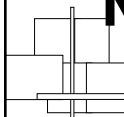


# **National Transfer Accounts, Nigeria 2004**



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and  
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*Report Presented at the 39<sup>th</sup> Summer Seminar on Population Held at East West Centre, Honolulu, Hawaii*

*01 July 2008*

## **Outline of Presentation**

- Data Issues and Caveats
- Population and Age Structure
- Economic Lifecycle
  - Profile of Consumption
  - Profile of Income
  - Life Cycle deficit
- Transfers

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## Data Sources

- Many sources were utilized and in all cases aggregate control was used to make figures compatible with NIPA
- Sources include
  - Nigeria Living Standard Survey, 2004
  - Abstract of Statistics (2006), National Bureau of Statistics
  - Central Bank of Nigeria Annual Report and Statement of Accounts, 2007
  - CBN Statistical Bulletin, 2006

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## National Income Account of Nigeria, 2004

Income Approach		Expenditure Approach	
<b>Compensation of Employees</b>	<b>1,203,620</b>	<b>Government Final Consumption</b>	<b>785,819</b>
<b>Operating Surplus and mixed income</b>	<b>9,833,319</b>	Education	69,276
<b>Mixed Income</b>	<b>5,899,991</b>	Health	57,169
Labour's share of mixed income	3,952,994	Other	659,374
Capital share of mixed income	1,946,997		
<b>Operating Surplus</b>	<b>3,933,328</b>	<b>Private Consumption Expenditure</b>	<b>8,111,127</b>
<b>Domestic Factor Income</b>	<b>11,036,939</b>	Education	430,696
Less Rest of World Employee Compensation	3,537	Health	1,118,410
Less Rest of World Property &Entrepreneurial Compensation	436,804	Other	6,562,021
Indirect Taxes	268,120		
Less Subsidies	5,585		
National Income at Market Prices	10,859,134	<b>Net Saving</b>	<b>2,144,179</b>
Other Net Rest of the World Transfers	181,992		
<b>National Disposable Income</b>	<b>11,041,125</b>		<b>11,041,125</b>

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## Estimation methods and data sources

NTFA	Determination of Age profile	Data Sources	Macro Control
<b>Private Expenditure</b>			
Education, private	Profile of the expenditure of education expenditure of individuals enrolled in public educational institutions by age and levels	NLSS	Education in NIPA (Public sector allocated based on World Banks survey of Private and Public Expenditure of all levels of Government, 2000)
Health, private	Profile of the expenditure of individuals who utilized privately owned health facilities by age and type of facility utilized	NLSS	Health in NIPA (Public component derived by the proportion in National Health Accounts (NHA) of Nigeria, 2002)
Others, private	Profile of other expenditure by individual age	NLSS	Obtained as residual after deducting Private education and health expenditures from NIPA figures

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## Estimation methods and data sources

NTFA	Determination of Age profile	Data Sources	Macro Control
Education, public	Profile of the expenditure of education expenditure of individuals enrolled in public educational institutions by age and levels	NLSS	Education in NIPA (Public sector allocated based on World Banks survey of Private and Public Expenditure of all levels of Government, 2000)
Health, Public	Profile of the expenditure of individuals who utilized government owned health facilities by age and type of facility utilized	NLSS	Health in NIPA (Private component derived by the proportion in National Health Accounts (NHA) of Nigeria, 2002)
Others, public	Allocated to all equally age groups		Obtained as residual after deducting education and health expenditures by government from NIPA figures

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## Estimation methods and data sources

NTFA	Determination of Age profile	Data Sources	Macro Control
<b>Labour Income</b>			
Compensation of employees	Profile of earnings of wage earners and family members who received wage income for working in family business	NLSS	Compensation of workers in NIPA
Self-employed Income	Profile of imputed income for the individuals who reported being an employer or being self-employed	NLSS	Mixed income determined to be 60% of total operation surplus given the large informal sector in Nigeria. Labour component of mixed income then allocated 66.667% of mixed income

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## Composition of Labor Income

### ■ Data Issues

#### ■ Earnings and wages

- One thirds of the individuals in survey reported working for age
- 10 percent of those who reported working for age gave information on their actual earnings
- Many respondents who reported not working for age also reported positive wage income

#### ■ Self-employed income

- We tried self reported income and compared with imputed self income
- Two third of self employed income was treated as the earnings while the remaining one third was treated as operating surplus

- Probably this is why earnings is very low at younger ages for the individuals

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## Composition of Labor Income

