Reducing Poverty Through a Social Grants Programme: The Case of Ghana

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Abstract

Social security and pensions have an important role to play in sustaining poverty reduction efforts. Ghana is one of the countries in SSA that is implementing a social grants policy under it'sNational Social Protection Strategy (NSPS, 2007). This study investigates the extent to which Ghana's social grant policies can impact on poverty, inequality and government fiscals in Ghana. The main findings of this study are that a universal social grants programme will reduce the incidence and depth of poverty as well as inequality in Ghana. It however argues that for Ghana, affordability remains the biggest challenge.

Keywords: Poverty, Inequality, Microsimulation, Child Support, Universal Pensions, Social Grants

Introduction

Current socio-economic development thinking recognises the important role that social security and pensions play in sustaining poverty reduction efforts. Growth has and remains an important ingredient of poverty reduction. Developing economies today grapple with how best to translate macroeconomic improvements into rapid and suatianed poverty reduction. Indeed the literature on growth and poverty point to the fact that growth is necessary but not sufficient condition for rapid poverty reduction. Many developing countries have witnessed growth and a reduction in the incidence of poverty. However, the depth of poverty and inequality remains problematic in these countries. Whilst the arguments for and against pro-poor policies and whether growth is always pro-poor will continue, the fact still remains that growth remains an important ingredient of poverty reduction and so does other 'non-growth' policies such as social security and employment policies (see inter alia Adelzedah 2007, Kakwani and Pernia 2000, Ravillion and Chen 2003). The global financial crises of 2008 has reinforced calls for social safety net programmes. It is not surprising that the number of countries subscribing to social safety net programmes have increased and the scale of these programmes have also increased. An example is Mexico's PROGRESA which

started with about 300,000 people in 1997 and had reached about 5 million people as at 2009 (World Bank, 2009.p-3). Two main types of social safety net programmes are of interest in this paper i.e. cash transfers and non-contributory pension schemes.

Few African countries (particularly in Sub-Sahara Africa) have non-contributory old age pensions and other forms of non-contributory social security (or social assistance). This problem is compounded by the fact that only a small proportion of the labour force in SSA countries contribute to a formal social security schemes. In Kakwani et al., (2008), it is noted that the pension scheme in Kenya covers only about 3% of the population. Also, ISSER 2005, note that only about 10% of the labour force contribute to Social Security and National Insurance Trust (SSNIT) which is the largest and government managed pension scheme in Ghana. Faye (2007) notes that the majority of Africa's population remains uncovered by a pension scheme in spite of the evidence which shows that in countries without old age pension systems, the older people are over represented among the poor.

Ghana's National Social Protection Strategy (2007) gets part of its motivation from the argument that growth alone is not sufficient for the fight against poverty in Ghana. A key component of the NSPS is a social grants programme called the Livelihood Empowerment Against Poverty (LEAP) programme. The main feature of the LEAP is to provide social grants to beneficiaries chosen from extremely poor households in Ghana. It is intended to supplement the basic subsistence needs of the target groups and link them up with complementary services to enable them 'LEAP' out of poverty. The target group includes *subsistence farmers and fisher folks, extremely poor citizens above 65 years; care givers of orphans and vulnerable children (particularly children affected by HIV/AIDS and children with severe disabilities), Incapacitated/extremely poor people living with HIV/AIDS* and *pregnant women/lactating mothers with HIV/AIDS.*

The LEAP started in 2008 and is currently in operation. However not many studies provide a rigourous assessment of its impact in Ghana. The aim of this paper is to provide an assessment of what it will mean to scale-up LEAP in Ghana. In other words, it addresses the question of how poverty and inequality will be impacted if child support is provided for all children from extremely poor households plus the provision of a non-contributory old age pension for all the over 60-year olds in Ghana.

The paper is organised as follows: In section 2, we provide a brief discussion of the the methodology and data used for the analysis. The results are discussed in section 3 and covers a discussion of the social grants programme in Ghana, the trends in poverty over the period 1991 to 2006 and the output from the microsimulation model for Ghana. In section 4, we discuss the poverty trends in Ghana and also the key features of the LEAP programme. The conclusions are given in Section 5.

Methodology and Data

In this study, we simulate the effect of a social grants policy on poverty in Ghana. The simulations are based on a microsimulation model that has been developed for Ghana. This is a static model with five key policy variables or parameters namely:

- Direct income taxes;
- Indirect taxes (VAT and Petroluem);

- Child Support;
- Pensions; and
- Other social grants;

The model can therefore be simulated by changing the parameters under the different policy modules.

The data have been '*aged*' using population distribution projections obtained from Ghana Statistical Service. The model is also 'uprated' using consumer price index obtained from the Bank of Ghana. This therefore means that the model results are valid for 2010.

It is important to mention that this model only provides a quick way of assessing the welfare and fiscal implications of the different policy scenarios. It's results are *mechanical* in nature as they do not take into account behavioural changes which results from policies which are simulated (See for instance Rohaly et al., 2005 for a discussion of this). In other words the model assumes that individual behaviour does not change. This caveat notwithstanding, it provides a very important tool for evaluating different policy options.

There are two key policy issues that we deal with in this study. The first is the issue of *effect/impact*. We try to answer the question of how child support and old age pension will affect poverty and inequality in Ghana. Here, we will be looking at the net effect of the transfer on households generally. This in-turn will depend on how the transfers are financed (i.e. do you use direct or indirect taxes) and on the effectiveness of the targeting. Where the targeting is good, then you are sure that the grants go to the 'true' beneficiaries. The second issue relates to *affordability* of the social grants programme. Whether or not the programme is affordable is a function of the total cost of the programme relative to the health of government finances. We therefore discuss our results around these two policy issues. We again caution that this paper provides results on the "morning after effects" only. Thus, understanding the medium to long term impacts can be done by the use of other approaches such as randomised control trials (RCTs).

