



UNITED NATIONS
UNIVERSITY
UNU-WIDER

Multidimensional Poverty and Inclusive Growth in Mozambique

Paola Ballon

Jose Cardoso

Finn Tarp

Research in Progress

November 27, 2018



Acknowledgments

We are very grateful to INE, Mozambique, in particular to Dr. Monica Magaua, for providing us with the GDP figures for this paper.



Background

The assessment of poverty in Mozambique is inscribed in the 2010-2014 [Poverty Reduction Action Plan \(PARP\)](#), which is the medium-term strategy of the Government of Mozambique for putting into operation the Five-Year Government Program (2010–14).

This medium-term instrument is part of the [National Planning System \(SNP\)](#) and is aligned with the [vision of Agenda 2025](#).

A [key](#) aspect of this Agenda is to [advocate](#) for policies where [economic growth](#) could [lead](#) to greater [reductions](#) in [poverty](#).



Aim of this paper

This paper aims to provide a **descriptive assessment** of **multidimensional poverty** and **growth inclusiveness** in Mozambique between the period of **2002** to **2014**.

For this purpose, it employs the **Inclusive Growth Framework** proposed by **Foster (2013)** where poverty-growth inclusiveness, measured through elasticities, is decomposed as:

- vertical inclusiveness (over time),
- horizontal inclusiveness (by province)
- dimensional inclusiveness (by dimension of poverty).

Outline



UNITED NATIONS
UNIVERSITY
UNU-WIDER

I. Measurement of Poverty

II. The Inclusive Growth Framework

III. Results

Concluding Remarks

Poverty Measurement in Mozambique



UNITED NATIONS
UNIVERSITY
UNU-WIDER

This paper uses the latest assessment of **multidimensional** poverty in Mozambique (4th Poverty Report).

In accordance with SDG 1 that aims for the eradication of poverty in **all its forms**, it includes an evaluation of **monetary** and **non-monetary poverty** for the period 1996 – 2014.

Our focus in this paper: 2002 -2014.



Pobreza e bem-estar
em Moçambique:
Quarta avaliação nacional
Inquérito ao Orçamento Familiar – IOF 2014/15

Ministério de Economia e Finanças
Direcção de Estudos Económicos e Financeiros





I. Measurement

The poverty reports use nationally representative household surveys that allow disaggregation by area and by province, referred to as:

Household Survey: Inquérito aos Agregados Familiares (IAF) – 2002;

Household Budget Survey: Inquérito ao Orçamento Familiar (IOF) – 2008, 2014.

To measure multidimensional poverty the 4th Poverty report applies the **Counting Approach** proposed by Alkire and Foster in 2011. This allows quantifying incidence and intensity of multidimensional poverty.

I. Measurement: AF Counting Approach

The AF method **identifies** the poor using **two** forms of **cutoff** one **within** a dimension, and one **across** dimensions.

The **dimensional** cutoff (denoted by z) is a traditional **dimension-specific** deprivation cutoff, that identifies a person as **deprived** if she falls below a (dimensional-*indicator*) poverty line.

The **cross-dimensional cutoff** (denoted by k) states **how widely** deprived a person must be in order to be **identified** as **multidimensionally** poor, by **counting** the dimensions in which she is deprived.

I. Measurement: AF Counting Approach

This method proposes a family of measures that can reflect the incidence, depth and severity of multidimensional poverty, among which the **adjusted headcount ratio** (M_0) is the mostly widely used

M_0 is the product of two indices: $M_0 = H \times A$

H is the **multidimensional headcount ratio**. This is the percentage of people. It shows the *incidence* of multidimensional poverty.

A is the **average proportion of deprivations** that the **poor** experience at the **same time (overlap)**. It shows the *intensity* of people's poverty

M_0 is **additive decomposable** by **subgroup** and by **dimension**/indicator

I. Multidimensional Poverty: Normative Considerations

(k = 60%)

Dimension	Indicator	Deprived if...	Weight
Education	Primary education	No household member aged 10 years or older has completed primary schooling.	1/6
Health	Improved Drinking Water	The household does not have access to a clean water source such as piped water (in or outside the household) public tap, borehole or pump, bottled water, or mineral water.	1/6
	Improved Sanitation	The household does not use some type of flush toilet or latrine, or ventilated improved pit or composting toilet.	1/6
Housing	Standard coat of roof/walls	The household does not have slab of concrete, tile, or plates (or a zinc lusalite)	1/6
	Electricity	The household has no electricity.	1/6
Durables	Asset ownership	The household does not own at least three durable goods: radio, TV, telephone, computer, printer, bed, refrigerator, freezer, bicycle or motorbike.	1/6

II. Inclusive Growth Framework



Foster (2013) proposes a family of growth elasticities to assess growth inclusiveness.