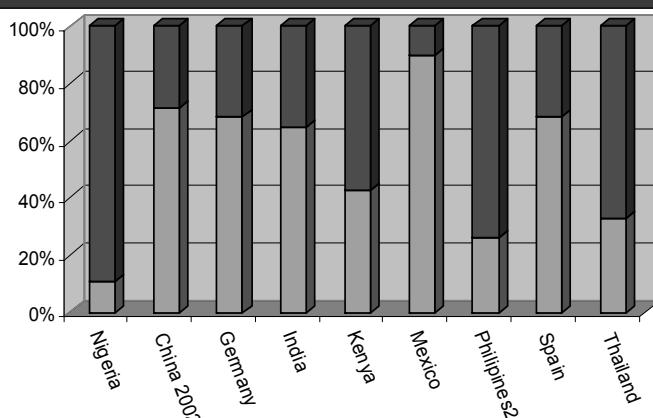
### ■ Mixed Income

- Data not separated from figures of Operating Surplus in NIPA
- We observe that the proportion of compensation of employees to operating surplus is the extremely low (see graph in next page)
- Initially, our income was smaller than consumption until we made assumption that mixed income is about 60% (?) of operating surplus

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## Comparison of Composition of Employee Income in Selected Countries



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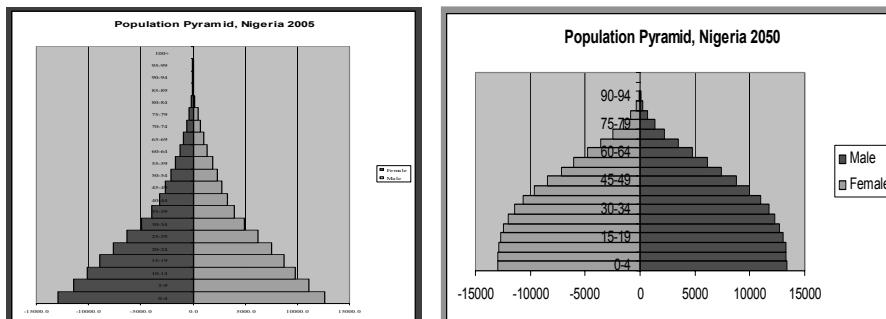
## Estimation methods and data sources

NTFA	Determination of Age profile	Data Sources	Macro Control
Taxes			
Income Tax	Profile of employees working in the formal sector (assumption: Income tax is mainly paid in Nigeria by workers in formal employment and income tax is proportion of income)	NLSS	Indirect Tax reported in NIPA, but Income tax derived by finding the proportion of income tax out of total tax reported in Government GFS and using it to allocate NIPA tax into different components of tax
Indirect tax	Profile of consumption expenditure by age is used (Assumption: indirect tax is mainly tax on consumption)	NLSS	Indirect Tax reported in NIPA, but Income tax derived by finding the proportion of income tax out of total tax reported in Government GFS and using it to allocate NIPA tax into different components of tax
Corporate income tax	Profile of Property ownership by individual is used to determine the age profile (Assumption: Corporate income is a form of household asset)	NNLSS	Indirect Tax reported in NIPA, but Income tax derived by finding the proportion of income tax out of total tax reported in Government GFS and using it to allocate NIPA tax into different components of tax

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## Population Pyramid, Nigeria 2005 and 2050



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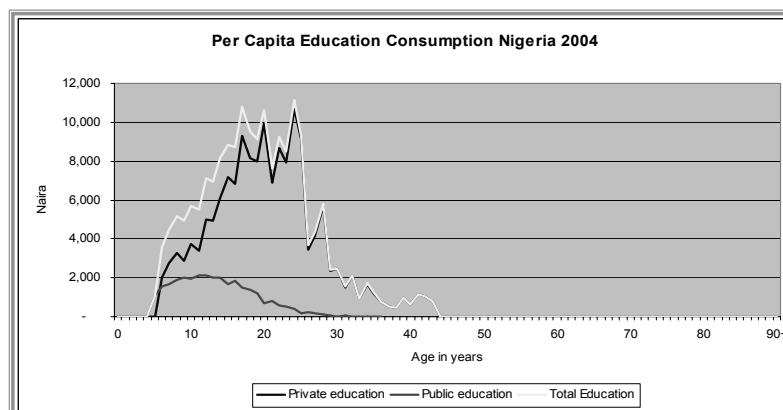
## Economic Lifecycle

- Consumption
  - Components (Health and Education Consumptions)
  - Components (Private and public)
- Income
  - Earnings and wages
  - Self-employed income

