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Discussion Paper

Cash Transfers and HIV Prevention

October 2014

United Nations Development Programme

HIV, HEALTH AND DEVELOPMENT



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Discussion Paper

Cash Transfers and HIV Prevention

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The content, analysis, opinions and policy recommendations contained in this publication do not necessarily reflect the views of the United Nations Development Programme.

ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
CCT	Conditional cash transfer
CSG	South Africa's Child Support Grant
CT-OVC	Kenya's Cash Transfer for Orphans and Vulnerable Children
DALY	Disability-adjusted life year
GDP	Gross domestic product
HIV	Human Immunodeficiency Virus
HSV-2	Herpes Simplex Virus 2
LMICs	Low- and middle-income countries
MICs	Middle-income countries
MSM	Men who have sex with men
OVC	Orphans and vulnerable children
PLHIV	People living with HIV
PWIDs	People who inject drugs
RCT	Randomized control trial
SCT	Malawian Social Transfer Scheme
STI	Sexually transmitted infection
UCT	Unconditional cash transfer
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
VCT	Voluntary counselling and testing

Executive summary

Cash transfers are direct cash payments to individuals and households, often targeting the poor and vulnerable. They have increasingly become a cornerstone of many low- and middle-income countries' social protection strategies. Cash transfers help reduce poverty and can reduce economic and gender inequalities, all of which are priority outcomes in UNDP's Strategic Plan: 2014-2017. They can also have

other important impacts on human development, such as improving education and health. In consideration of these multiple benefits, governments and development partners are increasingly viewing cash transfers – and social protection more broadly – as an investment in human development.

An investment approach has recently become central to AIDS responses. In a joint paper in 2012, UNDP and UNAIDS describe the relevance of 'development synergies' – investments in other sectors that can have positive impacts on HIV outcomes – to strategic investments in AIDS responses. Social protection is an example of a development synergy, and a growing evidence base indicates that cash transfers in particular have the potential to prevent HIV, especially sexual transmission of HIV, in certain contexts. Much of the evidence on HIV impacts comes from cash transfer programmes that have targeted girls and young women in generalized epidemics. Impacts have been demonstrated in three broad areas:

Cash transfers have been implemented successfully for a range of development goals. A growing evidence base now indicates that cash transfers have the potential to prevent HIV, especially sexual transmission of HIV, in certain contexts.

- 1 Cash transfers can help address structural drivers of HIV**, such as economic and gender inequalities and low levels of education. Pilot studies and evaluations of existing, large-scale programmes have shown considerable, positive impacts on structural drivers themselves as well as on proxies for risk of HIV infection. One seminal randomized control trial (RCT) in Malawi that provided cash transfers to girls and young women measured HIV prevalence directly. The study found that, after 18 months, HIV prevalence was 64 percent lower in the group of school-going girls who received transfers than in the control group. The transfers achieved this impact by influencing underlying structural conditions, which, in turn, shape sexual behaviour and risk of HIV infection.
- 2 Cash transfers can increase uptake of critical prevention services**, such as voluntary counselling and testing (VCT), with implied impacts on HIV. For instance, one RCT that conditioned receipt of cash payments on VCT uptake demonstrated that those receiving the incentive were twice as likely to retrieve HIV test results, an absolute increase of 27-39 percent. Cash transfers can also improve access to HIV treatment, for example by subsidizing transport costs to clinics and by increasing available income for the purchase of medicines. Effective HIV treatment has been shown to reduce the likelihood of HIV transmission.
- 3 Cash transfers tied to proxies for risk of HIV infection have shown promising, though mixed, results.** An RCT in Tanzania that conditioned receipt of cash transfers on being free of curable sexually transmitted infections (STIs), as a proxy for risk of HIV infection, showed that those receiving payments of US\$20 were 27 percent less likely to acquire an STI over the study period than were controls. No statistically significant reduction was observed among those receiving payments of only US\$10. Another RCT in Lesotho that conditioned eligibility for a cash prize lottery on being free of

curable STIs measured HIV incidence directly. After two years of the programme, HIV incidence was 25 percent lower among those eligible for the lottery than among those not eligible. The greatest impact was seen among women, who were 33 percent less likely to acquire HIV over the study period.

In practice, these three areas of impact are not mutually exclusive. Cash transfers can influence more than one area simultaneously. The demonstrated and inferred impacts of cash transfers on gender inequalities is an example; reducing various forms of gender inequality is an especially prominent and promising feature of cash transfers, including those for HIV prevention. Understanding precise mechanisms and how these mechanisms interact in different contexts requires further research.

Establishing that cash transfers can be effective for HIV prevention, while critical, is only a first step in deciding whether and how to implement a cash transfer programme. Policymakers and programme managers must carefully consider a number of other important issues: programme design and monitoring; human rights concerns; potential for perverse incentives; availability of supply-side complements; and scale, sustainability and cost. While these issues can matter uniquely with respect to cash transfers for HIV prevention, they are important considerations for any cash transfer programme. A deep and continuous exploration of these issues will help cash transfers achieve their intended objectives in different real-world contexts, respond to changing dynamics and new information, and achieve secondary benefits while reducing the possibility for unintended consequences.

Cash transfers are, and will continue to be, implemented for reasons above and beyond HIV, such as poverty reduction and mitigating the impacts of various shocks. In many cases, opportunities are not in creating or scaling up *de novo* cash transfer programmes for HIV; rather, opportunities are in making existing, broader cash transfer programmes sensitive to HIV – in other words, maximizing positive impacts on HIV while minimizing negative ones. Making cash transfers HIV-sensitive requires policymakers and programme managers first to reiterate the primary objectives around which a basic programme framework is designed. Then features can be modified to maximize any beneficial secondary impacts, including on HIV.

Changes in the AIDS funding landscape, notably a shift toward investment approaches to HIV, have created potential opportunities for financing HIV-sensitive cash transfers and other innovations in national HIV responses. Through its new funding model, for example, the Global Fund to Fight AIDS, TB and Malaria ('The Global Fund') has set aside extra resources, beyond regular allocations, for countries that wish to engage in high-impact, evidence-based innovation. Moreover, the streamlining of the application process, the focus on national strategic plans and the creation of country dialogues all create additional opportunities to explore HIV-sensitive cash transfers, as well as other synergies across HIV, health and development.

The available evidence on cash transfers for HIV prevention has several implications in terms of policy and programmes as well as research. The chief implication is that cash transfers can prevent HIV in some contexts, especially by empowering women and girls to protect themselves. Successes, however, have not been universal. Although cash transfers can have multiple targets and mechanisms of impact, they are not a magic bullet for HIV. Nor are they appropriate in all settings. Context matters greatly. Moving forward, more research is needed to confirm results, maximize positive impacts and better understand causal pathways through which impacts operate. This further work will help policymakers and programme managers create replicable and useful frameworks for scaling up cash transfers for HIV prevention and understand how to make existing, broader cash transfer programmes sensitive to HIV.

This paper proposes some initial principles on how to optimize HIV impacts of cash transfers, by encouraging targeting that:

- focuses on communities with high rates of new HIV infections, particularly acquired via sexual transmission;
- reduces local or community levels of economic inequalities between men and women;
- focuses on periods and contexts of high risk, particularly for girls and young women;
- maximizes cost-effectiveness without compromising people's privacy choices; and
- considers multiple dimensions of vulnerability (to both HIV and other shocks).

Due to significant ethical concerns, no cash transfer programme should target people on real or perceived HIV status, whether positive or negative. Nor should transfers condition on HIV status or on maintenance of HIV status. Also due to ethical concerns – and very real risks of coercion – cash transfers should not be directly linked to irreversible or invasive procedures, such as medical male circumcision or microbicide use, regardless of the potential for efficacy in these areas. Instead, focus should be on reducing financial and non-financial demand-side barriers, such as user fees and transport costs, to help people who wish to access these and similar services.

Importantly, the evidence demonstrates that cash transfers can achieve multiple impacts simultaneously, not just on HIV but across health and development more broadly. At a research level, HIV-related indicators, including outcome proxies, should be integrated where relevant into future cash transfer studies and into the evaluations of existing programmes at scale. At a programme level, the multiple, cross-sectoral impacts of cash transfers should be considered in programme design and monitoring and accounted for in costs, cost-effectiveness evaluations and financing. The development of cross-sectoral structures – or the use of existing ones, such as ministries of planning and finance – may be a useful governance model in different stages of design, financing, implementation and monitoring of cash transfers. Such structures can help draw links between key design elements and opportunities for pooled financing, ensuring that cash transfers are affordable and sustainable. Cross-sectoral co-financing of cash transfer programmes with HIV impacts would help realize the intersectoral linkages envisioned in investment approaches to AIDS, further embed HIV into national priorities, strengthen the sustainability of comprehensive AIDS responses and further position cash transfers as a development investment.

Purpose, scope, intended audience and structure

This discussion paper synthesizes the evidence for the effectiveness of cash transfers for HIV prevention and explores implications and opportunities for advancing research and policy agendas. Much of this evidence centres on girls and young women, who bear significant HIV burdens, particularly in sub-Saharan Africa, and often have less control over their sexual choices than do men. Many forms of transfers exist that may contribute to HIV prevention. These include in-kind transfers such as food transfers, supply-side cash transfers given to health service providers to encourage uptake of services, and vouchers/monetary rewards to reinforce healthier behaviours among people who inject drugs (i.e. contingency management). This paper focuses only on demand-side cash transfers that have the potential to prevent sexual transmission of HIV, which accounts for the greatest share of new infections. The intended audience is policymakers, programme managers and researchers, especially those who are considering building or modifying cash transfer programmes to maximize HIV and health benefits.

Background: Cash transfers in the context of HIV, health and development describes why exploring cash transfers' potential for HIV prevention is critical and timely, both for HIV and for development more broadly.

Chapter 1: Conceptual framework outlines a conceptual framework for understanding structural drivers of HIV.

Chapter 2: State of the evidence summarizes the empirical evidence for cash transfers in accordance with the conceptual framework.

Chapter 3: Issues, concerns and limitations describes important issues in programme design that can influence the effectiveness of cash transfers and explores some concerns and limitations of cash transfers, both generally and for HIV prevention more specifically.

Chapter 4: Discussion codifies what is known regarding cash transfers and HIV prevention, highlights unresolved issues and offers strategies for moving forward in terms of policy and programmes as well as research.

Conclusion recaps the paper's high-level themes and messages and offers thoughts on future work.

BACKGROUND

CASH TRANSFERS IN THE CONTEXT OF HIV, HEALTH AND DEVELOPMENT



Cash transfers defined

Cash transfers are a form of social protection. Their central feature is the provision of a pre-determined amount of cash to eligible individuals and households, typically the poor or vulnerable. Cash transfers can be unconditional or conditional. Unconditional cash transfers (UCTs) are provided without obligations on recipients. Conditional cash transfers (CCTs) require co-responsibilities, or conditions, which participants must first satisfy to receive the cash.

Cash transfers are becoming a cornerstone of countries' social protection and development strategies

Cash transfers originated in the early 1990s in Brazil, Mexico and Bangladesh. They have since grown rapidly in popularity around the world, first in Latin America and the Caribbean and more recently in sub-Saharan Africa (Fiszbein and Schady 2009; Garcia and Moore 2012; Molyneux 2008). In 2009, 29 countries – most in Latin America and the Caribbean – had some sort of CCT in place (Fiszbein and Schady 2009). Cash transfers in sub-Saharan Africa tend to be more varied. A 2012 World Bank review identified 123 cash transfer programmes in sub-Saharan Africa, ranging from “emergency one-time transfers to unconditional, noncontributory social pensions to conditional cash transfer programs with human capital development objectives similar to the flagship Latin American programs” (Garcia and Moore 2012). Cash transfers of all sorts are estimated to reach over one billion people in low- and middle-income countries (LMICs)(DFID 2011).

Cash transfers are estimated to reach over one billion people in low- and middle-income countries.

Cash transfers aim to reduce poverty and economic inequality and/or improve access to social services such as education and health services (DFID 2011; Fiszbein and Schady 2009). Many cash transfers have explicit gender-related objectives, such as reducing the gender gap in schooling and improving maternal health (see e.g. Andaleeb, Baez and Del Carpio 2011; Lagarde, Haines and Palmer 2007). Generally, the income boost from cash transfers is meant to reduce immediate income poverty and increase and diversify household consumption. Boosts in income and consumption can, in turn, improve access to social services. Conditionalities have also been used as part of some cash transfer programmes to further enhance uptake of social services. For example, many CCTs require that recipients enrol their children in school to receive the payment. While the impact of cash transfer programmes can vary depending on context, both UCTs and CCTs have for the most part achieved their goals (DFID 2011; DSD, SASSA and UNICEF 2012; Hasan 2010; Lagarde, Haines and Palmer 2007; Son 2008).

The successes of many cash transfer programmes have helped spur their global spread over the past two decades. Four additional factors have contributed to the growing political commitment and fiscal space for implementation. First, the recent spate of global shocks has pushed people into poverty and insecurity and eroded hard-won development gains. Building resilience to future shocks has become a global priority and is one of three key areas of work identified in UNDP's Strategic Plan: 2014-2017 (DFID 2011; UNDP 2013a). The Strategic Plan highlights phased progress toward universal social protection as one means of managing economic, social and environmental risks.¹ Cash transfers can be one component of that progress.

¹ UNDP's 2013 Human Development Report underscores the importance of social protection in helping people manage risks to their welfare (UNDP 2013b). UNDP's 2011 Human Development Report called for integrated social protection approaches that address sustainability, equity and human development, highlighting the role for innovative social protection for adaptation and disaster risk reduction, including in the context of climate change (UNDP 2011a).

Second, there is growing concern over inequalities within countries. Along with resilience to shocks, inequality features prominently in global policy agendas. Inequality was one of the UN Development Group's 11 global thematic consultations on the post-2015 development agenda (UNDG 2013). Reducing exclusion and inequalities, including within countries, is one of the visions underpinning UNDP's Strategic Plan: 2014-2017. It is also one of the pillars of the UN Secretary-General's vision for a post-2015 development agenda (UNGA 2013). Cash transfers and other forms of social protection can reduce inequalities, as noted in UNDP's 2011 Human Development Report (UNDP 2011a).

Third, cash transfers figure within the global agenda on results-based financing,² especially within the health sector, where cash incentives have been used to encourage health care providers in rich and poor countries to deliver specific services³ (Morgan 2009; World Bank 2010), including testing and counselling services for HIV (see de Walque et al. 2013). Cash incentives have also been paid to patients to encourage screening and uptake of specific services. As part of a broader push toward results-based financing in the health sector, the World Bank has created new lending instruments to support LMICs to utilize cash incentives⁴ (World Bank 2011).

Fourth, recent scholarship has underscored the efficiency gains of cash transfers relative to traditional forms of aid (see e.g. Blattman and Niehaus 2014). The benefits of cash transfers relative to international food transfers in addressing hunger and famine are well documented. In times of crisis, cash can be transferred much more quickly and at much lower cost than food. These advantages are increasingly recognized across a broad range of poverty alleviation measures. The explosion of mobile technologies, especially in poorer countries, has further reduced the costs of transferring cash, making direct transfers of assets or services comparatively more expensive. Nonprofit organizations now exist with the sole purpose of using mobile technologies to transfer cash from individual donors in one country to recipients in another. Thus, digital cash transfers can not only transform the ways in which governments and traditional donors address poverty but they can also engage smaller, individual donors in a new aid paradigm.

An evolving HIV landscape has created opportunities for cash transfers as part of sustainable, comprehensive HIV responses

The idea that cash incentives can have potential impacts on HIV prevention is not new. For years cash transfers and other rewards have been provided to people who inject drugs (PWIDs) as an incentive to take up and maintain adherence to services, such as methadone substitution therapy, that are ultimately effective in reducing exposures to HIV (see e.g. Ghitza, Epstein and Preston 2008; Hser et al. 2011; Operario et al. 2013; Reback et al. 2010). Most of this research has been carried out in higher-income countries, without HIV prevention explicitly in mind.

That cash transfers are increasingly being explored specifically for HIV prevention, particularly in lower-income countries and in relation to sexual transmission, is an extension of years of country experience and experimentation. It also reflects an evolving AIDS landscape. Cash transfers, as a type of structural intervention for HIV prevention, are part of a broader call for 'combination prevention'—combining conventional biomedical and behavioural approaches to HIV with those that address underlying structural drivers (Padian et al. 2011; UNAIDS 2010b).

2 Results-based financing programmes reward the delivery of an agreed upon outcome, output or impact upon verification of delivery, as opposed to simply directly financing programme *inputs*.