- Vertical inclusiveness – annualized rates:

$$e(M_0; Y) = -\frac{\bar{\delta}M_0}{\bar{\delta}Y}, \quad e(H; Y) = -\frac{\bar{\delta}H}{\bar{\delta}Y}, \quad e(A; Y) = -\frac{\bar{\delta}A}{\bar{\delta}Y},$$

- Horizontal inclusiveness – annualized rates (by province l)

$$e(M_0^l; Y^l) = -\frac{\bar{\delta}M_0^l}{\bar{\delta}Y^l}, \quad e(H^l; Y^l) = -\frac{\bar{\delta}H^l}{\bar{\delta}Y^l}, \quad e(A^l; Y^l) = -\frac{\bar{\delta}A^l}{\bar{\delta}Y^l}$$

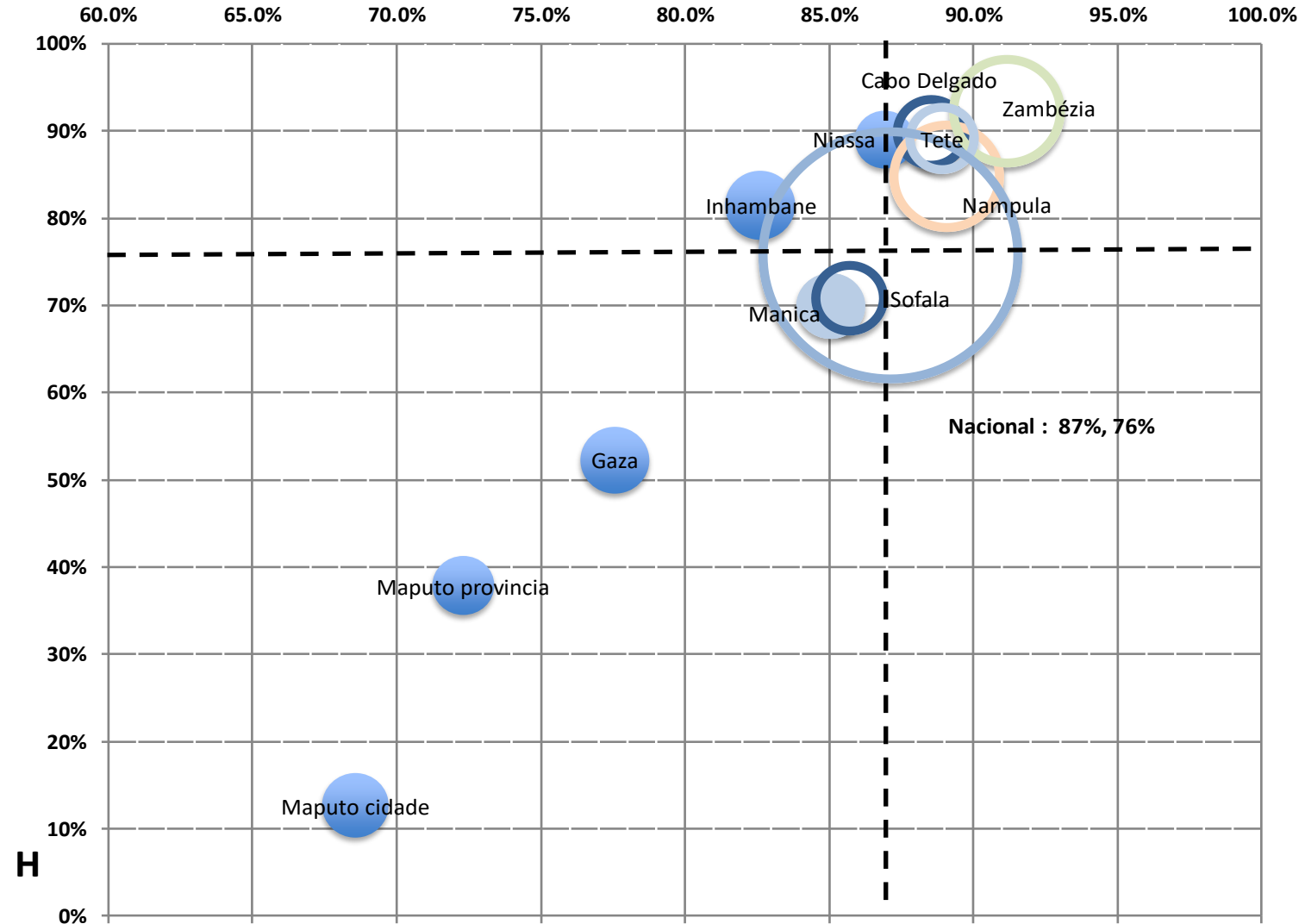
- Dimensional inclusiveness – annualized rates (by dimension/indicator j)

