SPECIAL ISSUE ARTICLE



The Poverty Reduction Effect of Social Protection: The Pros and Cons of a Multidisciplinary Approach

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Abstract

There is a growing body of knowledge on the complex effects of social protection on poverty in Africa. This article explores the pros and cons of a multidisciplinary approach to studying social protection policies. Our research aimed at studying the interaction between cash transfers and social health protection policies in terms of their impact on inclusive growth in Ghana and Kenya. Also, it explored the policy reform context over time to unravel programme dynamics and outcomes. The analysis combined econometric and qualitative impact assessments with national- and local-level political economic analyses. In particular, dynamic effects and improved understanding of processes are well captured by this approach, thus, pushing the understanding of implementation challenges over and beyond a 'technological fix,' as has been argued before by Niño-Zarazúa et al. (World Dev 40:163–176, 2012), However, multidisciplinary research puts considerable demands on data and data handling. Finally, some poverty reduction effects play out over a longer time, requiring longitudinal consistent data that is still scarce.

Keywords Social protection · Poverty · Multidisciplinary · Policy instruments · Interaction effects · Spill-over

Résumé

Il existe un corpus de connaissances de plus en plus important à propos des effets complexes de la protection sociale sur la pauvreté en Afrique. Cet article explore les avantages et les inconvénients d'une approche pluridisciplinaire dans le cadre de l'étude des politiques de protection sociale. Notre étude vise à étudier l'interaction entre les transferts monétaires et les politiques de protection sociale et de la santé,

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et plus spécifiquement leur impact sur la croissance inclusive au Ghana et au Kenya. Notre étude explore également l'évolution du contexte de la réforme des politiques au fil du temps afin d'éclaircir la dynamique et les résultats des programmes. L'analyse associe des évaluations d'impact économétriques et qualitatives avec des analyses politiques et économiques aux niveaux national et local. Cette approche reflète particulièrement bien les effets dynamiques ainsi qu'une meilleure compréhension des processus, ce qui repousse la compréhension des défis de mise en œuvre au-delà d'une « solution technologique», comme l'ont auparavant soutenu Niño-Zarazúa et al. (2012). Cependant, la recherche pluridisciplinaire impose des exigences considérables en matière de données et de traitement des données. Enfin, certains effets de réduction de la pauvreté se produisent sur une plus longue période, ce qui nécessite des données longitudinales cohérentes qui sont encore rares.

JEL $C18\cdot I13\cdot I31\cdot I32\cdot I38\cdot H53\cdot H55$

Introduction

Multidisciplinary research on the impact of social protection programmes and instruments on poverty in developing countries is gradually growing (Vanclay and Estevez 2011; Devereux et al. 2013; Devereux and McGregor 2014; Pouw et al. 2020; Bender et al. 2021). Although multidisciplinary research on social protection has been around much longer, during the past 15-20 years, quantitative RCT-type impact assessments have become very popular (Davis et al. 2012; Handa et al. 2010, 2013; Hidrobo et al. 2018). At the moment, we are finding an increasing body of new impact assessment studies combining quantitative methods with qualitative research, on contextual factors (Gentilini 2009; Barrientos 2010; Slater 2011; Davis et al. 2016), the role of institutions and institutional change, such as implementation and policy reforms over time (Daidone et al. 2015; Bender 2013) and spillover effects (Mostert and Castello 2020; Pouw et al. 2020). Taking a multidisciplinary approach is, thus, not new, but looking into complex effects is. Dynamic effects, such as interaction between different social protection policy instruments and emergent effects, have remained relatively understudied, with the notable exception of Biosca and Brown (2014), Berhane et al. (2014), Jensen et al. (2015) and Pouw et al. (2017). After a two-year research programme, on the multi-level impact of different social protection policy instruments in Ghana and Kenya,¹ this article aims to respond to the question: What have been the pros and cons of taking a multidisciplinary approach in assessing the dynamic effects of social protection? By combining a multi-level political-economy analysis with different types of impact

¹ The research project 'Breaking the Vicious Circle of Poverty and Ill-health: Are Cash Transfers and Social Health Protection Policies in Ghana and Kenya Complementary?' was funded by the Dutch Scientific Council (NWO) through the INCLUDE knowledge platform 'Inclusive Development in Sub-Saharan Africa' research programme under grant number: W 08.390.004. The project was implemented together with our local research partners in Ghana, the Institute of Statistical, Social and Economic Research and the University of Development Studies of Tamale, and in Kenya, the University of Nairobi.

analyses (qualitative community and household level research in Kenya, and qualitative research with econometric difference-in-difference analysis in Ghana), we have experienced the advantages and disadvantages of combining disciplinary approaches within a single-research programme, in particular with regard to revealing dynamic effects. Three years after programme ending, we feel that this is an appropriate moment to reflect back on the lessons learnt and offer suggestions for future evidence-based research in this field. In "Research Background and Design" section, we provide the background and research design of the social protection research programme that was implemented in Kenya and Ghana. In "Discussion of Findings" section, we present the findings coming out of the different components of the research, including the econometric analysis of secondary data, the community impacts assessments and the political-economy analysis. For each, we discuss the analytical lense applied, the key findings, the contribution to scholarly knowledge and the policy recommendations that followed. In "Pros and Cons of Multidisciplinary Research on Social Protection" section, the pros and cons of the multidiciplinary research are discussed and a connection is made to the use of research outcomes to policy stakeholders at multiple levels of governance. Finally, "Conclusion" section concludes with research recommendations.