3 See <http://www.rbfhealth.org/project/our-projects>

4 <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,contentMDK:23215867~pagePK:41367~piPK:51533~theSitePK:40941,00.html>

Significant shifts in the HIV financing landscape have only created more space for approaches, such as cash transfers, that move HIV responses from stand-alone silos to being embedded within countries' larger health, development and human rights strategies. The Global Fund's new funding model⁵ and the flat lining of HIV-specific donor funding since 2009 (Sidibé, Piot and Dybul 2012) have underscored the need for new prevention approaches that place a premium on cost-effectiveness, sustainability and national ownership. One way of meeting this need is through approaches that accomplish multiple HIV, health, development and human rights goals together - what UNDP and UNAIDS have coined 'the AIDS and MDGs approach' (Kim et al. 2011; UNDP and UNAIDS 2011). These prevention approaches are called 'development synergies' within the UNAIDS Investment Framework, which outlines a conceptual approach to more strategic resource allocation in the AIDS response (Schwartländer et al. 2011). The framework suggests that approximately 25 percent of resources for HIV responses should support development synergies, which would include social protection measures such as cash transfers.

That resources for HIV can be used to support development synergies does not suggest that they should *always* finance cash transfer programmes or other development interventions. Nor does it suggest what costs - in kind and quantity - should be borne by HIV budgets. Some argue that funds for HIV should be used in a targeted, strategic fashion to make development interventions, including cash transfers, sensitive to HIV (UNDP and UNAIDS 2012). Opportunities exist. In sub-Saharan Africa alone, over US\$10 billion - half from domestic budgets - was invested in cash transfer programmes in 2010 (Garcia and Moore 2012; UNICEF 2012). These existing resources can be programmed in ways that optimize cash transfers' potential contributions to HIV prevention, treatment and impact mitigation. Such thinking is an extension of investment approaches to HIV. Recent analyses indicate the ways in which cash transfers can be strategic, cost-effective investments of resources for HIV (Remme et al. 2012; Remme et al. 2014). Cash transfers' multiple, cross-sectoral impacts create opportunities for co-financing across sectors, such that the portion of programme costs borne by HIV budgets can represent good value for money from an HIV perspective.

An AIDS lens can strengthen social protection programmes, including cash transfers, and further position them as a development investment

One of the primary objectives of cash transfers is to alleviate poverty and promote human capital among vulnerable households. HIV-affected households face poverty as well as multiple other dimensions of vulnerability and insecurity. HIV and other catastrophic health conditions can negatively impact savings and asset accumulation as well as debt accumulation. The consequences of poor health can also shift consumption away from education, food and other development investments. These shifts may occur in addition to - or even before - impacts on income and other more narrow measurements of poverty. Such patterns are commonplace even in low-level epidemics. In Asia Pacific, UNDP has supported countries to better understand the household-level impacts of HIV on human development. Studies there confirmed significant negative consequences of HIV on not just income but also on employment, asset accumulation and education (TISS and UNDP 2011; UNDP 2011b; UNDP 2011c).

For a number of reasons, however, the multiple vulnerabilities of HIV-affected households may be less well-understood and visible to existing cash transfer programmes. For example, stigma and discrimination might prevent affected households from accessing existing cash transfer pro-

Viewing existing cash transfer programmes through an explicit AIDS lens can help these programmes reach the people they intend to reach and achieve their overall goals.

⁵ <http://www.theglobalfund.org/en/activities/fundingmodel/>

grammes. Similarly, the multiple, overlapping and sometimes unique vulnerabilities faced by HIV-affected households may not be recognized through conventional, narrowly targeted cash transfer programmes. Meeting narrowly defined income-based eligibility criteria, for example, may be difficult if impacts are felt primarily in terms of shifts in consumption patterns (e.g. from food, housing and education to health care-related expenses) and, especially in the short-run, liquidation of assets and savings. Income criteria on their own could miss these kinds of vulnerabilities. Accordingly, viewing existing cash transfer programmes through an explicit AIDS lens can help these programmes reach the people they intend to reach and achieve their overall goals.

The benefits of adopting an AIDS lens extend beyond cash transfers to social protection more broadly. UNDP's work in India is centred on impact mitigation and is an example of making broader social protection instruments HIV-sensitive (see Box 1, next page; see also Miller and Samson 2012; Temin 2010). Specifically, it involves changing eligibility and targeting to ensure that existing social protection programmes reach AIDS-affected households. To date, the focus on cash transfers in relation to HIV has mostly been on their potential for impact mitigation, especially among orphans and vulnerable children (see Webb 2011).

Impact mitigation is not divorced from HIV prevention. For example, AIDS-orphaned and AIDS-affected adolescents are highly vulnerable to the exchange of sex for money/goods, with extreme poverty as one documented explanation for this relationship (Cluver et al. 2011). Mitigating the impacts of poverty among these groups might, therefore, help prevent HIV.

Compelling evidence now suggests additional opportunities for cash transfers to support HIV prevention outcomes, particularly by protecting adolescent girls and young women from HIV. These findings, detailed herein, suggest that cash transfers and other social protection measures might have different impacts at different stages of the life course. Ensuring continuity of coverage throughout and across high risk periods may be a key result of applying a comprehensive AIDS lens to existing cash transfer programmes. The opportunity for cash transfer programmes to prevent HIV, as well as encourage HIV treatment access and mitigate HIV impacts, reinforces cash transfers' potential for achieving multiple health and development benefits simultaneously. Together, these benefits further reframe cash transfers – and social protection broadly – from an *expense* to a flexible, cost-effective *investment* in human development.

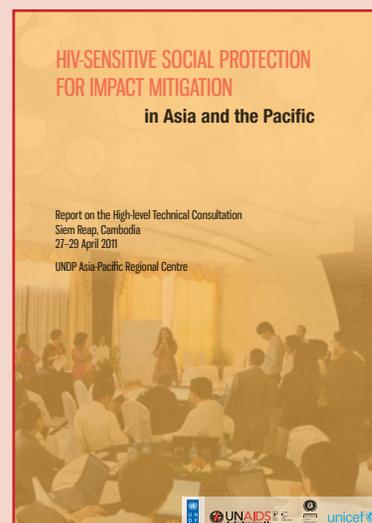
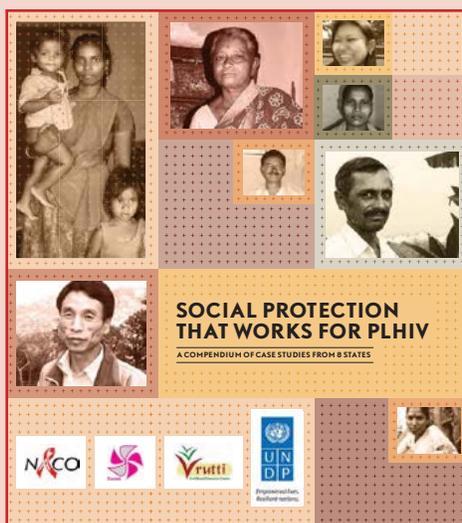
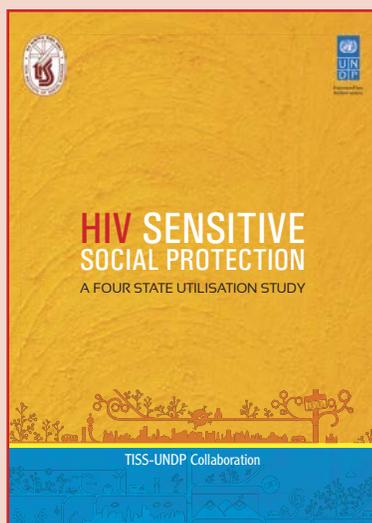
“Social protection is an investment to a country’s development, offering returns in poverty reduction, increased demand, and translating to expanded markets and a healthier, better educated, and more productive workforce.”

*– Ngy Chanphal, Secretary of State, Ministry of Interior & Vice Chairman,
Council for Agricultural and Rural Development, Cambodia (UNDP 2011b)*

The shift in narrative around social protection measures can have profound consequences for the political will and financial support necessary to scale-up cash transfer programmes. The ability to achieve multiple outcomes at once can position cash transfers and similar development interventions as attractive investments of public resources.

Box 1. UNDP support to HIV-sensitive social protection in India

A 2006 UNDP study in India found that the most visible impact of HIV at household level is the financial burden on HIV-affected families. In these households, people living with HIV (PLHIV) are often unable to work, families may liquidate assets and/or accumulate debt to pay medical fees and children routinely drop out of school to care for sick parents. Women and girls are particularly affected (Pradhan, Sundar and Singh 2006; UNDP 2011d). Yet, the reach and structure of India's social protection measures may not be sufficient to address the unique concerns of AIDS-affected households. In response, UNDP has supported networks of PLHIV (including women living with or affected by HIV) to better articulate their needs, understand social protection and demand inclusion (UNDP India 2011). UNDP has also advocated and provided technical support to relevant state and central ministries and civil society to expand the scope and inclusion criteria of India's existing social protection schemes, including by linking these schemes to PLHIV and those most vulnerable. For example, pension schemes have been amended to include women widowed by AIDS, while free road transport, legal assistance and nutrition have been provided to PLHIV.



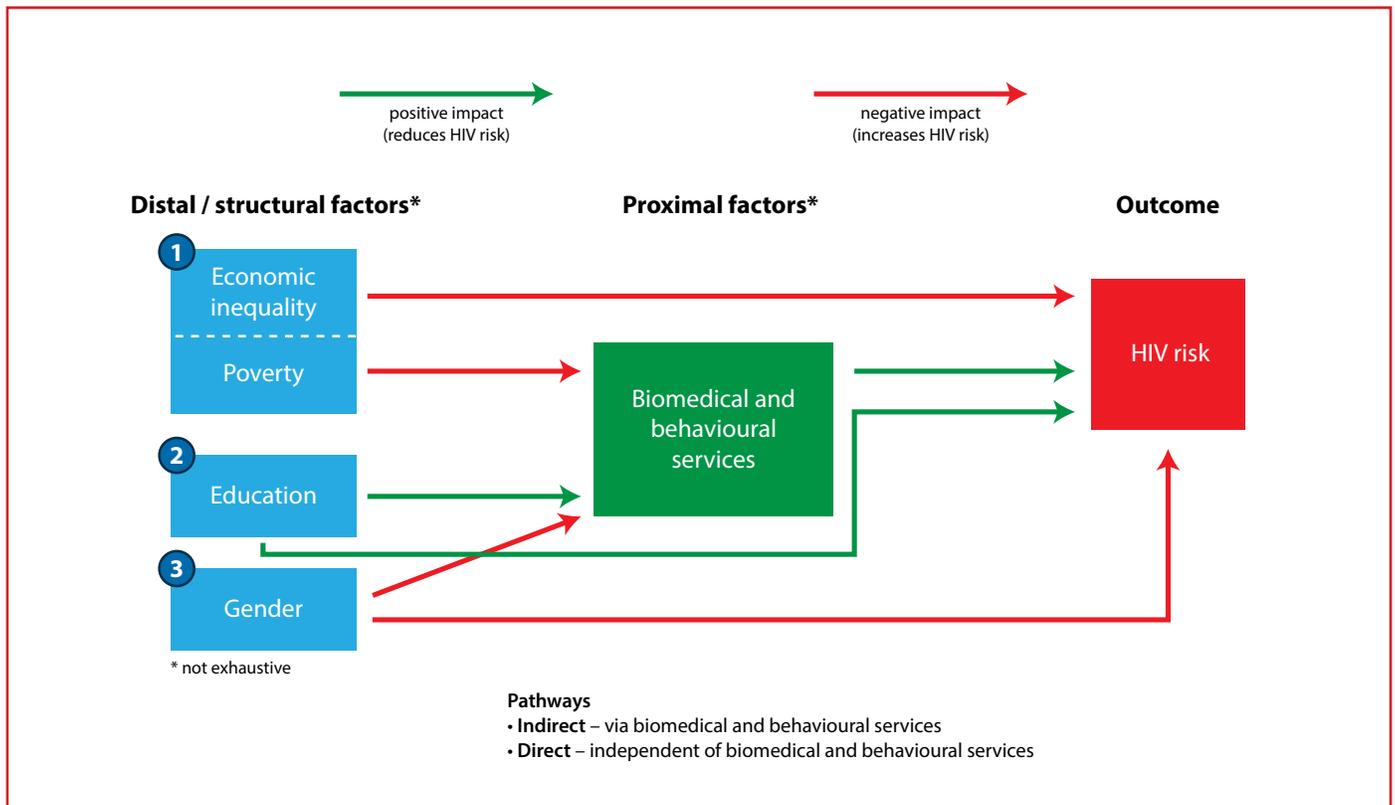
CHAPTER 1

CONCEPTUAL FRAMEWORK



HIV has multiple, overlapping risk factors, such as risky sexual behaviours and drug use. Several of these risk factors may be influenced by cash transfers. On a causal chain, risk factors for HIV may lie close to infection (proximal factors) or farther away (distal factors)(see Figure 1).¹ The certainty with which a risk factor is linked to HIV varies for numerous reasons: country and community contexts, the evolution of the epidemic over time, limited evidence and methodological constraints. In Figure 1, the single proximal factor – biomedical and behavioural services – aggregates a variety of individual services that have been shown to reduce risk of HIV infection, either by preventing risk behaviours or mitigating HIV-related harms. The aggregation is meant to illustrate the indirect and direct pathways through which structural factors can influence risk of HIV. For example, gender norms and inequalities can influence risk of HIV directly through, among other things, gender-based violence and inability for women to negotiate safer sex. These pathways are not detailed in the simplified framework in Figure 1. Gender can also indirectly influence risk of HIV by restricting access to biomedical and behavioural services that would otherwise reduce risk of HIV.

Figure 1. Simplified conceptual framework – HIV risk factors and pathways



¹ Proximal factors generally encompass individual decisions, such as condom use, the number and type of sexual partners and accessing drugs to prevent mother-to-child transmission. Distal, or structural factors, relate to social, economic and cultural conditions in the broader environment that shape individual decisions and behaviours. Examples include laws and policies, community norms and economic and gender inequalities.

1 *Links between poverty / economic inequality and HIV*

Poverty, wealth and economic inequality have all shown associations with risk of HIV but in different ways. The role of poverty and wealth in shaping risk of HIV infection is complex; it varies at global, regional and individual levels (Adato and Bassett 2012; Gillespie, Kadiyala and Greener 2007).

Poverty, wealth and economic inequality have all shown associations with risk of HIV but in different ways.

- At the global level, HIV disproportionately affects poorer countries. About 95 percent of new infections occur in LMICs (UNAIDS and WHO 2013). About 70 percent of those living with HIV are in sub-Saharan Africa (UNAIDS 2013).
- At the regional level, the relationship can invert, with wealthier countries disproportionately affected. In southern Africa, for example, countries with relatively high gross domestic products (GDPs) – for example, Swaziland, South Africa and Botswana – have some of the highest HIV prevalence rates in the world (Gupta et al. 2008; Kim et al. 2008; Mishra et al. 2007).
- At the individual level in poorer countries, wealth remains associated with increased risk of HIV infection as in the earlier days of the epidemic (Forston 2008; Fox 2012; Hargreaves and Glynn 2002; Lurie et al. 2003; Shelton, Cassell and Adetunji 2005). In some countries, wealthier income quintiles have higher HIV prevalence than poorer quintiles (Piot, Greener and Russell 2007). Recently, some have suggested that the epidemic is changing, with increasing shares of new infections among the poor (Hargreaves, Davey and White 2013). These scholars argue that while wealth has been associated with HIV historically, the wealthy are better able to take up new prevention and treatment interventions that reduce their risk over time relative to the poor.

