



Policy Brief

NUMBER 2, 2018

Overview

This policy brief is part of a wider research project entitled 'Building the Economic Case for Investments in Social Protection'. The research aims at demonstrating the potential impacts of social protection on inclusive growth. The project is a collaborative effort between the Maastricht Graduate School of Governance at the University of Maastricht and United Nations University-MERIT, NL; the Global Development Institute at the University of Manchester, UK; the School of Social Science at the University of Makerere, Uganda; and the Expanding Social Protection Programme of the Ugandan Ministry of Gender, Labour and Social Development. This project is part of the research agenda of the Knowledge Platform Inclusive Development Policies and funded by the Ministry of Foreign Affairs of the Netherlands through the NWO-WOTRO programme.

Written by Stephan Dietrich and Franziska Gassmann

© United Nations University 2018
ISBN 978-92-808-5008-6

Licensed under the Creative Commons Deed 'Attribution-NonCommercial-NoDerivs 2.5'

The views expressed in this publication are those of the authors and do not necessarily reflect the views of United Nations University.



UNITED NATIONS
UNIVERSITY

UNU-MERIT

Rates of Return to Social Protection: Social Cash Transfers in Uganda¹

BESIDES THEIR SHORT-TERM POVERTY REDUCTION IMPACT, social cash transfers are investments in people, yielding short-, mid- and long-term benefits to individuals and society. Two recent studies simulate the rates of return to a country-wide rollout of Uganda's Social Assistance Grants for Empowerment (SAGE) programmes, using data from the Uganda National Panel Survey (UNPS). Cash transfers have positive effects on child health and school attainment, which eventually translate into higher earnings, hence creating monetary returns. The welfare returns to the programmes increase over time, particularly when accounting for different welfare weights.

Social protection is an investment in human capital

Social protection can be more than a set of safety nets with protective and preventive functions. Especially in recent years, attention has turned to the promotional and transformational effects that social protection programmes have. In this sense social protection can be seen as an investment, which can generate future returns and also enhance growth with consequent benefits for the national and local economy, including an increased tax base.

Throughout the last decade social protection expenditures have remarkably increased in sub-Saharan Africa. Spurred by positive findings in impact evaluations, this increase was considerably driven by the spread of cash transfer programmes. A World Bank study showed that 40 countries in sub-Saharan Africa operated an unconditional cash transfer programme in 2014, which is about twice as much as in 2010 (World Bank, 2015). Globally more than one billion people in mid- and lower income countries are estimated to benefit from cash transfer programmes.

Promotional and transformational effects of cash transfers have been gaining more attention globally, and social protection is increasingly seen as a development policy of investment in people. Social cash transfers have the potential to support poor households in becoming healthier and better educated, by easing the financial burden of sending their children to school and investing in their health-



EXPANDING
SOCIAL
PROTECTION



better life chances for all

MAKERERE UNIVERSITY



care. There is substantial evidence proving that improved education and health outcomes can unleash long-term economic developments (see, for example, Glewwe & Kremer, 2006; Glewwe & Miguel, 2007; Psacharopoulos, 1984, 1985; Psacharopoulos & Patrinos, 2004; Strauss & Thomas, 2007).

Social Assistance Grants for Empowerment (SAGE) transfers in Uganda

In 2011, the Government of Uganda launched a pilot cash transfer programme called Social Assistance Grants for Empowerment (SAGE), which had two components: a social pension and a poverty-targeted transfer. The Senior Citizen Grant (SCG) is a universal social pension targeted at persons aged 65 and above. The Vulnerable Family Grant (VFG) is a social assistance programme targeted at the most vulnerable 15 percent of households. Both programmes have been piloted in different parts of Uganda. The value of each transfer is UGX 25,000 per month, which is paid for each senior citizen in the case of the SCG, and each eligible household in the case of the VFG. In 2015, after the successful piloting of the two alternative cash transfer programmes, the Government of Uganda announced the discontinuation of the VFG, and the rollout of the SCG to an additional 40 districts by 2020 (Ministry of Gender, Labour and Social Development, n.d.).