Research Background and Design

This research programme was embedded within a broader research programme under the umbrella of the INCLUDE Knowledge Platform, which is a Dutch-African platform that "promotes evidence-based policymaking on inclusive development in Africa through research, knoweldge sharing and policy dialogue". (INCLUDE 2021: p. 1) (see Introduction article by Dekker & Pouw, *this issue*). In the call, the need for multidisciplinary research on the contribution of social protection on inclusive growth and development and how to govern this in the context of sub-Saharan African countries was stated as a requirement. It is in this context that we pulled together a transdisciplinary team of researchers and practitioners from Ghana, Kenya the Netherlands and Germany to study the interlinkages between cash transfers and health exemption policies and their impact on inclusive growth. In addition, we explored the policy reform context to better understand programme dynamics and results and to be able to inform policymakers with evidence-based research. The focus on interlinkages between different social protection instruments was selected as the central tenet of the research for two reasons: (i) many impact assessments look at social protection policies *separately*; the *interactions* have been ill-understood and hardly examined at all in developing economies and (ii) we aimed to inform the current policy debate on social protection as a public service with national coverage. When considering the integration of different social protection schemes and (re) targeting existing instruments, we need to know if and how interaction takes place and if synergy is realized at all.²

Ghana: Research Design

In Ghana, we looked at the National Health Insurance Scheme (NHIS) and the cash transfer programme Livelihood Empowerment Against Poverty (LEAP). The NHIS has been in place since 2003. NHIS replaced the user fee policy in place since the 1980s, which greatly limited access to health care in particular for the poor, as health-care seekers had to pay cash whenever they wanted to see a doctor or attend hospital. The NHIS is constructed as a mix of contributory and non-contributory, tax-financed scheme. Up till 2015, enrolment rates in the NHIS were much lower than expected (40.2%), and the majority of the insured did not belong to the poorest income quintiles (64% rich; 26% poor). This was partly explained by the inherent exclusionary mechanism underlying its design: people's poverty and inability to pay for registration and annual premium (which were later abolished) within a context of low-quality health care. The NHIS did have exemptions for vulnerable groups: children < 18, pregnant women, the so-called "core-poor" and elderly people > 70. The minimum benefit package covers 95% of diseases (in theory). In 2015, the national reform commission aimed to make NHIS more efficient and sustainable. This is the moment at which we commenced the research.

The LEAP programme has been in place in Ghana since 2008, when it initially was rolled out in 21 districts. LEAP targets extremely poor households with one or more elderly persons (>65) who have no means of support, disabled, orphans and vulnerable children (OVC). It is a non-contributory, tax-financed cash transfer programme with bi-monthly, conditional cash transfers. The conditions formally require that children <15 in recipient households are in school (maximum absentee-ism allowed is 20%); children <5 are vaccinated and children visit health facilities every 5 months. The transfers range from GHc64 (US\$14.6) to GHc 106 (US\$24) depending on the household size. Since 2008, LEAP beneficiaries are entitled to have access to free health-care services through the NHIS, provided they register themselves. However, currently only 18% of LEAP beneficiaries are registered under NHIS. Given the complementary nature of the two instruments and the overlapping target beneficiaries, there is a need to uncover interaction effects.

The research design in Ghana comprised secondary data analysis of two waves of LEAP-NHIS panel data (2010, 2012) using a Difference-in-Difference model and propensity score matching looking at the interaction effects. This was complemented with community impact assessments (CIA) at household and community level. The CIAs covered 22 villages in 3 districts: Central Region (7), Greater Volta (5) and Upper East (10), which differed in terms of poverty levels, remoteness and public

² Originally, cost-benefit analysis and co-creation of new policies were also part of the research objectives, but time and resources provided too limited to achieve those.

servicing levels. In Ghana, a total of 20 FGDs with LEAP beneficiaries and 6 with non-beneficiaries were carried out, alongside 18 key informant interviews in 22 localities across the three regions.³The research on the ground was carried out in close collaboration with our local partners. In Ghana, with Kennedy Alatinga of the University of Development Studies in Tamale and Clement Adamba of the Institute of Statistical, Social and Economic Research (ISSER) in Accra.