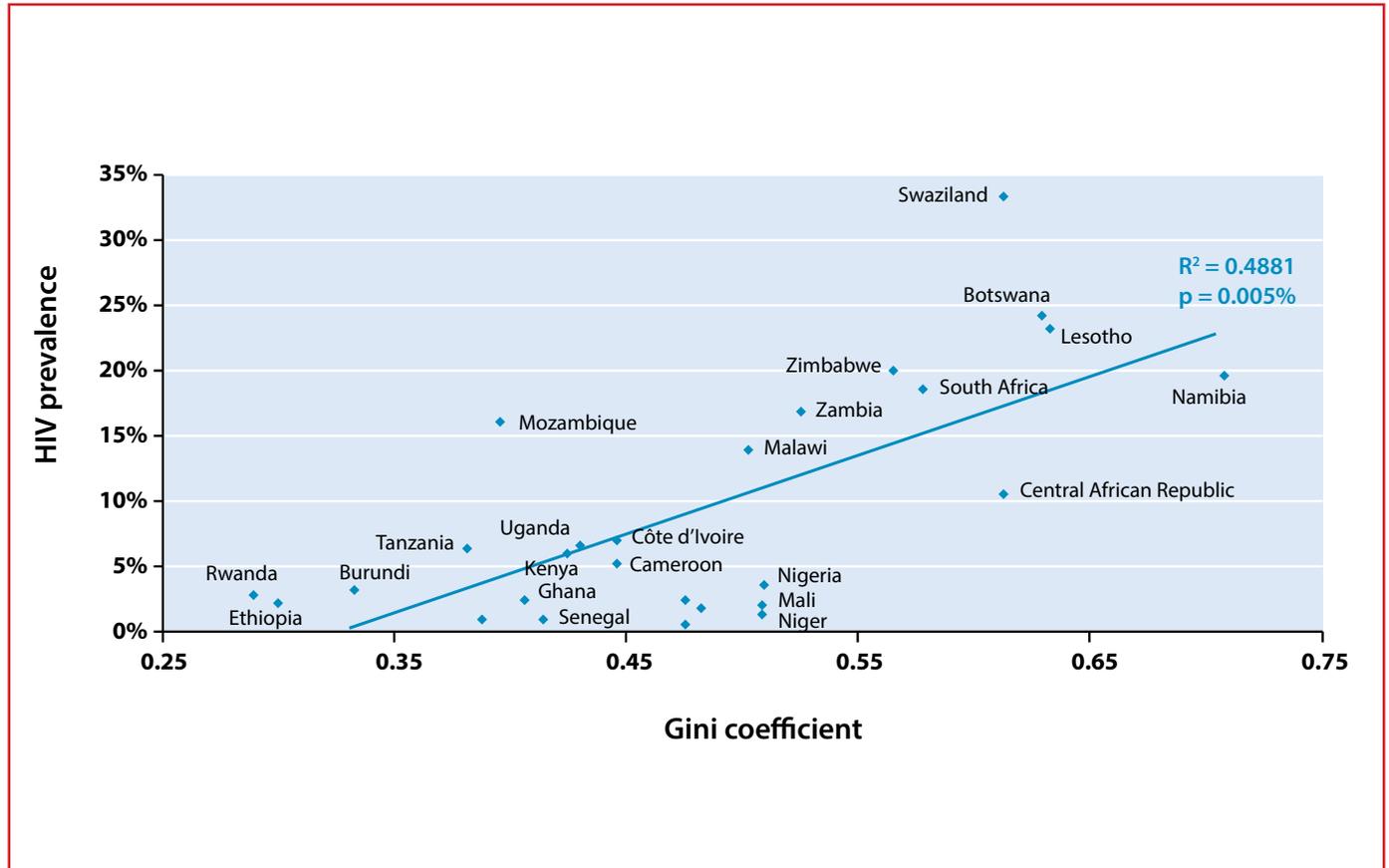
The relationship between economic inequality and HIV is becoming clearer. Increasingly, AIDS is seen as a disease of inequality and of economic and social transition (Mishra et al. 2007). Some LMICs show a strong association between adult urban HIV

Increasingly, AIDS is seen as a disease of inequality and of economic and social transition.

prevalence and income inequality (Gillespie, Kadiyala and Greener 2007; Piot, Greener and Russell 2007; World Bank 1997)(see Figure 2). Recent multi-level modelling provides additional evidence for a strong relationship between income inequality and HIV (Fox 2012). This relationship is independent of levels of wealth.

Emerging evidence also suggests an association between HIV and vulnerabilities, such as sudden income shocks, with climate change as one underlying driver (DFID 2011). For example, a review of 19 rural areas across sub-Saharan Africa found that HIV infection rates were 14 percent higher for women and 11 percent higher for men for every drought event experienced in the preceding ten years. The authors concluded that the higher HIV infection rates were likely due to an increase in female sex work in response to shocks (Burke, Gong and Jones 2011). Negative economic shocks have also been linked to riskier sex among women in western Kenya (Robinson and Yeh 2011) and among girls in South Africa (Dinkelman, Lam and Leibbrandt 2008).

Figure 2. Cross-country regression of HIV prevalence and inequality, as measured by the Gini coefficient



Source: Piot, Greener and Russell 2007

Economic instability does not lead to increased HIV prevalence in all cases, however. In Zimbabwe, between 1996 and 2009, during a period of economic collapse, HIV prevalence is estimated to have decreased from 25.6 to 13.7 percent (ANC HIV Estimates Technical Working Group Zimbabwe 2009). The decline has been attributed in part to men no longer having the disposable income to purchase sex or maintain multiple sexual partnerships or households. Mass displacement may have broken links between sexual networks (O'Brien and Broom 2011). In contrast, some researchers argue that Zimbabwe's economic collapse was only secondarily responsible for its decline in HIV prevalence (Halperin et al. 2011; Muchini et al. 2011). During the collapse, Zimbabweans also became more aware of AIDS deaths, facilitated by prevention programmes delivered through mass media, churches and workplaces. Nevertheless, the Zimbabwe case suggests that, in some instances, negative economic shocks can be associated with reduced HIV prevalence and perhaps contribute to that reduction. As a driver of HIV infection, economic contraction – or, conversely, economic growth – may ultimately prove to be a relatively minor driver on its own. Instead, the more significant determinant may be how economic change translates into changes in economic and gender inequalities in different contexts.

2 *Links between education and HIV*

Education is currently understood as a protective structural factor for HIV (a factor that reduces risk of HIV infection) but this relationship has not always been the case. Early in the epidemic, higher levels of HIV were found among the better educated, especially in sub-Saharan Africa, where education was linked to affluence, mobility and higher levels of sexual risk behaviours (Hargreaves et al. 2002). The pattern seems to have changed, however, with education now being strongly HIV protective (Bärnighausen et al. 2007; Beegle and Özler 2007; Hargreaves et al. 2007; Jukes, Simmons and Bundy 2008). The protective effect may be particularly important for girls (Hargreaves et al. 2008; Pettifor et al. 2008), provided the school environment itself is safe. Studies that move beyond association to find causal links between education and HIV are unfortunately rare, but some studies do strongly suggest a protective effect by virtue of reductions in proxies for risk of HIV, such as herpes (HSV-2) and self-reported sexual behaviours (Baird et al. 2010; Duflo et al. 2006).

Multiple mechanisms could reasonably explain observed associations. For the most part, children in school have smaller, safer social and sexual networks than do out of school youth (Hargreaves and Boler 2006; Hargreaves et al. 2007). Women who are more educated tend to: delay sex, marriage and childbearing; use condoms more often; have fewer children and healthier babies; and enjoy better earning potential (World Bank 2002). Education also influences risk of HIV indirectly by providing critical behavioural services, such as HIV awareness and knowledge.

3 *Links between gender and HIV*

Gender strongly affects risk of HIV infection, especially in areas with generalized epidemics. In sub-Saharan Africa, approximately 57 percent of PLHIV are women. Women also bear the greatest burden of care within HIV-affected families and communities. Also in sub-Saharan Africa, HIV prevalence among young women is more than twice as high as among young men (UNAIDS 2013). Girls and women between ages 15 and 24 are disproportionately affected (UNAIDS 2010a). Biological factors contribute to differences in risk of HIV, but gender inequality is also a strong influence. Risk pathways are both direct and indirect (see Figure 1), and gender inequalities overlap and interact with many other structural factors (e.g. economic inequalities, laws, policies and norms) to reinforce risk of HIV. For example, gender and economic inequalities drive overlapping risk behaviours, including: age-disparate sex, exchange of sex for money/goods, coerced sex, gender-based violence and inability to negotiate sex and safer sex practices (Byron, Gillespie and Hamazakaza 2006; Kim et al. 2008; Weiser et al. 2007). Women often have less control over their sexual choices than do men. One recent review found that women who have experienced intimate partner violence are 50 percent more likely to be living with HIV (UNAIDS 2013). Moreover, ethnographic studies in Tanzania on what is commonly referred to as 'transactional sex' have revealed strong, ingrained social norms – from peer groups to families – that legitimize and encourage exchange of sex for money/goods, even in situations where poverty itself is not necessarily an underlying driver (Wamoyi et al. 2010; Wamoyi et al. 2011a).

Gender norms and inequalities also act indirectly to increase risk of HIV by impeding access to biomedical and behavioural services. Spousal permission or escort to these services may be required, or women may not be able to access services, particularly sexual and reproductive health services, if the local service provider is male. Often, women have no control over household income to pay medical fees. Girls may bear labourious household tasks, such as fetching water, which impede attendance in school, where important knowledge about HIV and how to protect oneself is often conveyed.

All of the direct and indirect risk factors for HIV discussed in this chapter can be (and have been) influenced by cash transfer programmes. The next chapter reviews the state of the evidence on cash transfers for HIV prevention.

CHAPTER 2

STATE OF THE EVIDENCE

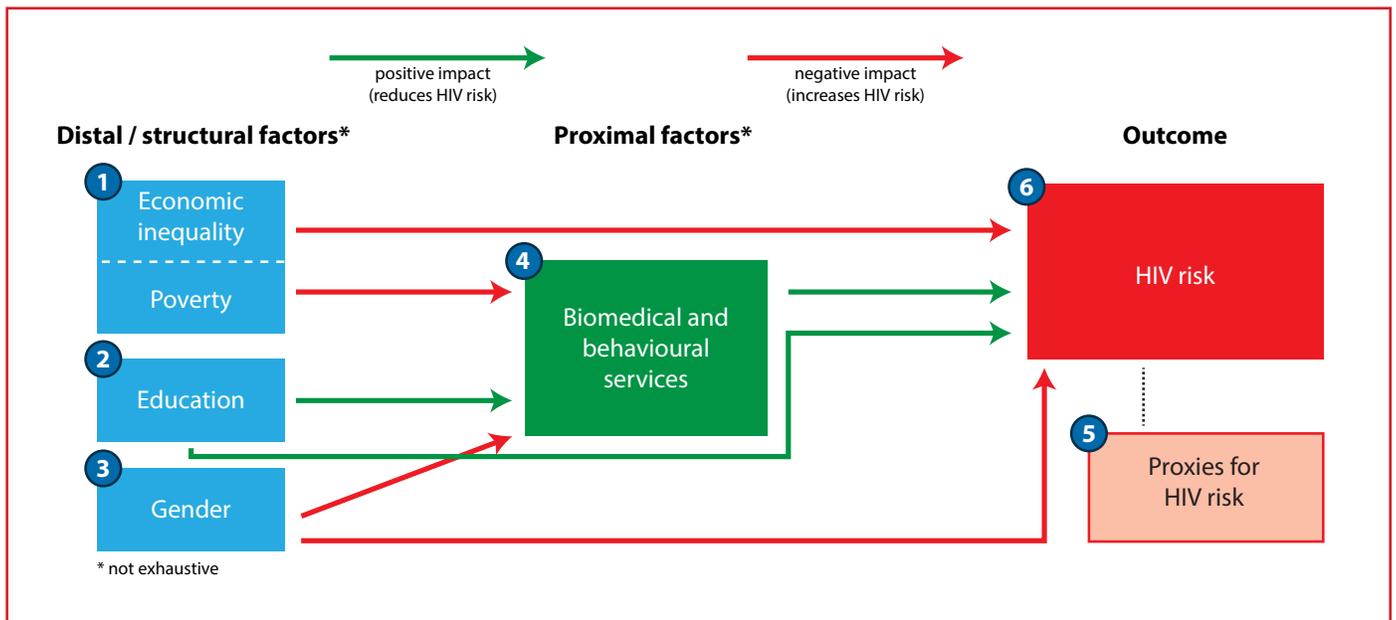


Reviews to date

The most comprehensive literature review of cash transfers for HIV prevention to date was conducted in 2012 by Pettifor et al., who identified 16 cash transfer programmes (ten completed at the time) that measure or have measured HIV or proxies for risk of HIV (see Appendix). As the authors note, most studies have been conducted with adolescent girls in developing countries, with payments focused on addressing structural risk factors for HIV, such as poverty and economic inequality. Pettifor et al. conclude that “cash transfer programs focused on changing risky sexual behaviors to reduce HIV risk suggest promise” (2012). More recently, Heise et al. considered the potential of cash transfers to prevent HIV, highlighting key research, policy and programmatic questions that should be addressed moving forward (2013). These themes and others are explored in greater detail herein.

The evidence that cash transfers can be effective for HIV prevention can be categorized into three broad areas.¹ First, evidence shows that cash transfers have had significant and positive impacts on key structural drivers of HIV: poverty / economic inequality, education and gender (Figure 3). Many studies that have tracked impacts of cash transfers on these structural drivers have also shown beneficial impacts on proxies for risk of HIV, such as exchange of sex for money/goods, number of sexual partners and other risky sexual behaviours. One landmark study, the Zomba trial in Malawi, tracked HIV prevalence directly, showing statistically significant differences in HIV between girls receiving transfers and those not receiving transfers (Baird et al. 2010; Baird et al. 2012). Second, there is evidence that cash transfers have increased uptake of biomedical and behavioural services for HIV prevention, such as voluntary counselling and testing (VCT), with implied impacts on risk of HIV. Cash transfers can also

Figure 3. Ways in which cash transfers have been (or can be) linked to risk of HIV



¹ This paper reviewed only cash transfer programmes. Other transfer programmes, such as food transfers, could also be effective for HIV prevention. There is a documented relationship between food insecurity and risk of HIV (Frega et al. 2010; Gillespie and Kadiyala 2005). Supply-side cash transfers for HIV prevention were also not evaluated. In Rwanda, cash incentives given to health service providers to encourage uptake of voluntary testing and counselling have worked (see de Walque et al. 2013). Cash incentives given to PWIDs were not evaluated in order to maintain focus on sexual transmission of HIV.

improve access to HIV treatment, for example by subsidizing transport costs to clinics and by increasing available income for the purchase of medicines. Effective HIV treatment has been shown to reduce the likelihood of HIV transmission. Third, CCTs tied to proxies for risk of HIV, such as curable sexually transmitted infections (STIs), have shown mixed but promising results.²

Taken together, the evidence indicates that cash transfer programmes have the potential to reduce the prevalence of HIV or proxies for risk of HIV, especially among girls, at least over the short term.

Evidence suggests that these three areas of impact are not mutually exclusive. Depending on targeting and design, cash transfers can impact one factor, several factors, or even have impacts across the HIV risk chain (Figure 3). The demonstrated and inferred impacts of cash transfers on gender inequalities can be especially cross-cutting. The majority of cash transfers designed for HIV prevention target girls and young women, who bear a significant portion of the HIV burden and often have less control over their sexual choices than do men. Some transfers implemented for broader development goals have had gender explicit objectives, for example reducing the gender gap in schooling (see e.g. Andaleeb, Baez and Del Carpio 2011; UNESCO 2004). Moreover, many of the transfers that have included men and boys in addition to women and girls have nonetheless shown differences in impact by sex.³

The causal pathways in Figure 3 overlap significantly with broader development and human rights objectives. The potential to catalyse cross-sector, integrated approaches to multiple health issues is an appealing feature of cash transfer programmes.

Income or incentive? Two schools of thought on how cash transfers work

Two schools of thought govern how cash transfers work to achieve health outcomes, including those linked to HIV. One school of thought argues that, when given money, people will spend it on health and education, and evidence exists to this effect (see e.g. Acacia Consultants 2007; Miller and Tsoka 2012). Some behavioural economists theorize that recipients adopt better outlooks for the future and thus stronger preferences for healthier behaviours when their socio-economic situation is improved (Fiszbein and Schady 2009; Pettifor et al. 2012). With respect to HIV prevention, the income boost from a cash transfer to adolescent girls and young women could provide them with alternatives to exchanging sex for money, gifts, favours or protection. The need to condition the transfer at all remains debated.⁴

In contrast, others argue that there is no guarantee that cash transfer recipients will use the extra money on health services or to adopt healthier behaviours. They argue that conditions on cash transfers are needed as part of a psychological incentive for people to pursue healthy behaviours. This second school of thought, based on contingency management, posits that conditional cash transfers can ‘nudge’ people toward healthy behaviours by ‘correcting’ irrational preferences for immediate gratification over discounted future risks – for example, the immediate and short-term gratification of risky unprotected sex or using sex to obtain goods versus the longer-term negative implications of adopting behaviours that increase STI and HIV risk (Higgins 2010; Ranganathan and Lagarde 2012). Transfers for HIV prevention based on this model, therefore, have conditioned payment on the achievement of a directly measured HIV-related outcome, such as getting tested or remaining STI/HIV free.

2 The one study that conditioned payment on actual HIV status showed no impact, but the authors hypothesized that the lack of effect could have been due to other programme design issues.

3 This section highlights where cash transfers have targeted women and girls, had gender explicit objectives and/or shown differences in impact by sex. Where studies have not tracked impacts on gender, such impacts might very reasonably be inferred, especially in those studies that have shown differences by sex. This section refrains from discussing inferred impacts, where possible. Future work is needed to confirm causal pathways, including research on how cash transfers empower girls and young women and impact gender dynamics more broadly (see Chapter 4).

4 Some academics favour in all cases placing a condition on the transfer while others are universally opposed. Compare Bassett 2008 (supporting the use of conditions as more effective policy) with Hanlon, Barrientos and Hulme 2010 (rejecting the contention that conditionality increases effectiveness of cash transfers). The use of conditionalities has been made on a case-by-case basis rather than pursuant to any general rule (de Janvry and Sadoulet 2006).