There is already a substantial evidence base on the positive short-term effects of Uganda's SAGE transfer programme, in particular of the SCG (Kidd, 2016). A recent evaluation of programme impacts found a drop in the poverty rate of SCG recipient households from 49 percent to 33 percent over two years, a much more pronounced decrease than observed

in the control group (OPM, 2016). In addition to monetary well-being, recipient households' food security has also increased. In SAGE-districts, the share of households with an elderly member consuming less than two meals a day has decreased by six percent, while the corresponding rate in districts without the programme increased by more than five percent (EPRI, 2016). Moreover, improvements in housing conditions are also associated with the SCG, as well an increased ability of recipients to cover their healthcare expenses (OPM, 2016).

However, in spite of the above discussed promising evidence on the short-term impacts of social cash transfers in Uganda, there is still limited knowledge about the mid- and long-term impacts, their transformational capacity and, hence, their economic returns. Two recent studies simulate the rates of return to a country-wide rollout of Uganda's Social Assistance Grants for Empowerment (SAGE) programmes, using data from the Uganda National Panel Survey (UNPS).

Pathways of returns

The primary objectives of non-contributory social protection are related to human development and poverty reduction, and they are increasingly understood as an economic investment. The economic case for social protection has been formulated in numerous studies in the recent decades, with both theoretical mechanisms and scientific evidence linking transfers to pro-poor economic growth (Cherrier, et al., 2013). Social protection contributes to economic growth through various direct and indirect transmission channels (see in Barrientos, 2012; Alderman & Yemtsov, 2012; Cherrier et al., 2013). It supports the proximate (e.g. labour productivity), intermediate (e.g. national demand) and ultimate factors (e.g. class and power relations)

Notes

1. This brief summarises the findings of two reports written as part of a research project on the returns to the Ugandan SAGE transfers: Dietrich, S.; Malerba, D.; Barrientos, A. & Gassmann, F. (2017): *Welfare weights and the evaluation of antipoverty transfer programmes*. Maastricht: UNU-MERIT & MGSOG; and Dietrich, S.; Malerba, D.; Barrientos, A.; Gassmann, F.; Mohnen, P.; Tirivayi, N.; Kayuma, S. & Matovu, F. (2017): *Social protection investments, human capital, and income growth: Simulating the returns to social cash transfers in Uganda*. UNU-MERIT Working Paper 2017-029. Maastricht: UNU-MERIT & MGSOG.

2. In Karamoja: 60 and above.

3. A value of 0 for the x-axis indicates that the society has no preference for redistribution; all outcomes are valued equally. With increasing x, society's preference for redistribution increases; hence outcomes for the poor are valued more.

of economic growth (for an elaboration on factors supporting economic growth, see Szirmai, 2014). Social protection particularly affects intermediate objectives, such as the accumulation of human capital, investment in, protection and accumulation of productive assets, and labour market participation. Hence, the economic rationale for investing in social protection derives from its contribution to inclusive growth and development. By encouraging and facilitating investments in human capital, social cash transfers are an instrument of development policy.

positive education outcomes. Through better health and increased school attainment, children grow up to be more productive individuals, eventually earning higher wages. These positive returns to human capital have also been observed for self-employed farm and non-farm income (Appleton, 2001; Joliffe, 2004) - an important factor in a country with a large informal sector, such as Uganda. It has to be noted that this represents a reduced framework concentrating on education and child health effects. It does not take into account other impact domains, such