The data used for the development of the microsimulation model is the fourth round of the Ghana Living Standards Survey (GLSS 4) for 1998/1999. This is a nationally representative survey covering 5,998 households and about 25,000 persons. The fieldwork for this survey covered a period of 12 months from April 1998 to March 1999 (GSS, 2000).

Background to Social Protection and Poverty in Ghana

Trends in Poverty in Ghana

The discussion here of poverty trends in Ghana is based on the last three waves of the Ghana Living Standards Survey (GLSS) namely, GLSS 3 (1991/1992), GLSS 4 (1998/1999) and GLSS 5 (2005/2006). The trends show that the incidence of poverty almost halved over the 15-year period that these three waves of the living standards surveys span. From about 51.7% in 1991/1992, the incidence of poverty decreased to about 39.5% in 1998/1999 and further to 28.5% in 2005/2006. Poverty in Ghana is noted to be a predominantly rural phenomenom. About two-thirds of the population live in rural areas. For these rural households, the probability of being poor is more than twice that of households living in the urban areas. For instance, from the 2005/2006 survey the share of the population living in rural areas was about 62%. The incidence of poverty for the

rural population was about 39.2% compared to 10.8% for those living in the urban areas.

In spite of the decrease in the incidence of poverty over these years, inequality has increased. The gini coefficient at the national level increased from 35.3% in 1991/1992 to about 39.4% in 2005/2006. We also note from Table 1 that inequality tends to be higher in the rural than in the urban areas.

The three northern regions of Ghana have the highest incidence of poverty where the Upper East and Upper West had incidence rates of 70% and 88% respectively in 2005/2006. This is then followed by the Northern region with an incidence rate of about 52%. Two other regions, Volta and Brong Ahafo had poverty rates above the national average. All the other regions have poverty rates below the national average with Greater Accra recording the lowest incidence of about 12%.

Table :1 Trends in Poverty and Inequality in Ghana by Locality, 1992 - 2006

		Urban	Rural	National
	Pop Share	33.2	66.8	100
1991/1992	Poverty Incidence	27.7	63.6	51.7
	Gini Coefficient	32.1	32.9	35.3
	Pop Share	33.7	66.3	100
1998/1999	Poverty Incidence	19.4	49.6	39.5
	Gini Coefficient	34	35.8	37.8
	Pop Share	36.7	62.4	100
2005/2006	Poverty Incidence	10.8	39.2	28.5
	Gini Coefficient	35.5	36.1	39.4

Source: Ghana Statistical Service

Table 2: Trends in Poverty in Ghana by Region, 1992 - 2006

	Incidence (%)			Percentage Point Changes		
	1991/1992	1998/1999	2005/2006	Diff (2-1)	Diff (3-2)	Diff (3-1)
Western	60	27	18	-33	-9	-42
Central	44	48	20	4	-28	-24
Greater Accra	26	5	12	-21	7	-14
Eastern	48	44	15	-4	-29	-33
Volta	57	38	31	-19	-7	-26
Ashanti	41	28	20	-13	-8	-21
Brong Ahafo	65	36	29	-29	-7	-36
Northern	63	69	52	6	-17	-11
Upper West	88	84	88	-4	4	0
Upper East	67	88	70	21	-18	3
Ghana	51.7	39.5	28.5	-12.2	-11	-23.2

Source: Ghana Statistical Service

All the regions except two, experienced a decline in the incidence of poverty between 1991/1992 and 2005/2006. The three regions that experienced the most decrease in the incidence of poverty over this 16-year period were the Western (42 percentage points), Brong Ahafo (36 percentage points) and Eastern (33 percentage points). The Upper East and Upper West, regions did not experience a decline in the incidence of poverty over this period. For the Upper West the incidence of poverty in 2005/2006 was the same as in 1991/1992, after experiencing a decline in 1998/1999. In the case of the Upper East, even though the 2005/2006 poverty incidence level is about 3 percentage points higher than the 1991/1992 level, it represents an 18 percentage point decrease from the 1998/1999 level. These trends in the incidence of poverty across regions indicate increasing spatial inequality across the regions of Ghana with the three northern regions remaining the poorest. It reinforces the increased gini coefficient over this period.

Social Grants Programme in Ghana

Ghana has expanded her social development agenda since 2003 with increased funding through the HIPC fund, and a more explicit policy focus on vulnerable and excluded groups as outlined in the GPRS I and II.

In 2008, Ghana started implementing a component of its national social protection strategy, which provides cash transfers to extremely poor households. The main aim is to support and improve the conditions of particularly the extreme poor, vulnerable, and excluded in society. This cash transfer programme is known as the Livelihood Empowerment Against Poverty (LEAP) programme. The LEAP has been designed for an initial 5-year period, from 2008 to 2012.
The constituents of the LEAP beneficiaries are the bottom 20% of extremely poor households in Ghana. Based on the fifth round of the Ghana Living Standards Survey (GLSS5), this 'poorest of the poor' includes some 164,370 households. In the LEAP programme document, all these households were to be reached by the end of year 5. The benficiaries include the aged (over 65 years), orphans and vulnerable children (OVC), and persons with disabilities who do not have productive capacities. All the beneficiaries in these categories must be from households that are extremely poor. For some of the beneficiaries, the cash transfer is conditional – these are mainly with respect to the OVCs. For the aged and persons with severe disabilities, the cash transfer is unconditional.

Generally, the selection of the household was done using a combination of community based targeting and a 'proxy means test'. The districts were selected as those with the worst form of child labour based on data from the Ghana Statistical Service and in consultations with key ministries, departments and agencies (MDAs). Further, consultations were held with communities and MDAs in the selected districts and this formed the basis of selecting the communities (NSPS, 2007). Commuinty committees were then asked to pick potential beneficiaries after which the assets, household characteristics and demographic information was collected on these potential beneficiaries. Using this information, the Department of Social Welfare then undertook a wealth ranking upon which final beneficiaries were selected.

