



Incidence, Depth and Severity of Household Poverty in Southern Ethiopia: Understanding the statuesque in the fastest growing City of the Region (Hawassa)

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Abstract

The main objective of this study is to examine the status of household poverty in terms of incidence, gaps and severity (P0, P1, and P2) in the capital of Southern Regional State of Ethiopia (Hawassa) and identify the key predictors of poverty severity. The analysis entails estimation of both the cost of purchasing basic food necessities and essential non-food expenditures based on consumption patterns reflected in the available consumption data at national level. The study estimated the three poverty parameters, and the values of the three indices were high (43%, 24 % and 15% respectively) compared to some previous studies conducted in Ethiopia, but somewhat lower than the figures reported for some African cities. Using the Tobit regression model, five variables were found to predict the poverty severity level at different p values (p< 0.05): age of household head, number of dependent household members, household size, education of household head and quality of house owned/lived. Given the high poverty rates reported in this study, it is needless to mention that both the regional and local governments should make concerted effort to strengthen the interventions to curb the growing problem.

Background

- **Poverty is deprivation of wellbeing, either material or social (Todaro and Smith, 2009). It is usually measured by commonly known indices: incidence (headcount index or proportion of the population below poverty line), depth or gap (consumption shortfall relative to the poverty line across the whole population) and severity (representing the level of inequality among the poor (Bourguignon, et' al, 2003).**
- In Ethiopia, urban poverty has increased during the course of time (Poverty Report, 2011; Tegene, 2010).
- The level of poverty in major towns of Southern Ethiopia is explored little while there are indications that the problem is pervasive. According to the last available estimate, the headcount poverty level was 29.6 percent in 2011 which is equal to the country's average.

Objective

- To examine the status of household poverty in terms of incidence, gaps and severity in the capital of Southern Regional State of Ethiopia (Hawassa) and identify the key predictors of poverty severity.

Data source & methodology

- It is a cross sectional survey design which used primary data collected from 311 randomly selected households of Hawassa, the capital of Southern Regional state of Ethiopia.
- Poverty was measured by three commonly known indices (incidence, depth and severity). The Cost of Basic Needs approach (CBN) was employed to estimate the poverty line of the sampled households. Given by

$$FGT = \frac{1}{N} \sum \left(\frac{Z - y_i}{Z} \right)^\alpha$$

- The main predictors of poverty severity were examined using the Tobit regression model.

R E S U L T S

Table 1. Characteristics of the respondents (n = 311)

Socio-demographic Characteristics	Percent
Head of household	
Male	68.8
Female	31.2
Household size	
0-3	28.3
4-6	50.2
7-10	18.6
10+	2.9
Marital status	
Married	70.7
Separated	4.2
Divorced	4.8
Widowed	14.8
Unmarried	5.5
Migration status of the respondent	
Non migrant	10.0
Migrant	90.0

Table 2. Poverty line per month of the study area in Ethiopian Birr, Hawassa town

Poverty line	values at current price
Food poverty line	213
Non food poverty line	92
Total poverty line	305

Table 3. Incidence, depth and severity of poverty among the respondents. Hawassa town

	food poverty	total poverty
Poverty incidence (P0)	.469	.434
Poverty gap or depth (P1)	.238	.155
Poverty severity (P2)	.145	.066

Table 4 Adult consumption expenditure in each quintile, Hawassa town.

Quartile group	mean	Std. Dev	% of mean expenditure	frequency
First quartile	155	14	9.52	62
Second quartile	221	21	14.29	62
Third quartile	292	19	12.93	62
Fourth quartile	371	28	19.05	62
Fifth quartile	487	65	44.22	62
	1526	147	100	63

Table 5. The percentage distribution of respondents for the reasons of vulnerability to poverty, Hawassa town.

Characteristics	Yes (%)
Large household population	41.2
Escalating inflation	59.8
Poor/ absence of saving culture by the household	65.0
Lack of credit access	38.3
Lack of information	46.0
Lack of job opportunity	46.0
Actual/ perceived health problem on key household member	64.6
Poor education	30.5
Disability of key household member	19.3
Lack of interest to participate in productive activities	47.9