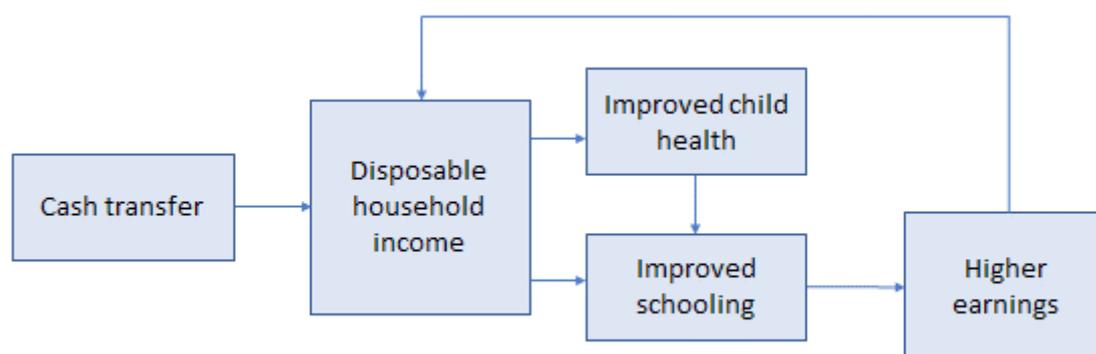


Figure 1 Cash transfers yield long-term benefits (reduced framework)

In the framework underlying the analysis, cash transfers ease the budget constraint of recipient households by raising the disposable income. The relaxed budget constraint is expected to increase the demand for child health inputs (such as nutrition, health care etc.) and for education. The framework replicates the many ways incomes, decisions on child health, schooling, and the returns to schooling connect (see Figure 1). Income security can contribute to school enrolment and school attendance by easing the costs associated with sending children to school. Instrumentally via nutrition and health, it enables students to unleash their cognitive capacity, and supports

as impacts on productive assets and livelihoods. Hence, the actual impacts of transfers on future earnings are likely to exceed the estimations of such a reduced model.

The relationship between income, child health, and schooling in Uganda

Estimations based on the Uganda National Panel Data show that an income increase in a household—for example through a cash transfer—reduces the risk of child underweight and reduces the risk of school drop-outs significantly. Interestingly, the effect of income on school drop-outs is small for children at primary education age and largest for adolescents at tertiary



education age. This reflects Uganda's universal primary education policies, which reduce the effect of a household's income on schooling decisions at younger ages. The estimation results also support the positive returns to education showing that an additional year of education is associated with a 12 percent increase in household income.

Mid-term and long-term effects of SAGE transfers

Using these estimates the effects of SAGE are projected over a period of 10 years. The scenario assumes the nation-wide implementation of both the SCG and VFG according to their initial programme design. This means, that all individuals 65 and above will receive the SCG and that in all districts the 15 percent poorest families will receive the VFG. The programme simulations also account for demographic changes in the population and the operational costs of SAGE. After 10 years, the simulation results show that both programmes would have significant positive effects on child underweight and school attainment. For the country as a whole, the model predicts a 1.5 percentage point decrease in child underweight. While there is little scope for these programmes to impact school enrolment (as primary education is already free), they are expected to have a positive effect on overall school attainment. Compared to a scenario without social transfers, the SCG and the VFG could increase the completed years of schooling of an average Ugandan aged 18 or older by 0.01 years on average after ten years. Given that one third of the Ugandan population is 18 years or older, this adds up to a substantial increase in the nation's human capital.

Rates of return to the SAGE transfers

The costs of cash transfer programmes can be considerable. To fully understand the net returns to the programmes it is important to regard the programme costs as well. The rate of return is commonly used to measure net-returns and to compare the profitability of different programmes. The rate of return is computed as the net present value of the programme benefits compared with the net present value of the costs.

There are different ways to measure the benefits of social policies for a society (see Text Box). The first and most commonly used approach is to focus on monetary returns without considering who benefits from a programme. In this approach every shilling is treated the same regardless of whether the beneficiary is a poor or rich household. This approach is appealing because it is easy to compute and there is no need to think about factors that could change the weights.

The literature, however, shows that people, and societies as a whole, might have preferences for transfers made to the poor, based on their expectations of future incomes and their inequality aversion (see, for example, Carlsson et al., 2005; Amiel et al., 1999). Findings from an experiment with 312 participants conducted in June 2016 at the Uganda Christian University suggest that Uganda is no exception to this. The preferences of the experiment participants are in line with similar experiments in other countries. Based on these experiment responses, so-called welfare weights are calculated to account for societal preferences in the evaluation of SAGE. Thereby the welfare weights put a different weight on programme benefits depending on whether beneficiaries are richer or poorer. In other words, the welfare weights indicate how much more the

About the Authors

Stephan Dietrich (PhD in Development Economics) is a postdoctoral fellow at UNU-MERIT/MGSOG, Maastricht University. His research interests include the analysis of household risk management processes and the impacts of micro-insurances, informal insurance networks, and safety net programs. Currently, he is part of research projects on the returns to social protection investments in Uganda, Kenya and Lesotho.

