

Centre for the Study of the Economies of Africa

## PUBLIC SPENDING ON EDUCATION AND HEALTH IN NIGERIA: A BENEFIT INCIDENCE ANALYSIS

CSEA's 2<sup>nd</sup> Economic Policy and Fiscal Strategy Seminar

Theme: STRENTHENING THE BUDGET PROCESS FOR IMPROVED SERVICE DELIVERY

December 9, 2010

#### **OBJECTIVE**



 Determine how to answer the question: Is public expenditure in education and health sector in Nigeria pro-poor or pro-rich?

#### **BASIC CONCEPT**

- BIA as a tool focuses on how government subsidies affect the distribution of welfare in the population. It addresses the issue of supply and demand for public services and delivers information on efficiency and equity in government allocation of resources for social services and on the public utilization of these resources. The central idea behind BIA is to gain a better insight into how government funds are distributed across different income/expenditure groups or if spending is in reality targeted to either worse-off or better-off households.
- Commonly used to examine the impact of public expenditure
- Analysis applicable to direct transfers or transfers obtained from consuming subsidized goods or services
- This is the first attempt to conduct a rigorous BIA in Nigeria on how effectively the Nigerian government is able to target limited resources towards meeting the needs of the poor.

#### **METHODOLOGY**



- Estimating the incidence of public spending in the social sectors, three methodological techniques are involved:
- STEP 1: ESTIMATE UNIT SUBSIDIES
- unit subsidy = <u>actual government expenditure</u> number of beneficiaries of that service.
- STEP 2: IDENTIFY USERS
- Obtain the number of beneficiaries in each social sector per facility level and quintile group.
- STEP 3: DISTRIBUTION OF BENEFIT
- Obtain the distribution of benefits by multiplying the unit cost of providing a service by the number of users in each facility level and quintile group.
- **Benefit concentration curve** is used to examine if government spending is progressive(pro-poor) or regressive(pro-rich).
- Rule of thumb if the BCC lies above the 45 degree diagonal, the distribution is said to be progressive (preference for lower income group). On the other hand, if the BCC lies below the 45 degree diagonal the distribution is said to be regressive (preference for higher income groups.



#### Source of Data

- National Bureau of Statistics (National living standard survey 2003/2004 the first living standard survey in the country)
- NLSS 2008 is still a work in progress.
- The NLSS was conducted during a period of twelve months, covering 96,610 respondents and 19,158 households.
- Budget office of the Federation (2008 actual recurrent expenditure for Education and Health)

## **Assumptions**

- Unit cost of providing the service is equally distributed across users and across facility level
- The number of respondents reporting any incidence of sickness is constant throughout the year.



# FINDINGS-

# TABLE 1: PER-PUPIL/STUDENT GOVERNMENT SUBSIDY FOR ENROLMENT BY FACILITY LEVEL: 2003/04

Facility level	Actual Expenditure (2008)	Rate of Utilization	Unit subsidy
Primary	41,195,092,963	18,678,000	2,205
Secondary	16,477,669,977	9,906,000	1,663
Tertiary	125,981,876,421	1,350,000	93,319



#### TABLE 2: PER USER SUBSIDY BY FACILITY LEVEL: 2003/04

Health facility Level	Actual expenditure (2008)	Rate of Utilization	Unit Subsidy
Hospital	45,569,277,024	51,454,000	885
Health centre/unit	19,767,952,116	77,532,000	254



#### TABLE 3:ESTIMATED ENROLMENT BY QUINTILE AND FACILITY LEVEL

Facility level	Quintiles	Total				
	1	2	3	4	5	
	(Poorest)				(Richest)	
Primary	4,790,000	3,982,000	3,711,000	3,415,000	2,780,000	18,678,000
Secondary	1,459,000	1,761,000	1,996,000	2,131,000	2,559,000	9,906,000
Tertiary	230,000	300,000	140,000	210,000	470,000	1,350,000



TABLE 4: ESTIMATED USERS BY QUINTILE AND FACILITY LEVEL

Facility Level	Quintiles	Total				
	1	2	3	4	5	
	(Poorest)				(Richest)	
Hospital	6,734,000	9,828,000	9,594,000	10,556,000	14,742,000	51,454,000
Health centre	12,428,000	15,366,000	15,236,000	15,496,000	19,006,000	77,532,000
Total	19,162,000	25,194,000	24,830,000	26,052,000	33,748,000	128,986,00 0



Table 5: Benefits of education expenditures by Quintile and Facility Level (## MILLIONS)