$$e(Ch_j; Y) = -\frac{\bar{\delta}Ch_j}{\bar{\delta}Y}, \quad e(Ch_j^l; Y^l) = -\frac{\bar{\delta}Ch_j^l}{\bar{\delta}Y^l},$$

III. Results- MD Poverty

A

- 2002

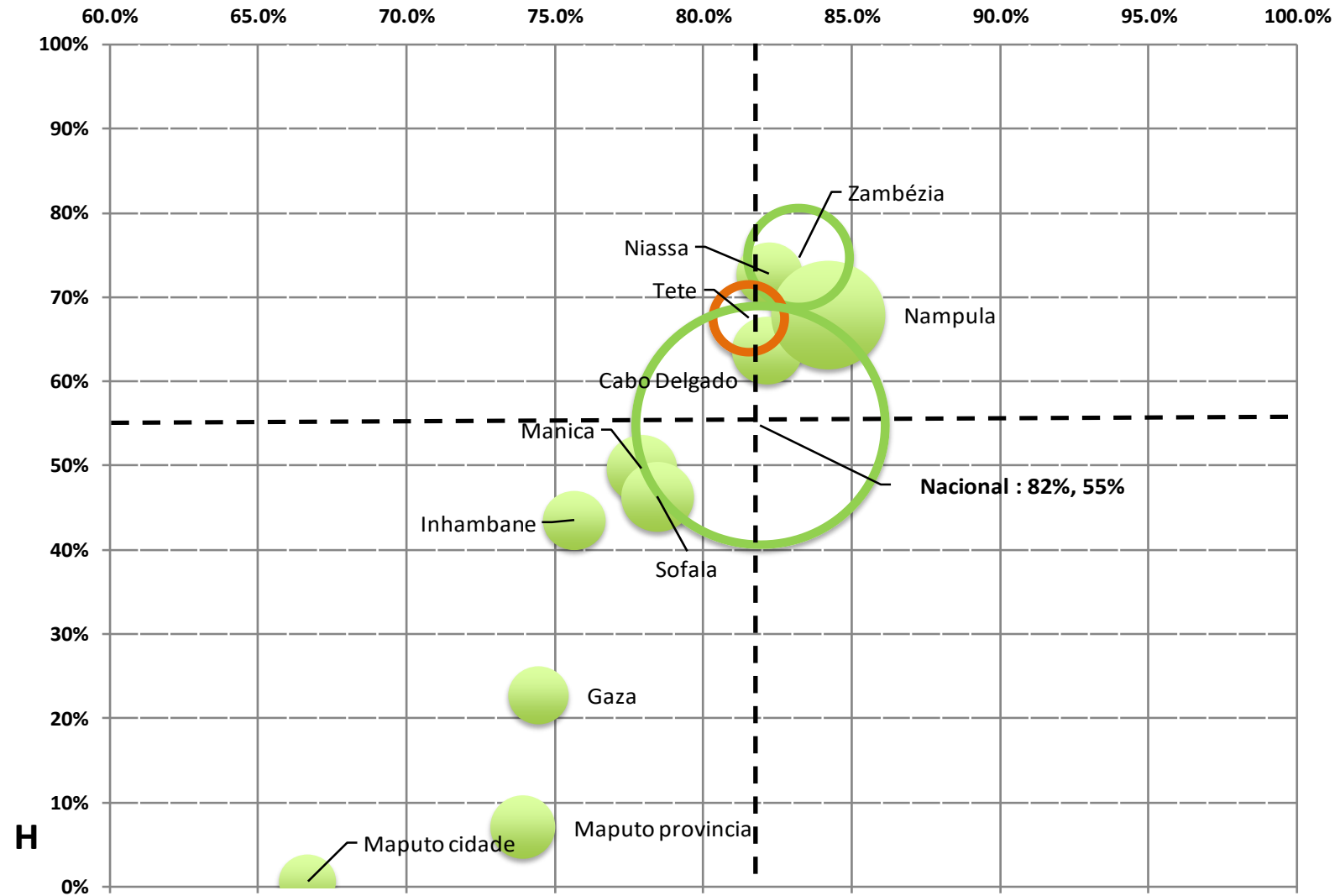


H