Franziska Gassmann (PhD in Economics) is Professor of Social Protection and Development at UNU-MERIT/MGSOG, Maastricht University, the Netherlands, where she leads the research theme on Social Protection, Inclusive Innovation and Development. She is also Professor of Poverty and Social Protection at Bonn-Rhein-Sieg University of Applied Science, Germany.

society values a shilling transferred to a poor household than the same shilling allocated to a richer household.

To analyse whether societal preferences make a difference in the evaluation of SAGE, the rates of return are calculated with and without welfare weights. The benefits are measured as the monetary returns to increased education attainment (induced by the cash transfers). Once the indirect benefits through higher school attainment start to kick in, the rates of return increase markedly. Applying equal weights, neither of the SAGE transfers generate positive returns through education after 10 years. This is

to only 10 years. However, the results indicate that returns through improved schooling matter and improve the rate of return significantly over time.

Comparing the SCG and the VFG, the former is expected to unleash higher rates of return. Firstly, this is due to the higher payouts – the transfer is provided universally to all people aged 65 and above. While the VFG reaches 15 percent of the households by design, 21 percent of all households have at least one member that is 65 years or above. Hence, the SCG reaches more households, and there can be even more than one recipient per household. Secondly,

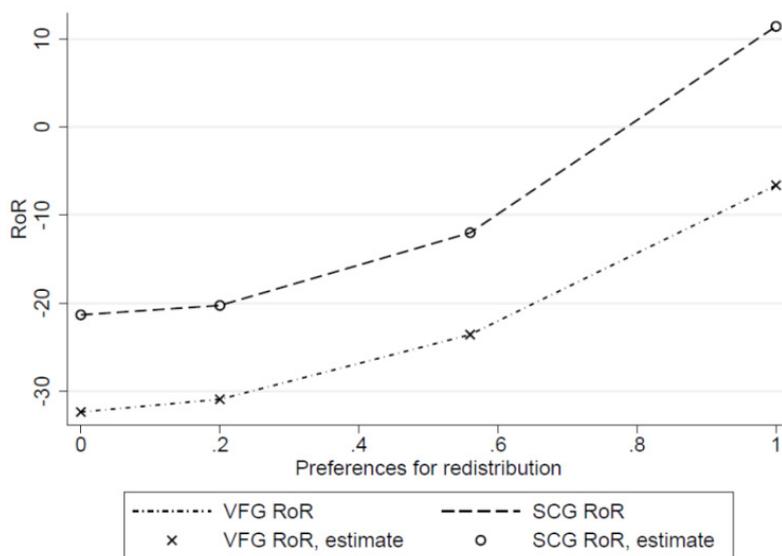


Figure 2 Rate of Return for VFG and SCG after 10 periods, by redistribution preference

not surprising as the study is based on a reduced framework and does not aim to include all possible returns to cash transfers. Moreover, it takes time until an increase in human capital translates into higher earning and higher household income, while the programme costs are incurred from the very beginning. For example, from the moment a child enrolls in school until she completes her education, many years have gone by. In the present study, the framework expands

universal targeting is associated with lower administrative costs than poverty-targeting. Thirdly, the large programme scale of the SCG further lowers its average costs compared to the relatively narrowly targeted VFG.

So far the analysis assumed that all programme outcomes are of equal value irrespective whether they are incurred by richer or poorer households. Assuming that the society indeed values the outcomes of the poor more in the



evaluation improves the rates of return by 2 to 10 percentage points. The stronger the societal preferences for redistribution, the sooner the rates of return become positive as is displayed in Figure 2.³ If the preferences for redistribution are relatively strong, the rate of return of the SCG becomes positive after 10 years. Figure 2 shows that the evaluation of SAGE changes noticeably depending on the assumptions about the level of preferences for redistribution in society. Yet, in all cases the SCG reaches a positive rate of return sooner than the VFG.

