigorous in that they employ an adequate research design to separate causation from mere correlation.

Standard CCT programs conditional on investment have raised beneficiaries' rates of international migration in Mexico, Honduras, Nicaragua, and Comoros. The Progresa/Oportunidades CCT, starting in 1998 in Mexico, was given conditional on basic investment in human capital: school attendance by children and periodic health checks by adults. The rollout of the CCT was randomized by design, allowing unusually confident measurement of the pure effects of the program. It caused an increase in the rate of emigration to the United States from recipient communities. This effect began the year after the transfers started (Angelucci 2005, 2012) and endured for several years (Görlach 2021; Araujo and Macours 2021; Azuara 2009). The same CCT caused an increase in migration to any destination outside the Mexican state of origin, a combined measure of both migration to other Mexican states and migration to the United States (Rubalcava and Teruel 2006; Parker and Vogl 2021).

A broadly similar CCT in Honduras, PRAF-II, caused an increase in rates of emigration to the United States among beneficiaries observed eight years after the end of the transfers (Molina et al. 2020). In Nicaragua, the similar CCT program known as RPS caused a large rise in temporary migration, observed 10 years later, to Costa Rica (Barham et al. 2018). In the African nation of Comoros, a national CCT program likewise caused higher rates of international migration to France by recipient households observed one year later (Gazeaud et al. 2020).<sup>1</sup>

It is useful to further examine the effects of Progresa/Oportunidades in Mexico, perhaps the best-known and most-studied CCT. It is common for summaries of the research literature on CCTs and migration to describe the cumulative evidence about this program's effects on migration as 'conflicting'. The relevant studies are, however, largely in agreement when carefully examined. Stecklov et al. (2005) find that Progresa had the effect of reducing Mexico-US migration during the first year of the program. But that dampening effect is only statistically distinguishable from zero for one type of migration—migration that is not work-related, but for the purpose of family reunification. Angelucci (2012) isolates work-related migration and finds that the same CCT, during the same

<sup>1</sup> The programs in Mexico, Honduras, and Nicaragua took place in randomly-selected municipalities. The program in Comoros program had beneficiary households selected at random. This design feature confers high confidence that the effects measured in the studies are not mere correlations between migration behavior and transfer receipt, but measure the true impact on migration behavior due to transfer receipt. The programs in Mexico and Honduras successfully caused improvements in schooling and nutrition among poor households; this was the chief mechanism for their positive long-term effects on international migration. There appear to be null effects of the Honduras program on extra-municipality migration (a measure combining both overseas migration and migration to another municipality within Honduras), but the Nicaragua program had a short-term positive effect on extra-municipality migration (Winters et al. 2006).

period, caused it to rise. Angelucci furthermore finds that Progresa/Oportunidades caused a rise in migration collectively, for whatever purpose, in the long run.

These two findings are quite compatible. The dampening effect on family-reunification migration found by Stecklov et al. is attributed by the authors primarily to a de-facto *condition on presence* that was built into the Progresa design and was broadly specific to family-reunification migration in context. Receipt of the transfer required a woman from the household to be physically present. Migration for family reunification, in the Mexico-US setting of that time, most commonly involved women moving to follow a male migrant who had been first to move. Stecklov et al. find that "conditionality that requires the physical presence of household members may substantially enhance the effectiveness of such programs." Thus the type of migration that was dampened by the transfer is the type to which a built-in, targeted *condition on presence* applied, and only for the duration of the transfer. Other types of migration, for which a *condition on presence* was not built in—or after the transfers ended, and the conditions with them—was increased by the CCT. The same Progresa/Oportunidades program has been found to reduce migration by children of school age. For them, but not adults, conditionality on attending school equates to a *condition on presence* (González 2009; Rodríguez and Freije 2012).

These rigorous evaluations from Mexico and elsewhere suggest that CCTs can reduce the incentive for migration primarily when they contain a *condition on presence* that is strict and targeted to potential migrants, but only for the duration of the transfers. For other forms of conditionality, and/or after the transfers end, this research literature broadly finds that CCTs cause emigration to rise—in both the short run and the long run.