The amount of the cash transfers ranged from GH¢8 (US$5.52) for one beneficiary to GH¢15 (US$10.34[1]) for 4 or more beneficiaries per

[1]Note: This conversion is based on March 2011 exchange rate of about US$1 to GH¢1.45

month. This means that the amount that the household gets depends on the number of beneficiaries in that household. According to the programme document, the amount is deemed to be appropriate as it is not too small (about 15% of the minimum wage as at 2007) and it is not too big so as to create perverse incentives. In other words, the amount decided on was thought to be *adequate* and *acceptable*. Also the LEAP document compared the amount with what pertained in other countries and found it to be within range of what is paid by other countries. The total cost for the LEAP by the end of year 5 was estimated to be about GH¢141 million. The cost of administering the cash transfers was to be about 12% of the total costs. Women were to be the preferred caregivers and therefore receipients of the transfers. The reason was that the probability of maximising the impact at the household level is higher if the recipients were women.

RESULTS

Baseline Poverty Distribution from Microsimulation Model for Ghana, 2010

The microsimulation model provides estimates of poverty for Ghana. The model takes into account the changing population and also the change in prices that has occured over the years since the household data was collected. As a result, all the expenditure estimates have been adjusted to reflect the current 2010 prices. The poverty line is set at GHC440 which is an adjustment of the 2005/2006 upper poverty line of GHC371.

The model shows that about 65% and 35% of households live in rural and urban areas respectively. The incidence of poverty is estimated at 38.5% nationally, with the rates being higher for the rural areas than it is for the urban areas of 47.6% against 21.6% respectively. The model estimates show a poverty gap of about 17.2% at the national level and 22% and 8.4% respectively at the rural and urban levels. The estimated gini coefficient is about 0.33 (Table 3)

Table 3. Poverty Estimates for Ghana by Location (2010)

Location	pop (2010)	Pop Share (%)	poverty count	Percent Poor	poverty gap	poverty gap per head	poverty gap percent	Gini
Urban	8,410,230	34.9	1,812,459	21.6	209,306,699	115	8.4	27.21
Rural	15,706,570	65.1	7,470,902	47.6	997,292,355	133	22.0	31.24
Total	24,116,800		9,283,361	38.5	1,206,599,054	130	17.2	33.33

Source: Ghana Microsimulation Model

Generally, what the model suggests is that poverty in Ghana has increased from the 2005/2006 levels. However, unlike previous trends observed (i.e. decreasing poverty incidence being associated with increasing inequality) inequality seem to have decreased. Two important factors may account for the increase in poverty. These are the global food price increases which manifested itself in Ghana in 2008 and the global financial crisis. Some commentators on the economy of Ghana have argued that the food crisis and the global financial meltdown have impacted adversely on poverty, a view which is consistent with Ackah and Appleton (2007).

We also look at the gender dimension of poverty by examining the distribution of poverty for male-headed and female headed households (Table 4). We observe that the incidence of poverty is higher among male-headed households, who also constitute about 77% of the households in Ghana. The incidence of poverty is about 39.8% compared to 34.2% for female-headed households. However inequality is higher in female headed households than in male-headed households.

Poverty incidence by quintile shows that the probability of being poor is highest amongst those in the first quintile at about 93% and with a poverty gap of about 56%. The incidence of poverty in the second and third quintiles are respectively 65.3% and 31.9%. For the fourth quintile the incidence is at a low of 2% and with a poverty gap of only 0.2%. In other words most of the poor in the fourth quintile are close to the poverty line. This suggest that not only is the incidence of poverty high, the depth of poverty remains also problematic, and is particularly the case for the first quintile (Table 5).

Table 4: Poverty Estimates for Ghana by Gender of Head of Household 2010

Gender	Pop (2010)	Poverty count	Percent Poor	Poverty Gap	Poverty Gap Per Head	Poverty Gap Percent	Gini
Male	18,468,959	7,350,418	39.8	940,873,169	128	17.4	36.8
Female	5,647,841	1,932,943	34.2	265,725,885	137	16.5	40.3
Total	24,116,800	9,283,361	38.5	1,206,599,054	130	17.2	33.33

Source: Ghana Microsimulation Model

Table 5: Poverty Estimates for Ghana by Quintiles 2010

Quintile	Pop (2010)	Poverty count	Percent Poor	Poverty Gap	Poverty Gap Per Head	Poverty Gap Percent
Quintile_1	4,825,624	4,492,931	93.1	772,423,793	172	56.3
Quintile_2	4,828,603	3,153,172	65.3	341,372,285	108	24.6
Quintile_3	4,823,451	1,540,288	31.9	90,505,195	59	6.5
Quintile_4	4,828,114	96,970	2.0	2,297,780	24	0.2
Quintile_5	4,811,009	-	-	-		-
Total	24,116,800	9,283,361	38.5	1,206,599,054	130	17.2

Source: Ghana Microsimulation Model

Table 3: Poverty and Inequality Estimates for Ghana by Region 2010

Region	Pop (2010)	Poverty count	Percent Poor	Poverty Gap	Poverty Gap Per Head	Poverty Gap Percent	Gini
Western	3,056,087	866,487	28.4	96,163,693	111	10.8	30.74
Central	1,535,331	633,138	41.2	81,303,835	128	18.8	29.49
Accra	2,737,206	310,253	11.3	30,255,058	98	3.7	19.41
Volta	3,603,697	1,294,756	35.9	174,591,353	135	16.3	27.16
Eastern	2,686,774	838,133	31.2	100,765,763	120	13.1	29.79
Ashanti	4,365,802	1,437,686	32.9	204,772,927	142	16.1	21.90
Brong Ahafo	1,651,505	520,813	31.5	63,002,914	121	13.3	27.98
Northern	2,516,616	1,742,343	69.2	207,051,879	119	28.7	41.72
Upper West	1,002,700	788,909	78.7	124,035,907	157	42.9	11.37
Upper East	961,083	850,844	88.5	124,655,725	147	45.0	25.61
Total	24,116,800	9,283,361	38.5	1,206,599,054	130	17.2	33.33