The study has three main findings:

1. Returns to human capital matter in the evaluation of SAGE, and findings indicate that incomes increase over time as a result of higher school attainment.
2. The results confirm that antipoverty transfers show positive and significant rates of return once redistribution preferences are considered.
3. The design and delivery of social protection programmes, as well as the context they operate in can influence their effectiveness and rates of return.

Policy implications and recommendations

Social protection policies are important development policy instruments, as they have impacts more far-reaching than the mere redistribution of incomes and the alleviation of poverty. The positive and significant link between child health and school attainment found in the Ugandan context provides evidence that social cash transfers can encourage and facilitate investments in human capital. Social protection is an investment in people, making it a sensible policy option from a socio-economic development perspective. Hence, fiscal space should be allocated for the nationwide implementation of SAGE.

Yet, social protection never exists in a vacuum, and social cash transfer programmes cannot be successful in isolation. The socio-demographic context and enabling or disabling factors largely determine the impact of interventions. For instance, the impact of social cash transfers on - and long-term return to - school enrolment, attendance and attainment depends on the access to and quality of education. The effect of Uganda's cash transfers on school enrolment is negligible due to the success of the last decades' education policies, which made sustained efforts to universalise primary education. With respect to school attainment, on the other hand, the context still provides space for improvements, which can materialise with the support of social cash transfers. Hence, the monetary returns to education (and, instrumentally, the returns to social protection investments) will depend on both the quality of schooling and the characteristics of the labour market. It is easy to see that social protection programmes need to be part of a broader development strategy, which addresses other factors in a coherent and integrated way.

Programme design is a further element that needs attention when aiming to maximize program effects and cost-efficiency, and thereby the rates of return to investment. There are always alternatives even within the scope of social cash transfers, and selecting the option with the largest effect at the lowest cost may make a significant difference. As demonstrated by the significant differences in anticipated outcomes between the SCG and the VFG, the size, targeting and delivery modalities influence programme impacts. Such design features can be selected to enhance the desired outcomes, keeping

Utilitarian and prioritarian approaches

A utilitarian approach in evaluating the returns to social protection assumes that the outcomes of all programme participants are equally valuable. A prioritarian approach proposes that benefits to the poorest are more valuable to the society than benefits to the better off.



in mind the specific context in which programmes operate. The Senior Citizens Grant, despite not being a child-targeted benefit, yields higher returns for children than the Vulnerable Family Grant. This is explained by the higher transfer value per household and the demographic context. Strategic considerations in the timing of transfer payments can further enhance impacts, for example by harmonising benefit payments with the school year. The consideration of administrative costs related to targeting, management information systems and transfer delivery matters for programme cost efficiency. For instance, a universal social pension such as the SCG has lower targeting costs than a poverty-targeted scheme, thereby

generating higher returns to investment. Electronic registries and payment modalities can further reduce the costs of recording and distributing transfers.

On a finishing note, while building the investment case for social protection is imperative for advocacy and mainstreaming as a development policy, the primary objective of social protection should neither be forgotten nor neglected. Programmes can and should be designed in a way that maximise human capital investment, but alleviating poverty and ensuring basic living standards remain the main purpose of social programmes. Economic arguments should not replace, but complement the human right case for social protection.