Similar effects are typically observed in rigorous evaluations of *unconditional* cash transfers. Procampo, a program of unconditional transfers to poor farmers in Mexico, caused higher rates of emigration from recipient municipalities than non-recipient municipalities over the course of a decade (Cortina 2014). Other unconditional transfers have caused an increase in rates of domestic (typically rural-to-urban) migration in poor countries, measured over the course of 1–2 years in Bangladesh (Bryan et al. 2014), Indonesia (Tiwari and Winters 2019), and China (Cai 2020). These studies did not investigate the effects on migration overseas.

### How CCTs can produce a rise in migration

Intuitively, it might seem like when families get higher income where they live, they should be less likely to migrate away—whether that higher income is caused directly by a cash transfer or indirectly by more education. But the net effect is the typically the opposite: those families are more likely to migrate, across a range of several CCTs. Two different effects work against the intuitive one.

First, cash transfers directly alleviate constraints on migration in the short term. Members of many poor households have powerful economic incentives to migrate, but lack the means to offset the high costs and risks they would incur by migrating. Cash transfers provide households with additional liquidity that they can quickly use to unlock migration opportunities. That does not imply, however, that households usually save up the transferred cash and "spend it on migration." The above studies of the Progresa CCT in Mexico show that the transferred cash was usually fully consumed, not saved. Instead, it seems that the transfers often allowed families to take on less debt to finance basic daily expenditures—for which they now had cash—and instead take on debt to finance migration (Angelucci 2015, p. 226).

Second, transfers that are *conditional on investment* can raise the education level of young people in the household, raising migration incentives in the long term. Families who have children with higher schooling attainment often have higher expectations for their children's earnings relative to their ability to find local jobs that reach those expectations (Araujo and Macours 2021). This would raise the aspiration to move even if the greater education did not raise the children's earnings abroad, but moreover, greater education does raise the children's earning opportunities abroad. Young people with relatively higher education and income have a higher propensity to permanently emigrate than those with less education and income, in 96 out of 99 developing countries where standardized data allow the question to be studied (Clemens and Mendola 2020).

Other forms of cash windfall—from sources other than CCTs—provide related evidence. Unusually good rainfall (and thus income) for farming households in Indonesia causes them to be more likely to send a household member to work abroad (Bazzi 2017). A similar pattern is observed in West Africa (Martínez et al. 2021). Another form of windfall is shocks to exchange rates that raise the local-currency value of remittance flows, and thus raise the incomes of migrant households and communities. Such shocks produce higher prevalence of emigration from the affected communities even a decade thereafter (Khanna et al. 2020).

# Features of CCT design that reduce the incentive to migrate

A handful of CCT programs have been rigorously evaluated to cause a reduction in emigration from low-income communities. Three design features of those programs appear necessary to that outcome.

First, CCTs can reduce the incentive to migrate when then contain a clear and strictly-applied condition on presence. The transfer must strictly cease if the recipient is not continuously, physically present in the locality of origin. The clearest example of this effect is the nationwide Cash for Work (CfW) program of India, the National Rural Employment Guarantee Scheme (NREGS). This program guarantees 100 days of wage work in any given year to any rural worker willing to perform manual labor on local public works. The projects typically generate little or no revenue, so NREGS is similar

to a cash transfer that is contingent on the presence of the worker. No presence means no payment. A rigorous evaluation has shown that NREGS reduces migration from low-income rural regions to higher-income regions (Imbert and Papp 2020). This is suggestive of potential for a similar effect on international migration in related contexts, but does not directly evaluate such an effect.

Second, potential migrants themselves must be the target of the condition on presence, not other members of the household. The Progresa/Oportunidades CCT in Mexico caused a reduction in migration for older children who were still of school age. This is consistent with the fact that the program's conditionality on their school attendance equated to a condition on their physical presence. The Comoros CCT discussed above offers an example of the reverse: It was a Cash for Work program in some ways similar to India's NREGS program. But unlike NREGS, the Comoros program caused a large increase in migration at the household level. The key difference arises from the design of the conditionality. In Comoros, households receiving the transfer could choose who performed the required work. They often choice a household member who was an older female with little migration experience and few migration plans. This allowed the transfer to provide the means for migration by other, younger, frequently male household members on whose presence the transfer did not depend. "This suggests that the program primarily increased the opportunity cost of individuals who were unlikely to migrate" (Gazeaud et al. 2020).