Source: Ghana Microsimulation Model

Finally, we looked at the regional distribution of poverty in Ghana based on the model estimates. We noted that the three northern regions remain the poorest, both in terms of incidence and also in terms of the depth of poverty (Table 6). Only two regions have experienced a decline in the incidence of poverty when compared to the 2005/2006 estimates from the GLSS 5. These are the greater Accra and the Upper West regions. For the Upper West region, it will be interesting to understand the factors which might have led to a decrease in poverty incidence (although this is beyond the scope of this paper). However it is important to note that even though the incidence of poverty declined for the Upper West region it still has the second highest incidence of poverty in the country, after Upper East region.

Simulation Results – Means tested Child Support and Universal Pensions

In this section we discuss what the implications are for poverty and inequality if government were to implement a policy which will provide a non-contributory old age pension and child support. The main assumptions with respect to this policy simulation are as follows:

- The amount of the child support is GHC6 per month per child
- The upper age limit for a child is 15 years
- The household in which this child lives should have an income of less than 50% of the poverty line.
- The non-contributory universal pension is set at GHC40 per month per old person
- The age limit for the pension benefit is 60 years for both male and female.

Implications for Poverty and Inequality

The results for the simulation shows that overall poverty reduces by about 5 percentage points. Also inequality as captured by the gini coefficient, and the poverty gap both decrease

to 28% (from 33%) and 10.6% (from 17.2%) respectively. In total, 1,128,510 people are moved out of poverty. Over 80% of these are rural households. Also, the depth of poverty reduces by about GHC39 per person with a bias in favour of the rural poor (Table 7). The reduction in inequality can also be seen from the Lorenz curves given in the Annex.

Note: This amount is slightly lower than the minimum amount paid under the government's LEAP programme which is at GHC8/month.

These improvements in the level and depth of poverty as a result of this policy can also be seen when one looks at results by gender of the head of household, quintile and region. For instance, an interesting observation can be seen by looking at the regional poverty distribution with such a policy (See Annex for Tables). We note that both in terms of the percentage gains in the incidence of poverty or the decrease in the per capita poverty gap, the regions that benefits most are the three northern regions.

Table 7: Poverty and Inequality with Social Grants and Pensions, by Locality

Location	Pop (2010)	Poverty count	Percent Poor	Poverty Gap	Poverty Gap Per Head	Poverty Gap Percent	Gini
Urban	8,410,230	1,596,520	19.0	141,773,828	89	5.7	24.81
Rural	15,706,570	6,558,331	41.8	599,666,703	91	13.2	23.81
Total	24,116,800	8,154,851	33.8	741,440,531	91	10.6	28.03
Poverty and Inequality Gains							
Urban	8,410,230	215,939	3	67,532,871	26	3	2
Rural	15,706,570	912,571	6	397,625,652	42	9	7
Total	24,116,800	1,128,510	5	465,158,523	39	7	5

Source: Ghana Microsimulation Model

Fiscal Implications

In this section, we discuss the cost implications of this policy scenario for government. We note that the implementation of such a social grants policy in 2010 will cost the government a total of about GHC1,028 million. Of this amount GHC756 million will be paid as non-contributory pensions whilst GHC272 million will go towards child support. We note from Table 8 that the bulk of the grants (about 75%) will go to rural households.

Table 8: Magnitude of the Grants by Locality (GHC)

	Total Grants	O/W Pension	O/W Child Support	VAT	Excise Tax	Total Indirect Tax	Grants(net of indirect taxes)
Urban	258,107,445	229,801,980	28,305,465	33,666,188	86,773	33,752,962	224,354,483
Rural	770,154,667	526,266,444	243,888,223	100,454,956	314,069	100,769,026	669,385,641
National	1,028,262,111	756,068,423	272,193,688	134,121,145	400,843	134,521,988	893,740,123
Grants (% of Total Govt expenditure) 8.3%							
Grants (% of Recurrent expenditure) 11.7%							
Source: Ghana Microsimulation Model							

Source: Ghana Microsimulation Model

Table 9: Magnitude of the Grants by Quintile

	Total Grants	Pension	Child Support	VAT	Excise Tax	Total Indirect Tax	Grants (net of indirect taxes)
Quintile_1	446,833,757	212,049,738	234,784,019	58,282,664	173,297	58,455,961	388,377,796
Quintile_2	209,339,859	171,930,190	37,409,669	27,305,199	77,267	27,382,466	181,957,393
Quintile_3	156,268,008	156,268,008	0	20,382,784	38,533	20,421,317	135,846,691
Quintile_4	122,908,164	122,908,164	0	16,031,500	24,316	16,055,816	106,852,348
Quintile_5	92,912,323	92,912,323	0	12,118,999	87,430	12,206,428	80,705,895
Total	1,028,262,111	756,068,423	272,193,688	134,121,145	400,843	134,521,988	893,740,123

Source: Ghana Microsimulation Model

It is important to mention that not all the grant amount will be cost to government. The increased spending by households which will result from the grants will lead to an increase in government tax revenue by an amount of about GHC134.5 million. This will be through indirect taxes (VAT and excise) on the goods and services that households spend the increased incomes on. As a result, the net expenditure by government on this policy scenario will be about GHC893.7 million. This amount translates to about 8.3% of total planned government expenditures or 11.7% of government recurrent expenditures for 2010.

