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A systematic and historical review of basic income support programs in middle- income countries

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A systematic and historical review of basic income support programs in middle-income countries

This discussion document is part of a series of discussion documents forming part of the Basic Income Support in South Africa Series. This Series is developed in response to the government's proposal that the Social Relief of Distress Grant will be replaced by an alternative form of household support.

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1. Introduction

The scale and scope of social protection in developing countries have evolved significantly over the past few decades with the rapid diffusion of intervention models across national borders underpinned by international efforts to reduce poverty and improve equitable access to opportunities. The increased focus on empowering individuals and expanding choices has given impetus to the shift from broad-based subsidies of basic commodities to cash transfer programs. Currently, more than 120 low- and middle-income countries run cash transfer programs for poor families, and more than 70 of them run social pension programs (Banerjee et al., 2022). The COVID-19 pandemic has exposed the underlying vulnerabilities in many societies that the debate around expanding social assistance programs has intensified.

The widespread adoption of cash transfer programs in developing countries combined with the changing conception of livelihood vulnerabilities in advanced countries has ushered in public discourse around the merits and feasibility of basic income support schemes. As one of the most structurally unequal countries in the world which also enjoys a reasonably progressive political environment, South Africa has emerged as one of the few places where an intensive public debate on basic income support is taking place in earnest. This paper aims to contribute to the policy debate around basic income grant in South Africa by providing a border historical and empirical context with regard to the implementation of various social protection measures in general and cash transfer programs in particular.



There is extensive literature on both the historical and empirical aspects of social protection that one can readily tap into to shed light on any given subject matter within the field. Therefore, the purpose of the paper is not to provide a literature review reflective of all the major contours of the field. Rather, the objective is situating the debate around basic income grant in South Africa in the right historical context as well as presenting a more targeted systematic review of the impacts of comparable interventions around the world. We also present a slightly extended overview of the design and implementation of two of the few universal/quasi-universal basic income grant programs in the world.

The historical review shows that the evolution of social protection programs in both developed and developing countries has been interlinked with fundamental shifts in economic and political dynamics at the national and international levels. In this context, the most salient drivers of the recent popularity of basic income grant proposals are increasing concerns about the precarity of work in today's global economy and the spread of rights-based approaches to poverty reduction. However, as the section on a systematic review of empirical findings shows, the actual implementation of fully-fledged basic income support programs remains a rarity. Most large-scale cash transfer programs continue to have conditions often linked to human capital investment. Meanwhile, unconditional cash transfer programs have also grown in popularity in some developing countries, particularly in Africa. However, not a lot of countries have taken the leap to institute large-scale unconditional transfer programs, let alone universal basic income grants.

The systematic review documents evidence from 11 rigorous impact evaluation studies on large-scale unconditional cash transfer programs, including one study on the first-year implementation of Iran's universal basic income program. Only a fraction of the few large-scale quasi-universal transfer programs have been evaluated properly, largely because the size and scope of the programs make it difficult to obtain appropriate control groups. Due to the nature of the programs as popular political projects in most of these cases, it is not tenable to stagger implementation or delay full-scale implementation for the sake of a pilot. Moreover, even when pilots are feasible, they



could fall short in terms of capturing the full extent of the general equilibrium impact a nation-wide unconditional transfer would have.

Due to the above reasons, the systematic review focuses mainly on large-scale but targeted unconditional transfer programs. Most interventions have a generally positive impact on basic well-being indicators and little negative impact on labor force participation, although the magnitude of the effect sizes varies widely, and there is still a dearth of long-term evidence on whether the effects stick. However, the positive short-term impact of cash transfer on wellbeing is not surprising because it is an arithmetic truism that the value transfer on its own is going to add something positive to the recipient's welfare. The policy-relevant question is whether the cash transfer program is cost-effective compared to the opportunity cost of the scarce resources. It is also crucial to consider the heterogeneity of effect both in terms of program efficacy and cost-effectiveness across different sections of the income distribution to assess the targeting approach.

As the experiences of countries such as Iran and Mongolia that have implemented near-universal transfer programs demonstrate, the macroeconomic implications of large-scale transfer programs are relevant not only for aggregate outcomes such as output and inflation but also for the credibility and sustainability of the interventions themselves. One thing that distinguishes cash transfers from other public services is that the impact of inflation is directly transferred to the recipient as long as the nominal value of the transfer remains constant or increases at a lower rate than inflation. Therefore, the de-facto sustainability of a program partly depends on its own effect on macroeconomic stability.

At the program level, one of the most crucial design features that appear to affect overall efficacy and macroeconomic implications is the initial scope and efficiency of targeting. Large-scale transfer programs that could potentially have a sizeable impact on poverty and inequality with tolerable fiscal implications can be undermined by politically driven decisions to universalize benefits too soon. Universal transfer programs enjoy the advantage of being more feasible in environments where targeting capabilities are weak. However, it might be more cost-effective in the long run to invest in those



capabilities than to end up with universal programs that could eventually prove too expensive or distortionary to sustain.

The rest of the paper is organized as follows. Section 2 presents a brief overview of the historical evolution of social protection in developed and developing countries with an eye on potential threads tying past trends to the present-day debate on basic income grant. Section 3 presents the findings of the systematic review of the impact of large-scale unconditional cash transfer programs, including universal basic income. Section 4 zooms further into the design, implementation, and macroeconomic implications of the basic income grant programs in Iran and Mongolia. Section 5 concludes.

2. Historical origins of social protection interventions

This chapter presents a broad overview of the economic and political underpinnings of social protection programs with a wide historical perspective. As such, it will help to put the basic income grant proposal in South Africa in a global and historical context. Unlike the more specific review of impact evaluations in the next chapter, this chapter paints a more comprehensive picture, including the social and political imperatives of social protection that have shaped such systems at different stages of economic and political development in various parts of the world.

A Emergence of the modern welfare state

The modern welfare state emerged in conjunction with the development of the market system and the weakening of traditional forms of solidarity which often gave rise to new forms of social insecurity. The increase in specialization and interdependence that accompanied industrialization led to the replacement of ‘mechanical solidarity’, which characterizes homogeneous and small-scale communities by ‘organic solidarity’ (Durkheim, 1893). This means industrialization and the sophistication of the market system entail the role of the state increases as the embodiment of organic solidarity. At a fundamental level, the welfare state as it developed in western democracies served the primary function of moderating the effects of market forces (Briggs, 1961).

Following the transformation of the economy and consolidation of nation states in late 19th century Europe, traditional means of social insurance such as family and



relatives, church, charities, guilds, and local organizations began giving way to the state as the primary provider of social protection. The evolution of the social protection system in western democracies has been characterized by path dependence, according to which the nature of earlier institutions that were influenced by underlying factors a century or so ago continues to shape the present welfare system. For instance, one of the reasons the social democratic systems of Scandinavia have developed extensive non-contributory social insurance systems was because the private welfare market was relatively undeveloped historically (Esping-Andersen, 1990).

The Great Depression (c. 1929-1939) brought the failings of a laissez-faire capitalist system into sharp relief. This jolted even the most liberal of western democracies, the United States, into adopting extensive public works and social assistance programs as part of the New Deal. The role of the Great Depression in creating the political will to dramatically deviate from the laissez-faire trajectory of economic policy in the US in the 1930s is emblematic of the power of large-scale systemic shocks in generating support for social protection. Apart from public works programs that were aimed at reviving business and agricultural communities and providing assistance through the labor market, the later iterations of the New Deal broke new ground by instituting social security measures such as old-age and widows pensions, unemployment compensation, and disability insurance.

The effect of the Great Depression in expanding social protection programs was further extended by the impact of World War II on public investment as well as reimagining the notion of solidarity. At least in the US, the war economy was built on the back of the public works system and associated infrastructure created by the New Deal. That means the role of the state in providing social protection by actively reinvigorating the economy continued through the war years. More importantly, the war created a significant impetus for newer ways of providing social assistance. Arguably the most notable example of the post-war innovations to institutionalize solidarity is the creation of the National Health Service in the United Kingdom.



The economic buoyancy generated by the post-war reconstruction extended the momentum of expanding social protection systems around the west. However, the post-war boom started running out of steam in the late 1960s and early 1970s, putting the role and size of the state into question. The stagflation of the 1970s galvanized the neoliberal resistance to Keynesian policies and associated social programs. The notion of the state as a primary provider of social protection came under fire as it was portrayed as the overreach of a 'nanny state'. The retreat of the welfare state was most noticeable in the anglo-american sphere with the ascendance of Margaret Thatcher in the UK and Ronald Reagan in the US. Among other things, the developments of the 1970s and 80s demonstrated that social protection policies are not immune to the repercussions of international macroeconomic shocks.