1 Cash transfers and poverty / economic inequality

Cash transfers can significantly impact the breadth and depth of poverty. Some evidence suggests that they can similarly reduce economic inequality. Evaluations have revealed that cash transfer programmes have reduced the depth or severity of poverty (i.e. the poverty gap⁵) in middle-income countries (MICs)(see Table 1). Less focus has been paid to impacts on economic inequality, but evidence suggests that cash transfers can significantly reduce national income inequalities, as shown in Brazil, Chile and Mexico between the mid-1990s and mid-2000s (Soares et al. 2009)(see Table 2). Given that economic inequality appears more clearly and closely associated with risk of HIV infection than does poverty on its own, the inequality reductions attributable to cash transfers, especially at community levels, may be more relevant for risk of HIV than poverty reductions per se. Greater understanding of the impacts of cash transfers on economic inequalities, for example in sub-Saharan Africa, would be invaluable.

The inequality reductions attributable to cash transfers may be more relevant for risk of HIV than poverty reductions per se.

Table 1. The impact of cash transfers on poverty reduction

Country	Programme	Transfer type	Poverty measure/s and % reduction attributed to transfer	Time-frame
 Mexico	Oportunidades	CCT	Poverty gap → 20% Squared poverty gap → 29%	Various years
 South Africa	Child Support Grants	UCT	Poverty gap → 47%	Various years
 Colombia	Familias en Acción	CCT	Poverty gap → 7% Headcount index → 3% Squared poverty gap → 2%	2002-2006
 Nicaragua	Red de Protección Social (RPS)	CCT	Poverty gap → 9-13% Headcount index → 5-7% Squared poverty gap → 9-12%	2000-2002
 Honduras	Programa de Asignación Familiar (PRAF)	CCT	Poverty gap → 2% Squared poverty gap → 2%	2000-2002
 Jamaica	Program of Advancement through Health and Education (PATH)	CCT	Squared poverty gap → 13%	Various years

Chart compiled from: DFID 2011; Fiszbein and Schady 2009; Soares et al. 2009

⁵ The poverty gap is the average distance by which living standards fall below the poverty line. It is calculated by adding the shortfalls of the poor (assuming the non-poor have zero shortfall) and dividing by the whole population. See http://siteresources.worldbank.org/INTPRS1/Resources/383606-1205334112622/5467_chap1.pdf.

Table 2. The impact of cash transfers on inequality reduction

Country	Programme	Transfer type	% reduction in Gini coefficient attributed to transfer	Time-frame
 Brazil	Bolsa Família	CCT	21%	1995-2004
 Chile	Chile Solidario	CCT	15%	1996-2003
 Mexico	Oportunidades	CCT	21%	1996-2004
 South Africa	Various cash grants	UCT	3%	Various years

Chart compiled from: DFID 2011; Fiszbein and Schady 2009; Soares et al. 2009

Studies that examine the impact of cash transfers on poverty or economic inequality that have also explicitly tracked HIV or proxies for risk of HIV are relatively rare. For the most part, impacts on HIV must be inferred, where plausible, from a two-stage process: (1) the degree to which cash transfers decrease inequality and/or protect against shocks; and (2) an understanding of how inequality and/or shocks drive HIV or proxies for risk of HIV in certain contexts. Some critical studies, however, provide additional evidence.

- Initiated in 2007, Kenya's Cash Transfer for Orphans and Vulnerable Children (CT-OVC) provides a flat unconditional cash transfer of approximately US\$20 per month to poor families with an eligible child aged 17 or below. A 2011 impact assessment found that the transfer was associated with a range of impacts on sexual behaviour. Among young people⁶ who had not had sex at baseline, those in programme households were 7 percentage points less likely to have had their sexual debut than were those not in programme households. Among those who had debuted at baseline, young people in programme households were 11 percentage points less likely to have had three or more unprotected sexual acts in the preceding three months. Young women who had their sexual debut after 2007 were 7 percentage points less likely to have had more than two sexual partners in the preceding twelve months. Young women 12-24 in programme households were 5 percentage points less likely to have ever been pregnant. The authors attributed impacts on pregnancy to higher educational attainment achieved by women in programme households (Handa et al. 2012). A later randomized study of Kenya's CT-OVC, among individuals 15-25 years old, demonstrated that the programme reduced odds of sexual debut by 31 percent, though no statistically significant effects were observed on condom use, number of partners and sex in exchange for money/goods. Impacts on sexual debut were stronger among females (42 percent less likely relative to controls) than among males (26 percent less likely relative to controls). The authors noted that because the transfers were unconditional and given to caregivers, impacts were indirect, possibly by keeping young people in school (Handa et al. 2014).

⁶ Those aged 11-16 at baseline (15-20 at follow-up).

- South Africa's Child Support Grant (CSG) provides an unconditional monthly benefit per child (under 18) to households living below the poverty line. In 2012, the grant reached nearly 11 million children, more than half of all children in the country. A large-scale evaluation found that, among adolescents, the CSG was associated with reductions in pregnancy, alcohol use and risky sexual activity, including number of sexual partners.⁷ Effects were stronger with early receipt of the grant, and girls in particular were more likely to report never having had sex if their household began receiving the grant when they were younger (DSD, SASSA and UNICEF 2012). These results support qualitative analysis of the CSG, which identified income poverty as the major source of HIV risk among adolescents in the study area, with girls having relationships with older men for material benefit as the main link (DSD, SASSA and UNICEF 2011).
- A study by Cluver et al. also evaluated how South Africa's CSG, along with another state-led grant for 'orphaned, abandoned, at risk, abused or neglected' children, could impact HIV outcomes. Girls whose households received a child-focused cash transfer were 51 percent less likely to exchange sex for money/goods and 71 percent less likely to be in an age-disparate sexual relationship. No impacts were observed on HIV risk behaviours for boys (2013). The work by Cluver et al. is especially noteworthy because it sought to assess the explicit HIV impacts of large-scale, state-led cash transfer programmes that were implemented for broader development reasons – a strategy with significant implications in terms of policy and programmes as well as research (see Chapter 4).
- More recently, in 2014, Cluver et al. published a prospective observational study of 3,515 adolescents aged 10-18⁸ years from randomly selected census areas in two South African provinces. Antenatal HIV prevalence at all sites was over 30 percent, and girls accounted for just over half the participants (57 percent). The study found that unconditional economic support in the form of government cash transfers, free school meals and/or food gardens reduced HIV risk behaviours⁹ for girls by 37 percent, but such support was not associated with statistically significant reductions in HIV risk behaviours for boys. The integration of psychosocial support (positive parenting and teacher support) with the economic support, however, was associated with reductions in HIV risk behaviours for both girls (45 percent reduction) and boys (50 percent reduction)(Cluver et al. 2014). These findings suggest that providing "care" alongside "cash" (i.e. economic support) yields greater HIV impacts than providing "cash" on its own. They also suggest that "cash" and "care" together might reduce gender gaps that are evident when using "cash" alone. A package of social protection measures could prove more efficacious for HIV prevention than any one measure in isolation, at least in South Africa and similar contexts.

Evidence continues to accumulate on how cash transfers can reduce poverty, economic inequality and proxies for risk of HIV. Where cash transfers achieve these outcomes, and where poverty or economic inequality is indeed a major structural driver of HIV, it is not a major leap to assume some reduction in HIV incidence or prevalence. Still, more direct and confirmed evidence is needed as to the existence, size and direction of any effect, especially considering that the long-term sustainability of observed impacts is debated (Hanlon, Barrientos and Hulme 2010; Medeiros, Britto and Soares 2008). In most cases, cash transfer programmes will likely continue to be evaluated based on extrapolation from observed short-term impacts (Reimers, Deshano da Silva and Trevino 2006).

7 Based on cross-tabulations with chi-square tests, adolescents in households receiving the CSG were 16 percentage points more likely to be abstaining from sex than adolescents in households not receiving the CSG (regardless of past receipt).

8 Because few adolescents below 12 years old reported any sexual activity, the dataset was limited to adolescents aged 12-18 years, excluding 305 boys and 428 girls from the analysis (n = 2,668).

9 HIV risk behaviours measured included: unprotected sex, transactional sex, age-disparate sex, casual sex (e.g. one-night stands, irregular partners), past-year sexual debut, multiple sexual partners, sex whilst using substances and pregnancy.



2 Cash transfers and education

Of the estimated 29 CCTs in developing countries in 2009, most included substantial schooling conditionalities, usually on one or more of the following: school enrolment, 80-85 percent school attendance, and, less frequently, some measure of student performance (Behrman, Parker and Todd 2011; Fiszbein and Schady 2009). Education is believed to be one of the primary mechanisms by which cash transfers can address intergenerational poverty (Reimers, DeShano da Silva and Trevino 2006).

Most studies on cash transfers linked to education have focused on more conventional school-related outcomes (Baird et al. 2010). The effectiveness of CCTs in improving these more

conventional outcomes varies by programme design and country context, but empirical evidence reveals that CCTs have almost universally increased school enrolment and attendance, narrowed the educational gender gap and reduced dropout rates (Filmer and Schady 2011; Fiszbein and Schady 2009; Latapí and de la Rocha 2008). UCTs have also improved educational outcomes, though perhaps not as significantly as conditional transfers (Case, Hosegood and Lund 2005; Schady and Araujo 2006). A recent study in Zimbabwe showed that both a UCT and CCT increased school attendance, though weakly enforced conditionalities and contamination across study arms could have underestimated the effect of the CCT relative to the UCT (Robertson et al. 2013). Children in households that began receiving South Africa's unconditional CSG at the time of the child's birth completed more grades and achieved higher test scores than did children whose household began receiving transfers when the child was six. The impact was driven by a 27 percent reduction in delays entering school by girls. While education impacts are important in their own right, these more conventional schooling outcomes could in certain contexts be considered HIV protective, particularly for girls.

The Zomba trial in Malawi investigated the impact of cash transfers on HIV and HSV-2 prevalence among adolescent girls. Among girls who were enrolled in school at baseline, the study showed statistically significant differences in HIV prevalence between those receiving transfers and those not receiving transfers. The study had two intervention arms: an unconditional transfer and a transfer conditioned on school attendance. While school enrolment increased more in the conditional arm than in the unconditional arm, both arms showed similar reductions in HIV prevalence (Box 2).

Box 2. The Zomba trial in Malawi**Study design**

The Zomba study randomly allocated 3,796 young women aged 13 to 22 to receive either monthly cash payments of different values or no cash payments. Girls receiving payments were randomized to receive the money either unconditionally or conditioned on regular school attendance. Girls' parents also received payments.

Results

Among girls already in school at baseline, a pooled analysis of the study's UCT and CCT arms showed, after 18 months, 64 percent lower HIV prevalence and 76 percent lower HSV-2 prevalence relative to girls not receiving any transfer. The apparent reduction in HIV risk is, at least in the short term, equivalent to that from male circumcision among heterosexual men (54 percent risk reduction), one of the major biomedical advances in HIV prevention over the past decade (Siegfried et al. 2009). Greater school enrolment was also observed. The risk reduction in the Zomba trial was attributed to changes in self-reported sexual behaviour among beneficiaries (they reported choosing younger male partners, who are less likely than older men to have HIV, and having sex less frequently with those partners). The authors detected no effects on age of sexual debut or rates of unprotected sex (Baird et al. 2010; Baird et al. 2012).

The results were different among girls receiving transfers who had already dropped out of school at baseline. For them, no effect on HIV or HSV-2 was observed, though their enrolment in school increased dramatically. The lack of effect may have been due to low statistical power for detecting HIV and HSV-2 differences in this group.

Discussion

It is unclear whether a condition was necessary for the observed impacts among girls already enrolled in school at baseline, as no significant differences in HIV and HSV-2 were found between girls receiving payments conditional on attendance versus those receiving unconditional payments. That is, girls who received a UCT showed significant reductions in risk of HIV and HSV-2 even if they did not regularly attend school.

Baird et al. noted high rates of transactional sex in the study area. Roughly one quarter of participants who were sexually active at baseline reported having at some point started a sexual relationship for monetary reasons (2012). One hypothesis, then, is that the cash transfers reduced the frequency with which girls engaged in transactional sex, which would mean that the income boost from the transfers likely played a significant part in the risk reduction. It is less certain what role, if any, schooling played (Baird et al. 2012). It is possible that schooling may have had a minor effect by shifting the sexual networks of some girls to the younger, safer partners, as reported. Yet, baseline dropouts saw dramatic increases in school enrolment but no statistically significant effect on HIV or HSV-2. Apart from explanations of low statistical power, reasons for this apparent lack of effect are unclear. If schooling did, in fact, play a minor or no role in the Zomba trial, this could have important implications on the design of future cash transfers to reduce risk of HIV for girls in similar contexts.

Further questions on the Zomba trial remain. It will be important, for example, to understand to what degree the intervention merely shifted the demand of older high-risk men towards girls who are out-of-school, thereby rendering those girls more susceptible to HIV infection. If so, one implication may be that cash transfers should reach all vulnerable girls in a community rather than targeting some directly through eligibility criteria or indirectly through compliance with conditionalities. Finally, because the effects of the Zomba trial were observed over the short term, it is not known whether they are sustainable, especially in the absence of a continued cash incentive. Nor is it clear whether the effects might be enhanced through complementary measures that address gender norms and community attitudes towards transactional sex. These remaining questions underscore the importance of continued research.

While the Zomba trial is the only study on cash transfers linked to education to track HIV outcomes explicitly, other studies linked to education have tracked possible proxies for risk of HIV, finding significant and positive results. A CCT for girls in Pakistan that conditioned on at least 80 percent school attendance showed delays in marriage and fewer children among participating girls aged 15-19 (Andaleeb, Baez and Del Carpio 2011).¹⁰ Three similar programmes – two in Kenya and one in Zimbabwe – provided school fees and uniforms to keep children in school.¹¹ While not cash transfers per se, these programmes functioned to reduce the cost of schooling. Between the three programmes, observed impacts included delayed sexual debut, lowered dropout rates, reduced teen marriage and childbearing, increased bonding and gender equity attitudes, better future expectations and more concerns over the consequences of sex (Duflo et al. 2006/Duflo, Dupas and Kremer 2011; Hallfors et al. 2011; Cho et al. 2011).

Bangladesh's Female Secondary School Stipend Programme took the extra step of making receipt of its stipend conditional on participant girls remaining unmarried through secondary school (it also required 75 percent school attendance and marks of at least 45 percent)(UNESCO 2004). One evaluation found "a wide range of positive impacts of the stipend programme on girls' lives, such as increase in age at marriage, greater birth spacing, positive attitude to smaller family size, and higher employment and earning levels" (Mahmud 2003). Such programme impacts are consistent with the fact that girls with secondary schooling are up to six times less likely to marry as children compared to girls who have little or no education (Malhotra et al. 2011). Marriage and pregnancy are more likely to be consequences than causes of girls leaving school early, though the nature of this relationship is subject to debate (Lloyd 2009).

Finally, one study compared two otherwise similar large-scale cash transfer programmes in Bogotá, Colombia, both conditioned on education – *Subsidio Educativo*, which conditions renewal on school advancement, and *Familias en Acción*, which conditions only on enrolment. *Subsidio Educativo* reduced teenage pregnancy while *Familias en Acción* had no observable effect. The authors hypothesized that a pregnant girl could not successfully complete her grade and advance to the following year, but, in a programme that does not condition on advancement, she could simply repeat the year and continue receiving the subsidy (Cortes, Gallego, and Maldonado, 2011).

Latin America and Malawi are very different contexts with different HIV epidemics. In *Subsidio Educativo*, school attendance impacted teenage pregnancy, a proxy for risk of HIV infection, but school attendance appears to have played a minor role (or not to have mattered at all) in reducing risk of HIV or HSV-2 in the Zomba trial. Such apparent incongruities speak to the importance of considering regional and epidemiological differences when designing cash transfer schemes. Moving forward, it will be crucial to better understand causal pathways and contexts. One of the most important questions is whether cash transfers linked to education impact HIV and HIV-related proxies predominantly through the income boost, the schooling conditionality or both. Another critical area for further exploration is better understanding the degree to which reducing gender inequalities in income and schooling matters for HIV and broader health outcomes. Answers will inform the development of future programmes, the HIV-sensitization of current programmes and scale-up of existing pilots.

¹⁰ The study used cross-sectional data at the school and household levels and quasi-experimental methods to contrast cohorts of girls in treatment and control districts (i.e. double-difference and RDD frameworks).

¹¹ In addition to receiving uniforms, some students in the Duflo study were also exposed to teachers who had been trained in HIV curriculum (which had little impact on childbearing) and encouraged to write essays debating the role of condoms in HIV prevention. At the time of the study, the intervention was too recent to detect any possible reduction in childbearing.