Kenya: Research Design

In Kenya, we looked at the unconditional cash-transfer programme for orphans and vulnerable children (CT-OVC) and the Free Maternity Health Care and Abolishment of User Fees Primary Health Care policy. The CT-OVC has been in place since 2004 and is targeted at families whom take care of OVCs. The idea behind the programme is the fostering and retention of such children within their (extended) families and communities and promotes their human capital development. The cash transfer consists of a bi-monthly unconditional payment of KSH 2,000. The CT-OVC covers 365,232 households (Government of Kenya 2017). It is the biggest and oldest among the cash-transfer programme in Kenya having started as a response to the rising number of orphans and vulnerable children due to HIV/AIDS.

In 2013, the free maternity health-care policy in Kenya was introduced in public hospitals. In the same year, all user fees in public dispensaries and health centres (primary health-care level) were abolished. As of 2014, the Kenyan government has been implementing the Health Insurance Subsidy Programme (HISP), which (in theory) provides CT-OVC beneficiaries with free access to health-care services. When we commenced the research in 2015, the CT-OVC beneficiaries in our sample were not covered by the HISP programme yet. This is why we could not measure any interaction effects between these two instruments yet.

In Kenya, we combined a multi-level political-economy analysis (PEA) with a CIA study in three counties. The same selection criteria as in Ghana were used. The PEA was aimed at unravelling different pathways of social protection reforms, looking at institutional change between 2001 and the pre-election period in July 2017, through process tracing, which involves detailed historical analysis. As described more extensively in Bender et al. (2021) process tracing aims to explain decision-making outcomes by identifying and exploring the mechanisms that generate them. It involves the interpretation of (mainly) qualitative primary and secondary data. A total of 25 semi-structured interviews were conducted between March 2016 and January 2017 with national-level stakeholders involved in policy design or implementation, including members of parliament (3), ministries (3), other public authorities (5), non-governmental organizations (5), donors (5) and independent observers (4).⁴

³ Interview partners were purposefully selected based on the following criteria: (1) whether they were caretakers of orphans, (2) whether they were beneficiaries of the LEAP/CT-OVC (and, thus, the "core poor"), or not and (3) according to gender (male/female) and (4) location (rural/urban). Non-beneficiaries were further clustered according to their socio-economic status (better-off/just-above-the-poverty line) (see Pouw et al. 2020).

⁴ A limitation of the study is that no interviews with participants from the private sector were conducted. To include their perspectives, the analysis relies on published academic literature or reports.

Secondary data covered legal documents (laws, regulations, decrees and sessional papers), policy strategies, reports and evaluations as well as academic literature. For the local-level PEA, 20 interviews with local stakeholders engaged in the implementation of the CT-OVC were conducted (3 county children's officers, 3 sub-county children's officers, 2 volunteer children's officers, 4 community leaders/elderly and 7 members of OVC-committees at local level). For the CIA, a total of 63 beneficiary interviews and 26 non-beneficiary FGDs were organized³, alongside 18 key informant interviews with health workers, village leaders, local implementation bodies, beneficiary committee workers and county level officers in 9 villages across 3 Kenyan counties (Kibera, West-Pokot and Kwale). In Kenya, we collaborated with Dr Bethuel Kinuthia and Grace Ikua at the University of Nairobi.

Both in Ghana and Kenya, the characteristics of the sample populations match the general characteristics of households identified in previous evaluations (Handa and Park, 2012; Hurrell et al. 2008). Interview questions included the various impacts in terms of material, social and relational wellbeing dimensions, driving forces of impact, and CT access challenges, perception of the exemption policies, health behaviour change, as well as access and quality of services. In both countries, joint training sessions involving country project leaders and research assistants took place before research implementation.

Discussion of Findings

This section reviews the three lines of research inquiry, their respective findings and policy recommendations in the following order: (i) the multi-level political-economy analysis (PEA) in Kenya, (ii) the econometric interaction analysis on the basis of the two LEAP/NHIS datasets in Ghana and (iii) the community impact assessments (CIAs) in both Ghana and Kenya.⁵

Political-Economy Analysis

The overall objective of the Political-Economy Analysis (PEA) was to understand processes of change resulting in observed policy outcomes. The specific objectives were (1) to understand within country variations in policy reform dynamics of social protection policies at national-level looking at the OVC cash-transfer programme and social health protection policies in Kenya and (2) to address variations in policy implementation at local levels by addressing the interaction between formal and informal institutions using the case of the OVC programme in Kenya as illustrative example. This is a relevant inquiry given the Kenian context of 2013/14 decentralisation providing for 47 county governments. Such analysis was important to understand degrees and variations in effects on the ground, at sub-county and community level.

⁵ This section builds forth on our in-depth proceeding publications, notably: Pouw et al. (2017), Pouw et al. (2020), Bender et al. (2021) and Rohregger et al. (2021).