Regardless of the overarching historical trajectory of gradual expansion over the first half of the 20th century, western societies have ended up with a variety of welfare states many scholars have attempted to taxonomize on the basis of various criteria. At the most basic level, the varying legacies of state and nation building in different countries have shaped the domestic political contexts that have given rise to various forms of welfare states (Beland et al., 2021). In addition to historical legacies, trust in government and societal cleavages are likely to have impacted the path of development of social protection policies.

The spurt of development of social protection measures in post-war Europe seemed to have been accompanied by a related development on the intellectual front in articulating a unifying framework for the welfare state. The conception of 'social citizenship' by T. H. Marshall, which views social rights as the logical next steps after the recognition of civil and political rights, is arguably the most influential articulation of social protection outside the pervasive market-based framework. It is also one of the frameworks that are often invoked in relation to the argument for removing conditionality on social assistance benefits.

Despite the perennial allusion to some form of basic income support, the closest thing most societies have come to providing basic income support in a large-scale institutionalized form is unemployment insurance. Unsurprisingly, unemployment

benefit has been a lightning rod in the ebb and flow of ideological struggle between liberal and statist approaches to economic policy. “One sign of the controversial nature of unemployment insurance schemes is that such schemes have tended to be introduced as the last of the major social insurance schemes” (Sjöberg et al., 2021, p. 573).

B The experiences of early-adopter developing countries

Although European countries were pioneers in most social security programs, some countries in the Global South adopted such programs fairly early in their development. For instance, Uruguay instituted an old-age pension as early as 1829. In general, Latin American countries have had the longest and most extensive experience with social protection among developing countries (Schmitt et al., 2015). This is partly due to the fact that they achieved political independence earlier than other developing countries in Africa and Asia. In Africa, South Africa was a pioneer in many areas, including old age pension, work injury compensation, and unemployment benefits.

In both Western countries and contemporary developing countries alike, work injury compensation stands out as the first type of social security scheme to be established in the median country in most regions. This reflects the co-evolution of industrialization and social security. However, the principal driver of economic policy in Western countries at the time of adopting social protection was the elimination of internal class inequality. On the contrary, the main motivation for economic reform in emerging countries at the time they started instituting social protection schemes was catching up with the industrialized nations by expanding wage labor (Rudra, 2007). This means some emerging countries may have had to prioritize international competitiveness over social protection and orient their social security programs towards encouraging labor force participation.

The peculiar historical trajectory of the politics and economics of Latin American countries might have contributed to the higher tendency of experimenting with various forms of social protection policies in the region. But the presence of common regional trends in the adoption of social protection is not unique to Latin America. Schmitt et al. 2015 find that there is broader empirical support for the existence of regional diffusion



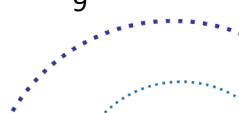
processes. According to their analysis spanning four regions, “the probability of introducing a social security program increases if other countries in the same geographical region have already adopted that scheme”. But they also attribute a significant portion of the move in developing countries towards expanded social security systems to the influence of the International Labor Organization.

The social insurance models in Latin American countries have oscillated between public-led and market-based systems since the middle of the 20th century (Carnes and Mares, 2015). The earlier model of occupation-based social security provision fell into disrepute with the macroeconomic instability and the associated political backlash against statist policies in the 1980s. This led to a shift towards private options for old age pension and unemployment and disability insurance. However, in recent decades, the public-based system has made a comeback following the overall increase in the precariousness of employment due to technological change and globalization.

One of the reasons unconditional basic income support programs are not common is that the political and economic imperatives have largely favored the conception of social protection policies as auxiliary to the promotion of productive enterprise. The fact that some of the few places where basic income support have been tried so far, such as Iran and Alaska, rely on significant resource rent seems to lend support to the hypothesis that the promotion of growth through greater productivity makes it difficult for governments to separate social protection from production. The changing nature of work and widening inequalities within countries is, however, forcing the question of divorcing basic income from employment to the fore.

C The rise of cash transfer programs in recent decades

The last few decades have seen the rapid rise of cash as the "king" of micro-level development interventions. Many of the earliest experiences of cash transfer implemented in developing countries context took place in Latin American countries where they mainly served the purpose of promoting human capital development. This means most of the vanguard Latin American cash transfer schemes have been of the conditional type. In contrast, many cash transfer programs in Africa are unconditional. This is partly because the origin of many of these schemes is related to the frustration





with more traditional social assistance programs such as food aid which were shown to have failed to transform the lives of their beneficiaries. Moreover, one of the drivers of cash transfer programs in Africa is the social and demographical crisis that was caused by the HIV/AIDS epidemic which often destroyed the income-generating capacities of households and left many children orphaned. As such, the main purpose of cash transfer programs in Africa is social safety net as opposed to human capital development as in Latin America.

There appears to be clustering of the types of cash transfer programs in Africa by geographical region. Niño-Zarazúa et al. (2010) categorize cash transfer systems in Africa into two as the "Southern Africa model" and the "Middle Africa model." The Southern Africa model mostly consists of rights-based cash grants awarded on the basis of categorical criteria such as old age and disability. There is an element of path-dependency in the cash transfer models that are operational in this region. For instance, "in Namibia and South Africa, the countries' cash grant systems are a carryover from earlier welfare systems that provided fairly generous benefits to the minority ruling group while giving smaller grants to members of the majority population" (Garcia and Moor, 2012). There is also an element of regional diffusion of policies either through emulation of perceived best practices in neighbouring countries.

The Middle Africa model, on the other hand, provides a mix of conditional and unconditional cash transfers that are often aimed at promoting the utilization of services such as education and health. Unlike programs in the Southern Africa model which are significantly institutionalized and funded out of tax revenues, the Middle Africa model features projects with limited time horizons that draw a substantial portion of their funding from international donors. However, the programs falling under these models are more varied and in some cases more creative than the institutionalized programs in Southern Africa.

Despite the ubiquity of cash transfer programs in the developing world, there is little experience of universal basic income grant schemes. This means there are only very few cases in which a universal, unconditional and regular transfer program has been tried for a reasonably long period of time. There is, however, increasing policy and



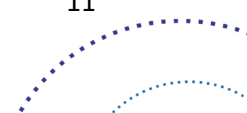
academic interest in universal or quasi-universal basic income grants leading to a few experimental and full-scale schemes. Basic income schemes are often viewed as the logical extension of more commonly implemented cash transfer programs. As such, the argument for basic income grants is similar to the standard argument in favour of cash transfers as opposed to in-kind transfers: there is a large body of empirical evidence showing that beneficiaries value the autonomy afforded by a cash grant. Banerjee et al (2019) make the case for basic income on the basis that, due to the heterogeneity of constraints the poor face and the near-impossibility of tailoring interventions to relax all idiosyncratic constraints at the same time, the impacts of basic income grants on a variety of outcomes are collectively a "good buy".

However, the same line of argument also suggests that basic income grants do not necessarily have to be universal. Due to the high fiscal cost of universal transfer programs, a government should be able to effectively tax the transfer from individuals above a certain threshold in the income distribution to sustain the scheme. This is often difficult to accomplish in developing countries where incomes are largely unobserved, which could ultimately lead to universal transfers being spread thin and less effective for those who need them than targeted transfers (Hanna and Olken, 2018).

In cases where some type of targeting is involved, basic income programs are more like conventional social security instruments such as non-contributory old age pension and disability assistance. In this context, many countries can be claimed to have experience of running a certain form of basic income grant program. Of course, there is a qualitative difference between justifying basic income transfers to groups based on age and disability status on the one hand and arguing for transfers to be based on income or poverty status on the other. But countries such as South Africa that already have significant experience in implementing other types of institutionalized social assistance programs often possess the political environment to entertain debate over basic income grant and the administrative capacity to implement it if it is adopted.

D The political economy of social protection in developing countries

Social protection policy is strongly influenced by the prevailing political dynamics, voter preferences and interest group politics. In some sense, the politics of social protection



can be viewed in the broad framework of the more general relationship between democratic institutions and redistribution. Theoretically, democracies are expected to be more redistributive than autocracies. In the same vein, social protection systems are likely to be more extensive and institutionalized in democracies than in autocracies.

But not all democracies are alike, particularly in terms of the distribution of de-facto power and the constitution of winning coalitions. As such, the types of welfare systems they adopt may differ dramatically depending on the preferences of the de-facto median voter. For instance, a polity where older voters constitute a large share of the effective voter roll tends to adopt relatively generous old-age benefits. In some developing countries, patronage driven benefits systems and rent-seeking can crowd out broad-based social protection. "Leaders may very well engage in low (or decreasing) social spending while promoting 'illiberal' welfare measures, such as public employment or labor market protections" (Rudra, 2007).