3 *Cash transfers and gender*

Reducing gender disparities is a crucial structural approach for HIV prevention. Cash transfers can be particularly useful in this regard because, as noted throughout, they tend to be gender-specific in terms of targeting and impacts. Mothers, for example, are often the target recipients of transfers conditioned on children's education or health services. To close the gender gap in schooling, girls are frequently the beneficiaries of cash transfers for education, as was the case in the Zomba trial. A growing number of studies find that cash transfers to women can increase their self-confidence, social standing and autonomy, while decreasing their economic dependence on men (Adato and Bassett 2008; Gorman 2004; Kim et al. 2008; Temin 2010). These impacts combine to provide women with greater control over their sexual relationships, particularly by increasing women's power to negotiate with whom, how and when they have sex. For instance, within six months of the transfer, female beneficiaries of a programme in Namibia reported more control over their sexuality and increased economic independence from men (BIG Coalition 2008; Temin 2010). Results from many of the studies on cash transfers for HIV prevention have a clear gendered impact.

4 *Cash transfers linked to biomedical or behavioural services for HIV prevention*

There is growing evidence on the impact of cash transfers conditioned on HIV prevention services. In a randomized control trial for a cash transfer conditioned on uptake of VCT services, those receiving the cash incentive were twice as likely to retrieve HIV test results, an absolute increase of 27-39 percent (Thornton 2008). Each dollar of the incentive corresponded with a 9 percent increase in collection of results. The final attendance rate in intervention areas was 72 percent. The impacts had a clear gender element. Women—but not men—had a small increase in VCT uptake when neighbours received a cash transfer for VCT. When



women received the transfer, their husbands were more likely to access VCT even when the husbands themselves did not receive the transfer. The reverse was not observed (Thornton 2008). A subsequent study confirmed the positive spillover effect of social networks on uptake of VCT, though the effect appeared stronger for men than for women (Godlonton and Thornton 2012).

A later study in which receipt of a cash transfer was conditioned on maintaining HIV status—and, thus, a follow-up HIV test—showed that those receiving any incentive, including those who were HIV-positive at baseline, were 9-10 percent more likely to undergo the follow-up test (Kohler and Thornton 2011). A similar effect was seen amongst those who were HIV-negative at baseline.

Cash transfers have also improved access to antiretroviral therapy (ART), which itself can be an important HIV prevention strategy (often referred to as ‘treatment as prevention’). ART has been shown to decrease perinatal transmission of HIV when given to mothers before and/or during childbirth (Siegfried et al. 2011), and, by lowering viral loads, ART has also been shown to decrease risk of transmission among sero-discordant couples (Cohen, McCauley and Gamble 2012). These benefits are stronger when ART is given early (Cohen et al. 2011; Dieffenbach 2012).

A recent RCT in a resource-limited area of Uganda showed that cash transfers of US\$5-8 per month to cover transportation costs to an HIV clinic increased treatment adherence among patients (Emenyonu et al. 2010). A 2007 evaluation of Kenya’s Cash Transfer for OVC found that children with HIV received antiretroviral (ARV) treatment that they were otherwise unable to afford, while adult beneficiaries used the transfer to purchase ARV treatment (Acacia Consultants 2007; Adato and Bassett 2012). PLHIV who received an unconditional cash transfer through the Malawian Social Transfer Scheme (SCT) reported using the money to buy ARVs at the hospital and for transport to receive ARV tablets (Miller and Tsoka 2012). Because SCT was unconditional, it is possible that the transfer removed financial barriers to treatment – allowing people to spend as they would have preferred – and/or the additional money improved recipients’ future expectations, leading them to seek treatment more actively. The precise mechanism is an important research question.

5 **Cash transfers conditioned on proxies for risk of HIV infection**

Some researchers have proposed linking transfers to non-stigmatizing proxies for risk of HIV infection, such as curable STIs. A recent RCT in Tanzania, RESPECT, conditioned payments on being free of a suite of common STIs, most of which were curable.¹² The study showed mixed but promising results. Those receiving the highest cash payment of US\$20 every four months had a combined prevalence of four curable STIs¹³ that was 27 percent lower than that for the control group, though this finding was only marginally statistically significant after twelve months (de Walque et al. 2012a). No change in combined HIV, syphilis or HSV-2 prevalence was observed. The authors speculate that the observed effects could have been due to participants seeking outside treatment rather than changing sexual behaviours. The RESPECT study underscores that the value of the incentives matters. While those receiving US\$10 every four months (US\$30 overall) did not have any reduction in curable STIs, those receiving US\$20 every four months (US\$60 overall) experienced the 27 percent reduction in STIs. Because study participants had an average annual income of only US\$250, the difference between US\$10 and US\$20 represents a significant share of income. As the study had no unconditional arm for comparison, it is unclear whether the observed impacts among those receiving US\$20 are attributable to the conditionality (i.e. incentivized behaviour change) or the income boost from the transfer (i.e. an improved economic situation).

¹² *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Trichomonas vaginalis* at four, eight and twelve months; syphilis and HSV-2 at twelve months

¹³ *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Trichomonas vaginalis*, *Mycoplasma genitalium*

An RCT in Lesotho further underscores the promise of cash transfers tied to proxies for risk of HIV. The Lesotho study conditioned eligibility for a cash prize lottery on participants remaining free of curable STIs. Participants were randomly assigned to either a control arm or one of two intervention arms eligible to receive lottery tickets: high or low (1,000 or 500 Malotis or South African Rands). All arms received STI testing, counselling, and STI treatment every four months over a two-year period. All participants were tested for HIV at baseline and after 16, 20 and 24 months. Village-level lotteries were organized every four months in which STI negative individuals from the intervention arms were eligible to participate and during which four lottery winners (two males, two females) per village were drawn. After two years of intervention, HIV incidence was 25 percent lower among those eligible for the lotteries than among those not eligible. The largest impacts were seen among women (33 percent lower HIV incidence) and in the group eligible for the high prize lotteries (31 percent lower HIV incidence)(Björkman-Nyqvist et al. 2013). As with RESPECT, the study in Lesotho demonstrates that the level of incentive matters. More research is needed to understand the exact mechanisms of impact.

Finally, Bangladesh's Female Secondary School Stipend Programme (see Cash transfers and education) is another study that linked to proxies for risk of HIV. In addition to conditionalities on school attendance and performance, the programme required that participant girls remain unmarried through secondary school. While HIV was not tracked in this study, reducing early marriage could reduce risk of HIV in certain contexts.

6 *Cash transfers conditioned on HIV status*

The evidence base for cash transfers linked to HIV status is limited, partly because such CCTs are controversial and raise ethical concerns. One RCT in Malawi did condition on maintaining HIV status. To minimize ethical concerns and the potential for stigma through exclusion from the study, both HIV-positive and HIV-negative individuals were included. Participants were randomly allocated to receive cash incentives of US\$0, 4 or 16. The study did not demonstrate any reduction in risk of HIV infection or changes in self-reported sexual behaviour. The authors acknowledge that the lack of effect could have been due to the incentives being too low as a share of income and/or too delayed to establish creditability and overcome any hyperbolic discounting of future rewards.¹⁴ Further, the study was not designed to detect small changes in HIV incidence. Interestingly, results showed that, beginning one week after final payment, men were 9 percent more likely to engage in risky sex (after accounting for the fact they were 5 percent more likely to use a condom) while women were 6.7 percent less likely to engage in risky sex (mostly due to abstinence rather than increased condom use)(Kohler and Thornton 2011). These findings raise important questions about gendered impacts and targeting in cash transfers for HIV prevention as well as the need to understand the impacts of discontinuing a cash transfer programme. For example, in light of the results of the Zomba trial and other research, it may be that the unconditional payment of cash, specifically to women rather than men, is at least as important as conditioning on certain behaviours or outcomes for reducing risk of HIV in certain contexts.

¹⁴ Hyperbolic discounting of future rewards is a form of time-inconsistent preferences. Economic research has shown that people tend to prefer smaller, more immediate rewards over larger rewards later on. Essentially, the value of these more removed, larger rewards is discounted because of the wait-time needed to receive them (see e.g. Kirby and Maraković 1995).

CHAPTER 3

ISSUES, CONCERNS AND LIMITATIONS



Establishing that cash transfers can be effective for HIV prevention, while critical, is only a first step in deciding whether and how to implement a cash transfer programme. Policymakers and programme managers must carefully consider a number of other important issues and risks:

- ① ***Programme design;***
- ② ***Human rights critiques;***
- ③ ***Perverse incentives;***
- ④ ***Availability of supply-side complements; and***
- ⑤ ***Scale, sustainability and cost-effectiveness.***

These issues have been outlined extensively for cash transfers in general, and for other demand-side incentives (see e.g. DFID 2011; Fiszbein and Schady 2009). But they also matter – in some cases uniquely – for cash transfers for HIV prevention. Apart from elements of programme design, existing studies of cash transfers for HIV prevention have not explicitly or rigorously explored most of these issues.

① ***Programme design***

Cash transfers for HIV prevention have been designed around structural drivers of HIV, proxies for risk of HIV, biomedical and behavioural services for HIV and even HIV directly. The results, including the absence of impact in the one study that directly linked a cash transfer to HIV status, highlight the critical role of programme design. Design elements vary and are often programme-specific, but all cash transfers address the following three key elements:

Targeting

Targeting establishes eligibility of participants and enrolment processes. Geography, household type and demographics are common targeting criteria, often used in combination (DFID 2011).¹ Community-based targeting is also used (Fiszbein and Schady 2009). Most transfers for HIV prevention have used geographic (e.g. a specific locality) and demographic (e.g. girls and young women) targeting together.

Dimensions and considerations for targeting include cost, cost-effectiveness, perverse incentives, issues of fairness and equity, stigma and discrimination, and confidentiality. Unintended consequences are possible, for example when people change behaviours to meet eligibility criteria. Targeting based on HIV status is potentially stigmatizing and unethical. It may also compromise efficacy, as excluding PLHIV from prevention efforts is counterproductive to population health. No study thus far has targeted HIV-negative participants only. The reality is that all targeting methods are imperfect, resulting in exclusion and inclusion errors (DFID 2011), and there are no perfect answers with regard to trade-offs. The core principle is to achieve maximum impact at lowest cost while protecting human rights and being as equitable as possible.

Perhaps the most important targeting question for cash transfers for HIV prevention is whether to focus on women and girls (and at what age) or to also include men and boys. A second and related question is whether programmes should

¹ For the most part, Latin American CCT programmes (which are the majority of the programmes with known targeting results) use a combination of geographic targeting and proxy means testing, and devote considerable effort toward effectively implementing these targeting systems (Fiszbein and Schady 2009).

target only among a definable subset of a community, such as the poorest, or should instead encompass all. The one study that linked cash transfers to HIV status (Kohler and Thornton 2011) may shed light on these questions. When the incentive was finally paid to a subset of the community - in some ways functioning as a UCT - observed impacts on sexual behaviour were different among men than among women. Men increased risky sexual behaviour while women decreased it. Understanding AIDS as a disease of inequality, with economic and gender inequalities interacting, may mean that targeting women and girls, particularly poorer women and girls, is the most effective strategy. Cash transfers that ultimately empower women and girls in negotiating sex, particularly in areas with high rates of new HIV infections, could be especially effective. The overall objective would then be to decrease gender inequalities – in resources and power – within a community or sexual network(s). Targeting that inadvertently maintains or increases inequalities among men and women would be less effective or counterproductive.

Benefit structure

Benefit structure refers to the system to pay benefits. It includes the level of benefits, payment mechanisms, selection of transfer beneficiaries/recipients and frequency of payment. Benefit structure is critical for HIV prevention. Research on incentives and health suggests that providing small, tangible incentives more frequently and closer to observed outcomes is more effective than providing less frequent, larger payments later (Volpp et al. 2011). Some studies, such as the Zomba trial, share the cash transfer between the girls (target beneficiaries) and their parents (co-recipients), illustrating that transfer recipients can be more broadly defined than target beneficiaries. Existing studies also show nonlinearities in impact related to the level of incentive. In RESPECT, those receiving US\$10 every four months did not show any reduction in curable STI risk relative to controls, while those receiving US\$20 experienced the 27 percent reduction.

Determining the appropriate incentive level and other elements of benefit structure depends on a number of factors, such as the socio-economic characteristics of target beneficiaries and the communities in which they live, the selected conditionality (if any) and desired outcomes. For example, in a context where women and girls receive sizeable gifts of money or goods from men in exchange for sex, a higher transfer amount may be required to reduce risky sexual behaviours.² A study in Mexico City among men who have sex with men (MSM), including male sex workers, measured willingness to accept conditional economic incentives to reduce risks for HIV and other STIs. The hypothetical programme would provide incentives to participants if they were free of STIs, verified by biological testing. Participants were more willing to accept such a programme at higher transfer levels, but only up to a point (Galarraga et al. 2014). That there were diminishing returns confirms nonlinearities in benefit structure and shows that finding the optimal incentive amount is critical to ensure cost-effectiveness.

Selection of conditionality, if any

Perhaps the most debated – and still incompletely understood – question is whether transfers should be conditional on certain behaviours or outcomes (i.e. CCTs), or provided with no strings attached (i.e. UCTs). Proponents of CCTs argue that they increase efficacy, but there were no differences in the CCT and UCT arms of the Zomba trial with regard to HIV and HSV-2 outcomes. In fact, conditionalities in the Zomba trial had the unintended outcome of placing added psychological

² Some poorer women and girls in South Africa have described their relations with men largely in stark economic terms (DSD, SASSA and UNICEF 2011).

distress on recipient girls (see Perverse incentives). Meanwhile, the South Africa unconditional CSG, a large-scale, state-led programme not implemented specifically for HIV prevention, showed significant decreases in risky sexual activity among adolescents in households receiving the grant. Similarly, in their 2014 study on the Kenya CT-OVC, Handa et al. conclude: “Our results suggest that large-scale national social transfer programs with poverty alleviation objectives may have potential positive spillover benefits in terms of reducing HIV risk among young people in Eastern and Southern Africa.” Thus, it appears that conditionalities are not required in some contexts to reduce risk of HIV infection. Understanding relevant contextual factors is an important area of inquiry, as is understanding whether conditionalities are useful in some cases for enhancing risk reduction.

Efficacy is not the only criterion in selecting whether to condition. Because of administrative and monitoring costs as well as the need to address supply-side constraints, CCTs can be more expensive – often significantly so – than unconditional programmes. In addition, enforceable compliance mechanisms are not always foolproof or entirely feasible. A recent study in Zimbabwe highlighted the difficulty in properly enforcing conditionalities as originally envisioned (Robertson et al. 2013). Moreover, to ensure they had not brought in the sample of another individual, recipients in RESPECT were required to remove their clothes before providing urine samples. An additional consideration for conditionalities is the ethical issue of withholding a benefit for failure to comply, for example withholding an education grant from an orphan who has dropped out of school to care for a sick relative.

On the other hand, a conditionality may be useful in generating opportunities for sustainable cross-sector financing of an intervention. While the conditionality itself may not provide HIV benefits, it can be used to leverage financial, technical and political contributions from other sectors (e.g. education) that do benefit from the conditionality, perhaps creating enough cross-sectoral support to make the actual cash transfer viable (Remme et al. 2012; Remme et al. 2014). Without the cross-sectoral support afforded by the conditionality, the cash transfer may not be implemented at all and the HIV benefits foregone.

In reality, the line between conditionality and non-conditionality can sometimes be blurred. In sub-Saharan Africa, CCT programmes have increasingly utilized ‘soft’ conditions, wherein conditions exist but penalties for non-compliance are not imposed. Rather than relying on rigid monitoring and enforcement mechanisms to ensure conditions are met, such programmes instead leverage positive peer influence and encouragement, community monitoring and forms of social capital. Even where ‘hard’ conditions exist, they need not be enforced in all situations, for example if the necessary supply-side infrastructure is absent. A mix of soft and hard conditions in programme design is possible, too (see Garcia and Moore 2012).

The costs and ethical concerns of conditionalities should be weighed against the anticipated benefits, and potential compromises, such as soft conditions, require further exploration. Knowing whether unconditional strategies can be equally effective is especially important. In all likelihood, there is no universal answer – whether conditions are needed likely depends on context and target population, as well as the broader political economy.

2 Human rights critiques

A number of human rights critiques have been levied at the conditionality component of CCTs. These critiques centre on coercion, paternalism and stigma.

Coercion

Critics of CCTs argue that conditional transfers are coercive instruments, essentially forcing the poor and vulnerable to adopt certain actions and behaviours. One example is financial incentives for sterilization of women, especially poor women (Mauldon 2003). Proponents have countered that the relationship between conditionality and individual choice is more complex, that CCTs help people overcome external barriers, such as financial barriers, to realize intrinsic preferences. They argue that, in such cases, CCTs are not coercive but enabling.