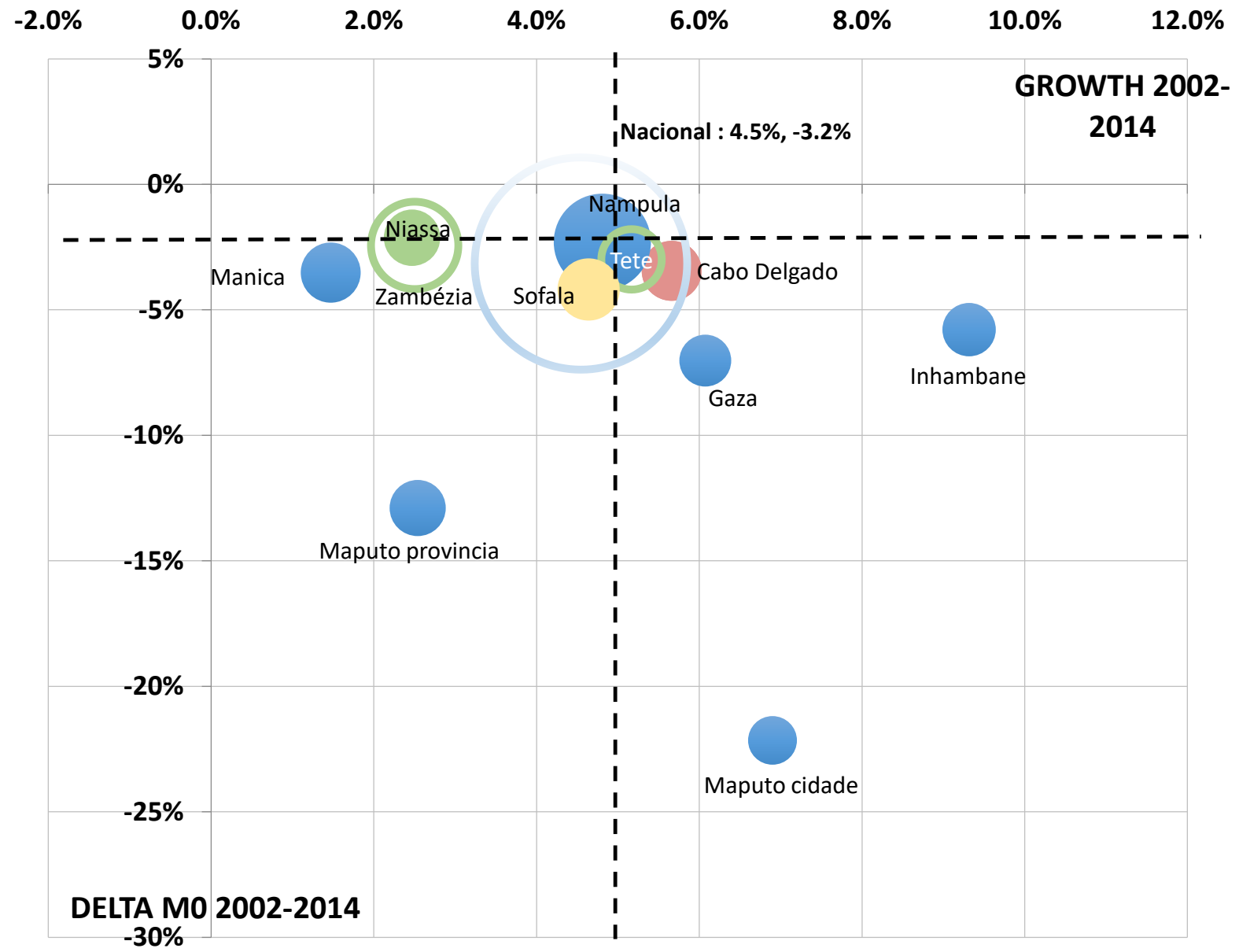
III. Results – MD Poverty

A

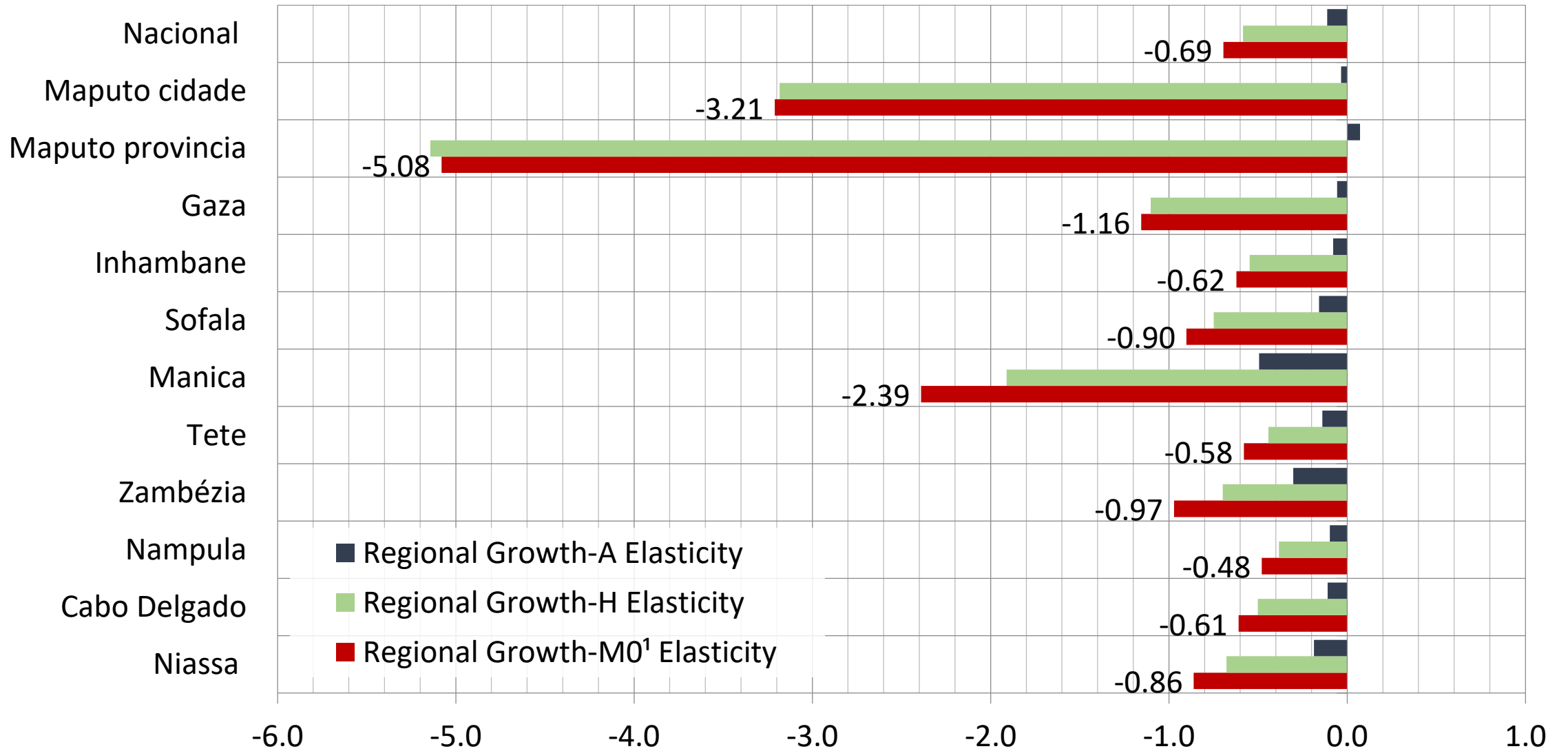