Table 10: Magnitude of the Grants by Gender of Household Head (GHC)

	Total Grants	O/W Pension	O/W Child Support	VAT	Excise Tax	Total Indirect Tax	Grants (net of indirect taxes)
Male	725,139,165.00	515,086,707	210,052,458	94,583,369	284,203	94,867,572	630,271,593
Female	303,122,946.00	240,981,716	62,141,230	39,537,776	116,640	39,654,415	263,468,531
Total	1,028,262,111.00	756,068,423	272,193,688	134,121,145	400,843	134,521,988	893,740,123

Source: Ghana Microsimulation Model

Table 11: Magnitude of the Grants by Region (GHC)

	Total Grants	O/W Pension	O/W Child Support	VAT	Excise Tax	Total Indirect Tax	Grants (net of indirect taxes)
Western	84,585,255	68,950,211	15,635,044	11,032,859	39,795	11,072,655	73,512,600
Central	84,744,695	64,859,201	19,885,494	11,053,656	23,584	11,077,240	73,667,455
Accra	68,832,839	63,151,394	5,681,445	8,978,196	34,443	9,012,639	59,820,200
Volta	138,558,808	101,262,295	37,296,513	18,072,888	41,675	18,114,563	120,444,245
Eastern	121,224,746	100,324,081	20,900,665	15,811,923	40,506	15,852,430	105,372,316
Ashanti	191,690,878	153,672,403	38,018,475	25,003,158	63,845	25,067,003	166,623,875
Brong Ahafo	60,957,954	50,431,945	10,526,009	7,951,038	34,486	7,985,523	52,972,431
Northern	126,318,357	71,549,275	54,769,082	16476,307	52,669	16,528,977	109,789,380
Upper West	77,494,826	49,024,610	28,470,216	10,108,021	39,789	10,147,809	67,347,017
Upper East	73,853,752	32,843,008	41,010,744	9,633,098	30,050	9,663,148	64,190,604
National	1,028,262,111	756,068,423	272,193,688	13 4,121,145	400,843	134,521,988	893,740,123

Source: Ghana Microsimulation Model

In terms of the distribution of this grant amount by quintiles, we note that the child support will only go to those in the first two quintiles. This is not surprising as qualification for child support is based on a means-test. However, for the pensions, the qualification is based on age and so the model outcomes do reflect the age distribution within the quintiles. They do not necessarily reflect the 'needs' of the household.

The magnitude of grant by gender in Table 10 indicates that, male headed households got the most grants (70%), which reflects a feature of households in Ghana. It further suggests that means-testing alone is not enough to maximise the impact (particularly second-order impact) of social grants on households welfare.

The distribution across regions show that Ashanti region will get the highest amount of the grant. This is followed by Volta with the northern region in third place. The reason for the very high grants to the Ashanti region is due to the fact that it is the most populated region in Ghana. This therefore translates into very high pensions for the region. In fact, in terms of child support, the grant payments is highest for the Northern region with the Upper East region in second place.

Conclusions

This study had a simple aim. It sought to investigate the extent to which a universal non-contributory old age pension plus a means-tested child support grant, will impact on poverty and inequality in Ghana. This policy simulation has important policy implication for good reasons. First, it provides a good platform for an empirical assessment of the impact of the LEAP programme on poverty in Ghana. We think of the policy scenario simulated in this paper as a scaled up version of the LEAP. In effect, what we evaluate is the impact of social grants for all poor OVCs and the aged (over 60 years) in Ghana. Second, it provides a good empirical basis for discussing welfare and fiscal issues relating to the social

grants programme in Ghana. It uses a microsimulation model for Ghana, which allows the estimation of poverty and inequality for Ghana for 2010. The simulation done in this study is based on a policy scenario where government pays old age pension universally plus child support for extremely poor households.

The main finding of this study are as follows:

First, the study finds that a universal social grants programme of the nature descibed in this study will impact positively on the fight against poverty. It will reduce the incidence of poverty as well as inequality in Ghana. Both poverty and inequality, as measured by the gini coefficient, reduce by about 5 percentage points. Also, the depth of poverty is found to reduce with such a policy. Households below the poverty line are pushed closer to it, hence increasing their chances of getting out of poverty. Generally, even though this reduction is true for most of the regions in Ghana, it is more pronounced for the poorer ones.

Second, the study finds that the key beneficiaries of this policy are poor rural households. About 75% of the total grants transfered under this policy scenario will go to poor rural households. This is consistent with a pro-poor policy as it will benefit relatively more the poorer households. It is important to mention here that part of the result is driven by the fact that the child support policy is based on a means-test. This is in no way an assessment of whether the targeting was good. Rather, it suggests that inequality objectives will be better achieved if the targeting is efficient.

Third, the total costs of this policy to the government is about GHC1,028 million. However, government gets back part of this money in the form of indirect taxes. Total indirect taxes that will accrue to government as a result this grant to these households will be about GHC134.5 million. Therefore, the net costs to government will be about GHC893 million (about 8.3% of total planned government expenditures for 2010). Of this amount, about 74% will be in the form of payment for pensions whilst the remaining 26% will go to child support. Undoubtedly, the very high costs to the government is driven by the universal pensions experiment. For a more targeted and mean-tested pensions scheme (such as is being pursued under the LEAP), the costs will be much lower and significantly improve the sustainability of the programme.

The study concludes by noting that social grants programme will impact positively on poverty in Ghana. However, its effectiveness in reducing poverty will depend on, among other factors, the nature of the targeting used to reach beneficiaries. Targeting based on means-test is likely to have the most significant beneficial effect on poverty and inequality in Ghana. Also, important in shaping how effective the programme will be is the question of how these grants are financed. In this study we have assumed that the government finances the social grants programme from non-tax revenue (for instance an external grant or divestiture receipts).If the experiment had been performed in such a way that the grants had been financed from taxes, then the effectiveness of the programme will depend on progressivity or otherwise of the tax instrument used.