In general, universal social protection programs such as health care and old age pension tend to enjoy broader public support than targeted programs such as unemployment benefits. However, the preferences of the critical block of swing voters can shift over time with evolution in the economic and social spheres. The intensification of globalization and the deindustrialization of some economies appear to have increased public support for more inclusive non-contributory social assistance. For instance, Carnes and Mares (2015) show that the key determinant of individual-level support for publicly provided social protection in Latin America is the vulnerability of employment.

The increasing vulnerability of employment in recent decades seems to have blurred the line between various sections of the working population, creating a new coalition for broader social protection composed of both middle-class and low-income workers. This is particularly the case when it comes to the support for basic income grants. Rincon and Vlandas (2022) argue that the political economy of a basic income follows a well-established income, and labour market risks cleavages in the electorate irrespective of traditional ideological divides and partisan fault lines.

There is also some degree of convergence among developing countries with respect to the choice of social protection policies in recent decades. For most of the



20th century, the evolution of the welfare system in emerging economies in Latin America and East Asia has been shaped by the nature of state-society relations, including the relative strength of left-wing parties and the autonomy of labor unions. However, social policy regimes in both regions have trended in a more universalistic direction over the last few decades (Huber & Niedzwiecki, 2018).

The social protection system in South Africa is largely based on legislated rights born out of the grand political bargain that gave rise to the post-apartheid constitutional order. As such, it has leapfrogged the gradual development of social policy driven by popular mobilization, unlike in Latin America and East Asian countries. Another element that distinguishes the emergence of social policy in South Africa from many of its peer countries is that most of the system came into existence against the backdrop of deepening globalization and eroded bargaining power of labor. Coupled with the high level of chronic unemployment and structural inequality, these foundational characteristics of the social protection system in South Africa seem to have created a fertile ground for a public discourse around basic income grant earlier than in comparable countries.

3. A systematic review of the empirical evidence on basic income support programs

This chapter focuses on the review of evidence on the impact of basic income support programs. More specifically, it aims to synthesize the existing evidence on the impact of basic income support programs on selected outcomes in middle and high-income countries (as defined by the World Bank). The review includes evidence on universal basic income and unconditional cash transfer programs because interventions that meet the definition of universal basic income are limited. We sought to have only evidence on middle-income countries before we began the literature search. However, we widened the focus to include studies covering high-income countries as we found a limited number of studies conducted in middle-income countries meeting the review criteria. Studies conducted in low-income countries are not included because most interventions in these countries target specific groups and may have limited relevance to this review.





Eligibility criteria

Before we started the literature search, we developed a protocol outlining the eligibility criteria. In terms of interventions, we included interventions that are both unconditional and universal in a given sample. In terms of the study design, we included experimental (randomized controlled trials and cluster-randomized controlled trials) and quasi-experimental studies. We restricted the review to studies comparing those receiving and not receiving cash transfers, and we did not include studies with other types of comparators. For instance, we excluded studies that compared conditional and unconditional transfer because these studies mostly report the differential effect. We also excluded interventions conducted in a humanitarian setting. We focused on five outcome domains (poverty, health, education, labor supply, and gender equity outcomes). Therefore, the review included journal articles and working papers reporting the effect of basic income or unconditional cash transfers on at least one of the outcome domains published after 2000.

Search strategy

Although our review is not as comprehensive as a systematic review, we ensured our data extraction process follows a similar approach to a systematic review. We searched the relevant literature in the Google scholar search engine and scopus bibliographic database. Search terms include 'universal basic income', 'basic income grant,' 'basic income guarantee' and 'unconditional cash transfer'. We also searched two specialist databases (EconPapers and SSRN) and the World Bank website. In addition, we further conducted targeted searches using bibliographies of systematic review studies. The search strategy allowed us to identify as many studies as possible, meeting the inclusion criteria. However, we cannot be sure our search strategy included all the relevant studies.

Search result

Overall, our initial search located a total of 26230 records. We first conducted screening by titles and abstracts. We further extracted 208 potentially relevant records and screened them in full text. In total, 11 studies meeting the inclusion criteria are included



in the review. The included studies were conducted in six countries between 2012 and 2022: USA (n=3), Kenya (n=3), Pakistan (n=2), Iran (n=1), India (n=1), Indonesia (n=1). Three studies used an experimental design, while the remaining eight employed quasi-experimental designs. Six studies reported effects on health outcomes, effects on education by two studies, effects on poverty by four, effects on labor supply by three, and effects on gender equity by four.

Table 1 describes the interventions included in the review. The studies included in the review are associated with six interventions in six countries. Three interventions are unconditional cash transfers, of which two are targeted transfers. The remaining three interventions are similar to the universal basic income program. The Alaska Permanent Fund Dividend, the Iran Cash Transfer Programme, and the GiveDirectly Basic Income experiment are similar to universal basic income program. We provide below a brief description of each intervention and a review of the associated evidence.

The Alaska Permanent Fund Dividend

The Alaska Permanent Fund Dividend (APFD) pays a yearly dividend to all Alaska residents from income the state receives from the sale of oil. The APFD has been paying a dividend since 1982. Individuals who have lived in the state for at least a year are entitled to receive the dividend. The payment amount is uniform regardless of demographic characteristics, length of residency, and income level. However, it varies annually, from \$331 in 1984 to \$2069 in 2008. The APFD is universal and not attached to any condition.

Three studies reporting the effect of the program are included in the review. A study by Evans and Moore (2011) used mortality data for 2000-2006 from the Multiple Causes of Death (MCOB) database to explore the short-term mortality effect of the APFD. The authors applied the difference-in-difference method using residents of the rest of the United States as a control group. They found a 13 percent increase in mortality for urban Alaskans in the week dividends was received compared to residents of the control group. They suggested that a large part of the increase in mortality is likely due to increased activity and consumption, attributing only 8 % of the increase in





mortality to substance abuse. They checked the robustness of their results by confining the control group to similar temperature and income states in the comparison and found that the results remained the same.

Chung et al. (2016) investigated the effect of the APFD on the health of newborns using data from 1978 to 1984 and applying the difference in difference method. The health outcomes of the newborns were measured using birth weight, and the five-minute APGAR score, indicating the general condition of newborns. They found that APFD has a statistically significant positive effect on birth weight and the five-minute APGAR score. Receiving the dividend is associated with a 34.8 grams increase in birth weight, 0.063 improvements in APGAR score, and a 0.7 percentage point decrease in the likelihood of low birth weight. They suggested that 34%–57% of the measured birth weight increase is driven by increased gestation.

Jones and Marinescu (2020) examined the labor market impacts of the APFD using data from the Current Population Survey and a synthetic control method. They found no evidence of the APFD effect on aggregate employment. While the employment to population ratio in Alaska is similar to matched control states, the share of all people working in part-time jobs increased by 1.8 percentage points following the APFD. They provided suggestive evidence that the decrease in employment due to the income effect of APFD is offset by the stimulating (labor demand) effect due to consumption increase.

The Iran Cash Transfer Programme

The Iran Cash Transfer Programme (ICTP) is a nation-wide program introduced in December 2010 to replace bread and energy subsidies. The amount of transfer varied by household size, and each household received 455,000 rials per person monthly (equivalent at the time to \$45 at the official exchange rate and \$90 in Purchasing Power Parity dollars). The per capita payment initially amounted to 49.3 percent of per capita expenditure for individuals in the bottom quintile. The ICTP is one of the world's most extensive cash transfer programs, and it is closest to basic income in that it is universal, unconditional, and intended to be permanent.

Mostafavi-Dehzoeei (2018) used panel data from the Household Expenditures and Income Survey (HEIS) to estimate the impact of ICTP on labor supply. They employed a combination of fixed effect and difference-in-difference methods. The authors took advantage of the variation in the timing of program participation owing to the late registration of 30 percent of the population to estimate the average ICTP impact using the difference in difference method. They found that ICTP did not reduce the probability of labor force participation or hours of work except for the youth (20-29 years old). Looking at the effect by sector, they found ICTP even increased work hours for those working in the service sector, who possibly utilized the transfer to expand their business. A 10 percent increase in treatment intensity is associated with 36 minutes of additional weekly working hours.

GiveDirectly Basic Income experiment

In 2017, the NGO GiveDirectly launched a long-term randomized controlled experiment (lasting 12 years) to study the impact of a Universal Basic Income. The study involves nearly 300 (195 treatment and 100 control) villages in rural Kenya's Western and Rift Valley regions. The treatment villages were assigned to three groups. The first group of 44 villages with 4966 adults over 18 years has received approximately \$0.75 per day paid monthly for 12 years. The second group consisting of 80 villages with 7333 adults received the same monthly amount for two years. The third group of 71 villages (8,548 adults) received the same amount as the second group, but the two years total payment was paid as a lump sum at the start of the program.