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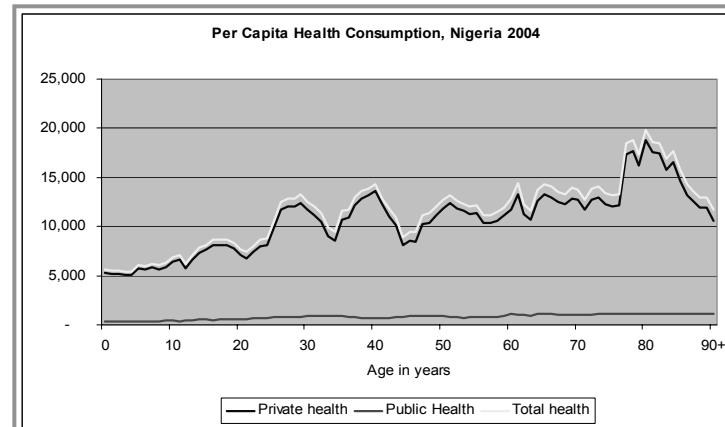
## Components of Consumption (Education) Nigeria, 2004



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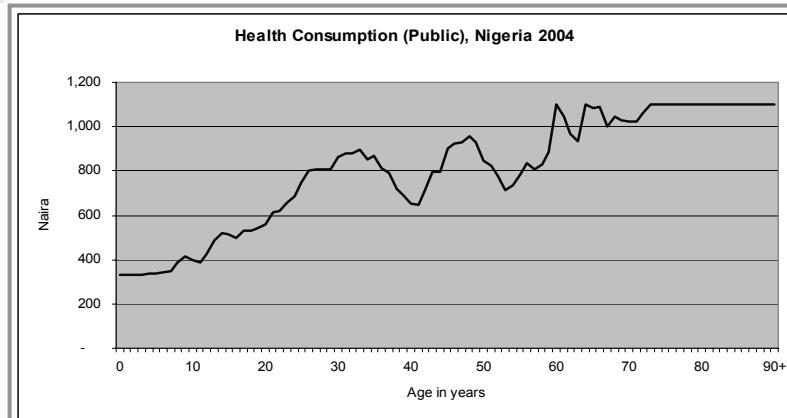
## Components of Consumption (Health) Nigeria, 2004



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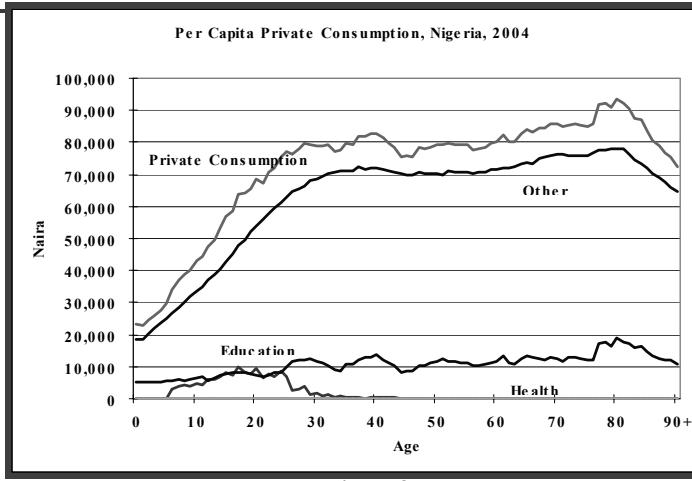
## Health Consumption (Public), 2004



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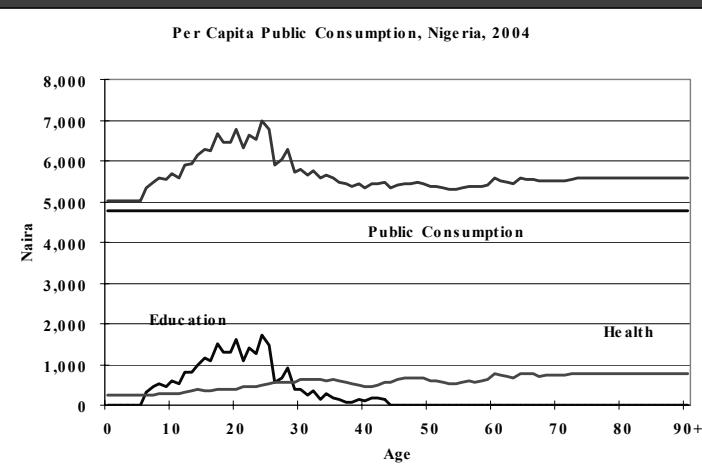
## 2.3 Consumption - Private