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APPENDICES

Table 12: Poverty and Inequality with Social Grants and Pensions, by Gender of Household head

Gender	pop (2010)	poverty count	Percent Poor	poverty gap	poverty gap per head	poverty gap percent	Gini
Male	18,468,959	6,531,114	35.4	581,276,647	89	10.8	29.55
Female	5,647,841	1,623,736	28.7	160,163,884	99	9.9	35.31
Total	24,116,800	8,154,851	33.8	741,440,531	91	10.6	28.03
Poverty and Inequality Gains							
Male	18,468,959	819,304	4	359,596,522	39	7	7
Female	5,647,841	309,207	6	105,562,001	38	7	5
Total	24,116,800	1,128,510	5	465,158,523	39	7	5

Source: Ghana Microsimulation Model

Table 13: Poverty Distribution with Social Grants and Pensions, by Quintile

Quintile	pop (2010)	poverty count	Percent Poor	poverty gap	poverty gap per head	poverty gap percent
Quintile_1	4,825,624	4,077,155	84.5	443,294,220	109	32.3
Quintile_2	4,828,603	2,885,427	59.8	232,948,568	81	16.8
Quintile_3	4,823,451	1,182,462	24.5	65,002,317	55	4.6
Quintile_4	4,828,114	9,807	0.2	195,426	20	0.0
Quintile_5	4,811,009	0	0.0	0	.	0.0
Total	24,116,800	8,154,851	33.8	741,440,531	91	10.6
Poverty and Inequality Gains						
Quintile_1	4,825,624	415,776	9	329,129,573	63	24
Quintile_2	4,828,603	267,745	6	108,423,717	27	8
Quintile_3	4,823,451	357,826	7	25,502,878	4	2
Quintile_4	4,828,114	87,163	2	2,102,354	4	0
Quintile_5	4,811,009					
Total	24,116,800	1,128,510	5	465,158,523	39	7