Studies on CCTs for HIV prevention have not investigated potential for coercion, but one could argue that since all people likely want to avoid HIV, CCTs that help them do so are not coercive. Such logic, while compelling on the surface, ignores the multidimensional nature of people's lives (i.e. that multiple intrinsic preferences could be at odds with one another). Determining intrinsic preferences is therefore difficult. One potential solution is to target potential external barriers to a desired action instead of the action itself, for example through transportation vouchers and reductions in user fees. Ensuring community participation in programme design and avoiding conditionalities directly linked to irreversible decisions, such as male circumcision, are two additional potential solutions.

Paternalism

The conditionality component of CCTs has been criticized as paternalistic. Some argue that conditionalities are based on the mistaken assumption that all cash transfer recipients lack the knowledge, understanding and decision-making skills to make the health and economic choices that maximize their welfare (Freeland 2013; Popay 2008).³ Others, however, consider conditionalities necessary to influence individual action for the perceived betterment of that individual and/or society at large (Cookson 2008). A wealth of research demonstrates that individuals commonly discount certain kinds of future rewards, instead favouring immediate rewards. Such time-inconsistent preferences may not maximize individual or societal welfare over the long term, a form of 'market failure' providing justification for intervention. Understanding and balancing welfare-enhancing interventions with paternalism critiques is neither easy nor avoidable. Striking a balance depends, in part, on one's perspective on the appropriate role of the state in influencing individual action. One strategy to minimize paternalism critiques is to engage communities in transparent and participatory processes to inform programme design, especially when some CCTs might be linked to irreversible actions or risk infringement on human rights. Transparent and participatory governance structures are important not just to resolve ethical dilemmas but also to ensure effective, equitable and sustainable programming.

Stigma

The very nature of targeting certain marginalized groups, such as the poor, could reinforce harmful norms and make personal information more public than what an individual may desire. Concerns over the stigmatizing effects of CCTs are

³ Some evidence suggests that, when given money unconditionally, the poor tend to spend it on food, health, education and productive investments.

particularly acute in the context of HIV, where making eligibility or receipt of benefits dependent on HIV status could not only be stigmatizing and damaging to individuals and families but also counterproductive to the goals of the CCT. For this reason, CCTs for HIV prevention have tended to avoid tying eligibility or conditionalities to HIV status.

While the one study that conditioned on HIV status attempted to minimize these concerns by including HIV-positive participants, tracking HIV status in any way could infringe on privacy and discourage people from participating. Furthermore, if HIV-positive participants at baseline are guaranteed cash payment at the end of the period, they would have little incentive to actually change their behaviour – a missed opportunity to engage a key population in positive prevention. This stands in contrast to RESPECT, where, because the cash transfer was conditioned mostly on curable STIs rather than on HIV, both HIV-positive and HIV-negative participants had an incentive to change sexual behaviour. Apart from perhaps being more effective via positive prevention, the approach in RESPECT helps minimize this particular ethical concern.

3 *Perverse incentives*

Perverse incentives, or unintended, undesired outcomes, are another consideration for cash transfers. Examples include behaviour change to meet eligibility criteria, known as an ‘incentive cost’ (Slater 2011), disincentivizing those not receiving the cash, and undermining personal initiative to pursue healthy and productive behaviours in the absence of incentives (i.e. moral hazard).

Perverse incentives have been observed in CCTs across Latin America (Molyneux 2007; Morris et al. 2004; Stecklov et al. 2006). They have also been found in more recent studies in Africa. Schoolgirls enrolled in the conditional arm of the Zomba trial reported higher levels of psychological distress than did girls who received transfers unconditionally (though both groups reported improved mental health overall). The girls in the conditional group seemingly experienced added stress to meet programme requirements, which the researchers concluded was from having to be the breadwinner for the family (through fulfilment of the condition) rather than from school attendance per se (Baird, de Hoop and Özler, 2011).

Fears over perverse incentives are not always realized. Some studies have shown that, by mitigating risk and allowing investment, cash transfers have actually reduced dependency and improved productivity (Freeland 2013). And unintended consequences of CCTs are not necessarily all bad. Several ‘positive’ unintended outcomes have also resulted from CCTs, such as positive spillover effects onto non-beneficiaries (Maluccio and Flores 2005). Most existing studies on cash transfers for HIV prevention have largely avoided consideration of perverse incentives, even though the risk is considerable.⁴ For example, it is unclear whether RESPECT considered and attempted to minimize the risk of study participants obtaining STI treatment elsewhere – unbeknownst to researchers – so that they could qualify for the incentive, as opposed to actually changing sexual behaviour.⁵ Whether in pilot CCTs that may be later scaled-up or in existing cash transfer programmes already implemented at scale, continuous monitoring for expected and unexpected outcomes is vital.

⁴ Lesotho’s Child Grants Programme is one exception, as it decided to provide a relatively small transfer in response to concerns that a larger transfer would encourage dependency in beneficiary households (Garcia and Moore 2012).

⁵ Of course, the act of participants obtaining undisclosed STI treatment could still ultimately have beneficial HIV impacts; STIs increase risk of HIV transmission.

4 *Availability of supply-side complements*

Demand-side approaches, such as CCTs, require the appropriate corresponding supply-side capacity, in either existing infrastructure or additional compensatory programmes. That is, CCTs are meant to complement rather than substitute for traditional supply-side investments. Evidence shows that where CCTs stand alone as a substitute for other social protection policies, success is limited, but where complementary programmes are launched, CCTs are more successful. Complementary supply-side programmes are especially critical for CCTs where a minimum threshold of supply does not already exist, as is the case in most low-income countries (Johannsen, Tejerina and Glassman 2009; Lagarde, Haines and Palmer 2007). For HIV, a programme incentivizing participants to attend VCT services would fail without sufficiently trained counsellors and testing supplies to provide health services. CCTs may also require complementary measures that address gender norms and inequalities, in order to ensure equitable, sustainable impacts (Molyneux 2008). In RESPECT, for example, the conditionality by itself may not have impacted women who have little control over their sexual choices, effectively excluding them from the cash transfer and limiting its impact.

5 *Scale, sustainability and cost-effectiveness*

A critical – and perhaps most critical – consideration for using cash transfers to prevent HIV is whether to scale-up pilot programmes or make existing, larger-scale programmes not implemented explicitly for HIV more HIV-sensitive – or both (see Miller and Samson 2012; Temin 2010). This section focuses on scaling-up smaller programmes. Chapter 4 discusses tailoring broader programmes already at scale to maximize positive HIV impacts and minimize negative ones.

Scaling-up pilot programmes requires a number of well-known ingredients: political commitment; government support; community support and engagement;⁶ sustainable financing; adequate technical capacity and infrastructure; and human resources for administration, monitoring and evaluation. These ingredients are important for both scale and sustainability. Scaling-up cash transfers in middle-income countries, especially in Latin America, has generally been successful and avoided heavy fiscal burdens associated with traditional welfare systems and social security (Davis 2006; Soares, Ribas and Hirata 2008). The same experience may not be easily replicated in low-income countries (ILO 2008; Schubert and Slater 2006; Slater 2011). Some have argued that supply-side investments may be more appropriate in low-income countries, where resources for scaling-up are more constrained.

Costs vary across programmes and are driven by a number of factors: programme design (e.g. conditionality), existing infrastructure, capacity and administration (de Brauw and Hoddinott 2008; Handa and Davis 2006; Lagarde, Haines and Palmer 2007; Lund et al. 2008; Son 2008). Narrower targeting could reduce costs compared to ‘universal’ programmes, as fewer benefits would be distributed. On the other hand, narrower targeting could involve a complex and costly administrative process that universal programmes can largely bypass. Existing studies on cash transfers for HIV prevention have not explicitly or rigorously tracked costs; while the direct cost of the incentive is known, other implicit implementation costs are not.

⁶ In some countries, conditioning cash transfers has increased public support because conditions help the public view transfers less as welfare handouts that disincentivize work (Fiszbein and Schady 2009).

Cost evaluations should not be performed in isolation; rather, they should compare cash transfers to other anti-poverty and social welfare measures, as well as to more conventional supply-side investments in health and education. Such cost-effectiveness and cost-benefit data, while limited, does exist for the more established, non-HIV specific cash transfer programmes (Handa and Davis 2006; Lagarde, Haines and Palmer 2007). For example, a review of Colombia's Familias en Acción programme revealed a high benefit-cost ratio of 1.59 (IFS 2006). Indeed, CCTs have proven to be high-impact (at least in MICs), cheaper interventions than supply-side programmes (Soares et al. 2009), though economic simulations suggest a combination may be optimal. Because cost information is lacking with regard to cash transfers for HIV prevention, most studies have not yet analysed their cost-effectiveness. Moreover, cost-effectiveness or cost-benefit analyses tend to focus on a narrow set of outcomes rather than considering the multiplicity of impacts inherent to most cash transfers.

An evaluation of the Zomba trial, for example, estimated a cost per HIV infection averted of US\$5,000-12,500 or US\$284-711 per disability-adjusted life-year (DALY) averted (Vassall, Remme and Watts 2011). Though this evaluation frames the Zomba intervention as less cost-effective than other HIV prevention options, it also ignores the multiplicity of impacts that cash transfer schemes can have – multiple impacts that could justify co-financing from other sectors (Remme et al. 2012; Remme et al. 2014). Such co-financing would make the cash transfer programme a much better value for money from an HIV perspective (Remme et al. 2012). After accounting for multiple impacts, Remme et al. argue that the HIV sector's share (of the costs of the Zomba cash transfer) would be at most 29 percent (2014). This figure is sensitive to underlying assumptions. A sensitivity analysis showed a range of 12-86 percent of costs borne by HIV resources. Other sectors, such as education, could then potentially finance the rest. In some cases, other sectors might find it cost-effective to cover the entire cost of the cash transfer, eliminating the need for any HIV resources. Remme et al.'s analysis is timely considering the current emphasis on realizing development synergies as described in the UNAIDS Investment Framework (Schwartländer et al. 2011; UNDP and UNAIDS 2012).

CHAPTER 4

DISCUSSION – WHAT WE KNOW AND STRATEGIES FOR MOVING FORWARD



The evidence on cash transfers for HIV prevention is increasingly compelling. More research is needed to confirm findings, understand better the mechanisms by which cash transfers produce their effects, and develop optimal models for implementation at scale in different contexts. Despite the need for more and better evidence, some policy recommendations are possible, particularly in terms of identifying opportunities to make cash transfers already at scale more sensitive to HIV.

The potential implications of cash transfers for HIV prevention were recently explored by Heise et al. (2013). This chapter largely mirrors their commentary but delves into the issues more deeply. It presents what we know with regard to cash transfers for HIV prevention. It also offers strategies for moving forward in terms of policy and programmes, as well as research, striving to answer the critical question, 'Where do we go from here?'

What we know

1 *Cash transfers can prevent HIV*

That cash transfers can be effective for HIV prevention has moved from conjecture to a concept with increasingly strong empirical foundations, particularly in relation to adolescent girls; however, cash transfers are not invariably effective in preventing HIV or appropriate in all settings. Programme design and context matter. Moreover, HIV prevention may only be one objective among many – and perhaps not even the primary motivation – in deciding whether to implement a cash transfer programme.

2 *Cash transfers have the potential to help empower girls and women to protect themselves*

Cash transfers may ultimately prove to be one of the few HIV prevention interventions that empower girls and women to protect themselves. Girls and women have relatively fewer methods at their disposal to protect themselves from HIV infection than do men, despite their substantially greater vulnerability to HIV relative to men, especially in adolescence and early adulthood (UNAIDS 2009; UNAIDS 2010a). Female condoms have been proposed as one method for women to protect themselves, but, for several reasons, uptake and awareness among women are low. This is the case in Zimbabwe, for example (see e.g. Motsi, Banda and Mabvurira 2012). Vaginal microbicides are another proposed method for women to protect themselves. But their efficacy has been inconsistent across trials of different gel formulations (HPTN 2009; Karim et al. 2010; MDP 2009; MTN 2011). Ongoing and future studies may demonstrate efficacy under different formulations or applications, but the recent setbacks have undoubtedly delayed microbicides' implementation at scale. The end result is that cash transfers are left as one of the only new promising methods that help empower girls and women to protect themselves.

3 *The efficacy of cash transfer interventions compares with that of recent biomedical interventions*

The Zomba trial showed an efficacy – at least in the short run – equivalent to that of male circumcision, which is being rolled out in various countries in sub-Saharan Africa (Auvert et al. 2005; Bailey et al. 2007; Gray et al. 2007). Comparisons between these interventions must be made thoughtfully, as cash transfers and male circumcision have significant differences, not the least of which is that male circumcision is permanent, while the sustainability of the effect in cash transfer schemes, such as the Zomba trial, is yet unknown. Also, cash transfers likely have many more variations in operational models that will be in-

extricably tied to efficacy in different contexts. Initial investigation of treatment as prevention has shown much higher efficacies than either male circumcision or cash transfers, but larger trials must replicate initial results, and additional operational research is needed to show that such an approach is possible at scale (Cohen et al. 2011; Cohen, McCauley and Gamble 2012). Structural interventions, such as cash transfers, and biomedical advancements, such as medical male circumcision, vaginal microbicides and ART, should not be viewed as a zero sum game; rather, they are mutually reinforcing strategies that can help achieve a more synergistic approach to HIV prevention (UNAIDS 2010b). For example, cash transfers that promote health service access would be more effective where biomedical advancements are available. In turn, structural interventions can improve the efficacy of biomedical approaches by shaping the broader environment. Cash transfers have been shown to remove external barriers to health services, increase access to ART and empower women to make healthy choices.

4 *Cash transfers can have multiple targets and mechanisms of action*

Cash transfers that target structural or proximal drivers of HIV, as well as those that target proxies for risk of HIV infection, have all shown varying degrees of effectiveness in reducing risk of HIV (or proxies thereof), creating a fair amount of flexibility in design to different contexts. The evidence strongly indicates that cash transfers can impact multiple pathways simultaneously.

5 *Cash transfers are not a magic bullet for HIV*

Despite increasing evidence that cash transfers can prevent HIV, they are not a magic bullet. The history of HIV has repeatedly shown that new prevention approaches acting in isolation have not halted the epidemic. Instead, new approaches have augmented a prevention arsenal that, when used in effective combinations in the right contexts, can bend the epidemic's curve. Cash transfers are likely to be no different, and, if implemented, should be utilized as a complement to, rather than a substitute for, other prevention interventions, including biomedical ones.

6 *Cash transfers may be worthwhile irrespective of beneficial HIV outcomes*

Cash transfers, like many structural interventions, have multiple impacts that matter beyond potential HIV impacts. Thus, they may be worth implementing regardless of HIV outcomes. The multiplicity of impacts, which may include HIV, can be a clear benefit relative to more conventional prevention approaches that address more proximal causes of risk of HIV infection.

The history of HIV has repeatedly shown that new prevention approaches acting in isolation have not halted the epidemic. Instead, new approaches have augmented a prevention arsenal that, when used in effective combinations in the right contexts, can bend the epidemic's curve.

Strategies for moving forward – policy and programmes

1 *Pay adequate attention to perverse incentives, ethics and human rights*

The potential for cash transfers to create perverse incentives or infringe on human rights is very real. Monitoring and evaluation frameworks should be comprehensive and rigorous to capture these elements – that is, programmes must monitor for unintended, potentially significant impacts (positive and negative) in addition to intended ones. Involving communities in programme design can further minimize risks for perverse incentives and unintended outcomes. One example that requires further research is whether there are any negative consequences of providing payments directly to women, for instance by contributing to household violence (Garcia and Moore 2012). Though such concerns have been raised, there is no evidence to date that money provided to the female head of household has increased intimate partner violence (Pettifor et al. 2012). This does not render the concern without merit. Existing programmes must carefully monitor – likely through qualitative study – how payments to women affect gender dynamics.

2 *Avoid conditioning cash transfers on perceived or real HIV status, including maintenance of HIV status*

Of all studies reviewed, the only study that conditioned the cash transfer directly on HIV status was also the only study that showed no effect, and discontinuation of the incentive raised questions about opposite impacts by gender (see Kohler and Thornton 2011). Though this lack of effect may be due to study design, conditioning directly on HIV status – at this time – raises multiple ethical concerns (e.g. privacy, confidentiality, stigma, and discrimination). Moreover, tying to HIV status assumes that the community members are sufficiently aware of HIV, its behavioural risk factors and how to protect themselves (the same argument could be made of tying a cash transfer to any health outcome, like curable STIs as was done in RESPECT). If this basic knowledge is absent, or if complementary information is not provided, then conditioning a cash transfer on HIV status may not work, or its effectiveness may be reduced. Given these concerns, particularly the significant ethical considerations, conditioning cash transfers on HIV status is not advised at this time.

