

Educational inequality in Mozambique

Servaas van der Berg (Resep, Stellenbosch University)

Carlos da Maia (World Bank)

Cobus Burger (Resep, Stellenbosch University)

**WIDER conference on
'Poverty and Inequality in Mozambique',
Maputo**

27-28 November 2017



Educational inequality

Three areas of focus:

- Attainment (history)
- Attendance (current), repetition and drop-out
- Quality (cognitive outcomes)

Three dimensions of inequality:

- By gender
- By location (region/province/urban-rural)
- By wealth grouping (socio-economic status, SES)

Some issues arising:

- Teachers:
 - Numbers
 - Quality
 - Effort
- Expansion of school system

Data sources

- Census 2007
- DHS 1997, 2003, 2009, 2011
- IOF (Inquérito ao Orçamento Familiar) 2014/15
- SACMEQ II 2000 & SACMEQ III 2007
- Annual Census of Schools (EMIS)
- Ministry of Education 2016 Gr3 Portuguese Test

Where we are today

- Deep structural problems show the effect of colonial history & the civil war
- The war's effect on education was particularly strong in Northern and Central Regions
- Rapid expansion of access in post-war period, stimulated by Free Primary Education

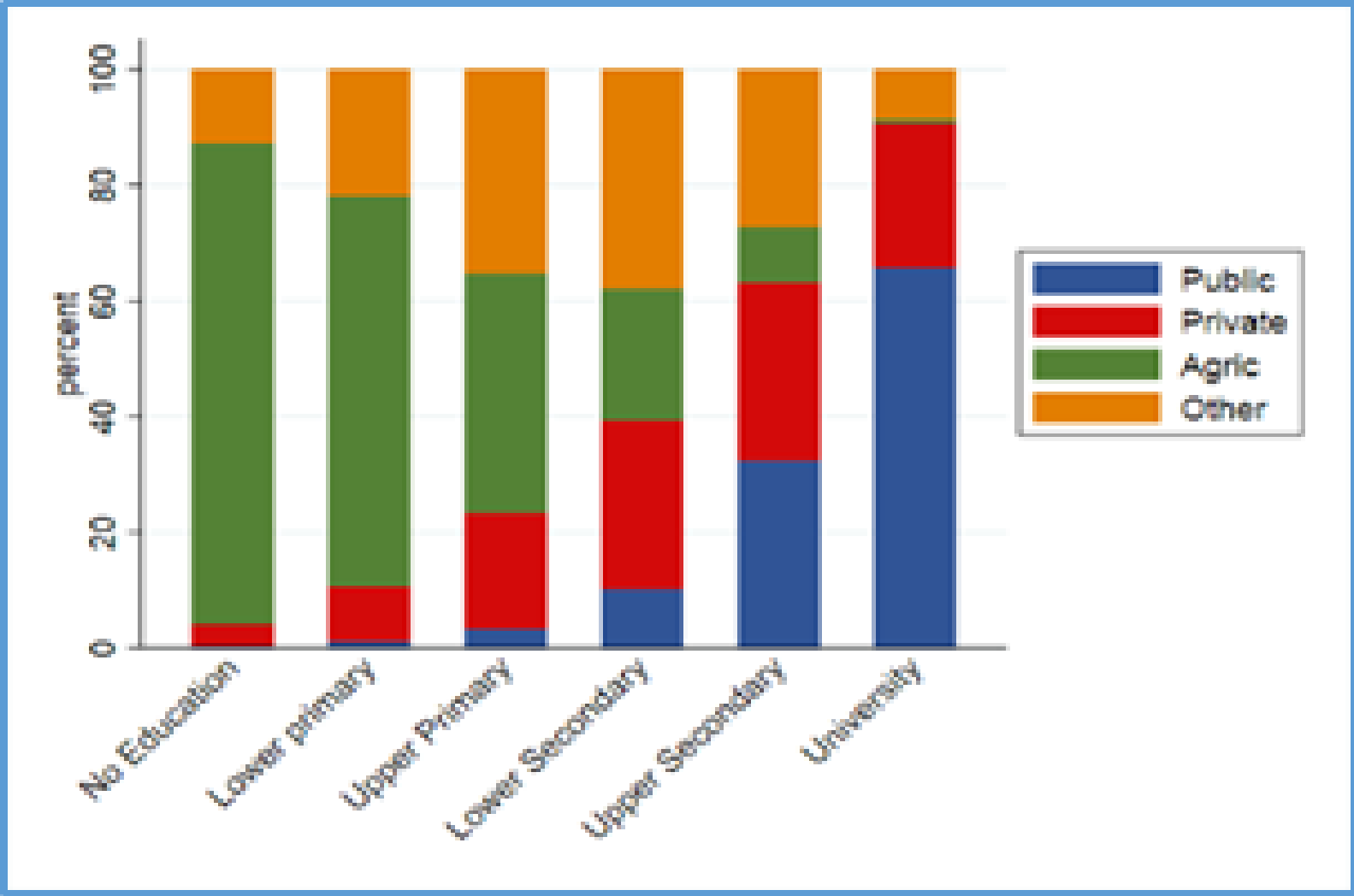
Impact of the civil war on the destruction of the school network