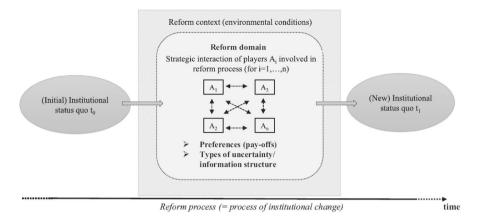


Fig. 1 Analytical lens to assess social protection policy reforms

This constituted a relatively innovative approach within the PEA landscape of literature, which mostly looks at the political economy of single social protection policies, instruments, or domains and which tends to overlook local-level implementation processes (e.g. Abuya et al. 2015; Brooks 2015; Fox and Reich 2013; Hickey et al. 2019; Schuering and Gassmann 2013; Ayede et al. 2015; Plagerson et al. 2019). Only very few studies offer a comparative approach across different pillars of social protection (Bender and Rompel 2010; Bekenya and Hickey 2019; Ulriksen and Plagerson 2017; Wanyama and McCord 2017). Moreover, as explained in Bender et al. (2021), most of these studies adopt an applied econometric approach but without linkages to political economic theoretical reasoning. Exceptions include, for example, Hickey (2008); Lavers and Hickey (2016), or Leisering (2019).⁶

Two analytical lenses—both applying institutional analysis—were applied to the PEA analysis in Kenya. At national level, the first analytical lens was grounded in comparative institutional analysis and framed in game-theoretic terms considering the strategic interaction between key actors (Bender et al. 2021): This analysis first aimed at identifying variations in reform dynamics in each sub-policy area, and the factors contributing to their political feasibility and then focused on the attributing factors. Each social protection pillar was described as one specific reform domain. Reform dynamics within each domain were classified in three dimensions, following Bender et al. (2013): (1) Temporal baseline; (2) Scope of change; and (3) Mode of change. To explain reform dynamics, the analytical framework addresses the interplay of the following elements: (i) Initial institutional status quo; (ii) Strategic interactions of actors within a reform domain, which are shaped by their preferences,

⁶ For example, Hickey (2008) and Lavers and Hickey (2016) extend the political settlement approach by examining the interaction between elite factions and non-elites and incorporate insights from discursive institutionalism to address the role of ideas, discursive processes and non-domestic actors in shaping policy outcomes. Leisering (2019) develops a comprehensive sociological approach rooted in constructivist institutionalism and examines how ideas constitute interests or institutions in the development of social cash-transfer policies.

(iii) Prevailing types of uncertainty (or "information structures") within a reform domain, (iv) Environmental conditions, i.e. the reform context to which all domains are exposed alike (see Fig. 1).

The findings of this first research line of the PEA in Kenya are summarized as follows. The social health policy reforms and OVC cash transfer differed particularly with respect to the *mode of change*. Both sub-policy domains are characterized by gradual institutional change leading-up to 'third-order' changes, i.e. changes in "the hierarchy of goals behind the policy"(Hall, 1993, pp. 278-279).⁷ The two policy domains differ in terms of the extension of cash transfers showing slow moving yet incremental change and the social health protection extension to the poor showing a pattern of non-cumulative change. The latter included stages of blocked reforms or even reform reversals depending on the political climate. Important contributing factors to this pattern were stronger conflicting interests and hindering institutional legacies within the health sector. However, these constitutive constellations are either shaped or intensified by uncertainties. Stronger information asymmetries within the cash transfer and fee waiver reform domains opened space for discretionary decision making. Interpretations of the concept of social protection and complexity of 'insurance' facilitated processes related to cash transfers whereas providing impediments to social health insurance. Lastly, the international and socio-economic context provided focal points facilitating coordination on targeted or vertical interventions such as cash transfers or fee waivers. For a more detailed discussion, see Bender et al. (2021).

The contribution to scholarly knowledge made on the basis of this first research line in the PEA was twofold. First, the taxonomy that was developed proposed a conceptual framework to assess and trace social protection policy reform dynamics across different pillars simultaneously. This led to comparative insights on differences in policy design and reform trajectory. But it also revealed the relative disconnect between the two social protection domains as a significant institutional weakness, despite them responding to the same societal problem. Second, the research demonstrated the relevance of different types of uncertainty for understanding change in social protection policies. What information is available to whom, the way it is interpreted by different actors and what kind of shared beliefs develops over the longer-term matter.

The second analytical lens focussed on the local level (community level) of implementation (see Fig. 2). Specifically, the purpose of this second research line in the PEA was to understand the role of traditional authorities in the implementation of the CT-OVC programme in Kenya. Building on Helmke and Levitsky's (2004) typology on the interaction between informal and formal institutions, we investigated the interaction between the formal institutional set-up of the OVC programme with the traditional authorities (informal institutions) that were already in place.

⁷ Hall (1993) distinguishes between three levels of policy change: 1. First-order change includes changes in the 'levels (or settings) of the basic instruments of (public) policy'. 2. Second-order change includes changes in 'the basic techniques used to attain (policy goals are) altered'. 3. Third-order change includes changes in 'the hierarchy of goals behind policy' (pp. 278–279).



Fig. 2 Formal and informal institutions interacting in delivering CT-OVC to the poor

These historically played an important role in social support and informal organization of care within communities. The typology categorizes these institutional interactions in four types: (i) complementary, (ii) competing, (iii) substituting and (iv) accomodating.