Facility Level	Quintiles	Total				
	1	2	3	4	5	
	(poorest)				(richest)	
Primary	10,564	8,782	8,185	7,532	6,131	41,194
Secondary	2,427	2,929	3,320	3,546	4,257	16,479
Tertiary	21,464	27,996	13,065	19,597	43,860	125,982



TABLE 6: BENEFITS OF HEALTH EXPENDITURES BY QUINTILE AND FACILITY LEVEL (IN MILLIONS OF NAIRA)

Health Facility	Quintiles	Total				
Level	1	2	3	4	5	
	(poorest)				(richest)	
Hospital	5,964	8,704	8,496	9,348	13,055	45,567
Health centre	3,168	3,917	3,884	3,949	4,845	19,763
Total	9,132	12,620	12,380	13,298	17,900	65,330



TABLE 7: BENEFITS OF EDUCATION EXPENDITURES BY QUINTILE AND FACILITY (%)

Facility level	Quintiles	Total				
	1	2	3	4	5	
	(poorest)				(Richest)	
Primary	25.6	21.3	19.9	18.3	14.9	100
Secondary	14.7	17.8	20.2	21.5	25.8	100
Tertiary	17.0	22.2	10.4	15.6	34.8	100



TABLE 8: BENEFITS OF HEALTH EXPENDITURES BY QUINTILE AND FACILITY (%)

Health Facility Level	Quintiles						
	1	2	3	4	5		
	(poorest)				(Richest)		
Hospital	13.1	19.1	18.6	20.5	28.7	100	
Health centre	16.0	19.8	19.7	20.0	24.5	100	



#### **WEALTH DISTRIBUTION OF BENEFITS**

#### FIGURE 1: DISTRIBUTION OF BENEFITS OF EDUCATION EXPENDITURES (%)

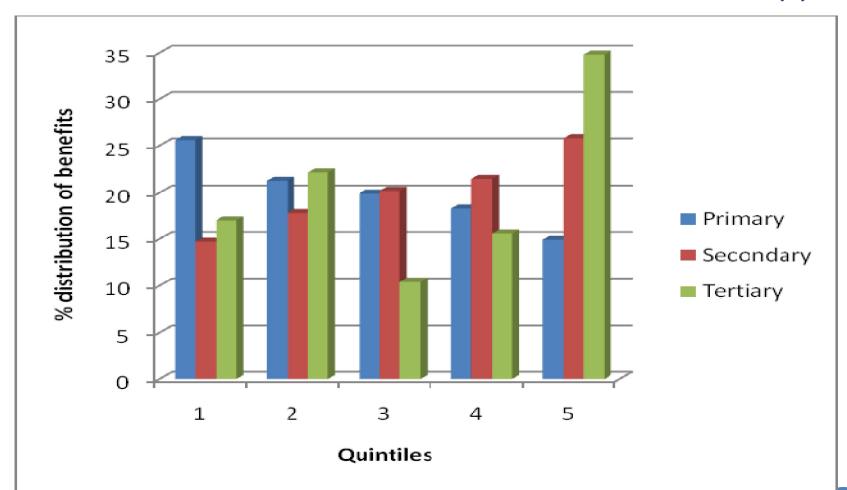
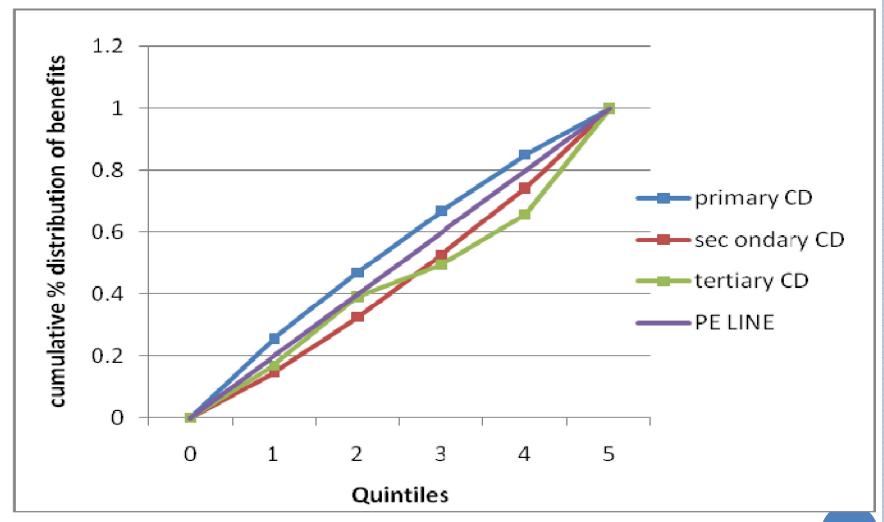




