

# Effect of Household Catastrophic Health Expenditure on Vulnerability to Poverty in Ghana.

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## Outline

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# Introduction

## Poverty Facts

- > 1 billion people live on less than a dollar a day.
- 75% of the world's poorest countries are in Africa, with Sub-Saharan Africa having the highest index of extreme poverty.
- Poverty headcount for Ghana – 24%, 78% in rural areas.
- 8.4% of Ghanaians live in extreme poverty.



# Introduction

- Vulnerability to poverty is a more recent concept which looks at the ex-ante probability of a household becoming poor, in the future.
- Mainly results from shocks (idiosyncratic or covariate).
- Health shocks affect wellbeing, especially when it comes with catastrophic spending.
- Substantial evidence of CHE resulting in poverty.



## Objectives

This study sought to estimate the effect of catastrophic health expenditure on vulnerability to poverty among households in Ghana.

## Methods

- Cross-sectional quantitative study
- Data Source – GLSS 6 (2012/13) - 16,772 households.
- WHO approach by Ke Xu (2005) and Proportionality of income approach at 5% and 20% threshold - Catastrophic health expenditure.
- Chaudhuri's econometric model at 50% threshold - Vulnerability to poverty.
- Multivariate Regression Analysis (Probit model) – to estimate the effect of CHE on vulnerability to poverty.

## Results 1

**Table 4.2: Incidence of catastrophic health expenditure**

Thresholds (%)	WHO capacity to pay approach	Proportionality of income approach
5	2,347 (24.96)	2,525 (25.55)
10	958 (10.18)	1,566 (15.34)
20	272 (2.87)	956 (8.84)
40	44 (0.45)	617 (5.24)

Notes: (...) represents percentages of households incurring catastrophic health expenditure.

## Results 2

**Table 4.5 Regression Results**

	5% threshold		20% threshold	
	Coefficient (95% CI)	P-value	Coefficient (95% CI)	P-value
<b>Vulnerability</b>				
<b>CHE 5%</b>	0.234 (0.161, 0.306)	<b>&lt;0.001</b>		
<b>CHE 20%</b>			0.121 (-0.078, 0.319)	<b>0.235</b>
Age	-0.001 (-0.003, 0.000)	0.100	-0.001(-0.003, 0.000)	0.127
<b>Household Size</b>	0.307 (0.295, 0.319)	<b>&lt;0.001</b>	0.305 (0.293, 0.317)	<b>&lt;0.001</b>
Gender		<b>&lt;0.001</b>		<b>&lt;0.001</b>
Female	Ref		Ref	
Male	0.225 (0.164, 0.285)		0.222 (0.161, 0.283)	
<b>Education</b>		<b>&lt;0.001</b>		<b>&lt;0.001</b>
None	Ref		Ref	
Primary	-0.550 (-0.613, -0.488)		-0.560 (-0.622, -0.498)	
Secondary	-3.828 (-4.188, -3.467)		-3.841 (-4.202, -3.479)	
<b>Tertiary</b>	0		0	
Employment		0.835		0.841
Unemployed	Ref		Ref	
Employed	-0.059 (-0.614, 0.496)		-0.560 (-0.609, 0.497)	
<b>Health Insurance</b>		<b>&lt;0.001</b>		<b>&lt;0.001</b>
Uninsured	Ref		Ref	
Insured	-0.167 (-0.223, -0.111)		-0.176 (-0.231, -0.119)	
Disability		0.132		0.211
Not disabled	Ref		Ref	
Disabled	-0.115 (-0.264, 0.035)		-0.095 (-0.244, 0.054)	
Region		<b>&lt;0.001</b>		<b>&lt;0.001</b>
Greater Accra	Ref		Ref	
Western Region	1.182 (1.034, 1.329)		1.191 (1.044, 1.338)	
Central Region	1.136 (0.988, 1.283)		1.143 (0.995, 1.290)	
Volta Region	1.349 (1.199, 1.498)		1.360 (1.210, 1.509)	
Eastern Region	1.219 (1.074, 1.364)		1.222 (1.078, 1.367)	
Ashanti Region	0.909 (0.763, 1.057)		0.919 (0.773, 1.065)	
Bronx Ahafo Region	1.096 (0.948, 1.244)		1.107 (0.959, 1.255)	
Northern Region	1.136 (0.987, 1.285)		1.159 (1.010, 1.308)	
Upper East Region	1.549 (1.398, 1.700)		1.544 (1.392, 1.695)	
Upper West Region	1.714 (1.557, 1.871)		1.700 (1.543, 1.857)	

## Results 3

- The vulnerability headcount was 34% using the upper poverty line compared to the estimated observed poverty rate of 24.2%.
- Catastrophic health expenditure was significantly associated with vulnerability. An increase in threshold resulted in decrease in significance.
- Household characteristics such as socioeconomic status, household size, educational level and health insurance significantly influenced vulnerability.

## Recommendations

- Vulnerability allows assessment of future risk. It is therefore, exigent to incorporate this into poverty alleviation measures in all sectors including healthcare.
- Incorporating vulnerability into current poverty estimates to determine who is eligible to social protection.
- Increased government funding for the health sector and instituting complementary policies to improve healthcare delivery.
- Further research into vulnerability: Surveys should include modules on risks, shocks and coping mechanisms of households.

## Conclusion



**LET'S PROJECT INTO THE FUTURE!!!**

# Thank you