The findings discussed extensively in Rohregger et al. (2021) showed that traditional authorities often play an important complementary role, where they take over functions of effective but inadequate formal institutions. They can also substitute or compete with ineffective formal institutions, for example, in the case of targeting scheme or bribery. Traditional authorities also accommodate effective formal institutions by diverging from formal rules in the interest of local stakeholders but still generating favourable outcomes for the poor. Traditional authorities also substitute ineffective formal institutions, or compete with them when they have similar referral and complaint mechanisms in place-e.g. the locational OVC committee (LOC) and the beneficiary welfare committee (BWC). Patronage is a risk with social protection policies, as politicians misuse programme roll-out and access for gaining votes. Also, patronage in the form of local leaders deciding who is entitled to enrol is a real risk that has come with programmes such as the CT-OVC. In sum, the role of traditional authorities should be taken into account when designing and implementing social policies targeting the poor, especially in the rural areas of Kenya. Their interaction with formally implemented social protection should not be overlooked, as this shapes outcomes on the ground.

The policy recommendations issued on the basis of the two research lines in PEA to the Kenyan government were to: (i) Warrant a uniform conception and socialeconomic rationale of social protection at multi-levels of governance; (ii) Political feasibility may vary across different social protection pillars. Taking account of the specific reform dynamics in each specific policy domain helps to better plan and manage for intended reforms and facilitate the development of integrated and coordinated social protection systems. (iii) Local political economies matter and differ. Understanding the local political and institutional contexts is key in order to address implementation challenges adequately. (iv) Recognize the multifaceted and possibly ambiguous roles of traditional authorities involvement in implementing social protection measures. (v) Investing in social protection systems requires a medium- to long-term perspective.

Interaction Analysis

The interaction analysis⁸ was performed on two waves of panel data including information on two different social protection instruments in Ghana, which became accessible through our collaboration with Clement Adamba at the Institute of Statistical Social and Economic Research (ISSER), in Accra: the Livelihood Empowerment against Poverty (LEAP) cash-transfer (CT) programme (since 2008) and the National Health Insurance Scheme (NHIS) (since 2003), which are both administered by the Government of Ghana. The panel data underlying this research follow from a longitudinal propensity score matching research design by ISSER and Yale University (USA). The full baseline dataset (2010) consists of 5,009 households, of which 2330 households were selected for the propensity score matching (PSM) of LEAP beneficiaries. The LEAP sample for the evaluation was drawn from households that were part of the LEAP expansion in 2009 covering Brong Ahofo, Volta and Central Regions of Ghana. See for an extensive description of the sampling strategy (Handa and Park 2012). The objective was to assess the nature and direction of the effects of multiple interacting social protection instruments, i.e. between the CT programme (as part of LEAP) and the health insurance scheme (NHIS) on the poor and very poor, compared to the non-poor. Although LEAP beneficiaries are entitled to free NHIS subscription in theory, past implementation had been incomplete (but incremental), which allowed us to separate the effects of the CT part in the early years, we were considering (2010 and 2012) and the two combined. Both short-term multi-dimensional impacts on nutrition and health, as well as medium-term impacts on health, productive assets and labour were explored (through improved health), using panel data according to the following analytical scheme (Fig. 3). Although long-term effects lied beyond the scope of our study, medium-term effects had been explored-yet, being limited by the data availability to a two-year span. The model that was used to analyse the interaction effects was a difference-in-difference (DiD) model with the propensity score matching technique. Using a probit model, PSM weights were calculated for each of these 2330 households including all variables used by the LEAP programme in ranking households for eligibility. Since LEAP and ISSER households come from different communities, the model also included community variables. People enrolled in NHIS were easy to identify within the two samples through a string of questions in the health section. The LEAP and NHIS data are, thus, sourced from the same panel. In datasets of quasi-experimental design

⁸ Ms. Lizzie Dipple assisted in the econometric analysis in her capacity as junior researcher at the University of Amsterdam.

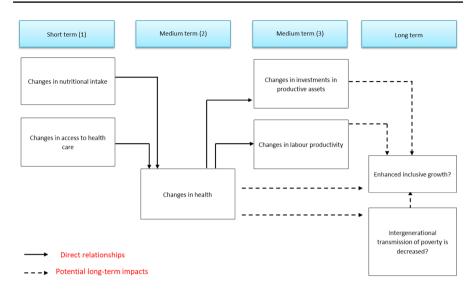


Fig. 3 Analytical model of NHIS and CT impacts in Ghana

such as the two waves of LEAP/NHIS data underlying this paper, propensity score matching is appropriate to perform matching based on observed baseline characteristics (Morgan and Harding 2016). The model is specified was follows

$$Y_{it} = \beta_0 + \beta_1 \text{year}_{it} + \beta_2 \text{SHI}_{it} + \beta_3 \text{CT}_{it} + \beta_4 \text{CT} \& \text{SHI}_{it} + \beta_5 \text{SHI}_{ct} * \text{year}_{it} + \beta_6 \text{CT}_{it} * \text{year}_{it} + \beta_7 \text{CT} \& \text{SHI}_{it} * \text{year}_{it} + \beta_8 \text{X}_{it} + u_{it}$$

