Understanding the Capability Approach through education and labour/employment market outcomes in Ghana

Samuel AGYEI-MENSAH
DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT, UNIVERSITY OF GHANA
John ANARFI
REGIONAL INSTITUTE FOR POPULATION STUDIES, UNIVERSITY OF GHANA, ACCRA, GHANA
Adu Owusu SARKODIE
ECONOMICS DEPARTMENT, UNIVERSITY OF GHANA, ACCRA, GHANA
Thomas ANTWI BOSIAKOH
DEPARTMENT OF SOCIOLOGY, UNIVERSITY OF GHANA, ACCRA, GHANA

Paper developed under the project ENHANCING THE CAPABILITIES OF THE MOST VULNERABLE: A PILOT PROJECT ON INEQUALITIES IN HUMAN DEVELOPMENT IN BAMAKO AND ACCRA

1.1 Background

New approaches to human development have evolved through the globalisation process. One of such new approaches is the Capability Approach (CA) developed by Amartya Sen. Sen sees development in terms of the expansion in opportunities available to individuals to achieve the kind of life they value. Accordingly, Sen, views development as "a process of expansion of real freedoms enjoyed by individuals in order to lead the kind of lives they have reason to value "(Sen 1999; 3-10). Education is seen as instrument for economic activities. Sen (1997), from the perspective of Human Development and Capability Approach, see development as not only increase in economic activity, but expansion in real opportunities for the improvement of human life.

As young individuals grow into adulthood, there are many risks and opportunities associated with this transition in life. It is the hope of these individuals to achieve a meaningful employment status which enables them to play their role in society. One tool with which to achieve this meaningful employment status and eventually enable individuals to play their role in society is education. Using the Capability Approach therefore, this paper seeks to identify the types of employment available to individuals of same/similar opportunities (educational attainments) to lead the kind of lives they have reason to value.

1. 2 VARIABLE MAPPING

The purpose of the study is to find out why individuals with the same opportunity (educational qualification) end up in different types of employment, given differentials in endowments and the conversion factors. The type of employment is considered as the functioning, the capabilities are the levels of educational qualifications. The conversion factors include ethnicity, religion, use of ICT, marital status, age and the sex of an individual. The variables that make up endowments are location (Accra, other urban, rural coastal, rural forest and rural savannah), type of dwelling (self contained, compound house, and huts and tents), and access (availability of) to ICT.

1. 3 METHODOLOGY

Since the dependent variables are dichotomised, and the effects of the explanatory variables expressed in relative terms as it is conventional in many studies using Capability Approach, logistic regression is preferred to any other method. A logistic regression is used for predicting the probability of an event occurring or not occurring by fitting data to a logit form (Greene, 2003). In this model, education is treated as the opportunity to engage in a type of employment. The data for the study is derived from the Ghana Living Standards Survey-Round Five (GLSS 5), which is a nationally representative sample of 8,687 households in 580 enumeration areas, containing 37,128 household members.

1.4 ANALYSIS OF RESULTS

The null hypothesis will be tested at 1% in order to examine the statistical significance of each explanatory variable.

Predictors of Capabilities

By the technique of the Capability Approach, the variables are introduced in blocks into the regression analysis starting from the endowments to conversion factors. The importance of this technique is to examine any change in the proper effects of an explanatory variable following the introduction of each of the explanatory variables. With Greater Accra Metropolitan Area as the reference category, all other geographical locations show positive and significant coefficients with no education and primary education. The exact opposite

holds for SHS+ educational qualifications. Not much difference can be observed about the middle/JHS education. The type of dwelling is only a good predictor of the extreme levels of education. ICT is composed of fixed line, mobile phone, personal computer, and internet. If the access to anyone of these is used as the reference category, the coefficient of 'none' shows positive and significant for 'no education' and negative for other levels of education. There is no significant difference between the number of ICTs one has access to and or use.
With the exception of Ewes, the coefficients of all the other ethnic groups are positive and significant for no education. Including the Ewes, all the coefficients are negative and significant on middle/JHS. There are mixed effects on primary and SHS+. Using Christianity as reference, the coefficients of all other religious groups are significantly positive on no education. The exact opposite holds for Middle/JHS and SHS+. Compared with married people, unmarried ones have significant positive coefficients on SHS+, but negative and significant coefficients on other levels of education. Compared with those aged between 20 and 29 years, all other age groups are significantly positive on no education, but insignificantly negative on SHS+. There is mixed results on other levels of education. The results show that higher educational levels are related to males than females. The full regression results on all the capabilities are shown on the table below.

Table 1: Regression results on all Capability sets (No. of observations: 18, 679)

INDEPENDENT VARIABLES	NO EDUCATION	PRIMARY.	JHS/MIDDLE	SHS+
LOCATION:				
Accra (GAMA)				
Other urban	.4142056	.4309729	.0184714	-.2986819
Rural coastal	.8655712	.8549718	-.3221524	-.8114751
Rural forest	.5565869	.8141264	.004549	-.9693047
Rural savannah	1.427795	.0517532	-.7442803	-1.029159
DWELLING				
Self & dn't sh.	-.3444481	-.501877	-.250018	.9198204
Self & share	-.3008589	-.2566452	-.3124628	.6502744
Comp. &dnt sh	.1514189	.0384402	-.0888071	-.161681
Comp &share				
Huts &dnt sh.	.2901399	.1240074	-.4555239	-.3970376
Huts &share	.3563525	-.2148153	-.2661615	-.1126722
ACCESS TO ICT	.2769707	-.1279634	-.1465882	-.3885446
None				
One	.0630949	.0025343	.0477931	-.0370948
Two	-.1228423	.0370332	.1389417	.0475263
Three	-.3889534		.0949546	.2727783
Four		-.1003693		
ETHNICITY				
Akan				
Ga-adangbe	.4485429	.2629689	-.2010651	-.2050282
Ewe	.0231187	.2894779	-.2511305	.2795538
Mole-dagbani	1.709062	-.2559246	-1.362963	.0427282
others	1.258964	.0182871	-.9177205	-.114644
RELIGION				
Christianity				
Islam	.8968398	.0754707	-.6187974	-.6211347
Traditional	1.383833	-.3708353	-1.453322	-2.515787
Others&no rel.	.7808241	.3834918	-.469435	-1.251772
USE OF ICT				
None	.7323318	.4278212	-.3364476	-.8600236
One				
Two	-.1684135	.0806235	-.2519552	.2628066
Three	-.4932502	-.0809928	-1.107439	.9629926

