

AFRICAN CENTRE OF EXCELLENCE FOR INEQUALITY RESEARCH

An Assessment of WIID Companion Inequality Measures for Kenya

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WIDER Development Conference 5-7 October 2022, Bogotá, Colombia



INTRODUCTION-Inequality in Kenya

- ACEIR inequality study on Kenya over the period 1994-2016 shows the following inequality trends:
- Per capita consumption expenditure inequality increased between 1994-2006 before declined between 2006-2016 (0.46 , 0.47 and 0.040 respectively
- Palma ratio was 2.8 in 1994 and 2006 2 in 2016
- Inequality higher in urban than in rural areas.
- Asset ownership index at about 0.54 in 2006 & 2016
- labour market earnings 0.692 to 0.594 in 2016



INTRODUCTION-Inequality in Kenya

- A wide variation observed in inequality across the 47 counties.
- The within-group inequality contributes more to overall inequality, than between-groups inequality
- High inequality in the social domains



WIID Inequality Measures

- **UNU-WIDER World Income Inequality Database (WIID)**-provides data on income inequality globally
- **The current WIID version:**
 - ❖ *Contains Obs. Up to 2019*
 - ❖ *Covers 200 countries*
 - ❖ *Has over 20,000 data points*
 - ❖ *Has over 37,000 unique-country obs.*
- **WIID has two datasets:**
 - Original WIID full/general-inequality(Kenya 32 observations)*
 - WIID companion-standardized (Kenya 9 observations)*
- **Main Focus:** Carry out an assessment of the inequality measures for the period where we have the WIID Companion/standardized inequality measures for the period **1961 to 2016**



WIID Inequality Measures

- This section reports comparative Analysis of Original WIID estimate WIID standardized(WIID companion) and ACEIR Diagnostic inequality trends



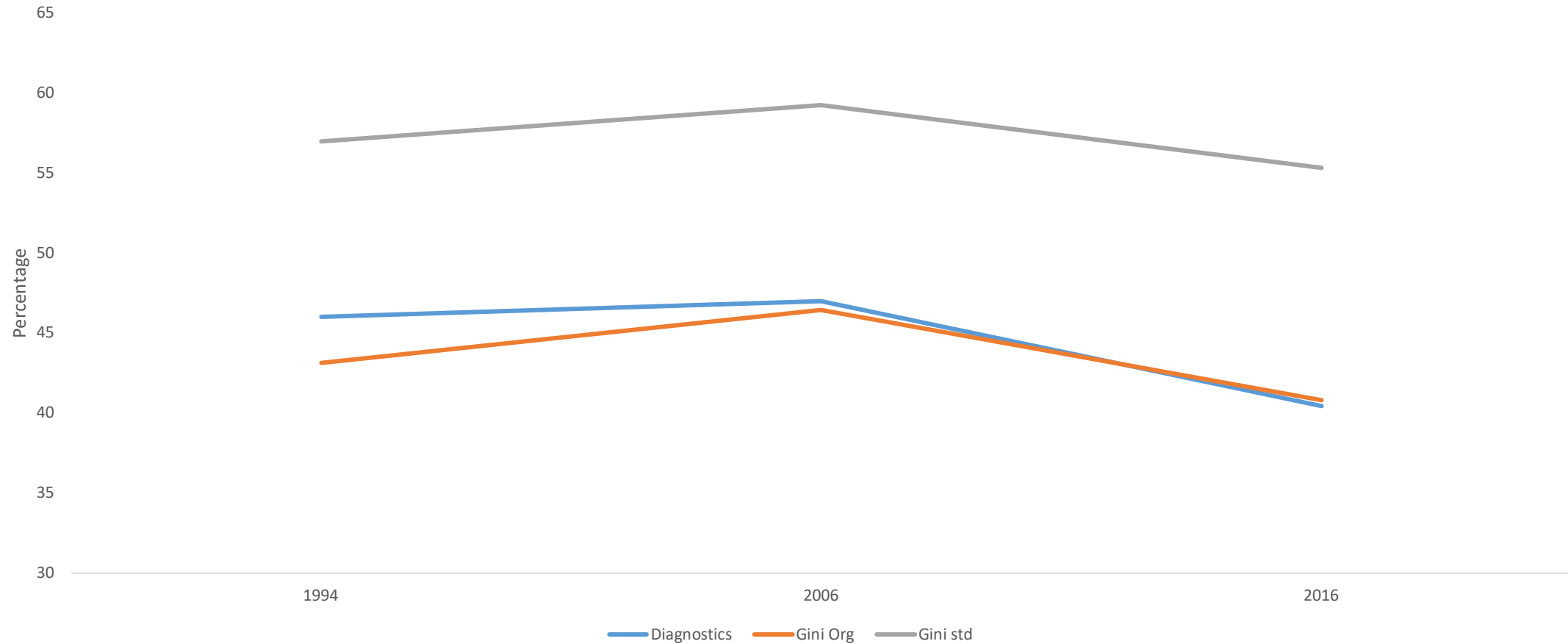
Difference Between Original and Standardized WIID Gini Coefficients Measurements

YEAR	Original Gini Coefficient (capita expenditure)	Standardized Gini coefficient(per capiat Income)	Difference between original and standardized WIID Gini coefficients – (percentage points)
	(A)	(B)	(B-A)
1961	48.80	51.17	2.37
1976	52.00	53.43	1.43
1977	59.00	59.00	0
1982	57.30	57.16	-0.14
1992	57.46	67.30	9.90
1994	43.11	57.21	14.10
1997	44.98	58.52	14.41
2006	46.45	59.56	15.11
2016	40.78	55.57	14.79

Difference between Diagnostic Study, the Original WIID and Standardized WIID Companion Gini Coefficient Estimates

Year	Diagnostics Gini coefficient Estimates	Original Gini Estimates WIID Companion	Standardized Gini Coefficient WIID Companion	Difference Percentage points	Difference Percentage points
	(A)	(B)	(C)	(B-A)	(C-A)
1994	46.0	43.11	56.97	-2.89	10.97
2006	47.0	46.45	59.22	-0.55	12.22
2016	40.4	40.78	55.30	0.38	14.90

Trends in Inequality Measures for Diagnostic Study, the WIID Original and WIID Standardized 1994-2016



Possible Explanation of the Difference in the Inequality Measures (Two Critical Hypotheses)

- **Inequality estimates based on per capita consumption expenditure are likely to be lower than those estimated based on household per capita income due to:**
 - ✓ Per capita consumption expenditure most likely leaves savings
 - ✓ But can lack of taking into account savings lead to the large differences in the measures? –
 - ✓ Missing information on income and measurement errors
- **Probably the way the standardized inequality measure was constructed:**
 - ✓ Was Kenya part of the sample that was used to estimate the regression on WIID standardized?
 - ✓ Was SSA countries well represented in the sample used in the regression of WIID standardized?.



Attempt to measure inequality using WIID Companion guideline

- **Using income data u KIHBS data 2005/06 & 2015/16 became complicated due to :**
 - Non-availability of comparable income information)
Eg. information on taxes on income, social security, dividend
 - **Notable was inequality in gin coefficient generated using income concept on fiscal incidence was very close to Original WIID to as opposed to standardized WIID.**



Conclusion

- Quality data on income is an issues in Kenya and probably same with most African countries to support the WIID standardised inequality measure based on per capita income inequality
- This issue needs to be investigated further as better data become available.
- WIID Companion inequality measures indices are higher than those derived from
 - ✓ a) the per capita consumption expenditure
 - ✓ b) Survey and administrative data or fiscal incidence





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