We found one study reporting the impact of the basic income experiment meeting our inclusion criteria. Banerjee et al. (2020) reported the first results from an impact evaluation of the basic income experiment during the corona pandemic. They found evidence that the transfer in all treatment arms significantly improved food security, physical health, and mental health (depression). In particular, recipient households were 4.9-10.8 percentage points less likely to experience hunger and 3.6-5.7 percentage points less likely to have a sick member than the control group. The effect size is more significant for the long-term treatment arm (first group) and the period before the corona



pandemic relative to the short-term and lump sum arms (second and third group) and the period during the corona pandemic.

Before the basic income experiment, Givedirectly also implemented a small-scale randomized controlled experiment to study the impact of unconditional cash transfer on household welfare between 2011 and 2013. In this experiment, Givedirectly provided unconditional cash transfers to poor households living in a house with a grass-thatched roof in western Kenya. The 503 treatment households were assigned to three treatment arms. The first arm (258 families) received KES 2,800 (USD 45 PPP) monthly amount for nine months, and the second arm (245 families) received KES 25,200 (USD 404 PPP) one-time lump sum payment. The third group (137 families) received KES 10,000 (USD 160 PPP) for seven months in addition to the lump sum or monthly payment. Two studies reporting the impact of the experiment are included in the review.

Haushofer and Shapiro (2016) studied the short-term impact of the experiment. They found evidence that the unconditional transfer increased monthly nondurable expenditure by USD 36 PPP, asset holdings by USD 302 PPP, and agricultural and business revenue by USD 16 PPP. They also observed significant improvement in psychological wellbeing. However, they found no effect on educational and health outcomes. Comparing the effects between treatment arms provide additional results. First, they found little difference in treatment effect between female and male recipient households. Second, monthly and lump sum transfers have different effects on different outcomes. The former is associated with a significant increase in food security, and the latter with a significant increase in asset holding. Third, large transfers are superior to small transfers, with the returns to the size decreasing.

In related work, Haushofer and Shapiro (2018) explored the long-term impact of the cash transfer using a follow-up survey three years after the transfer, finding that most of the short-term effects persist. The authors found that the transfer increased asset holdings by USD 416 PPP, consumption by USD 47 PPP, and reduced hunger among recipient households compared to control households in the same village. They also reported increased education expenditure and improved psychological wellbeing among recipient households. However, they observed no statistically significant long-

term effect of cash transfer on most outcomes when comparing recipient households to control households in distance villages.

The Madhya Pradesh Unconditional Cash Transfer

In 2011, India introduced a pilot cash transfer program in Madhya Pradesh state to study its impact. The pilot program was carried out by the Self-Employed Women's Association (SEWA Bharat) between 2011 and 2012 and was funded by UNICEF. The program transferred a fixed monthly payment to all residents in the treatment villages without imposing any conditions. The amount in the first year was 200 rupees for adults and 100 rupees for children, which later increased to 300 and 150 rupees per month, respectively. The payment is equivalent to 30 percent of the average income for impoverished people.

We found one study reporting the program's effect, meeting the review criteria. Beck et al. (2015) analyzed data from a cluster randomized controlled trial to test the health impact of the MPUCT program. They examined the program's effect on three health outcomes: minor illnesses and injuries, illness and injuries requiring hospitalization, and child vaccination coverage. Using propensity score matching and logistic regression, they found that the odds of minor illnesses and injuries in the intervention village decreased by 46 percent compared to the control village. However, they found no evidence of program effect on severe illnesses and Injuries and child vaccination coverage, which already exceeded 90 percent at the baseline.

Bantuan Langsung Tunai (BLT) Direct Cash Transfer programme

The Indonesian government introduced the BLT in 2005 to compensate for the sudden removal of fuel subsidies. It provided quarterly payments of 300,000 Rupiah (approximately \$30) to poor households for one year between 2005 and 2006, which increased in 2008 to 100,000 Rupiah per month. The program targeted the poorest 30 percent of the population, and the initial payment amounted to 15 percent of the expenditure of the targeted households. BLT did not impose any condition, but it was temporary and not universal. We found one study that examined the program's impact, meeting our inclusion criteria.



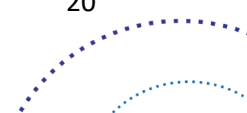
Bazzi et al. (2012) investigated the labor supply and household expenditure impact of the BLT program using panel data from the National Socioeconomic Survey. They employed a difference-in-difference method relying on variation in the predicted probability of treatment and multiple sources of variation in transfer (due to variation in the timing of second transfer and household size). They found no difference in the household expenditure growth and labor supply changes between beneficiary households who received two quarterly disbursements and non-beneficiary households. However, they found that households waiting for the second disbursement reported 7 percentage points lower expenditure growth and 1.5 hours per week less labor supply than non-beneficiary households.

Benazir Income Support Program (BISP)

The Benazir Income Support Program (BISP) was established in 2008 to address the declining purchasing power among low-income families. The BISP provided the poorest households with unconditional transfers of PKR 1,600 per month (USD 15), paid in quarterly installments to female members. Eligible households were initially identified through parliamentarian recommendation, which was later changed to a system based on Proxy Means Test (PMT). We included two studies reporting the impact of the program.

Ambler and De Brauw (2017) examined the impact of the Benazir Income Support Program (BISP) on measures related to women's empowerment using panel household data collected between 2011 and 2013 and regression discontinuity methods. The authors used gender norms and female mobility indices to measure empowerment. The female mobility index was constructed based on variables related to whether women can go alone to different places and female voting behavior. They found that the program has a statistically significant positive effect on gender norms and female mobility.

Majid and Riaz (2022) analyzed the impact of the Benazir Income Support Program (BISP) on employment outcomes for women. Using data from Pakistan Standard of Living Measurement (PSLM) surveys and propensity score matching techniques, the authors compared women in beneficiary and control households. They



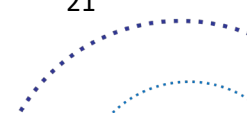


found that the program positively affects women's labor supply. The number of working women and the ratio of working women to women older than ten years in recipient households were higher than in non-recipient households. In addition, they found higher movement out of agriculture for women in beneficiary households relative to non-beneficiary households. The authors attributed the results to women's empowering effect of the program.

Summary of findings by outcome

While the summary above focuses on the main findings by intervention, in what follows, we briefly summarize the main findings of the basic income support programs across outcome domains. The outcomes included in the review are in the area of poverty, health, education, labor supply, and gender-equity outcomes as outlined above. Table 2 provides a summary of the main findings for poverty outcomes. The included studies demonstrate that UBI-type interventions contribute to poverty reduction. The interventions improved food security (Haushofer & Shapiro, 2018; Banerjee et al., 2020) and increased nondurable household expenditure, asset holdings, and agricultural and business revenue (Haushofer & Shapiro, 2016; Haushofer & Shapiro, 2018). However, one study found no significant effect on household expenditure growth (Bazzi et al., 2012).

Evidence on the impacts of the programs on health status is mixed (see Table 3), with most studies reporting a positive impact on a variety of health measures. Positive impacts are observed for the health outcomes of the newborns (measured by birth weight and the five-minute APGAR, Chung et al., 2016), physical and mental health (Banerjee et al., 2020), psychological wellbeing (Haushofer & Shapiro, 2016; Haushofer & Shapiro, 2018), and minor illnesses and injuries (Beck et al., 2015). Few studies found no evidence of intervention effect on general health status (Haushofer & Shapiro, 2016; Haushofer & Shapiro, 2018) and severe illnesses and Injuries and child vaccination (Beck et al., 2015). A study by Evans and Moore (2011) reported a negative short-term mortality effect.





While there is considerable evidence in the literature on the impact of unconditional cash transfers on educational outcomes, only two studies reporting educational outcomes are included in our review. Table 4 indicates that the studies found no significant impact on educational outcomes measured by an index constructed using education expenditure per child and the proportion of school-aged children in school (Haushofer & Shapiro, 2016; Haushofer & Shapiro, 2018).

The labor supply impact of basic income support programs is reported in Table 5, with minimal or no impact observed in all the included studies. The studies found no evidence of the intervention effect on aggregate employment (Jones & Marinescu, 2020), the probability of labor force participation and hours of work (Salehi-Isfahani & Mostafavi-Dehzoeei, 2018), and labor supply changes (Bazzi et al., 2012). A decrease in work hours among the youth and an increase in work hours for those working in the service sector are reported in Iran (Salehi-Isfahani & Mostafavi-Dehzoeei, 2018).

There is some evidence that demonstrates UBI-type programs have a significant impact on women's empowerment (see Table 6). Results are positive and significant for variables related to gender norms, female mobility, women's labor supply, and mobility out of agriculture (Ambler & De Brauw, 2017; Majid & Riaz, 2022). No impact is observed for the female empowerment index constructed using a weighted average of attitude and violence-related variables (Haushofer & Shapiro, 2016; Haushofer & Shapiro, 2018).