where by *SHI* = social health insurance (NHIS), *CT* = cash transfer (LEAP) and X = set of individual and household control variables,⁹ and *year* = the wave indicator, which takes the value 0 for observations in year 2010 and 1 for observations in year 2012. The DiD model with PSM, thus, uses 2010 and 2012 LEAP/NHIS panel data and distinguishes between different combinations of the social protection instruments over the two time periods. In this way, we can look at the separate effects of the social health insurance only (β_2), and over time (β_5), the cash transfer only (β_3) and over time (β_6), and the joint effect (β_4), and over time (β_7), compared to no assistance at all (β_1). The model included weighted means at baseline (2010) of the covariates used to control for certain socio-economic, demographic and locational differences. Weights are required because in the original study, even after matching, the density plots were comparable for treatment and control groups only



⁹ Including household expenditurs, gender, region, urban/rural, household size, dependency ratio, female headed household, enrolent in community/school feeding programme.

when also inverse probability weighted from the PSM (Handa et al. 2014). We were able to obtain these weights for use in our analysis from the ISSER in Ghana. The DiD model was appropriate here because it deals with differences in the treatment and control group that are constant over time. However, DiD in itself does not deal with those differences that change over time (Angrist & Pischke 2009). That is why we combined DiD with Propensity Score Matching (PSM) (Rosenbaum and Rubin 1983; Heckman et al. 1997).¹⁰

The findings show that over the period of two years, several significant positive separate and combined effects of the NHIS and CT took place. It is beyond the scope of this paper to present all the tabled regression results presented in Pouw et al. 2017. A synergetic effect can only be observed whenever the joint effect of NHIS&CT exceeds the sum of separate effects. We also looked at two further breakdowns, the poor and extremely poor (apart from all together). For all indicators, including health access and subjective health, food consumption, productive assets and labour positive effects of NHIS and CT were observed. But the only synergetic effect was observed for child health, by a significantly improved weight-for-height measure. The literature on this topic in SSA is scant and shows mixed evidence. On the one hand (and concerning studies of earlier date, using more limited data), no positive synergy effects were found by Berhane et al. 2014 in Ethiopia and Jensen et al. 2015 in Kenya. One reason for this is that there is very little overlap between different instruments, leading to only a minority of very poor people being covered by more than one instrument despite them being entitled to multiple (e.g. see also Hirvonen et al. 2020). On the other hand, more recent studies do observe some few synergy effects, such as by Daidone et al. (2015) and Pace et al. (2018) in Malawi and by Shigute et al. in Ethiopia (2020).

The lack of synergy findings for Ghana point to implementation failures as well as the weakness of the institutions managing the social protection instruments across different ministries (i.e. the Ministry of Gender, Children and Social Protection managing LEAP and the Ministry of Health managing the NHIS), as well as to small transfers and limited roll-out remote areas. These factors were further unpacked in the Community Impact Assessments (CIAs), through qualitative research (see next section). Due to the qualitative reports coming out of the CIAs on positive effects of CT and/or NHIS on education expenditures, we conducted additional regression analysis on the secondary data with regard to education expenditure (over and beyond the model in Fig. 3). Indeed, we found significant positive separate and joint effects of CT and NHIS on education expenditure, especially for the extreme poor. However, the joint effect was always less than the sum of the separate effects, which means lack of synergy.

Based on the interaction analysis alone, we concluded that membership in one social protection programme is currently not necessarily leveraged by another

¹⁰ Propensity scores were applied to select a group of non-enrolled households/individuals with similar characteristics to the enrolled group in the NHIS/LEAP. The accuracy of matched DiD estimation was enhanced through this combination, and furthermore, by appropriate clustering standard errors (e.g. see also Porter & Goyal 2016; Bertrand et al. 2004). This improves results when treatment assignment is based on pre-treatment level, such as in the case of LEAP whereby the cash-transfer component was only accessible to the poorest households in Ghana.

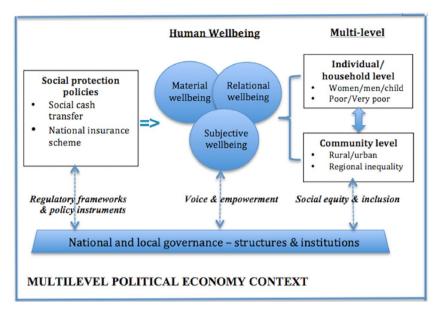


Fig. 4 An inclusive development framework for analysing social protection

programme, in particular not when considered from the perspective of the poor and extreme poor. Whether this lack of inclusive interaction results is due to substitution effects, neutral effects, programmatic effects, or research limitations was insufficiently clear from the interaction analysis alone. With the support of the Ghana CIA findings (see next section), a deeper understanding of the nature and scope of transaction costs was developed, as well as a better understanding of implementation failures at community level. The policy recommendations made, thus, focussed on (i) reducing the transaction cost for the poor to access and retain the NHIS/LEAP; (ii) resolving programmatic design and implementation failures (e.g. size of fees; in-time cost recovery payments of local health centres); (iii) establishing more uniformity in communication from national to local governance and health centres; and (iv) integrating NHIS and LEAP strategies and operations to effectively reach the extreme poor, by connecting participant profiles across the different Ministries involved, identify the extreme poor who are not reached by one or the other and align targeting strategies.