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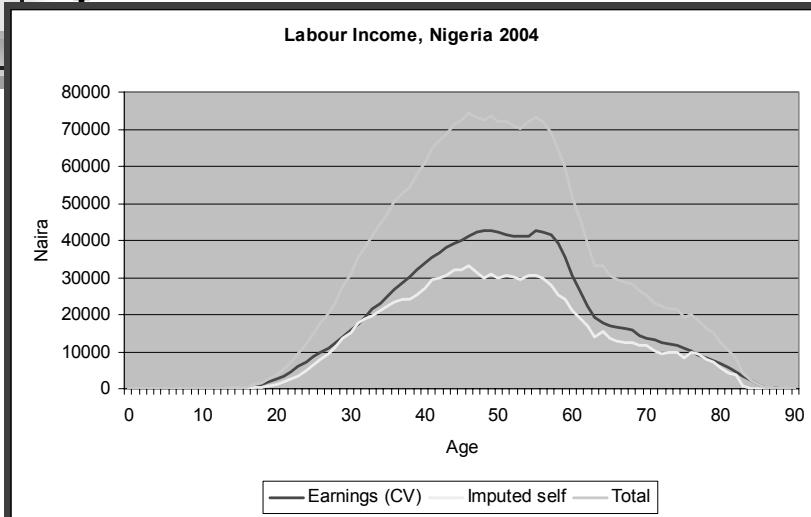
## 2.4 Consumption - Public



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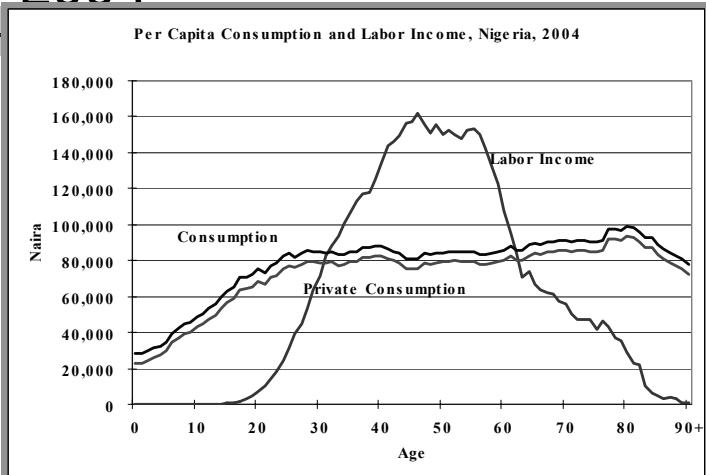
### 3. Composition of Labor



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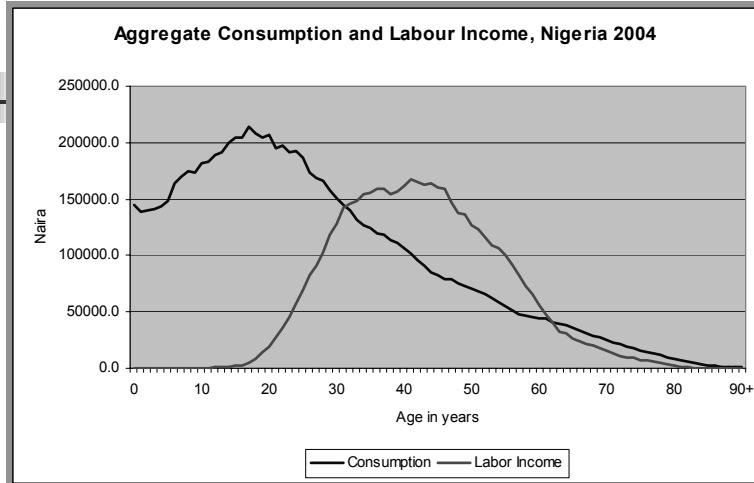
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### 4. Economic Lifecycle, Nigeria 2004