Table 1. Summary characteristics of included interventions

Program/Intervention	Country	Type of Intervention	Intervention Year	Description	Population
The Alaska Permanent Fund Dividend (APFD)	USA	Universal Basic Income (UBI)	Ongoing since 1982	The APFD pays all Alaska residents a dividend based on the state's income from the sale of oil. The amount of the payment varies annually.	The entire population of Alaska
The Iran Cash Transfer Programme	Iran	Universal Basic Income (BI)	Ongoing since 2010	The Iran Cash Transfer Programme was introduced in 2010 to replace bread and energy subsidies. The transfer amount varied by household size, and each household received 455,000 rials per person monthly (equivalent at the time to \$45 at the official exchange rate and \$90 in Purchasing Power Parity dollars).	The entire population of Iran
GiveDirectly Basic Income Experiment	Kenya	Universal Basic Income (BI)	2017-2029	It is a pilot basic income program that provides adults in the treatment villages \$0.75 per day paid monthly for two or 12 years.	20,000 individuals living across 197 villages
The Madhya Pradesh Unconditional Cash Transfer	India	Unconditional Cash Transfer (UCT)	2011-2012	It is a pilot program that transfers a fixed monthly payment to all residents of the treatment villages in Madhya Pradesh state. The amount initially was 200 rupees to adults and 100 rupees to children, which later increased to 300 and 150 rupees per month, respectively.	All residents of treatment villages in the state of Madhya Pradesh
Bantuan Langsung Tunai (BLT) Direct Cash Transfer programme	Indonesia	Targeted Unconditional Cash Transfer (UCT)	2005-2006 and 2008	It was introduced by the Indonesian government in 2005 to compensate for the sudden removal of fuel subsidies. It initially provided quarterly payments of 300,000 Rupiah (approximately \$30) to poor households for one year, which later increased to 100,000 Rupiah per month.	Over 19 million households (the poorest 30% of the population)
Benazir Income Support Program (BISP)	Pakistan	Targeted Unconditional Cash Transfer (UCT)	Since 2008	The BISP provides the poorest households with unconditional transfers of PKR 1,000 per month, paid in quarterly installments.	3 million households (2008-09)

Table 2. Summary characteristics and main results of included studies –Poverty outcomes

Author	Outcome variable	Year	Country	Study design	Main finding (coefficient)
Haushofer, J. and Shapiro, J. (2016)	Value of non-land assets	2016	Kenya	Randomized controlled trial	301.51***
	Nondurable expenditure				35.66***
	Total revenue, monthly				16.1***
	Food security index				0.26***
Banerjee, A., Faye, M., Krueger, A., Niehaus, P. and Suri, T.(2020)	Experienced hunger (Long term arm	2020	Kenya	Randomized controlled trial	-0.11***
	Experienced hunger (Short-term arm				-0.05**
Haushofer, J. and Shapiro, J. (2018)	Value of non-land assets	2018	Kenya	Randomized controlled trial (Treatment within villages)	416.27***
	Nondurable expenditure				47.04***
	Total revenue, monthly				20.70
	Food security index				0.20***
	Value of non-land assets			(Treatment Across villages)	421.91***
	Nondurable expenditure				17.41
	Total revenue, monthly				2.67
	Food security index				-0.05
Bazzi, S., Sumarto, S. and Suryahadi, A., (2012)	Household expenditure (first disbursement)	2012	Indonesia	Quasi-experimental design (Difference in Difference)	-0.075
	Household expenditure(second disbursement)				0.076

Asterisks indicate the level of significance: *p < 0.1; **p < 0.05; ***p < 0.01



**Table 3. Summary characteristics and main results of included studies –
Health outcomes**

Author	Outcome variable	Year	Country	Study design	Main finding (coefficient)
Chung, W., Ha, H. and Kim, B. (2016)	Birth weight	2016	USA	Quasi-experimental (difference-in-differences)	34.833 ***
	Low birth weight				- 0.007***
	5-Minute APGAR				0.063***
	Low 5-Minute APGAR				- 0.004***
Evans, W.N. and Moore, T.J., (2011)	All deaths compared to rest-of-USA	2011	USA	Quasi-experimental (difference-in-differences)	0.0907*
	All deaths compared to rest-of-USA in urban areas				0.1329*
	All deaths compared to similar states				0.0771**
	All deaths compared to similar states in urban areas				0.1301***
Beck, S., Pulkki-Brännström, A.M. and San Sebastian, M., (2015)	Households with cases of illness or injury in the last 3 months lasting more than 24 hours and needing treatment but no hospitalization	2015	India	Quasi-experimental (propensity score matching)	0.54
	Households with cases of illness or injury in last 3 months requiring hospitalization				1.07
	Households with complete vaccination				1.04
Haushofer, J. and Shapiro, J., (2016).	Health index	2016	Kenya	Randomized controlled trial	0.03
	Psychological wellbeing index				0.26***
Banerjee, A., Faye, M., Krueger, A., Niehaus, P. and Suri, T., (2020)	Any member sick (Long-term arm)	2020	Kenya	Randomized controlled trial	-0.06***
	Any member sick (Short-term arm)				-0.04**
	Health history (Long-term arm)				-0.04
	Health history (Short-term arm)				-0.08***
	Consulted hospital (Long-term arm)				-0.04**
	Consulted hospital (Short-term arm)				-0.05**
	CES-Depression scale (Long-term)				-1.69***
CES-Depression scale (Short-term)				-1.07***	
Haushofer, J. and Shapiro, J., 2018.	Health index	2018	Kenya	Randomized controlled trial (Treatment within villages)	-0.07
	Psychological wellbeing index				0.16***
	Health index			Randomized controlled trial (Treatment across villages)	-0.06
	Psychological wellbeing index				-0.02

Asterisks indicate the level of significance: *p < 0.1; **p < 0.05; ***p < 0.01



Table 4. Summary characteristics and main results of included studies – Education outcomes

Author	Outcome variable	Year	Country	Study design	Main finding (coefficient)
Haushofer, J. and Shapiro, J. (2016)	Education index	2016	Kenya	Randomized controlled trial	0.08
Haushofer, J. and Shapiro, J. (2018)	Education index	2018	Kenya	Randomized controlled trial (Treatment within villages)	0.15
	Education index			(Treatment across villages)	0.09

Asterisks indicate the level of significance: *p < 0.1; **p < 0.05; ***p < 0.01

Table 5. Summary characteristics and main results of included studies – Labor supply outcomes

Author	Outcome variable	Year	Country	Study design	Main finding (coefficient)
Jones, D. and Marinescu, I. (2022)	Employment rate	2022	USA	Quasi-experimental (synthetic control method)	0.001
	Part-time rate				0.018***
	Labor force participation				0.012
	Hours worked last week				-0.796***
Salehi-Isfahani, D. and Mostafavi-Dehzoeei, M.H. (2018)	Weekly hours worked (men)	2018	Iran	Quasi-experimental (Fixed effect)	0.049**
	Weekly hours worked (women)				0.001
	Weekly hours worked (men)			Quasi-experimental (difference-in-differences)	1.3
	Weekly hours worked (women)				2.54
	Labor force participation (men)				-0.011
	Labor force participation (women)				0.074
Bazzi, S., Sumarto, S. and Suryahadi, A. (2012)	Weekly hours per adult (first disbursement)	2012	Indonesia	Quasi-experimental design (Difference in Difference)	-2.565
	Weekly hours per adult (second disbursement)				2.114

Asterisks indicate the level of significance: *p < 0.1; **p < 0.05; ***p < 0.01



Table 6. Summary characteristics and main results of included studies – Gender equity outcomes

Author	Outcome variable	Year	Country	Study design	Main finding (coefficient)
Haushofer, J. and Shapiro, J. (2016)	Female empowerment index	2016	Kenya	Randomized controlled trial	0.01
Haushofer, J. and Shapiro, J. (2018)	Female empowerment index	2018	Kenya	Randomized controlled trial (Treatment within villages)	0.01
	Female empowerment index			(Treatment across villages)	0.15
Ambler, Kate; De Brauw, Alan. (2017)	Gender norms, female responses	2017	Pakistan	Regression discontinuity design	0.18
	Women's mobility measures				0.377
	Gender norms, mobility				0.632*
	Gender norms, male responses				0.827***
Majid, H. and Riaz, S.W. (2022)	Working woman in the household	2022	Pakistan	Quasi-experimental design(propensity score matching)	0.117***
	Ratio of working women to women aged 10 plus				0.066***
	Ratio of women working as employees				-0.021

Asterisks indicate the level of significance: *p < 0.1; **p < 0.05; ***p < 0.01

4. Case studies of large-scale basic income grant programs

4.1 Iran

A Origin and design features

The Universal Basic Income program in Iran has a peculiar origin that is unlike most other social protection programs. The program was intended as a political compromise to phase out the long-standing price subsidies by a direct transfer to households, businesses and government. As such, it was not conceived based on an explicit aim to serve a social policy objective. However, the decision to scrap price subsidies was

motivated by the fact that 70 percent of the benefits of subsidies on fuel, utilities and staple foods went to the top 30 percent of households in the income distribution (Karshenas and Tabatabai, 2019).