Community Impacts Assessments

The purpose of the CIAs was to analyse the differentiated impacts of the respective social protection interventions in Ghana and Kenya through a three-dimensional wellbeing lens (Fig. 4). Multi-level effects were considered at individual, household and community level. Where possible and relevant, a disaggregation according to gender and age was made. Institutional accountability towards building voice and empowerment of vulnerable populations and emerging notions of social equity and sustainability were discussed in passing. The more in-depth analysis on regulatory frameworks and policy instruments, in the case of Kenya, was done in Bender et al. (2021) and Rohregger et al. (2021).

- (1) In the material dimension of wellbeing, the majority of respondents in both Ghana and Kenya report increased expenditure on food consumption and education (protective and preventive impacts). Access to health care, for themselves and/or their children ranks third (preventive). Investments in productive assets (livestock, business/farm investments, household assets and labour) are also made but mainly by the better-off (promotive). Misallocation of resources, relatively high transaction costs of accessing and retaining the CT and social health insurance, exclude the extreme poor. Some transaction costs are visible (transportation to CT point, picture on ID), others are hidden (e.g. waiting times at cash dispensaries, health centres, purchase of health items (e.g. needles) and payment of doctors/nurses before receiving treatment).
- (2) In the social-relational dimension of wellbeing, improved social status helped people to improve family and kinship relations because they could offer support instead of being dependent (transformative). Moreover, the CT helped to lessen intra-household pressure on resources and conflict and 'freer' interaction among community members. However, social pressure to share resources on especially female beneficiaries of the CT in Kenya increased. The CT invoked jealousy and hostility, especially among rejected non-beneficiaries who taught of themselves as equally poor. The CT and social health insurance brought an equalizing effect in communities, because of children now attending school irrespective of their social-economic status (transformative). Also, credit worthiness of beneficiaries and reduced household vulnerability enhanced economic activity and support networks (promotive). All in all, findings in both countries subscribe to social protection as a potential trigger of transformative effects, in the form of countering exclusion and social injustice at the community level (Pouw et al. 2020).
- (3) In the subjective dimension, people in Ghana and Kenya reported (i) feeling more recognized as citizens (but in Kenya to a lesser extent), (ii) enhanced participation in community life, (iii) improved dignity, (iv) reduced stress levels, (v) increased trust in government and (vi) empowerment and voice in community meetings.

The comprehensive inclusive development lens (Fig. 4) enabled to bring positive and negative spillover effects of social protection to the surface. Also, emergent community level effects and citizen-state relations were captured by this approach. The qualitative reports of beneficiaries and non-beneficiaries increased knowledge of the inadequacy and inefficiencies of the system. Wellbeing effects were found to be far reaching but still very much hampered by programme design and implementation failure and exclusion (Pouw et al. 2020, p. 7). The mis-targeting observed in the secondary data was confirmed on the ground, where many (extreme) poor are seen to be not reached by either the CT or the social health insurance or both. We, therefore, recommended that underlying exclusionary mechanisms do need to be addressed by policy. Furthermore, we identified the need to reduce the transaction costs of the (extreme) poor to access and retain social protection. This requires the design of more inclusive instruments—tailor made to the needs and capacities of the (extreme) poor.

In sum, the lack of synergies between different social protection instruments laid bear by the econometric interaction analysis was confirmed by the political-economy analysis of disconnected social protection policy domains and conflicting local institutions, as well as by the inefficiencies and transaction costs identified through the community impact assessments. Therefore, at national level, we conclude that both countries could benefit of a more concerted effort towards an integrated and better targeted social protection system grounded in a collaborative multi-sectoral approach and supported by a new inclusive narrative on social protection to warrant the necessary social and political support.

Pros and Cons of Multidisciplinary Research on Social Protection

The above findings show in substantive terms that (i) social protection does not necessarily reach the extreme poor due to hidden and overt transaction costs of access and retainment; (ii) positive effects of singular instruments on the poor and extreme poor are realized in terms of nutrition, access to health and education, thus, helping vulnerable groups to cope but not to transform livelihoods; (iii) Investments in productive assets and labour only take place by the non-poor; (iv) synergy effects measured quantitatively between different social protection instruments are minor/ negligible; (v) there is some anecdotal evidence of synergy effects in the qualitative data, i.e. *breadth* of impact (health and education); (vi) spill-over effects (both positive and negative) in terms of community cohesion, economic activity, selfworth and citizenship emerge from the qualitative research; (vii) at implementation level, interaction between (formal) operational programme structures and traditional authorities may facilitate or aggravate targeting processes leading to ambivalent outcomes for the poor and extreme poor; (viii) policy formulation processes of different social protection policies and instruments differ between blocked reform and gradual change and (ix) international and socio-economic contexts may provide focal points around which national actors coordinate their actions (spirit of the time).