3 *Avoid conditioning cash transfers on irreversible or invasive procedures*

Examples include medical male circumcision and microbicide use. Trials on cash incentives for medical male circumcision are underway (Wilson and Gorgens 2013). Even if these trials demonstrate that cash incentives can increase uptake of medical male circumcision, such incentives risk being coercive and should generally be avoided. Instead, focus should be on reducing financial and non-financial demand-side barriers to accessing these interventions such that individuals' intrinsic preferences can be acted upon. In some cases, a cash incentive directly linked to medical male circumcision may simply compensate for user fees or other demand-side barriers, helping to allay fears of coercion. When incentives more than compensate for these barriers, net financial gain is possible and the risks of coercion become real. Instead, efforts to reduce specific demand-side barriers should target those barriers directly. These efforts include reducing or eliminating user fees or providing cash or vouchers for trans-

portation to clinics. Male circumcision is a vitally important component of the HIV prevention toolkit. Efforts should be made to ensure its sustainable scale-up, but the means of doing so matter and should not distort intrinsic preferences when choices are one-off and cannot be undone.

4 **Optimize cash transfer targeting for HIV impacts**

This paper has proposed some guiding principles, encouraging targeting that:

- focuses on communities with high rates of new HIV infections, particularly acquired via sexual transmission;
- reduces local or community levels of economic inequalities between men and women;
- focuses on periods and contexts of high risk, particularly for girls and young women;
- maximizes cost-effectiveness without compromising people's privacy choices; and
- considers multiple dimensions of vulnerability (to both HIV and other shocks).

These proposals are based on the conceptual understanding of HIV as a disease of inequalities. They are an attempt to generalize from the available empirical data in order to move beyond piecemeal programmatic thinking, past the need for community-by-community studies. Generalizable frameworks will be part and parcel of rapid assessment techniques. In this context, South-South exchange of information will be particularly important.

5 **Design programmes that consider cash transfers' impacts across multiple sectors**

Maintaining a broader perspective is particularly relevant for programme design. For example, viewing the Zomba trial specifically through an HIV lens suggests that only the UCT arm was required. However, in some contexts, attaching a condition may be critical for school attendance irrespective of impacts on HIV. In such instances, conditioning on schooling is worth considering, as schooling is highly important in its own right. Desired objectives and any tradeoffs must be comprehensively understood before designing programmes. It is likely that HIV-specific CCTs need to take a broader perspective while non-HIV-specific CCTs should tailor their designs to maximize HIV impacts, where relevant.

6 **Pool resources from sectors that benefit from cash transfers**

It is possible that further cost analysis will show cash transfers to be more expensive for HIV prevention than biomedical and behavioural approaches. Unlike those approaches, however, cash transfers can have wider, simultaneous health and development impacts. If measured and considered, these broader impacts help make cash transfer programmes cost-effective from a cross-sectoral perspective, creating opportunities to distribute shares of financing across multiple sectors. An appropriate pooling of resources across sectors to finance structural interventions like cash transfers would considerably reduce the share borne by HIV alone,

Co-financing from other sectors can be significant enough to make a cash transfer programme, such as the Zomba trial, cost-effective and good value for money from an HIV perspective.

perhaps making cash transfers for HIV prevention as cost-effective as other more proximal biomedical and behavioural approaches (Remme et al. 2012; Remme et al. 2014). Baird et al. found the Zomba study to be less cost-effective than some alternative HIV prevention options but did not consider cash transfers' multiplicity of impacts in their analysis. Other sectors that benefit from cash transfers, such as education, could reasonably finance a significant part of cash transfers for HIV prevention. Sector-specific cost-effectiveness thresholds can be guides to the maximum contributions from sectors, including HIV. Co-financing from other sectors can be significant enough to make a cash transfer programme, such as the Zomba trial, cost-effective and good value for money from an HIV perspective.

7 *Develop cross-sectoral structures for programme design, implementation and monitoring*

Because cash transfers have multiple impacts beyond HIV, they can potentially optimize impacts across HIV and development fields. HIV, health and development experts must work across silos to help social protection managers understand how to design, monitor and evaluate programmes for HIV and health impacts. This is not just a challenge but also an opportunity. Where existing cash transfers have been implemented without attention to health impacts, integrating HIV and health components, as appropriate, would better inform structural approaches to the HIV epidemic, without creating expensive new studies whose costs are borne by HIV or health sectors alone. For cross-sector collaboration to work, specific mechanisms and structures are required to bring relevant, multidisciplinary experience together. Those responsible for administering cash transfers and other types of social protection should likely lead these structures, but they can draw heavily from lessons from HIV, which, perhaps more than any other field, has extensive experience in coordinating multisectoral initiatives.

8 *Ensure that cash transfer programmes are integral to national social protection strategies and development plans*

Cross-sector collaboration and consideration of multiple impacts is crucial, because, to be delivered at scale, it is likely that cash transfer programmes for HIV prevention must be integrated into national social protection strategies. This integration might involve scaling-up pilot programmes aimed mainly at HIV prevention, such as the Zomba trial, and/or adopting broader programmes that positively impact HIV, such as South Africa's CSG. Some countries – for example, South Africa, Bangladesh, Cambodia, Indonesia, Tanzania, Thailand and Uganda – have already begun to adopt more comprehensive approaches to social protection in their national development frameworks, with cash transfer programmes identified as a primary instrument to facilitate cross-cutting impacts (Miller and Samson 2012). This trend is promising, but government ownership and commitment in other regions is critical, as are resources for scale-up. While cash transfer programmes in Latin America – typically focused on poverty reduction, schooling and health – are almost entirely government-driven, funding for programmes in sub-Saharan Africa tends to follow country income level. Generally, donors finance programmes in lower-income countries, and governments fund programmes in wealthier nations. With exceptions, programmes in sub-Saharan Africa have also been implemented on a relatively small scale (Garcia and Moore 2012). In the long term, the most sustainable models may be those that, where feasible and where there is the scope, link cash transfer programmes to existing government social welfare programmes.

9 *Consider linking cash transfer programmes to development projects that increase HIV risks*

Large capital projects, such as roads, dams and mines, can create hotspots of HIV susceptibility. Population movements and labour conditions change sexual networks, raising HIV risks for construction workers, miners, truck drivers, sex workers and people in local communities. The risks are particularly acute in sub-Saharan Africa, which has high levels of HIV and six of the world's fastest-growing economies over the last decade. With increased foreign direct investment targeting commodities and mineral resources, there is high demand in many countries for improved railways, roads, dams, power stations and other infrastructure. While these projects promote employment and economic growth, they can also increase susceptibility to HIV among workers and those in surrounding communities, particularly women and girls. In recognition of this risk, UNDP has worked with partners to publish guidelines for integrating HIV and gender-related issues into environmental impact assessments in Eastern and Southern Africa (UNDP 2013c).

As stipulated in the guidelines, a multi-pronged strategy is required to address the HIV- and gender-related risks of capital projects. Strengthening mitigation plans is one approach, especially in local communities. While not mentioned explicitly in the guidelines, cash transfers could be one means to mitigate the impacts of capital projects on HIV risks in local communities. A well-targeted cash transfer could empower women and girls to protect themselves in the face of inequalities introduced or exacerbated by the capital project. The cash transfer could be temporary, perhaps operating only during the construction phase or other high-risk phases of the project's life cycle. Such cash transfer programmes might make sense specifically to prevent HIV, but they would also provide additional benefits by sharing some of the economic gains of the project with the local communities affected by it. Such transfers might even already exist for purposes of sharing economic benefits but might not necessarily be designed in ways that are sensitive to HIV concerns. Targeting vulnerable women and girls is one way to help make the transfers HIV-sensitive. The financing could come from the project itself rather than adding costs to public budgets. Such cash transfers, therefore, can serve multiple objectives in a sustainable fashion. Transparency and rigorous monitoring would be required to ensure that the programme operates according to agreed parameters, that HIV and other benefits are realized and that perverse incentives, including opportunities for corruption, are minimized or eliminated. Care should also be paid to avoid incentives for in-migration due to the cash transfer, though isolating the effect of the cash transfer from in-migration effects of the capital project itself may be challenging.

10 *Make existing cash transfer programmes more HIV-sensitive*

Instead of focusing on HIV prevention specifically or exclusively, existing cash transfer programmes tend to address broader development concerns: poverty, low levels of education and low uptake of health services. While these broader concerns matter in their own right, they can contribute to risk of HIV infection in many contexts, especially in generalized epidemic settings. Given the scope and popularity of cash transfer programmes – estimated to reach over one billion people worldwide (DFID 2011) – it is critical that managers of existing, large-scale programmes collaborate with HIV specialists to make these programmes HIV-sensitive – in other words, to maximize the positive impacts on HIV while minimizing the negative ones.

Making cash transfers HIV-sensitive requires policymakers and programme managers first to identify the primary objectives of an existing cash transfer programme around which basic programme pillars are designed. Then, within these basic programme pillars, they can modify features where possible to maximize beneficial secondary impacts, including impacts on HIV in some cases. To understand what modifications can be made, programme managers and HIV specialists should work together to: assess the programme's current impacts – positive and negative – on STI/HIV outcomes and risk behaviours; investigate causal pathways through which impacts from cash transfers take place; and analyse epidemiological contexts and trends, including how certain populations might be particularly vulnerable to HIV-linked risks. As answers to these questions become available, programmes should be incrementally adapted such that harmful impacts on HIV are reduced or avoided and beneficial impacts are enhanced, all without compromising gains achieved in other development areas (see Miller and Samson 2012; Temin 2010). Regular, ongoing evaluation and a willingness to respond to new information and changing dynamics are crucial in this process.

Such work is already underway for many social protection programmes, including cash transfers, with regard to impact mitigation. In these cases, viewing programmes through an AIDS lens has encouraged changes in eligibility and targeting to ensure that social protection programmes reach AIDS-affected households. In other cases, HIV-sensitization has meant building better links between social services and health services and finding ways to reach AIDS-affected households without inadvertently stigmatizing them. Given the interrelationship between HIV and broader development goals, such HIV-sensitization not only strengthens AIDS responses but also strengthens social protection programmes themselves, including cash transfers.

With increasing evidence on the links between impact mitigation and HIV prevention, as well as on the role of cash transfers in supporting treatment and prevention outcomes, opportunities exist for further HIV-sensitization of existing cash transfer programmes. Looking across prevention, treatment and impact mitigation can reveal opportunities, especially for streamlining and integrating stand-alone programmes. It can also reveal opportunities for ensuring continuity in coverage across critical stages of life, especially for girls as they move from childhood to adolescence to early adulthood. Continuity of coverage can also be important during other periods of significant transition, such as when young women move from rural to urban areas.

Given the scope and popularity of cash transfer programmes, it is critical that managers of existing, large-scale programmes collaborate with HIV specialists to make these programmes HIV-sensitive – in other words, to maximize the positive impacts on HIV while minimizing the negative ones.

11 *Position cash transfers appropriately in concept notes for the Global Fund's new funding model*

Changes in the AIDS funding landscape have created new opportunities to make cash transfers HIV-sensitive. The Global Fund's new funding model is a prime example of the shift toward investment approaches to HIV, which prioritize achieving maximum impacts with limited resources. The new funding model is anchored in comprehensive national strategic plans rather than rounds-based proposals. Comprehensive national strategic plans create opportunities to identify intersectoral links, such as those embodied by cash transfers for HIV prevention. In some cases, national HIV plans may be embedded within broader national development strategies, further creating opportunities for investments that yield impacts across HIV, health and development. In addition, the use of concept notes in the new funding model creates space for countries to propose innovations and engage with the Global Fund in how to finance, implement and learn from their execution. Cash transfers for HIV prevention present a unique opportunity for engagement with the Global Fund. In some countries, the Global Fund already finances cash transfers for OVC, which could be built upon for HIV prevention. Finally, the new funding model provides countries with a more predictable source of funding by making country allocations in advance based primarily on epidemiological burden and financial need. Countries in sub-Saharan Africa are prioritized, and this is where there is also the greatest opportunity to launch and scale-up cash transfers. The Global Fund has set aside extra resources beyond these country allocations to finance high-impact ambitions, rewarding countries that aspire to evidence-based innovations. Identifying and proposing such innovative ideas, such as HIV-sensitive cash transfers, will require countries to think about their Country Coordinating Mechanisms, as well as their social protection planning, in multisectoral ways.

Changes in the AIDS funding landscape have created new opportunities to make cash transfers HIV-sensitive.

12 *Select the most appropriate social protection instruments to address the problem*

Cash transfers are not the only social protection instrument that has been explored for HIV prevention. A recent systematic review of microfinance interventions tracked HIV-related outcomes, finding the impact of microfinance on HIV prevention to be inconclusive (Kennedy et al. 2014). The IMAGE study in South Africa, however, is one rigorous RCT on microfinance that did show improvements in HIV risk behaviours, intimate partner violence and women's empowerment (Pronyk et al. 2006; Pronyk et al. 2008). IMAGE targeted women with an integrated intervention: group-based microfinance along with training on gender roles, domestic violence, HIV and health. A complementary study that compared the integrated intervention with microfinance on its own showed that reductions in levels of violence and HIV risk were evident only in the integrated intervention (Kim et al. 2009). Placing cash transfers in a broader context of effective and ineffective microfinance interventions can help illuminate which social protection instruments and design elements are most relevant for HIV prevention. For example, a key insight from microfinance literature is that many – if not the majority – of microcredit loans do not finance small business investments but rather support individual and household consumption needs (Attanasio et al. 2011; Collins et al. 2009; Johnston and Morduch 2008; Karlan and Zinman 2012). For a large portion of microfinance participants, the primary purpose of microfinance loans is to smooth consumption in the face of volatile and unpredictable cash flows. Cash flow volatility and unpredictability thus becomes a type

of shock, against which cash transfers, microfinance and other forms of social protection can provide protection. Absent these social protections, girls and young women may employ a variety of coping strategies, including engaging in sexual behaviours that increase their risk of HIV. The stronger evidence for cash transfers over microfinance as an HIV prevention mechanism may reflect the regularity and stability of the former relative to the latter, especially among regular, unconditional transfers.

Other factors may also matter. Cash transfers, especially UCTs, may be more easily accessible than microfinance or microcredit. Girls and young women, who are most at risk for HIV, may not be eligible for loans – a fact reflected in the higher average age of female microfinance recipients in Kennedy et al.'s systematic review (2014). Moreover, women who successfully access microfinance may be in relationships and communities where opportunities for women are greater and HIV risk potentially lower.

If accurate, such comparisons and contrasts among different social protection instruments move the discussion beyond an overly simplified, linear ranking of different instruments vis-a-vis HIV prevention. Instead, the focus is shifted first to people and places – ages, forms and contexts of vulnerability and gender-economic disparities that create conditions for HIV. The question then becomes which social protection instruments – cash transfers, microfinance, pensions, disability, insurance and other forms of social assistance – best reach vulnerable groups and address underlying structural problems that contribute to increased risk of HIV infection. Some social protection instruments may achieve these objectives better in some contexts than others. Where various social protection instruments are already in place, the opportunity for HIV prevention lies in deciding which can be best sensitized to HIV and how – for example, by ensuring access by vulnerable women and girls. Instead of focusing on cash transfers or other social protection instruments in isolation, developing a more general framework for social protection and HIV prevention can optimize the portfolio of prevention tools available to policymakers and programme managers in different contexts.

Strategies for moving forward – research

1 Confirm results

Cash transfers have cleared some proof of concept hurdles, showing that under certain conditions they can be effective for HIV prevention. But, as with trials on vaginal microbicides and treatment as prevention, large-scale confirmation of results is needed to reduce uncertainties around moving toward implementation at scale. Confirming HIV impacts is especially important when cash transfers are being scaled-up primarily for HIV-related reasons.

Further investigation can follow two general strategies. The first strategy consists of initiating or continuing to monitor trials where HIV outcomes are primary outcomes of interest. Such studies include the Zomba trial, RESPECT and the Lesotho study as well as the several ongoing cash transfer trials that are already measuring HIV directly or proxies for risk of HIV (see Appendix). Continuous monitoring of these studies, including sub-group analyses, can help identify important contextual factors in determining HIV-sensitivity. Rigorous study design will be especially important. Given that their primary outcomes of interest are HIV-related, these studies provide opportunities to understand how different programme design elements—eligibility, targeting, accessibility, continuity, benefit structure, conditionalities (if any)—can be modified to maximize positive HIV impacts and minimize negative ones. They can also facilitate a deeper understanding of important contextual factors, as well as complementary interventions that might amplify and/or sustain impacts.

The second general strategy focuses on cash transfer trials and evaluations of programmes where HIV impacts were not originally intended to be tracked. These trials are untapped opportunities for generating as much HIV-related knowledge as possible. In some cases, new cash transfer studies may present opportunities for integrating HIV- and broader health-related indicators. While biomarkers may not be feasible, other techniques can be used for measuring risk of HIV or proxies thereof. The opportunity for integrating HIV into such studies is likely highest in contexts of higher HIV incidence, both in terms of geography and key populations.