In other words, the Comoros CCT contained a *condition on presence* but it was not targeted to the presence of those most likely to migrate. Such a targeted condition on presence can also have indirect effects on migration. The Progresa/Oportunidades CCT reduced rates of migration for women even as it appeared to increase migration by men (Hughes 2019; see also Stark 2021). The transfer was not explicitly conditional on women's presence specifically. In practice, however, the transfer was typically received by women, and it caused higher school attendance by children in the household, in turn increasing their need for support most frequently provided by women, at home.

Another form of indirect *condition on presence* is to require beneficiaries to make an ex ante, high-stakes public commitment to presence. This is not the same as withholding the transfer if the recipient is not present ex post. But it can create related, targeted incentives. Giambra and McKenzie (2021) review randomized experiment in both Africa and South Asia that competitively selected potential entrepreneurs for a chance at a business startup cash grant. Many of these cash grant programs were found to cause a small reduction in the international migration probability by grant recipients observed three to ten years later. All such grantees had made a high-stakes, public commitment to remain at the origin in order to carry out their business plan. For instance, one of these programs occurred in Uganda, where groups of youths competitively proposed business plans for a randomized chance at a startup grant. (Blattman et al. 2020). This structure meant that any member of the winning, grant-receiving team who emigrated soon thereafter would be reneguing on an implicit or explicit pledge to remain physically present to execute the funded business plan. Such a departure would not break the terms of the grant in a contractual sense, but the social commitment to remain present was a by-product of program design. This amounts to an indirect, but strong incentive for presence.

Third, and last, the evidence in the literature offers little reason to believe that the duration of any dampening effect on emigration outlasts the duration of the transfers. That is, even if a CCT contains strict and targeted conditions on presence, their effect on the incentive to migrate ends when the transfers end. NREGS, for example, is not a one-off transfer but an ongoing cash transfer available to any poor household in any year, for an unlimited duration. The creation of the NREGS program permanently raised earning potential for poor households within their communities of origin. Typical time-delimited transfer programs lack that feature, but do have the effect of providing households with the means to invest in migration.

On balance, the literature does contain limited evidence to support the idea that CCTs conditional on presence reduce the incentive to emigrate and dampen migration behavior—when the condition is strict, targeted to the potential migrant, and lasting.

## **Lessons for policy**

Conditional Cash Transfers in poor countries are coming under increasing pressure to shape migration behavior. If this is to be their new, partial mandate, they should be designed based on evidence of whether and how the can achieve that goal. None of the evidence discussed here necessarily applies to any new setting. But typical CCTs that condition on investment, such as investment in education, frequently cause recipients to be more likely to emigrate in both the short term and long term. In contrast, CCTs that contain a strict, targeted, and lengthy condition on presence appear much more likely to reduce the incentive for migration in the short run. Pilot projects of this kind should receive ongoing impact evaluation to determine their effects on migration behavior prior to scale up.

The evidence does not imply in any way that CCTs are inherently less desirable due to their effects on migration, positive or negative. Consider Honduras' PRAF-II transfer program. Molina et al. (2020) find that it successfully improved both schooling attainment and nutrition in a large cohort of youths, a major improvement in terms of human development. That increase in human capital facilitated the same youths' later investment in another form of human capital: migration to a place where the return on their labor was much higher on average. These are all signs of the success of the project in terms of its purpose: to unlock greater human capital investment by Honduran families.

One promising area for innovation in projects of this kind lies in Cash and Voucher Assistance (CVA) during humanitarian emergencies. Recent evidence shows, for example, that sudden adverse weather events in El Salvador curtail farm productivity and thus cause more unauthorized emigration from affected communities (Ibáñez et al. 2021). CVA transfers during emergencies have the potential to offer households a way other than migration to manage crises of this kind, as well as inherently containing a *condition on presence*. This suggests that CVA transfers have potential to reduce migration waves driven by natural catastrophes.

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