FIGURE 2: BENEFIT CONCENTRATION CURVE OF EDUCATION SUBSIDY BY QUINTILES AND FACILITY LEVEL





# WEALTH DISTRIBUTION OF BENEFITS FIGURE 3: DISTRIBUTION OF BENEFITS OF HEALTH EXPENDITURES

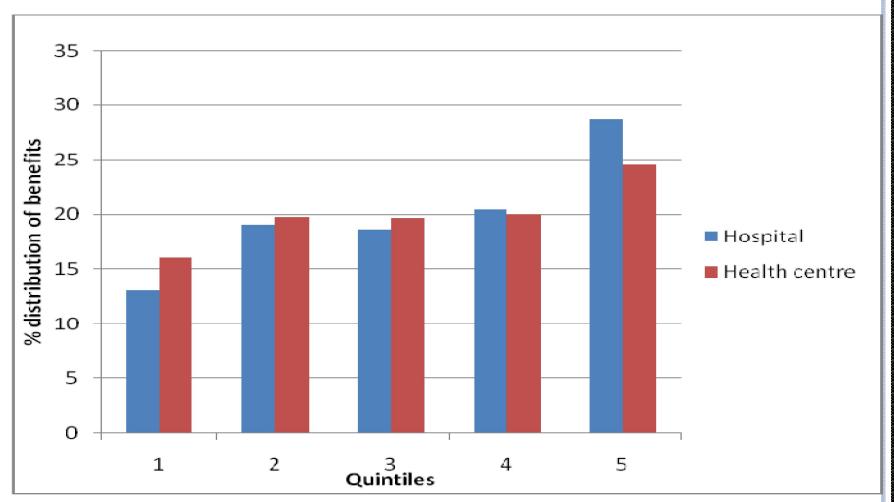
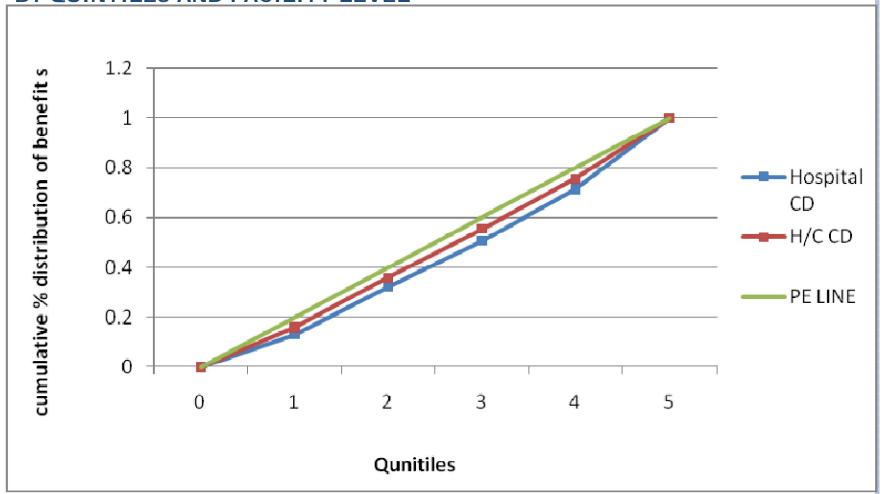




FIGURE 4: BENEFIT CONCENTRATION CURVE OF HEALTH SUBSIDY BY QUINTILES AND FACILITY LEVEL



#### **KEY POINTS**



- Only the incidence of primary education is found to be propor while secondary and higher education tends to be regressive or skewed in favour of the rich (pro-rich). The pro-poor bias of primary education is largely driven by;
  - (a) The demographic pattern of poor households tending to have more children.
  - (b) The rich enrol their primary school aged children in expensive private schools
- Expenditure in the health sector is pro-rich for both health facilities (hospitals and health centres). The reason for the low utilization of public health facilities by the poor are as follows;
  - (a) Out of pocket payment in the health sector by the poor increases inequality in access to health care
  - (b) Lack of access maybe due to distance to health care facilities by the poorest quintile of the population
    - (c) Religious and cultural beliefs



## CONCLUSION

- The proximity of government facilities to disadvantaged groups should be revisited and resources shifted from urban to rural areas
- Public expenditure tracking survey (PETS) should be introduced.
  This is a tool used to investigate the flow of public funds, major
  resource leakage and misuse. The method will ensure
  transparency and accountability of appropriate use of
  government expenditure.
- Measures should be initiated to improve the quality of service provided and monitor performance with a view to improving the rate of utilization of government services.

# Thank you for your attention!