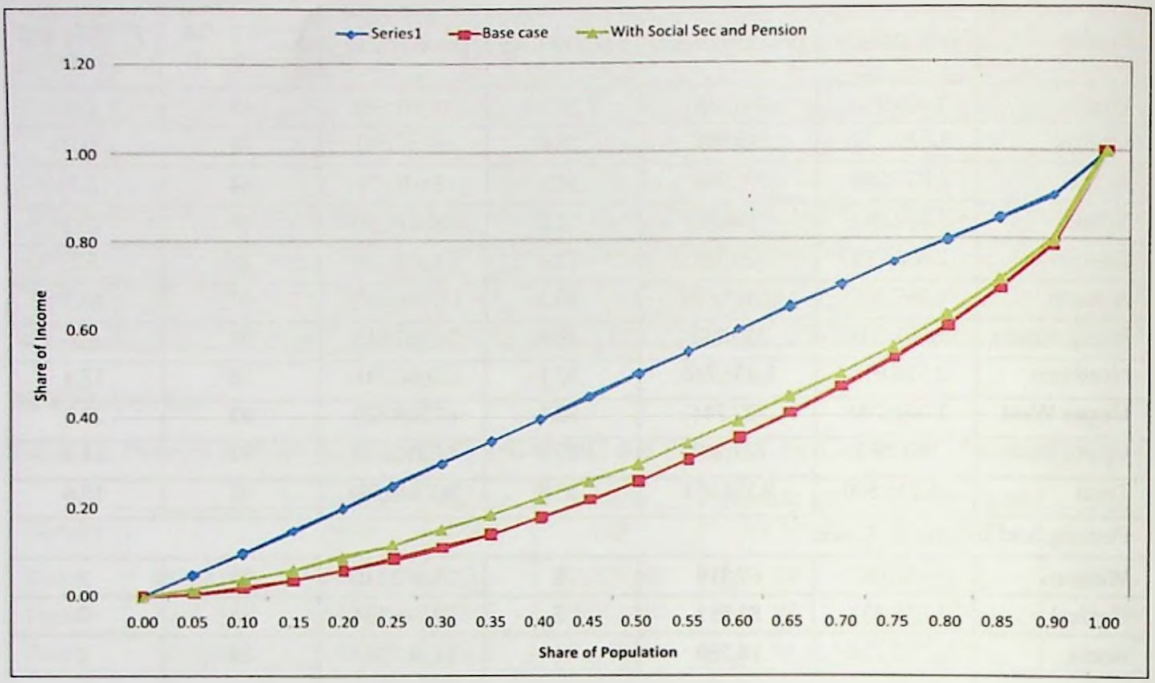
Source: Ghana Microsimulation Model

Table 14: Poverty Distribution with Social Grants and Pensions, by Region

Region	pop (2010)	poverty count	Percent Poor	poverty gap	poverty gap per head	poverty gap percent
Western	3,056,087	796,668	26.1	70,501,553	88	7.9
Central	1,535,331	549,587	35.8	51,557,311	94	11.9
Accra	2,737,206	291,993	10.7	18,567,776	64	2.3
Volta	3,603,697	1,154,411	32.0	109,435,388	95	10.2
Eastern	2,686,774	729,549	27.2	63,372,198	87	8.2
Ashanti	4,365,802	1,317,639	30.2	127,941,507	97	10.0
Brong Ahafo	1,651,505	435,242	26.4	39,451,515	91	8.3
Northern	2,516,616	1,435,748	57.1	125,841,901	88	17.4
Upper West	1,002,700	722,744	72.1	67,518,529	93	23.3
Upper East	961,083	721,269	75.0	67,252,853	93	24.3
Total	24,116,800	8,154,851	33.8	741,440,531	91	10.6
Poverty and Inequality Gains						
Western	3,056,087	69,819	2	25,662,140	23	3
Central	1,535,331	83,551	5	29,746,524	34	7
Accra	2,737,206	18,260	1	11,687,282	34	1
Volta	3,603,697	140,345	4	65,155,965	40	6
Eastern	2,686,774	108,584	4	37,393,565	33	5
Ashanti	4,365,802	120,047	3	76,831,420	45	6
Brong_Ahafo	1,651,505	85,571	5	23,551,399	30	5
Northern	2,516,616	306,595	12	81,209,978	31	11
Upper_West	1,002,700	66,165	7	56,517,378	64	20
Upper_East	961,083	129,575	14	57,402,872	54	21
Total	24,116,800	1,128,510	5	465,158,523	39	7