Fig 1 Poverty parameters , Hawassa

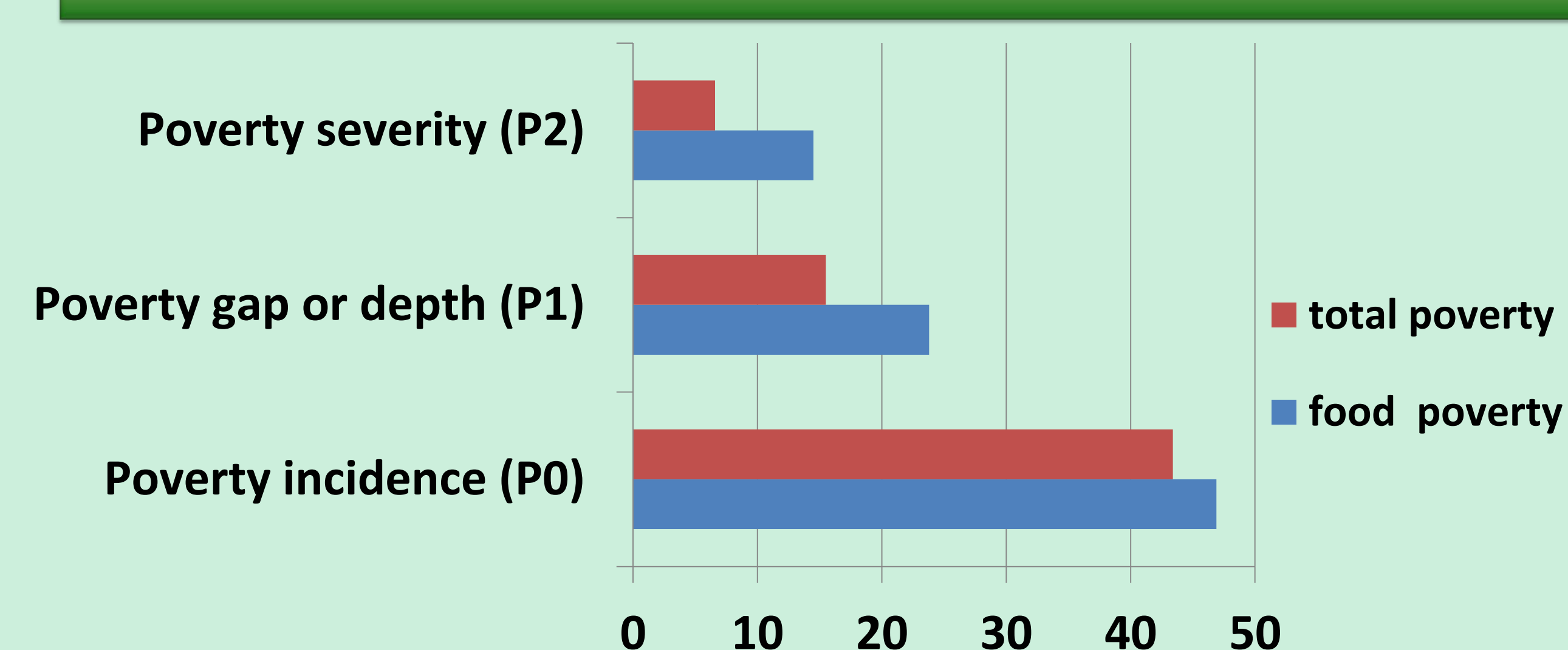


Table 6. Determinants of severity of poverty (Tobit Model), Hawassa town.

Explanatory Variables	dy/dx	Std. Err.	z	P>z
Age	0.057	0.016	3.640	0.000
Age ²	-0.001	0.000	-3.150	0.002
Dependents	0.098	0.036	2.730	0.006
Saving status	-0.030	0.147	-0.210	0.836
Household size	0.153	0.023	6.610	0.000
Info. access	0.005	0.041	-0.130	0.897
Income diversity	-0.012	0.056	-0.210	0.835
Migration Status	-0.013	0.197	-0.070	0.946
Head's Edu Status	-0.130	0.075	-1.740	0.052
Spouse Edu stat	-0.006	0.013	-0.510	0.609
Adult (15-64)	-0.019	0.043	-0.440	0.662
Headship	0.019	0.153	0.130	0.899
Quality of house	-0.187	0.103	-1.820	0.049
Head-married	0.231	0.256	0.910	0.365
Head-divorced	0.138	0.266	0.520	0.602
Head-widowed	-0.093	0.249	-0.370	0.709
House own/ship	-0.084	0.066	-1.280	0.200
Food ratio	0.024	0.107	0.230	0.821
Petty trading	-0.249	0.157	-1.590	0.112
Head-pension	0.051	0.157	0.330	0.744
Constant	-1.160		0.596	0.052

Major findings

- It is noted that the values of the three indices are somewhat high (43%, 24 % and 15%) compared to some studies conducted under nearly similar settings..
- The fact that poverty gap index provides a clearer perspective on the depth of poverty, the computed figure (i.e 24 %) denotes that this fast growing city has more pronounced problems compared to some of the figures reported by other recent studies in Ethiopia and African settings
- The regression analysis witnessed that five of the twenty variables were significant predictors of household poverty severity at different p values (p< 0.05): age, number of dependent household members, household size, educational status of the head of the household and quality of the house.

Conclusion & Policy Implications

- Given the very high poverty rates reported in this study, needless to mention that both the regional and local governments should make concerted effort to strengthen the interventions to curb the growing public concern of poverty.

References

- Bourguignon Francois and Satya R. Chakravarty (2003). "The Measurement of Multidimensional Poverty," *Journal of Economic Inequality* 1:25-49, 2003
- Michael P.Todaro and Stephen C. Smith (2009). *Economic Development*. Ninth edition.
- Poverities Org (2012). *Research for social and economic development*.