- 2014



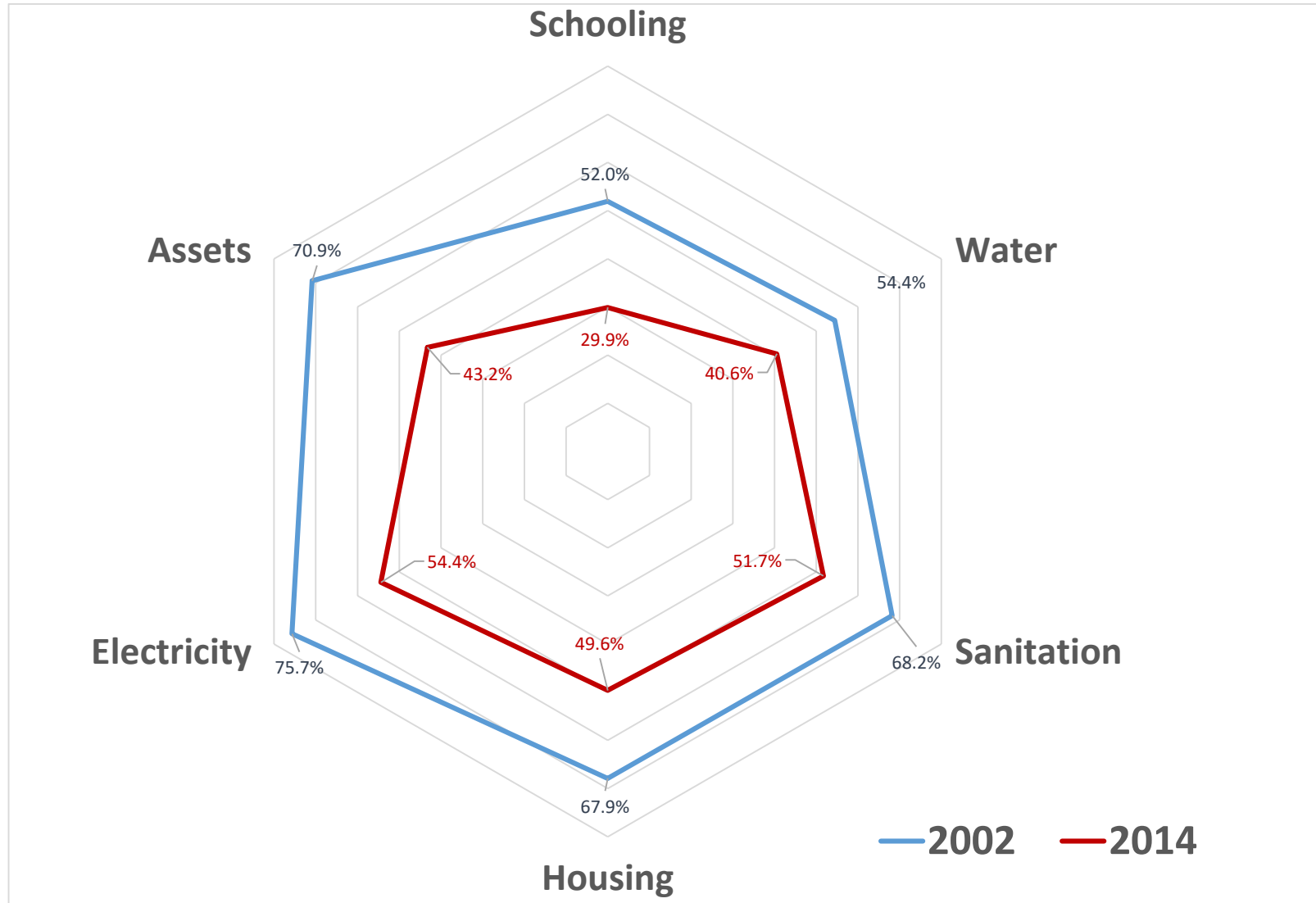
III. Annualised rates – V/H inclusiveness