The concept of UBI was virtually absent from the public discourse prior to the adoption of the program (Tabatabai, 2012). Iran became the first country to implement a full-scale UBI at a national level accidentally. Despite it being an alien idea to much of the public, the de facto UBI program was politically palatable because it was presented as a fiscally neutral liberalization of the subsidy regime. In a way, the social bargain in favor of direct state intervention had already been in place for a number of decades which must have made the transition to UBI relatively frictionless.

The program was introduced in 2010 by the administration of President Mahmoud Ahmedinejad, and implementation commenced in 2011. The original design was such that the price subsidies would be removed gradually over the period 2010-2015. The gradualism was later abandoned in favor of the shock therapy approach for fear of various interest groups halting implementation along the way (Salehi-Isfahani, 2011). Half of the total savings from the removal of the subsidies would be transferred directly to households whereas 30 percent would go to businesses and the remaining 20 percent to government and state-owned enterprises.

The program was initially intended to be targeted at households earning less than the average national income with the bottom four deciles receiving the highest amount while the next three deciles receive a reduced amount of transfer. The original plan was for the upper 30 percent of households to be excluded from the program (Karshenas and Tabatabai, 2019). This plan was received with public discontent due to households disagreeing with their group assignment. This led the government to resort to making the transfer universal (at least temporarily), creating an accidental UBI program. In this regard, the very feature that made the cash transfer politically feasible, the fact that it was a metamorphosis of an existing universal program, undermined its design by rendering selective targeting politically unpalatable.

B Implementation

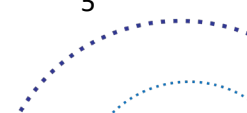


Despite earlier misgivings about the government's capacity to roll out the program, the initial execution of the transfer program was a significant logistical success. The government set up special accounts for each household registered to receive the transfer which would allow the beneficiaries to view the amount of transfer deposited ahead of the removal of price subsidies but would only let them withdraw the money on the day prices were to increase. This served as a nifty solution to stave off popular protest on price hikes as well as prevent potential distortion that could have arisen due to the mismatch between the time of price increase and availability of household liquidity.

The government's ability to determine who qualifies for the program according to the initial targeting criteria was not as robust as the logistical capabilities to disburse the transfer. Despite extensive data collection on self-reported income and wealth covering 15 million households, the government faced serious challenges in accurately identifying the target group. The long-term implementation of the program was bumpy because the legislative act did not specify the monthly amount of cash transfer. Therefore, the government exploited a loophole in the law by truncating the time of implementation during the first year to artificially increase the monthly amount of transfer to match the 'shock therapy' applied in the form of dramatically increasing prices.

During the first year of implementation in 2011, the government's revenue from the price increases exceeded the amount that was stipulated to be collected in the act. However, the total transfer to households still outstripped the revenue collected due to the significant increase in the number of beneficiary households resulting from the unplanned universalization of the program. This meant the government had to borrow from the central bank to fill the gap on top of reallocating the portion of revenue gain that was designated to businesses and public investment to household transfers.

In the second phase of implementation of the program, marked by the introduction of a new legislative act in 2016, the government was forced to reconsider a targeted approach in order to make the program affordable. This was followed by a decision to purge over 3.3 million households from the transfer roll based on a means testing criteria





that was not made public (Zamneh media 2016). The implementation process was still troubled by targeting challenges even after the adjustment, as demonstrated by the appeals submitted by 870,000 recipients protesting their removal from the beneficiary list. As of 2016, 561,000 recipients were allowed back into the scheme.

C Macroeconomic implications

The biggest concern facing the implementation of large-scale transfer programs is affordability and sustainability. When programs are as large as Iran's cash transfer program, it can have considerable implications for macroeconomic stability. The most important selling point for the cash transfer program was that it would be budget-neutral and, as a consequence, less inflationary than similar social spending programs. Moreover, it was expected to generate growth by improving productivity by relaxing the credit-constraint on poor households and young entrepreneurs.

The macroeconomic implications of the cash transfer program were complicated by the fact that the program was set up as a flip-side of a large price subsidy reform. During the first year of implementation of the program, 12-month inflation doubled. "This owed much to the passthrough from the adjustment in subsidized prices for food and energy, as producer price inflation rose from 12 percent to 39 percent (y/y) during the same period" (IMF, 2014, p. 6). The unplanned expansion of the program to cover the entire population and the resulting budget deficit which prompted the government to borrow from the central bank may have contributed to the inflationary pressure. However, it is difficult to disentangle the effects of the budget deficit on inflation from the effects of subsidy reform.

But a month-to-month tracking of inflation shows that, although inflation accelerates in the first six months of implementation which was largely induced by a sudden jump in energy prices, it fell rapidly in the rest of the first year of implementation (Karshenas & Tabataba, 2019). This indicates that the consistently high inflation in subsequent years (since 2012) that has ultimately eroded the real value of the cash transfer is more a result of international sanctions than the reform itself. One of the criticisms leveled against the subsidy reform-cum-transfer program is that it was poorly timed. This is related to the escalation of international sanctions within a year of the





program's implementation which has complicated the macroeconomic impacts and rendered evaluation incredibly difficult. Another confounding factor preventing identification of the macroeconomic impacts of the cash transfer program is that the government also engaged in other ambitious social spending programs such as housing in the first few years.

The other anticipated macro-level benefits of the largescale cash transfer program, such as higher economic growth due to a demand-side effect, must have been undermined due to the real value of the transfer being eaten up by inflation. The potential efficiency gains from better targeting in the program's later years diminished due to the cumulative effects of the macroeconomic imbalances worsened by international sanctions.

4.2 Mongolia

A Origin and design feature

Mongolia is the second country that implemented a national universal basic income (UBI) scheme for a short period. The UBI program in Mongolia evolved from previous resources-to-cash experiments. In 2005, following the mining boom, the government introduced Child Money Program (CMP), which provided 3000 Mongolian tugriks (MNT), equivalent to US\$2.49 per month per child. Eligibility was conditional on living in a low-income family with at least three children with up-to-date vaccination status and those over eight years attending school. In 2006, the CMP became universal to all children; only living with family and attending school remain conditions for eligibility. The annual transfer increased from 36,000MNT (US\$30.76) to 136,000 MNT (US\$116.19) per child in 2007.

In 2008, the two major parties (Democracy Party and MPRP) proposed the introduction of UBI on election platforms. The winning MPRP party, later on, included UBI in Government Action Plan 2008-2012 to replace the existing CMP. The Human Development Fund (HDF), responsible for accumulating funds and financing the distribution of transfers, was established in 2009. The implementation was delayed due to a decline in mineral revenue and the global financial crisis. The transfer distribution





commenced in February 2010, providing each citizen with 70,000MNT (US\$51.96). This was followed by a transfer of 50,000MNT, increasing the total transfer per citizen to US\$ 89 over the year. Because financing the transfer had a substantial budgetary burden, the next transfer was delayed, prompting widespread protest. The public did not accept the government's proposal to provide alternative social welfare services in replacement. The monthly transfer amounted to 10,000MNT (US\$7.42) between August and December 2010 and adjusted to 21,000MNT (US\$16.57) between January 2011 and June 2012. In 2011, the transfer amount was equivalent to 70 percent of per capita consumption expenditure for individuals in the bottom decile.

B Implementation

Individuals were required to show personal identity documents to be eligible for the benefit. This helped avoid fraud and payment collection more than once, albeit it delayed the registration process. The transfers were distributed on the 15th of each month, and on several occasions, protests broke out when payments were delayed.

C Macroeconomic implications

Unconditional cash transfers can, in principle, contribute to reducing poverty and inequality. Analysis by Yeung & Howes (2015) shows that Mongolia's cash transfer reduced poverty and improved equity. The transfer reduced the poverty rate based on the lower poverty line from 38.7 percent in 2010 to 21.6 percent in 2012, using the upper poverty line from 47.6 percent to 23.6 percent in the same period. In addition, the universal cash transfer reduced inequality measured by the Gini coefficient by 7.6 percent in 2010 and inequality measured by the Palma ratio by 12.8 percent (Yeung & Howes, 2015). Another benefit of UBI is increasing the state's dependence on taxation. In the case of Mongolia, the cash transfer was not taxed, similar to Alaska's resources-to-cash transfer. Some critics mention this failure to tax the transfer as a shortcoming of the program.