Four	-.3156962	-1.141006	-1.467048	1.49644
MARITAL STA.				
Married				
Not married	-.4037268	-.4159366	-.0429498	.8421845
AGE				
15-19	.5963978	.2826336	-.43985	-.1237699
20-29				
30-40	.7125544	-.5966759	.0376684	-.0844194
>40	1.561939	-1.243998	-.1806414	-.1827702
SEX				
Male	-1.261658	-.1157355	.6374474	.9379847
female				
constant	-3.083324	-1.56133	.0446774	-1.472502

Coloured coefficients are not significant at 1%. Source: Authors' computation

Predictors of Functioning

The predictors of employment, after controlling for endowments and conversion factors are explained as follows: With SHS+ used as the reference category, all other educational levels (i.e no education, primary and JHS) have negative and but significant coefficients. This means that apart from SHS+, all other educational levels are negatively related to paid work, but significantly positive for non-agric and agric. Thus, people with higher educational level are more likely to do paid work than non-agric and agric. After sorting the regression by sex, the same results are recorded. However, the female coefficients on paid work are greater than males. What it means is that, paid work is very sensitive for female than males. Even though location is controlled, it still has significant effect on the types of employment. Compared with Accra (GAMA), people who live in other locations are more likely to score higher points for non-agric and agric and lower points for paid work. There is much significant difference between dwelling types, where those in self contained dwellings are more likely to do paid work than these in other dwellings. Those who have no access to ICT, are likely to engage in agric work other than non-agric and paid work. Like their effects on capabilities, there is no significant difference between the number of ICTs one has access to. Similar effects were observed on the use of ICT. Compared with females, males are more likely to do paid and agric work, and not non-agric. Table 2 shows the regression results of the functionings.

Table 2: Regression results for type of employment on educational qualification, controlling for endowments and conversion factors.

INDEPENDENT VARIABLES	PAID WORK	NON-AGRIC	AGRIC
EDUCATIONAL QUALIFICATION:			
No qualification	-1.726335	.2621552	1.481878
Primary	-1.329347	.7858905	.9771029
Middle/JHS	-.9242779	.8224443	.6399638
SHS+			
LOCATION:			
Accra (GAMA)			
Other urban	-.6024153	.2313012	1.807677
Rural coastal	-.812805	-.781307	2.847649
Rural forest	-1.465558	-1.184178	3.425123
Rural savannah	-2.378429	-.858513	3.418749

DWELLING			
Self & dn't sh.	.6291654	-.292018	-.3040656
Self & share	.5339803	-.0477932	-.7444555
Comp. &dnt sh	-.2361833	-.0970441	.1975674
Comp &share			
Huts &dnt sh.	-.2789903	-.1803592	.2446172
Huts &share	-.4310353	.0254514	.1549168
ACCESS TO ICT			
None	-.2420403	-.5875167	.4591364
One			
Two	.2936674	-.1792946	.0835548
Three	.3753888	-.1664726	-.0254034
Four	.3148487	.2396353	-.8248154
ETHNICITY			
Akan			
Ga-adangbe	.0756999	.4885061	-.6157355
Ewe	-.0806033	.3555774	-.2444076
Mole-dagbani	.1430362	-.1551471	.0643807
others	.1694567	-.0496958	-.0162491
RELIGION			
Christianity			
Islam	-.0521045	.3939979	-.2776767
Traditional	-1.015656	-.0244982	.1237099
Others&no rel.	.0207701	-.1530454	.0660897
USE OF ICT			
None	-.2480979	-.3043605	.465587
One			
Two	-.2075038	.3255307	-.3843928
Three	.1281495	-.4142804	.1377496
Four	.1416846	-.408905	.0121562
MARITAL STA.			
Married			
Not married	.4079064	-.5450909	-.0716387
AGE			
15-19	-.0619288	-1.34923	1.04483
20-29			
30-40	-.4598144	.1322723	.1018692
>40	-.4718208	-.0852222	.3483979
SEX			
Male	1.178989	-1.384915	.5910572
Female			
MALES' MARRIAGE AGE:			
Early marriage (<20)	-.0263556	-.0224894	-.0282369
Marriage age (20-30)			
Late marriage (>30)	.1324912	-.1130464	-.0278602
FEMALES' MARRIAGE AGE			
Early marriage (<17)	-.3294677	-.0499004	.1280993
Marriage age (17-24)			
Late marriage (>24)	.2020564	-.0062031	-.091916
CONTRACEPTIVE USE:	.2071313	.1011865	-.2509134
Use			
Don't use			
Constant	.0132633	-.1636809	-4.105936

Note: coloured coefficient Source: Authors' computation