This second strategy does not only mean creating *de novo* studies into which HIV is integrated; it also means evaluating HIV and broader health impacts in existing programmes. This was the approach employed by Cluver et al. in their assessment of South Africa's two main state-led child support grants. These child support grants were geared primarily toward poverty reduction, but Cluver et al. retrospectively examined impacts on proxies for risk of HIV, including sex in exchange for money/goods (2013). Kenya's CT-OVC, another state-led, large-scale programme implemented for broader poverty alleviation objectives, was evaluated in a similar way. Investigators observed a range of spillover benefits on proxies for risk of HIV, including sexual debut, number of unprotected sexual acts, number of sexual partners and pregnancy (Handa et al. 2012; Handa et al. 2014). It may be that HIV impacts are explored after the original study. Linking different datasets and utilizing quasi-experimental methods, as well as natural experiments, are useful approaches. A recent study on cash transfers in Zimbabwe is a case in point. The study took place in the context of a long-standing HIV prevention project in communities with a high prevalence of HIV. Birth registration, vaccination and school attendance were tracked but HIV was not. Given the likelihood of ongoing HIV measurement in the study sites, it may be possible to integrate the separate datasets to determine whether impacts on HIV occurred and, if so, whether the impacts could be plausibly linked to the cash transfer (Robertson et al. 2013).

2 **Identify causal pathways and evaluate complementary interventions, especially to maximize positive impacts for women**

Studies on cash transfers should build on current findings to unpack unresolved questions. Causal pathways and key contextual factors are still imprecisely understood and the need for conditionality remains debated. This is not just of academic interest; understanding pathways informs how programmes are designed, influences costs and implementation challenges at scale, and underscores the contextual factors and complementary interventions that might either enhance or impede efficacy.

Understanding in what settings cash transfers can be an empowering intervention model for women is particularly important. Most current and emerging evidence comes from settings with high HIV incidence among adolescent girls. Gender equity in the social sense is just as important as in the economic sense, and should be treated as such. The lack of sustained impact among women in the one-year follow-up to RESPECT could have been due, at least in part, to women having low levels of control over their sexual choices. Thus, even where a cash transfer programme has a clear gender explicit objective, sustaining impacts for women might require complementary measures that are transformative, i.e., that shift gender

relations, especially those related to sex (see Molyneux 2008). Implementing transformative measures that address gender inequalities, alongside poverty reduction components of cash transfer programmes, could present a key opportunity for making cash transfers more HIV-sensitive and unearth opportunities for strategic use of HIV resources.

One method to inform unresolved questions is to supplement quantitative, economic-focused data with qualitative research—especially intervention research – on the social construction of gender roles and sex in exchange for money/goods (Wamoyi et al. 2010; Waymoyi et al. 2011b), thereby potentially creating space for concomitant interventions that would enhance the effect and/or sustainability of a cash transfer for HIV prevention. An example is the ongoing Swa Koteka (HPTN 068) study, which supplements quantitative research with in-depth interviews, case studies and focus groups to understand complex causal pathways through which impacts take place (HPTN 2011; see Appendix). The communities in which girls live are also randomized to a community mobilization intervention around changing negative gender norms, to see if girls receiving the CCT and living in communities that are mobilized have different HIV incidence and risk behaviours at the end of the trial. Results should shed light on the efficacy of such a complementary approach.

To understand the multiplicity of impacts and pathways further, studies should explore whether STI and other relevant health outcomes in addition to HIV could be easily monitored. Inequality, particularly as it interacts with gender in generalized epidemic settings, should be measured in addition to poverty reduction. Better understanding the interaction of economic and gender inequalities – and how cash transfers address those – can illuminate opportunities to introduce cash transfers for HIV prevention and/or to make existing cash transfer programmes as HIV-sensitive as possible.

3 Assess whether cash transfers can reduce HIV risk among key populations, such as men who have sex with men, transgender people, sex workers and people who inject drugs

In concentrated and generalized epidemics alike, HIV tends to affect certain groups disproportionately, such as men who have sex with men, transgender people, sex workers and people who inject drugs. Some research exists on using cash transfers for HIV prevention among these groups, especially among PWIDs. Much of this research focuses on using cash transfers as incentives to take up and maintain adherence to services, such as methadone substitution therapy, that are effective in reducing exposures to HIV. The relevance of cash transfers for HIV prevention among these key populations deserves further investigation. Some trials are already underway. The RESPECT study in Tanzania, for example, is being extended to sex workers (Wilson and Gorgens 2013). Mechanisms would need to be well-tracked, clearly distinguishing between potential incentive effects that are linked to uptake of HIV prevention services and income effects that may alter risk behaviours positively or negatively. For example, income effects from cash transfers may reduce economic factors that help move some, including MSM, into sex work. Unconditional cash transfers might prove effective in ways similar to that seen in the Zomba study. The opportunity in such cases, therefore, is in ensuring that key populations have access to cash transfers when they are available.

Special attention would need to be paid to unintended consequences and safeguarding human rights. Explicitly targeting cash transfers to key populations may not be feasible and could be counterproductive, perhaps unwittingly identifying vulnerable groups to unsympathetic state authorities. An alternate approach might be to ensure that broader cash transfer programmes are as inclusive as possible. To this end, civil society organizations and other delivery platforms might better reach key populations with cash transfers and improve integration of social services with HIV and health services. The integration of cash transfers and other social protection systems for key populations with HIV-related services may, in fact, be a more important avenue to pursue than directly using cash transfers for purposes of HIV prevention among these groups. Linking often-isolated service delivery systems can aid in reaching these groups with integrated services, helping to ensure their uptake as a package and ensuring cross-referrals as needed. Even if effective when used directly for HIV prevention in these groups, cash transfers would not replace the need for broader reforms in law, policy and justice systems that create stigmatizing and discriminatory environments for these key populations and impede their access to basic services and protections.

4 *Maintain rigorous study design, incorporating key operational and implementation research questions*

To inform policy, and to maximize allocative and technical efficiencies, analyses of cash transfer studies must go beyond efficacy considerations to understand costs, operational design and sustainability. New studies need to capture costs accurately and compare cost-effectiveness with other approaches. Research on programme design and management can help minimize costs without unduly affecting efficacy, which is particularly important in moving from pilots to scale and in countries where structures are weak and experiences with social protection fairly new.

While cash transfer interventions for HIV prevention have generally been well-designed, this cannot be said of all cash transfer studies. A recent cash transfer pilot in New York City, modeled on global experiences with cash transfers for health and education, is a case in point. Though randomized, the study introduced many conditions simultaneously and did not vary the level of incentives. Thus, it was difficult, if not impossible, to understand what input was causing what output, and if the general lack of efficacy was due to programme design elements (e.g. too low of an incentive) or if the cash transfers were simply inappropriate in the given context (Riccio et al. 2010). Optimizing study design is not just about achieving desired outcomes but also about achieving cost efficiencies. Randomized trials in particular are not typically designed for operation at scale; opportunities to achieve significant efficiencies are likely.

In terms of sustainability, most cash transfers for HIV prevention have been evaluated over relatively short time-frames. Thus it is unclear how long any protective effects may last and whether any protection is contingent on a continued incentive, either to the same cohorts as they age or to new cohorts as they become eligible. Of concern is that cash transfers may not fundamentally change HIV incidence curves but instead simply postpone infections while incentives are provided. Alternatively, it may be that, depending on context, transfers are not needed throughout a recipient's life but rather only during periods of particularly

high risk. It is, therefore, critical to understand what effects withdrawing incentives may have, how best to do so, and if possible effects would be gendered. An analysis of the RESPECT study showed that one year after discontinuing incentives to remain free of curable STIs, the intervention impact had persisted among men but not women (de Walque et al. 2012b). This finding suggests that a short-term incentive may affect men's behaviour over a longer-term period, but impacting women's behaviour over the longer term may require the continued provision of an incentive. Similar analysis of other studies or of existing programmes should be conducted.

5 *Develop rapid assessment techniques*

It is impractical, time-consuming and expensive to conduct randomized control trials before fully implementing each and every cash transfer programme. The development of rapid assessment techniques would allow policymakers to quickly understand what kinds of cash transfers are most likely to be effective in different settings, while avoiding lengthy, costly trials. Ongoing cash transfer research should identify clear 'socio-epidemiological' markers that give insight into whether cash transfers for HIV prevention are effective as well as what kinds of cash transfer models might work. Monitoring and evaluation of implemented programmes against established targets and benchmarks is critical. Leveraging experiences from existing cash transfer programmes is also critical, including through sub-group analyses.

CONCLUSION



The evidence that cash transfers can prevent HIV in some contexts, particularly among adolescent girls and young women, is growing. It suggests that cash transfers are an exciting and potentially powerful addition to the arsenal of tools for HIV prevention, one that embeds HIV further within broader investments in human development.

Still, cash transfers are not a magic bullet. Nor are they necessarily effective or appropriate for HIV prevention in all contexts. Future research on cash transfers should focus on better understanding mechanisms of impact, causal pathways through which impacts take place and how unique contextual factors may either enhance or impede efficacy. To maximize successes and minimize harms, policymakers and programme managers must carefully consider a number of issues related to design and monitoring, human rights, perverse incentives, supply-side complements and scale, sustainability and cost.

Three areas of work are particularly important for moving forward.

- First, researchers and policymakers should explore the potential to replicate pilot studies in different contexts and investigate key factors that enhance both efficacy and sustainability of impacts. In addition to impacts on HIV, these studies should also evaluate other health and development impacts and gather cost information that will be critical when considering scaling up.
- Second, existing cash transfer programmes should be evaluated, where possible, to understand broader impacts on HIV and health. These cash transfers, which generally exist for reasons other than HIV prevention, can shed additional light on how broader social protection instruments impact HIV outcomes positively and negatively, including through impact mitigation. Such evaluations need not be confined to cash transfers. For example, microfinance should also be further evaluated for HIV impacts, especially since microfinance and cash transfers share underlying features, such as helping vulnerable groups manage irregular cash flows.
- Third, existing cash transfer programmes should be made more HIV-sensitive, especially to HIV prevention. Evaluations of existing cash transfer programmes can identify opportunities, and when combined with insights from smaller, well-designed pilots, can help create specific strategies to maximize impacts on HIV prevention. Improving targeting is one possibility. Another is improving continuity of coverage across critical stages of the life course and when people, especially vulnerable young women, move between rural and urban areas. Given the overlap between structural drivers of HIV and broader development objectives, this sort of HIV lens can help strengthen cash transfer programmes themselves and provide fresh impetus for their maintenance or expansion.

Underpinning these three areas of work is the recognition that cash transfers generally exist for reasons above and beyond HIV. The ability of cash transfers to generate multiple beneficial impacts across HIV, health and development is one of their most appealing features and should be considered in cost-effectiveness analyses, financing and monitoring. Structures that enable cross-sectoral alignment and pooling of resources will help realize the promise of development synergies envisioned in investment approaches to AIDS, further embed HIV into national priorities, strengthen the sustainability of comprehensive HIV responses and further position cash transfers as an investment in human development.

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Appendix: Studies providing cash payments/incentives to reduce HIV risk behaviours as of April 2012

Adapted from Pettifor et al. 2012 and used with permission

Study name	Primary author	Study years	Location	Study design	Transfer type	Conditionality	Main outcome	Measure of effect
SUUBI	Sewamala	2005-2008	Uganda	Cluster randomized control trial	Savings account for secondary schooling or a family business	Conditional Attending 12 asset building and financial planning workshops	Intention to engage in sexual risk taking behaviour	β : -1.64 (95% CI -2.92 to -0.35)**
	Halfors	2007-2009	Zimbabwe	Cluster randomized control trial	Assistance with school costs	Unconditional	School dropout	Adjusted OR: 8.48 (95% CI 3.6-19.8)***a
	Cho	2008-2009	Kenya	Cluster randomized control trial	Assistance with school costs (un- forms and fees and money to address other problems resulting from absenteeism)	Unconditional	School dropout	Absolute change: 8% point decrease***
	Handa	2007-2011	Kenya	Randomized control trial	Cash transfer for parent/ guardian	Unconditional	Sexual behaviour	Study ongoing
	American Institutes for Research	2011-2013	Zambia	Cluster randomized control trial	Cash transfer for guardian/ caregiver/ household head	Unconditional	Sexual behaviour	Study ongoing
	Kenya cash transfer for orphans and vulnerable children (CT-OVC)			Randomized at household level			Begin sexual intercourse	Absolute change: 14% point decrease*
	Zambia Vulnerability grant			Randomized at the Community Welfare Assistance Committees (CWACS) level				

Study name	Primary author	Study years	Location	Study design	Transfer type	Conditionality	Main outcome	Measure of effect
Zomba Cash Transfer Program (also known as Schooling, Income, and HIV Risk (SIHR))	Baird	2008-2009	Malawi	Cluster randomized control trial	Assistance with school costs and cash transfer for parent/guardian and child	Three treatment arms	HIV prevalence	Adjusted OR: 0.36 (95% CI 0.14–0.91)**b
				Randomized at the enumeration area level		Conditional on school attendance for drop out; conditional on school attendance for school girl	HSV-2 prevalence	Adjusted OR: 0.24 (95% CI 0.09-0.65)**
						Conditional on school attendance for drop out; unconditional for school girl		
						Conditional on school attendance for drop out; no transfer for school girl		
Swa Koteka (HP-TN 068)	Pettifor	2011-2013	South Africa	Randomized control trial	Cash transfer for parent/guardian and child	Conditional School attendance	HIV incidence Sexual behaviour	Study ongoing
CAPRISA 007 (Reducing HIV in Adolescents (RHIVA))	Karim	2010-2012	South Africa	Cluster randomized control trial	Cash transfer for child	Conditional	HIV incidence Sexual behaviour	Study ongoing
				Randomized at the school level		Improved academic performance		
						School attendance		
						Passing examinations		
						HIV test		
						Participating in after school program		

Study name	Primary author	Study years	Location	Study design	Transfer type	Conditionality	Main outcome	Measure of effect
	Duffo	2003-2005	Kenya	Cluster randomized control trial Randomized at the school level	Assistance with school costs (school uniforms)	Unconditional	Childbearing (girls)	Absolute change: 1.5% point decrease* Relative change: 10% decrease*
Malawi Diffusion and Ideational Change Project (MDICP)	Thornton	2004	Malawi	Randomized control trial	Cash transfer for individual tested	Conditional Learning HIV status	Learning HIV test results	Absolute change: 43% point increase***
Oportunidades	Galárraga	2004	Mexico	Observational	Cash transfer for parent/guardian	Conditional Participation in health promotion activities School attendance	Sexually active (girls) Condom at last sexual intercourse (girls) Sexually active (boys)	Absolute change: 6.1% point increase Absolute change: 17.3% point increase Absolute change: 32.6% point decrease
							Condom at last sexual intercourse (boys)	Absolute change: 64.8% point increase
Malawi Incentives Project (part of the Malawi Diffusion and Ideational Change Project (MDICP))	Kohler	2006	Malawi	Randomized control trial Randomized at the individual or couple level	Cash transfer to individual tested	Conditional Negative HIV test after 1 year	HIV incidence (women) Condom use (women) Risky sexual behaviour (women) HIV incidence (men) Condom use (men)	No effect (no estimate given) No effect (Absolute change: 0.0% points) Absolute change: 6.7% point decrease* No effect (no estimate given) Absolute change: 5.2% point increase*
							Risky sexual behaviour (men)	Absolute change: 9.0% point increase**

Study name	Primary author	Study years	Location	Study design	Transfer type	Conditionality	Main outcome	Measure of effect
Iringa Combination HIV Prevention Trial	Celentano and Kerrigan	2012-2015	Tanzania	Community cluster randomized control trial	Cash transfer for parent/guardian and child	Unconditional	HIV incidence Sexual behaviour 1,800 15-24 women/girls for CT behavioural outcomes	Study ongoing
RESPECT (Rewarding STI Prevention and Control in Tanzania)	deWalque	2009-2010; ongoing follow-up through Spring 2011	Tanzania	Randomized control trial	Cash transfer to individual tested	Conditional Negative STI test	STI incidence (Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis, Mycoplasma genitalium)	Adjusted RR high-value transfer arm to control: 0.73 (95% CI 0.47-0.99)** Adjusted RR high-value transfer arm to low-value transfer arm: 0.69 (95% CI 0.45-0.92)**

* P value ≤ 0.10

** P value ≤ 0.05

*** P value ≤ 0.01

a The referent in the adjusted OR (AOR) are girls not exposed to the cash transfer

b No significant difference in effect among conditional versus unconditional intervention groups, or between individuals enrolled in school at baseline and individuals who had already dropped out

PHOTO ATTRIBUTIONS

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