One of the main concerns of the program was the lack of fiscal sustainability. The revenue collected by HDF from dividends and royalties was short of the total transfer. For instance, the total cash transfer in 2010 was nearly twice the revenue collected by





HDF. The gap even widened in 2011 as the total transfer significantly increased. In 2011, the total cash transfer amounted to 13 percent of total fiscal expenditures and 6 percent of GDP (Yeung & Howes, 2015). The difference was initially financed using advance payments obtained from mining investors, which was unsustainable as the growth in the mining sector was stalled. In addition, the budget deficit was financed by transferring funds from government-owned mining companies, forcing the companies to borrow from banks to continue their operation.

The budget gap was created mainly because the amount of transfer did not take into account the available funds at the time of distribution. In other words, the cash transfer was not linked to the performance of the underlying mining projects, unlike the case of the Alaska Permanent Fund. The transfer amount was based on promises made during election campaigns. The promises made during the election campaign (US\$855.17 by Democratic Party and US\$1,282.75 by MPRP) were significantly higher than the actual transfer and amounted to 65 percent of the country's GDP in 2008.

Because of budgetary pressure, government borrowing rapidly increased to finance the fiscal deficit and invest in infrastructure and other projects. The government, through the development bank, issued bonds both in the domestic (US\$119.4 million in December 2012) and international markets (US\$580 million in March 2012 and US\$1.5 billion in November 2012) (Gankhuyag & Banzragch, 2014). As a result, public external debt increased significantly to 48.3 percent of GDP in 2012 from 30.8 percent in 2010 (IMF, 2013). Servicing the outstanding debt continued long after CMP replaced the universal cash transfer. For instance, debt servicing accounted almost half of HDF's total expenditure in 2014.

Although not tested empirically, it is possible that the cash transfer also contributed to inflation. There was relatively high inflation (10 -15 percent) during the UBI implementation between 2010 and 2012. The inflationary pressure may have affected the program's distributional impact by reducing the purchasing power of benefit recipients. In addition, it is widely believed that by increasing additional budgetary and administrative burdens, the UBI scheme adversely affected the provision of social assistance for groups desperately in need.



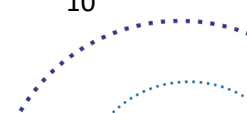


The program's overall impact was undermined by poor design and implementation owing to short-term decision-making. Because it was not affordable, the universal cash transfer program lost political and public support. It was abandoned after June 2012 and replaced by the CMP, which provided every child with 20,000MNT (US\$14.72) per month. In addition to the CMP, the parliament approved a law establishing four types of social assistance programs (social pensions, social assistance, social services, and social development services) based on categorical and income-based targeting. Moreover, the government took various measures to restore fiscal sustainability. First, a new Budget Law was approved, establishing principles and guidance for the budgeting process. Second, an election law preventing the use of resource-to-cash transfer as a campaign issue was amended in December 2011. Third, a law to abolish the HDF and establish the Future Heritage Fund (FHF), which serves as a traditional sovereign wealth fund by saving and investing mineral revenue, was drafted in 2014 and implemented in 2016.

5. Conclusion

The debate around the merits and feasibility of a basic income grant program in South Africa has intensified since the COVID-19 pandemic. This is in line with the historical trend globally which shows that large-scale systemic shocks such as war and depression play a role in creating the collective realization and political will to institute new social assistance measures. Even prior to the pandemic, the effects of globalization and associated economic vulnerabilities together with the emphasis on rights-based approaches to poverty reduction have contributed to the emerging debate on basic income support.

The current conception of basic income grant can be considered a marriage between the longstanding concept of social security such as old age pension and more recent innovations of cash transfer which are more development oriented. Lately, frustration with the lack of effectiveness of broad-based subsidy programs as well as corruption and mismanagement in large-scale public works programs have added to the attractiveness of cash transfer as a viable social policy tool. As such, targeted and conditional transfers have been massively popular presumably because they are

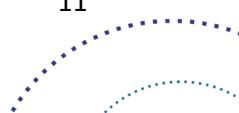




sufficiently large to have a national impact, but not too large to become unaffordable. They are also more amenable to independent and credible impact evaluation and subsequent tweaking.

Unlike targeted cash transfer schemes, universal or large-scale quasi-universal programs are still rare. To the extent that they have been implemented, their impact beyond the direct value of transfer is not sufficiently investigated due to methodological difficulties. The political dynamics surrounding the adoption and implementation of such programs often reduce the incentive to gather evidence with the aim of making adjustments. Therefore, rigorous ex-post evaluation is usually infeasible in the context of universal transfer programs.

But there is sizeable evidence on the performance of large-scale cash transfer programs that share a number of characteristics with the type of program that is being proposed for South Africa. Such evidence, where relevant, should be considered carefully in designing a transfer program in South Africa. More importantly, the experiences of other countries such as Iran demonstrate that systematic ex-ante evaluation and scenario building are critical to understanding the complex macroeconomic implications of such programs. Such exercise can provide useful inputs towards the decision on program scope and targeting. Considering that even small external shocks can have an amplified impact on nation-wide programs, scenario analysis can facilitate informed decision making.



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Appendix

Table A1 . Summary characteristics and main results of included studies

Outcome type		Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Health	Birth weight	Money Transfer and Birth Weight: Evidence from the Alaska Permanent Fund Dividend	2016	USA	Quasi-experimental (difference-in-differences)	574.39 (585.51)	34.833	in gram	2.1850			15.94
	Low birth weight					0.21(0.24)	-0.007	Binary indicator	0.0005			-14.00
	5-Minute APGAR					0.94 (0.96)	0.063		0.006			10.50
	Low 5-Minute APGAR					0.15 (0.14)	-0.004	Binary indicator	0.0004			-10.00
Health	All deaths compared to rest-of-USA	The short-term mortality consequences of income receipt	2011	USA	Quasi-experimental (difference-in-differences)		0.0907		0.0551			1.65
	All deaths compared to rest-of-USA in urban areas						0.1329		0.0742			1.79
	All deaths compared to similar states						0.0771		0.0313			2.46
	All deaths compared to similar states in urban areas						0.1301		0.0344			3.78



Outcome type		Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Labor supply	Employment rate	The Labor Market Impacts of Universal and Permanent Cash Transfers: Evidence from the Alaska Permanent Fund	2020	USA	Quasi-experimental (synthetic control method)		0.001				0.942	
	Part-time rate						0.018				0.02	
	Labor force participation						0.012	Binary			0.331	
	Hours worked last week						-0.796				0.084	



Table A1. Summary characteristics and main results of included studies (continued)

Outcome type		Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Labor supply	Weekly hours worked (men)	Cash Transfers and Labor Supply: Evidence From a Large-Scale Program in Iran	2018	Iran	Quasi-experimental (Fixed effect)	19.53	0.049	Hours	0.022	4435		2.23
	Weekly hours worked (women)						0.001	Hours	0.01	4763		0.1
	Weekly hours worked (men)				Quasi experimental (difference-in-differences)		1.3	Hours	2.18	3224		0.6
	Weekly hours worked (women)						2.54	Binary	1.63	3656		1.56
	Labor force Participation (men)						-0.011	Binary	0.016	3370		-0.69
	Labor force Participation (women)						0.074	Binary	0.046	3474		1.61
Health	Households with cases of illness or injury in the last 3 months lasting more than 24 hours and needing treatment but no hospitalization	Basic income – healthy outcome? Effects on health of an Indian basic income pilot project: a cluster randomized trial	2015	India	Quasi-experimental (propensity score matching)		0.54			2034		0.01
	Households with cases of illness or injury in last 3 months requiring hospitalization						1.07					>0.05
	Households with complete vaccination						1.04					>0.05



Table A1 . Summary characteristics and main results of included studies (continued)

Outcome type	Outcome variable	Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Poverty	Value of non-land assets	The Short-Term Impact of Unconditional Cash Transfers to the Poor: Experimental Evidence from Kenya	2016	Kenya	Randomized controlled trial	415.32	301.51	In USD	27.25	940	0.00	
	Nondurable expenditure					82.18	35.66	In USD	5.85	940	0.00	
	Total revenue, monthly					90.52	16.1	In USD	5.88	940	0.02	
	Food security index					1.00	0.26	Index	0.06	940	0.00	
Health	Health index					1.00	0.03	Index	0.06	940	0.82	
	Psychological wellbeing index					1.00	0.26	Index	0.05	1,474	0.00	
Education	Education Index					1.00	0.08	Index	0.06	823	0.43	
Gender equity	Female empowerment index					1.00	0.01	Index	0.07	698	0.88	
Poverty	Experienced Hunger (Long term arm)	Effects of a Universal Basic Income during the pandemic	2020	Kenya	Randomized controlled trial		-0.11		0.02	8398		-5.50
	Experienced Hunger (Short-term arm)						-0.05		0.02	8398		-2.50
Health	Any member sick (Long-term arm)						-0.06		0.02	8398		-3.00
	Any member sick (Short-term arm)						-0.04		0.02	8398		-2.00
	Health history (Long-term arm)						-0.04		0.03	8398		-1.33
	Health history (Short-term arm)						-0.08		0.03	8398		-2.67
	Consulted hospital (Long-term arm)						-0.04		0.02	8398		-2.00
	Consulted hospital (Short-term arm)						-0.05		0.02	8398		-2.50
	CES-Depression scale (Long-term)						-1.69		0.45	8105		-3.76
	CES-Depression scale (Short-term)						-1.07		0.38	8105		-2.82