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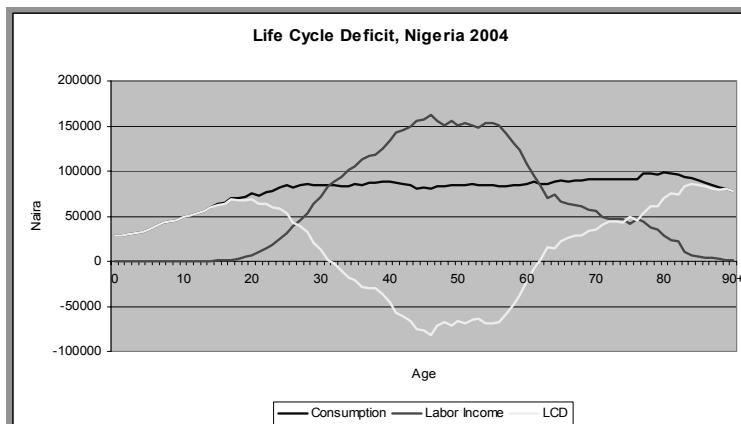
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## 4. Economic Lifecycle and Life Cycle Deficit, Nigeria 2004



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## Life cycle Deficit, Nigeria 2004

Age group (years)	0-19	20-29	30-49	50-64	65+	TOTAL
<b>Lifecycle Deficit</b>	<b>45,409.64</b>	<b>43,761.59</b>	<b>-35,929.01</b>	<b>-46,381.32</b>	<b>41,012.19</b>	<b>25,348.93</b>
<b>Consumption (Public and Private)</b>	<b>45,898.87</b>	<b>71,385.84</b>	<b>84,926.92</b>	<b>85,225.72</b>	<b>91,467.06</b>	<b>62,715.38</b>
<b>Public Consumption</b>	<b>5,578.33</b>	<b>5,613.77</b>	<b>5,517.98</b>	<b>5,393.31</b>	<b>5,540.07</b>	<b>5,694.30</b>
Education	511.48	957.48	151.43	0	0	502
Health	288.82	452.26	588.52	615.27	762.03	414.26
Other	4,778.03	4,204.03	4,778.03	4,778.03	4,778.03	4,778.03
<b>Private Consumption</b>	<b>40,320.54</b>	<b>65,772.07</b>	<b>79,408.94</b>	<b>79,832.41</b>	<b>85,926.99</b>	<b>57,021.09</b>
Education	3,691.10	4,794.38	492.9	0	0	3,120.96
Health	6,186.43	8,412.60	10,790.28	11,499.77	13,387.35	8,104.35
Other	30,443.01	52,565.09	68,125.76	68,332.65	72,539.64	45,795.78
<b>Labor Income (Employee compensation and Self employed Income)</b>	<b>489.23</b>	<b>27,624.25</b>	<b>120,855.94</b>	<b>131,607.04</b>	<b>50,454.87</b>	<b>37,366.45</b>
Compensation of Employees	180.32	6,550.23	27,032.75	33,090.64	11,517.17	8,721.81
Self-employed Income	308.91	21,074.02	93,823.19	98,516.39	38,937.70	28,644.64

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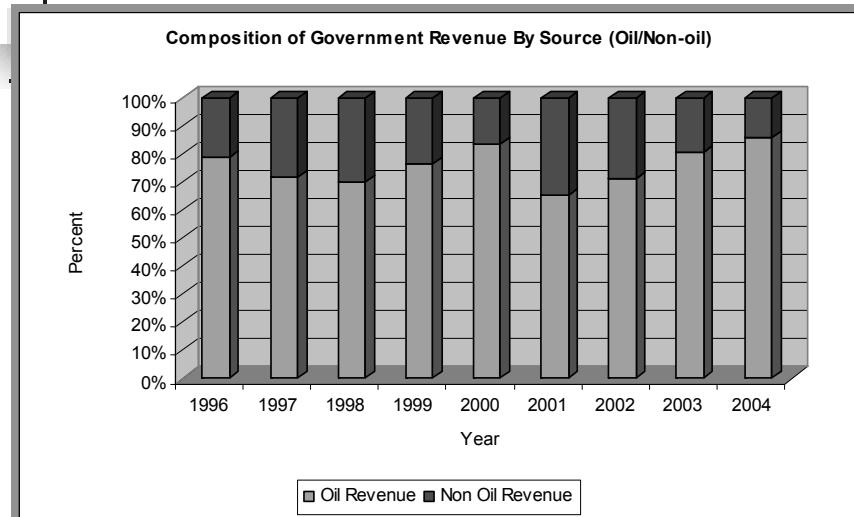
## Public Transfers: Structure of Taxes in Nigeria