III. Horizontal inclusiveness

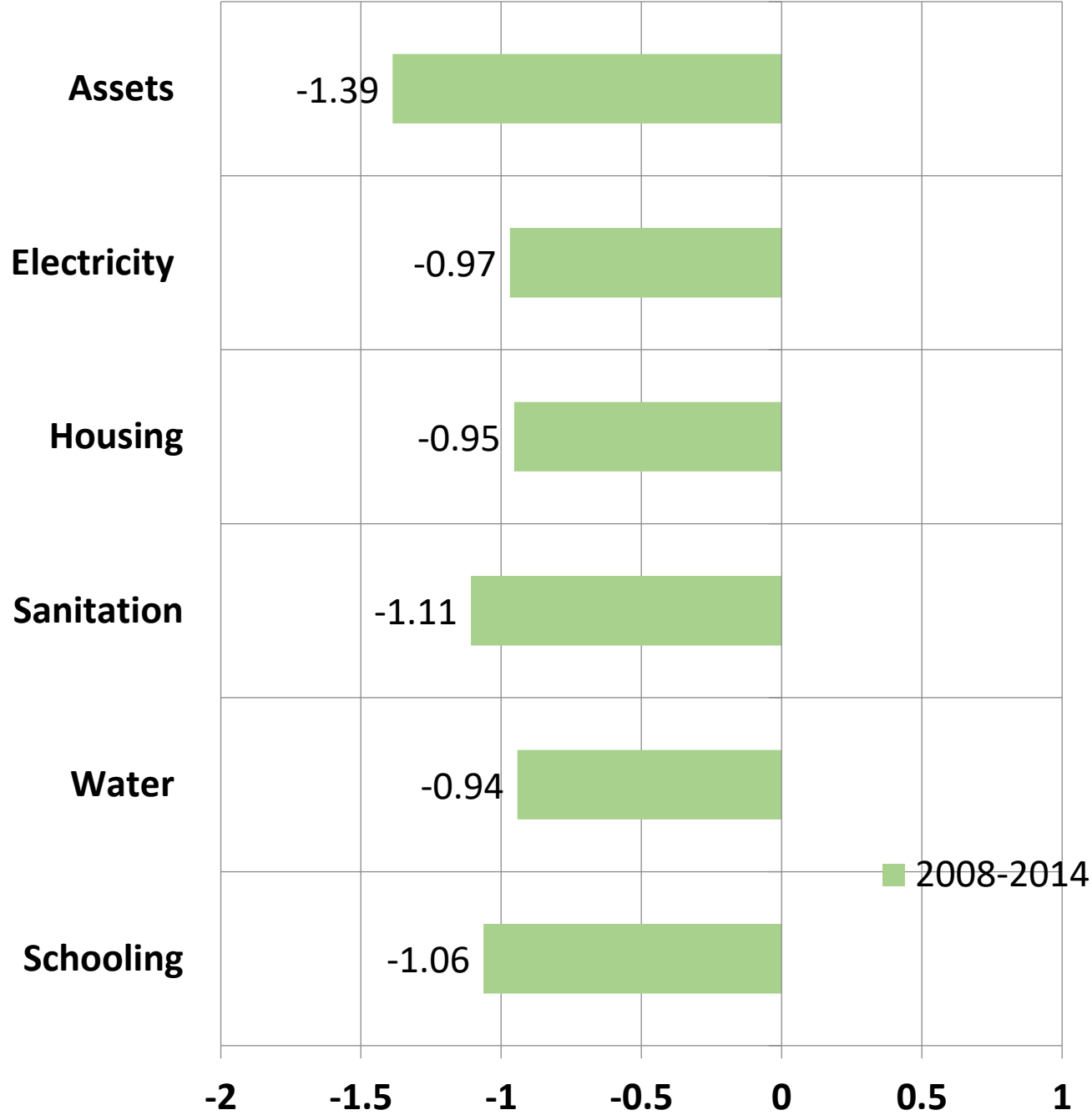


III. Dimensional inclusiveness: Censored headcounts

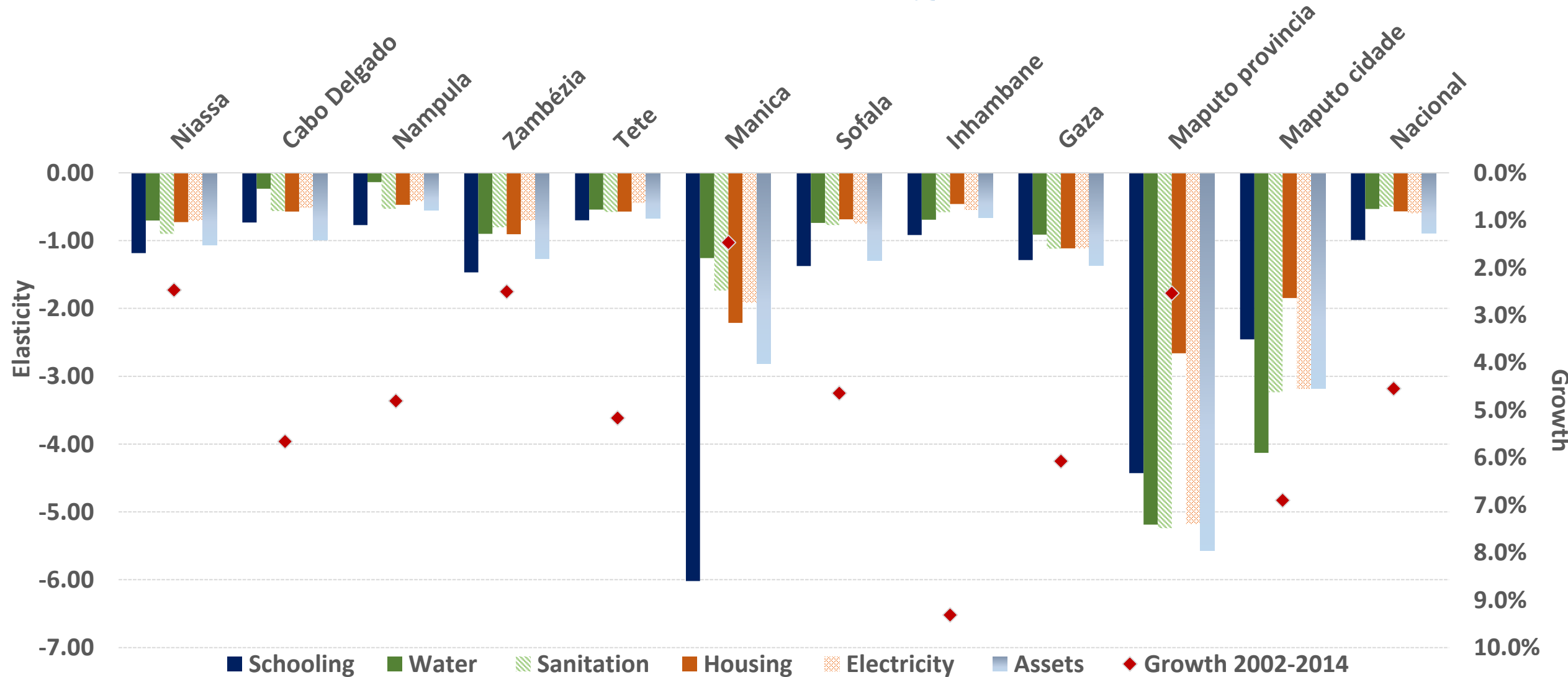


III. Dimensional inclusiveness:

Elasticities – National level



III. Dimensional inclusiveness: Elasticities by province



Concluding Remarks

The fourth poverty assessment for Mozambique indicates:

- A significant **reduction** in **multidimensional incidence** rates
- A **reduction** in the **intensity** of multidimensional poverty, although less pronounced.

Vertical inclusiveness indicates that **incidence** of poverty is more sensitive to growth compared to intensity.

Concluding Remarks

Horizontal inclusiveness indicates that **provinces in the South** are those where growth has had larger impacts (show larger elasticities)

Dimensional inclusiveness at the national level indicate that **assets, sanitation and schooling** are the indicators more sensitive to growth. At the provincial level, dimensional inclusiveness exhibits greater variation with Manica showing greater growth-gains in education.



UNITED NATIONS
UNIVERSITY
UNU-WIDER

Thanks.