Table A1. Summary characteristics and main results of included studies (continued)

Outcome type	Outcome variable	Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Poverty	Value of non-land assets	The Long-Term Impact of Unconditional Cash Transfers: Experimental Evidence From Kenya	2018	Kenya	Randomized controlled trial (Treatment within villages)	682.39	416.27		43.21	912	0.00	
	Nondurable expenditure					134.79	47.04		9.78	912	0.00	
	Total revenue, monthly					158.53	20.70		10.60	912	0.30	
	Food security index					1.00	0.20		0.06	912	0.00	
Health	Health index					1.00	-0.07		0.06	912	0.50	
	Psychological Wellbeing index					1.00	0.16		0.05	1491	0.00	
Education	Education Index					1.00	0.15		0.07	817	0.10	
Gender equity	Female empowerment index					1.00	0.01		0.07	1256	1.00	
Poverty	Value of non-land assets				(Treatment Across villages)	682.39	421.91		57.12	1286	0.00	
	Nondurable expenditure					134.79	17.41		12.09	1286	0.60	
	Total revenue, monthly					158.53	2.67		12.30	1286	1.00	
	Food security index					1.00	-0.05		0.10	1286	1.00	
Health	Health index					1.00	-0.06		0.06	1286	0.70	
	Psychological Wellbeing index					1.00	-0.02		0.06	2097	1.00	
Education	Education Index					1.00	0.09		0.09	1129	0.80	
Gender equity	Female empowerment index					1.00	0.15		0.08	943	0.40	



Table A1. Summary characteristics and main results of included studies (continued)

Outcome type	Outcome variable	Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Gender equity	Gender Norms, female responses	The Impacts of Cash Transfers on Women's Empowerment: Learning from Pakistan's BISP Program	2017	Pakistan	Regression discontinuity design		0.18	sum of binary indicators		1801	0.288	
	Women's Mobility Measures						0.377	sum of binary indicators		1769	0.149	
	Gender Norms, Mobility						0.632	sum of binary indicators		1598	0.096	
	Gender Norms, Male Responses						0.827	sum of binary indicators		961	0.006	
Labour supply	Working woman in the household	Unconditional cash transfers and women's labor supply in Pakistan	2022	Pakistan	Quasi-experimental design(propensity score matching)		0.117	Binary indicator	0.019	4245		6.05
	Ratio of working women to women aged 10 plus						0.066	Ratio	0.014	4240		4.6
	Ratio of women working as employees						-0.021	Ratio	0.029	1370		-0.730
poverty	Household expenditure (first disbursement)	Evaluating Indonesia's Unconditional Cash Transfer Program, 2005-6	2012	Indonesia	Quasi-experimental design (Difference in Difference)		-0.075		0.030	9010		
	Household expenditure(second disbursement)						0.076		0.033	9010		
Labor supply	Weekly Hours per adult (first disbursement)						-2.565		1.053	6992		
	Weekly Hours per adult (second disbursement)						2.114		1.179	6992		



Table A2. Summary characteristics and main results of excluded studies

Outcome type	Outcome variable	Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Education	Enrollment (ever enrolled)	The impact of Kenya's Cash Transfer for Orphans and Vulnerable Children on human capital	2012	Kenya	cluster randomized social experiment (DD estimator)		0.032		0.0152	6190		2.1
	Enrollment (currently enrolled)						0.078		0.023			3.38
	Grade progression						0.043		0.0242			1.77
	Grades behind						-0.096		-0.1			0.96
	Drop out						-0.023		0.0157			-1.46
	Returning to school						0.023		0.0063			3.67
Health	mental health	Effects of a Large-Scale Unconditional Cash Transfer Program on Mental Health Outcomes of Young People in Kenya	2015	Kenya	Randomize controlled trial	(0.33)(0.32) (0.37) (total)(intervention) (control)	0.79	Binary indicator of depressive symptoms		1960		
	Been healthy in past 4 weeks						0.93	Binary indicator				
	Healthier than 1 year ago						1.41	Binary indicator				
	Hope score above median						1.59	Binary indicator				
Health	Ever been pregnant	Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on early pregnancy and marriage of adolescent girls	2015	Kenya	cluster randomized longitudinal design	(0.15) (0.19) (0.13)	0.049	Binary indicator	0.0202	1547		2.42
	Ever married or co-habiting					(0.07) (0.08) (0.06)	0.003	Binary indicator	0.0066	1547		0.45



Table A2. Summary characteristics and main results of excluded studies (continued)

Outcome type	Outcome variable	Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	N	T-stat
Poverty	Per capita total expenditure	The Impact of an Unconditional Cash Transfer on Food Security and Nutrition: The Zambia Child Grant Programme (CGP)	2014	Zambia	cluster randomized controlled trials (difference-in-differences)		15.18	Zambia kwacha (ZMW)	4594	5.07
	Per capita food expenditure						11.6	Zambia kwacha	4594	4.76
	Eats more than one meal a day						0.079	Binary indicator	4549	4.02
	Food security scale						2.498	Scale	4549	4.23
	Is not severely food insecure						0.177	Binary indicator	4549	4.0
Health	Weight-for-height z-score						0.118	Z score	6157	1.74
	Height-for-age z-score						0.066	Z score	6155	0.7
Poverty (CGP)	Expenditure per capita	Poverty and perceived stress: Evidence from two unconditional cash transfer programs in Zambia	2017	Zambia	cluster randomized controlled trials	control (treatment) 36.97(37.56)	10.43	Zambia kwacha	2515	4.32
	Household Food Insecurity Access Scale					5.20 (4.84)	2.86	Scale (0-27)	2515	7.63
	Number of non-productive assets owned					1.44 (1.80)	0.72	count	2515	6.29
Health (CGP)	Perceived Stress Scale (0 -24)					4.20 (4.03)	0.07	Scale (0-24)	14565	0.21
Poverty (MCP)	Expenditure per capita					40.53 (53.62)	16.68	Zambia kwacha (ZMW)	2515	4.76
	Household Food Insecurity Access Scale					5.54 (5.11)	3.02	Scale (0-27)	2515	6.94
	Number of non-productive assets owned					0.87 (0.97)	0.37	count		5.73
Health (MCP)	Perceived Stress Scale					4.73 (4.64)	-0.42	Scale (0-24)		1.17



Table A2. Summary characteristics and main results of excluded studies (continued)

Outcome type	Outcome variable	Name of paper	Year	Country	Study design	SD of outcome variable	Main finding (coefficient)	Unit	SE	N	p-value	T-stat
Poverty (CGP)	Total consumption per capita	Can unconditional cash transfers raise long-term living standards? Evidence from Zambia	2018	Zambia	cluster randomized controlled trials		0.38	Zambia kwacha (ZMW)	0.07	2519	0.00	5.43
	Food security scale						0.53	Scale (0–24)	0.13		0.00	4.08
	Overall asset index						0.55	Index	0.09		0.00	6.11
	Relative poverty index						0.74	Binary indicator	0.11		0.00	6.73
	Incomes & Revenues index						0.35	Index	0.07		0.00	5.00
	Finance & Debt index						0.29	Index	0.08		0.01	3.63
	Material needs index (5–17 years)						0.57	Index	0.1		0.00	5.70
Education (CGP)	Schooling index (11–17 years)						0.07	Index	0.07		0.97	1.00
Health (CGP)	Anthropometric index (0–59 months)						0.06	Binary indicator	0.05		0.89	1.20
Poverty (MCP)	Total consumption per capita						0.51	Zambia kwacha (ZMW)	0.14	3078	0.00	3.64
	Food security scale						0.54	Scale	0.1		0.00	5.40
	Overall asset index						0.72	Index	0.09		0.00	8.00
	Relative poverty index						0.97	Binary indicator	0.13		0.00	7.46
	Incomes & Revenues index						0.36	Index	0.07		0.00	5.14
	Finance & Debt index						0.33	Index	0.06		0.00	5.50
	Material needs index						0.55	Index	0.08		0.00	6.88
Education	Schooling index						0.23	Index	0.06		0.00	3.83

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