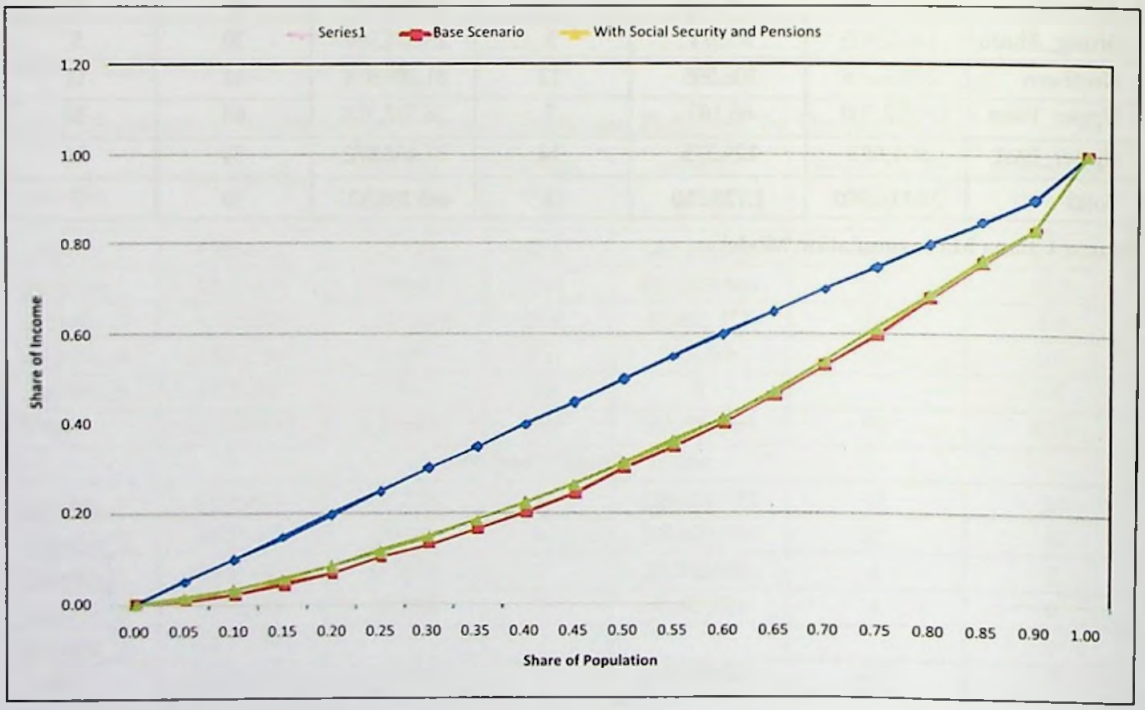
Source: Ghana Microsimulation Model

Figure 1: Lorenz Curve for all Households – With and without social grants



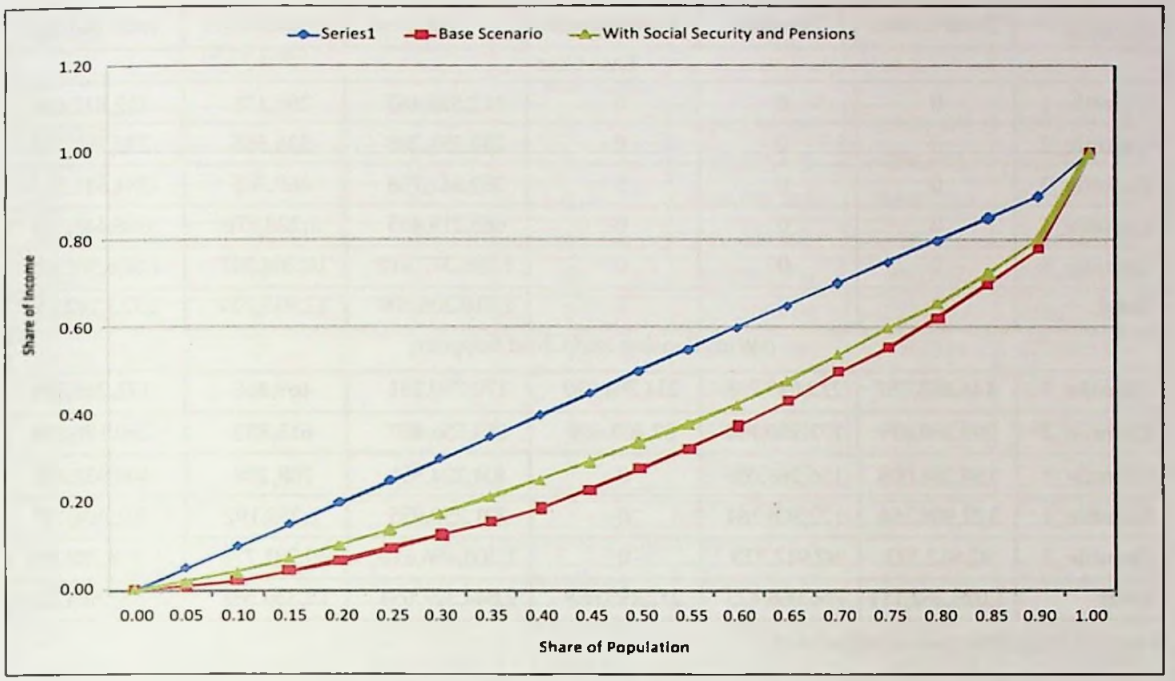
Source: Ghana Microsimulation Model

Figure 2: Lorenz Curve for Urban Households – With and without social grants



Source: Ghana Microsimulation Model

Figure 3: Lorenz Curve for Rural Households – With and without social grants



Source: Ghana Microsimulation Model

Table 15: Magnitude of Grants by locality – Before and after scenario

Locality	Total Grants to be paid	Pension	child support	vat	excise	total indirect
Base Case						
Urban	0	0	0	1,443,615,253	7,318,618	1,450,933,871
Rural	0	0	0	1,266,591,256	5,617,106	1,272,208,362
Total	0	0	0	2,710,206,509	12,935,724	2,723,142,233
With Pension and Child Support						
Urban	258,107,445	229,801,980	28,305,465	1,477,281,441	7,405,391	1,484,686,833
Rural	770,154,667	526,266,444	243,888,223	1,367,046,213	5,931,175	1,372,977,388
Total	1,028,262,111	756,068,423	272,193,688	2,844,327,654	13,336,567	2,857,664,221

Source: Ghana Microsimulation Model

Table 16: Magnitude of Grants by Quintile – Before and after scenario

Quintile	Total Grants	Pension	child support	Vat	excise	total indirect
Base Case						
Quintile_1	0	0	0	112,516,467	296,171	112,812,638
Quintile_2	0	0	0	232,251,208	536,565	232,787,773
Quintile_3	0	0	0	383,841,768	669,765	384,511,533
Quintile_4	0	0	0	685,219,455	1,228,876	686,448,331
Quintile_5	0	0	0	1,296,377,612	10,204,347	1,306,581,958
Total	0	0	0	2,710,206,509	12,935,724	2,723,142,233
With Pension and Child Support						
Quintile_1	446,833,757	212,049,738	234,784,019	170,799,131	469,468	171,268,598
Quintile_2	209,339,859	171,930,190	37,409,669	259,556,407	613,832	260,170,239
Quintile_3	156,268,008	156,268,008	0	404,224,551	708,298	404,932,850
Quintile_4	122,908,164	122,908,164	0	701,250,955	1,253,192	702,504,147
Quintile_5	92,912,323	92,912,323	0	1,308,496,610	10,291,776	1,318,788,387
Total	1,028,262,111	756,068,423	272,193,688	2,844,327,654	13,336,567	2,857,664,221

Source: Ghana Microsimulation Model

Table 17: Magnitude of Grants by Household Head's Gender – Before and after scenario

Gender	Total Grants to be paid	Pension	child support	vat	excise	total indirect
Base Case						
Male	0.00	0	0	1,986,160,168.74	10,162,877.30	1,996,323,046.04
Female	0.00	0	0	724,046,340	2,772,847	726,819,187
Total	0.00	0	0	2,710,206,509	12,935,724	2,723,142,233
With Pension and Child Support						
Male	725,139,165.00	515,086,707	210,052,458	2,080,743,538	10,447,080	2,091,190,618
Female	303,122,946.00	240,981,716	62,141,230	763,584,116	2,889,486	766,473,602
Total	1,028,262,111.00	756,068,423	272,193,688	2,844,327,654	13,336,567	2,857,664,221

Table 18: Magnitude of Grants by region – Before and after scenario (GHC)

Locality	Total Grants to be paid	pension	child support	vat	excise	total indirect
Base Case						
Western	0	0	0	325,375,038	1,698,871	327,073,909
Central	0	0	0	122,292,878	296,192	122,589,070
Accra	0	0	0	693,555,138	5,640,710	699,195,848
Volta	0	0	0	340,524,964	898,767	341,423,730
Eastern	0	0	0	239,451,308	855,042	240,306,351
Ashanti	0	0	0	607,306,760	2,721,514	610,028,274
Brong Ahafo	0	0	0	172,230,698	280,344	172,511,042
Northern	0	0	0	135,209,661	332,262	135,541,923
Upper West	0	0	0	41,644,946	105,023	41,749,969
Upper East	0	0	0	32,615,118	106,998	32,722,116
Total	0	0	0	2,710,206,509	12,935,724	2,723,142,233
With Pension and Child Support						
Western	84,585,255	68,950,211	15,635,044	336,407,897	1,738,666	338,146,563
Central	84,744,695	64,859,201	19,885,494	133,346,534	319,777	133,666,310
Accra	68,832,839	63,151,394	5,681,445	702,533,335	5,675,153	708,208,488
Volta	138,558,808	101,262,295	37,296,513	358,597,852	940,441	359,538,293
Eastern	121,224,746	100,324,081	20,900,665	255,263,232	895,549	256,158,781
Ashanti	191,690,878	153,672,403	38,018,475	632,309,918	2,785,359	635,095,277
Brong Ahafo	60,957,954	50,431,945	10,526,009	180,181,736	314,830	180,496,565
Northern	126,318,357	71,549,275	54,769,082	151,685,968	384,932	152,070,900
Upper West	77,494,826	49,024,610	28,470,216	51,752,967	144,812	51,897,779
Upper East	73,853,752	32,843,008	41,010,744	42,248,216	137,048	42,385,264
Total	1,028,262,111	756,068,423	272,193,688	2,844,327,654	13,336,567	2,857,664,221

Source: Ghana Microsimulation Model

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