References

- Alderman, H. and R. Yemtsov (2012). 'Productive Role of Safety Nets, Background Paper for the World Bank 2012–2022 Social Protection and Labor Strategy', Social Protection & Labor Discussion Paper, No. 1203, World Bank, Washington DC.
- Amiel, Y., Creedy, J., & Hurn, S. (1999). Measuring attitudes towards inequality. *Scandinavian Journal of Economics*, 101(1), 83–96.
- Appleton, S. (2001). Education, Incomes and Poverty in Uganda in the 1990s. Centre for Research in Economic Development and International Trade, University of Nottingham.
- Barrientos, A. (2012). Social Transfers and Growth: What Do We Know? What Do We Need to Find Out? *World Development*, 40, 11–20. doi: 10.1016/j.worlddev.2011.05.012
- Carlsson, F., Daravula, D., & Johansson-Stenman, O. (2005). Are people inequality-averse or just risk-averse? *Economica*, 72(287), 375–396.
- Cherrier, C., Gassmann, F., Mideros Mora, A. and Mohnen, P. (2013). 'Making the Investment Case for Social Protection: Methodological challenges with lessons learnt from a recent study in Cambodia', Working Paper 2013-06. UNICEF Office of Research, Florence.
- EPRI (2016). Formulating a Business Case for Sustained Investments in Social Protection in Uganda. Version 1st August 2016. Mimeo.
- Glewwe, P., & Kremer, M. (2006). Schools, teachers, and education outcomes in developing countries. In: Hanushk, E.A. and F. Welch (eds). *Handbook of the Economics of Education*. Volume 2. Amsterdam: North Holland.
- Glewwe, P., & Miguel, E. A. (2007). The impact of child health and nutrition on education in less developed countries. In: Schultz, T.P. and J. Strauss (eds). *Handbook of Development Economics*, Volume 4:3561–3606. Oxford: Elsevier B.V.
- Jolliffe, D. (2004). The impact of education in rural Ghana: examining household labor allocation and returns on and off the farm. *Journal of Development Economics*, 73(1), 287–314. doi: <http://dx.doi.org/10.1016/j.jdeveco.2003.02.002>
- Kidd, S. (2016). Uganda's Senior Citizens' Grant: A success story from the heart of Africa. Nairobi: Ministry of Gender, Labour and Social Development.
- Ministry of Gender, Labour and Social Development (n.d.). Expanding Social Protection website: http://socialprotection.go.ug/?page_id=2717
- Oxford Policy Management (OPM) (2016). Evaluation of the Uganda Social Assistance Grants for Empowerment (SAGE) Programme. Impact after two years of programme operations 2012–2014 – Final report. Oxford Policy Management and Economic Policy Research Centre, Department of Anthropology and Sociology, University of Makerere.
- Psacharopoulos, G. (1985). Returns to education: a further international update and implications. *Journal of Human Resources*, 20(4):583–604.
- Psacharopoulos, G. (1994). Returns to investment in education: A global update. *World Development*, 22(9):1325–1343.
- Psacharopoulos, G., & Patrinos, H. A. (2004). Returns to investment in education: a further update. *Education economics*, 12(2):111–134.
- Strauss, J., & Thomas, D. (2007). Health over the life course. In: Schultz, T.P. and J. Strauss (eds). *Handbook of Development Economics*, Volume 4:3561–3606. Oxford: Elsevier B.V.
- Szirmai, A. (2012). Proximate, Intermediate and Ultimate Causality: Theories and Experiences of Growth and Development. UNU-MERIT Working Paper Series 2012-032. Maastricht, UNU-MERIT.
- World Bank (2015). The State of Social Safety Nets. Washington, D.C.: The World Bank. <http://documents.worldbank.org/curated/en/2015/07/24741765/state-social-safety-nets-2015>



UNITED NATIONS
UNIVERSITY

UNU-MERIT

The United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) is a research and training institute of United Nations University based in Maastricht in the south of the Netherlands. The institute, which collaborates closely with Maastricht University, carries out research and training on a range of social, political and economic factors that drive economic development in a global perspective. Overall the institute functions as a unique research centre and graduate school for around 100 PhD fellows and 140 Master's students. It is also a UN think tank addressing a broad range of policy questions on science, innovation and democratic governance.

INSIDE:

Policy Brief

Rates of Return to Social Protection: Social Cash Transfers in Uganda

Simulating the rates of return to a country-wide rollout of Uganda's Social Assistance Grants for Empowerment (SAGE) programmes.

United Nations University -
Maastricht Economic and
social Research Institute on
Innovation and Technology
Boschstraat 24
6211 AX Maastricht
The Netherlands

UNU-MERIT

UNITED NATIONS
UNIVERSITY