From the multidisciplinary research design, we have learnt on the positive side that (i) the multidisciplinary approach accommodated multiple methods and research lines but posed challenges in terms of data alignment; (ii) the econometric analysis enabled the analysis of separate and joint effects on different socio-economic categories anonymously, in our case on the poor and extreme poor, compared to the non-poor. Such a clear distinction, albeit that the income-based cut-off points may be debatable in themselves, is more difficult to make in focus group discussions that are part of CIAs because of people's reluctance to public disclosure; (iii) the CIAs added the advantage to complement and triangulate the econometric findings and PEA findings in a contextualised manner; (iv) the PEA provided a broader contextual understanding of policy reforms over time. Furthermore, looking at

institutional interactions on the ground leads to deeper understandings of the conditions under which divergent or convergent outcomes for the poor are generated; (iv) when econometric analysis sheds light on pre-defined linear relationships, the CIAs shed light on complexity in the form of spillover effects and unintended consequences; (v) the PEA that was conducted at multiple levels of governance, fostered a greater understanding of the (v.1) lack of synergy effects observed between different social protection instruments due to policy actors and domains working in silo's and lack of connection between instruments, (v.2) yet also how "paths" may change, for example how these silos are diminishing over time, (v.3) why institutional and implementation failures led to high (visible and invisible) transaction costs for the poor to benefit from the 'free' health-care services provided.

On the down side, a multidisciplinary approach comes with certain challenges: (i) The research design can become over-ambitious for the time and resources available. (ii) Problems in accessing data led to cumulative delays impeding the scope of our analysis (ii.a) access to longitudinal quantitative data proved a hurdle; partly due to bureaucratic obstacles, partly due to dataset inconsistencies and unavailability over time, (ii.b) primary data collection for the PEA were delayed due to (unforeseeable) bad weather conditions followed by elections. (iii) Dynamic impact effects were not really captured beyond the two-year period. Dynamic analysis requires longitudinal data, which was not possible within the period and countries of study. (iv) Connecting the dots across the different findings did not prove easy, mainly due to the time difference between the existing survey data and the primary data collected in the CIAs and PEA.

Nevertheless, the deliberate combination of different theoretical and empirical approaches allowed us gain comprehensive and multifaceted insights into the development and functioning of social protection systems. Specifically, it enabled us to extend our knowledge on the breadth and depth of impacts of social protection policies on the poor at different levels of society (individual, household, community), while at the same time, understanding factors facilitating or impeding on the evolution of social protection within a given institutional context at different levels of society (local, national). In short, adopting a multidisciplinary perspective enabled us to (a) treat social protection policies as an independent and a dependent variable in one unified research programme, (b) gain a more holistic understanding in terms of impact channels and levels of society and (c) take into account context-dependencies influencing social protection.

Conclusion

This article has discussed the pros and cons of taking a multidisciplinary approach to assessing the impact of multiple social protection policy instruments and their interactions, on the (extreme) poor. Synergy effects between different instruments were found to be limited, but social-relational and subjective wellbeing effects are noteworthy especially since material wellbeing effects are biased towards the betteroff. From a political-economy perspective, limited synergy effects are also rooted in differences in reform dynamics across different pillars, with social health protection

policies on the one hand being characterised by blocked reform and on the other hand cash-transfer policies by more gradual expansion. Also, at local level, impact on the poor may differ greatly due to differences in implementation. The working on different instruments and policies in silos does not help synergy effects, whereas political biases in regional implementation and funding reduce the effectiveness on the poorest. Taking stock leads us to conclude that the benefits of having used multiple methods outweighed the disadvantages. The richness of these findings, knowledge of separate and joint effects on different sub-groups of poor, opportunities for complementing and triangulating findings, contextualisation and dynamic understanding of policy process change stand more favourably in comparison to the unrealized ambitions of the research, limits of the longitudinal data, limited insights on dynamic effects over time, in part anecdotal evidence, and the difficulty of connecting all the dots. In our research, it proved difficult to connect the econometric analysis to the community impact assessment and political-economy analysis, because of the different time frames of the data for example. There is, thus, a timing element to consider when deciding on the appropriate selection of methods. More longerterm research on dynamic interaction effects between different social protection programmes in the context of SSA is much needed. The main challenge for countries such as Ghana and Kenya, who are in the process of professionalizing and upscaling social protection, is to figure out how different programmes work in tandem and can be better connected to reinforce each other to the benefit of the inclusion of the people who need it most?

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Declarations

Conflict of interest The authors state that there is no conflict of interest concerning the content of this paper and any third party involved.

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