Oil Revenue	Total Received	Total deductions/spent	Distributable revenue
Petroleum profit tax/royalties	1498.4	454.9	1043.5
Domestic crude sales	1183.5	496.6	686.9
Other oil revenues	668.1	309.9	358.2
Deductions	4.8	1.8	3
<b>Crude oil/gas export</b>	<b>3354.8</b>	<b>1263.2</b>	<b>2091.6</b>
<b>Non-oil revenue</b>			
Companies income tax			113
Custom and excise			217.2
VAT			159.5
Independent revenue of federal government			58.9
Education Tax			17.1
Custom levies			40.4
<b>Non-oil revenue</b>			<b>606.1</b>
<b>TOTAL (Oil and Non-oil)</b>			<b>2697.7</b>

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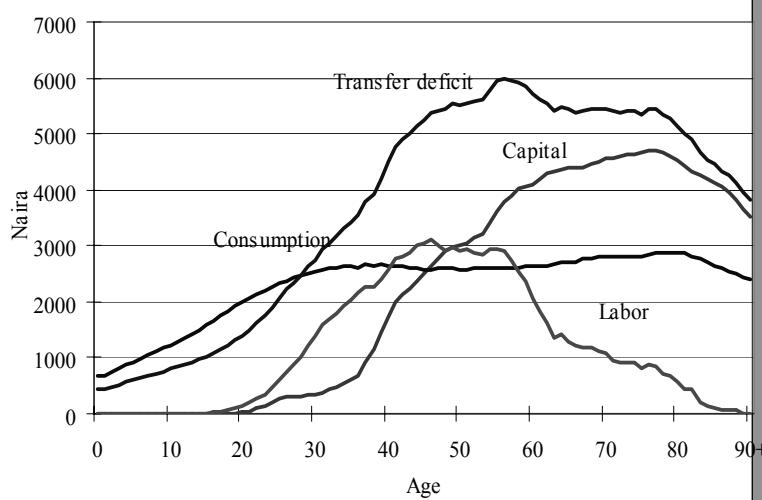
## Public Transfers: Profile of Government Revenue in Nigeria



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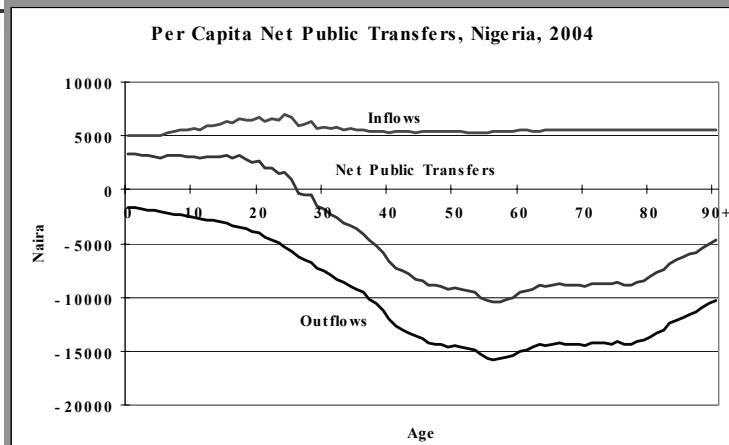
**Per Capita Taxes, Nigeria, 2004**



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## Per Capita Net Public Transfer, Nigeria 2004



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## Public Transfer Flows, Nigeria 2004 (Million Naira)

Age group	0-19	20-29	30-49	50-64	65+	TOTAL
Net Public Transfers	3,096.63	642.23	-5,388.04	-9,656.96	-8,586.04	0.00
Public Transfer Inflows	5,578.33	5,613.77	5,517.98	5,393.31	5,540.07	5,694.30
Education	511.48	957.48	151.43	0.00	0.00	502.00
Health	288.82	452.26	588.52	615.27	762.03	414.26
Other	4,778.03	4,204.03	4,778.03	4,778.03	4,778.03	4,778.03
Public Transfer Outflows	2,481.70	4,971.54	10,906.02	15,050.27	14,126.11	5,694.29
Personal Income Tax	9.38	529.39	2,316.09	2,522.12	966.92	716.09
Corporate Income tax	1.18	184.83	1,365.35	3,667.51	4,500.43	656.70
Net Indirect Tax	1,166.44	2,014.07	2,610.28	2,618.21	2,779.41	1,754.70
ROW	543.09	477.85	543.09	543.09	543.09	543.09
Surplus/Deficit	761.60	1765.40	4071.21	5699.33	5336.26	2023.71

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## Next Steps...

- Estimation of Inter-household and Intra-household transfers
- Estimation of Asset Composition
- Simulation and Projections
- Write-up of Final Report

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# THANK YOU

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