Province	Schools		
	Existing in 1983	Destroyed or closed by 1992	
		Number	%
Niassa	508	352	69
Cabo Delgado	542	109	20
Nampula	1 116	535	48
Zambézia	1 130	997	88
Tete	479	454	95
Manica	225	109	48
Sofala	386	253	66
Inhambane	506	220	44
Gaza	546	169	31
Maputo Province	339	204	60
Maputo City	109	0	0
Total	5 886	3 402	58

Source: Da Maia 2012, adapted from Ministry of Education (1996: 40)

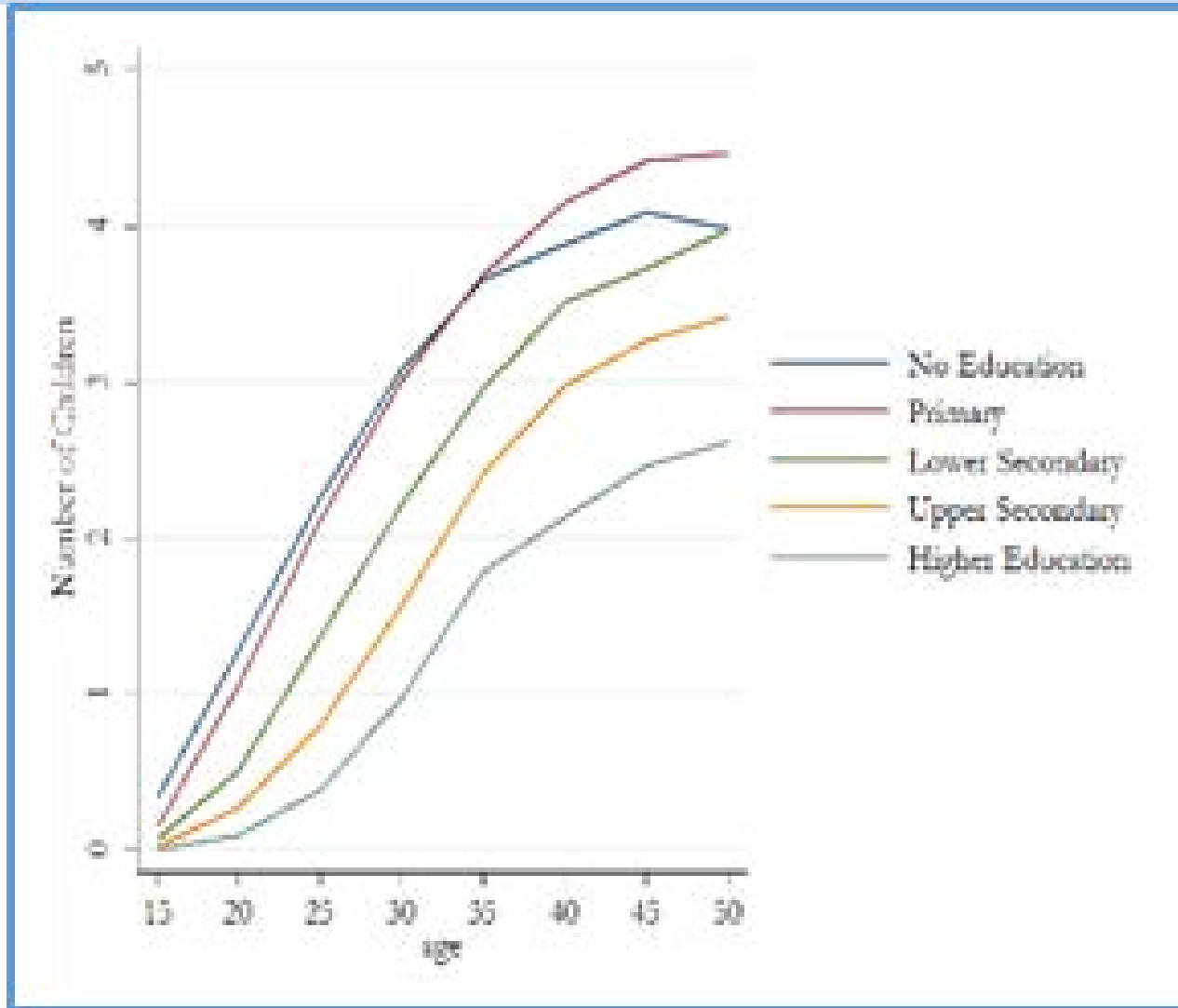
BENEFITS OF EDUCATION FOR DEVELOPMENT

Level of education and position in the labour market, 2014/5



Source: Mozambique Income and Expenditure Survey 2014/15

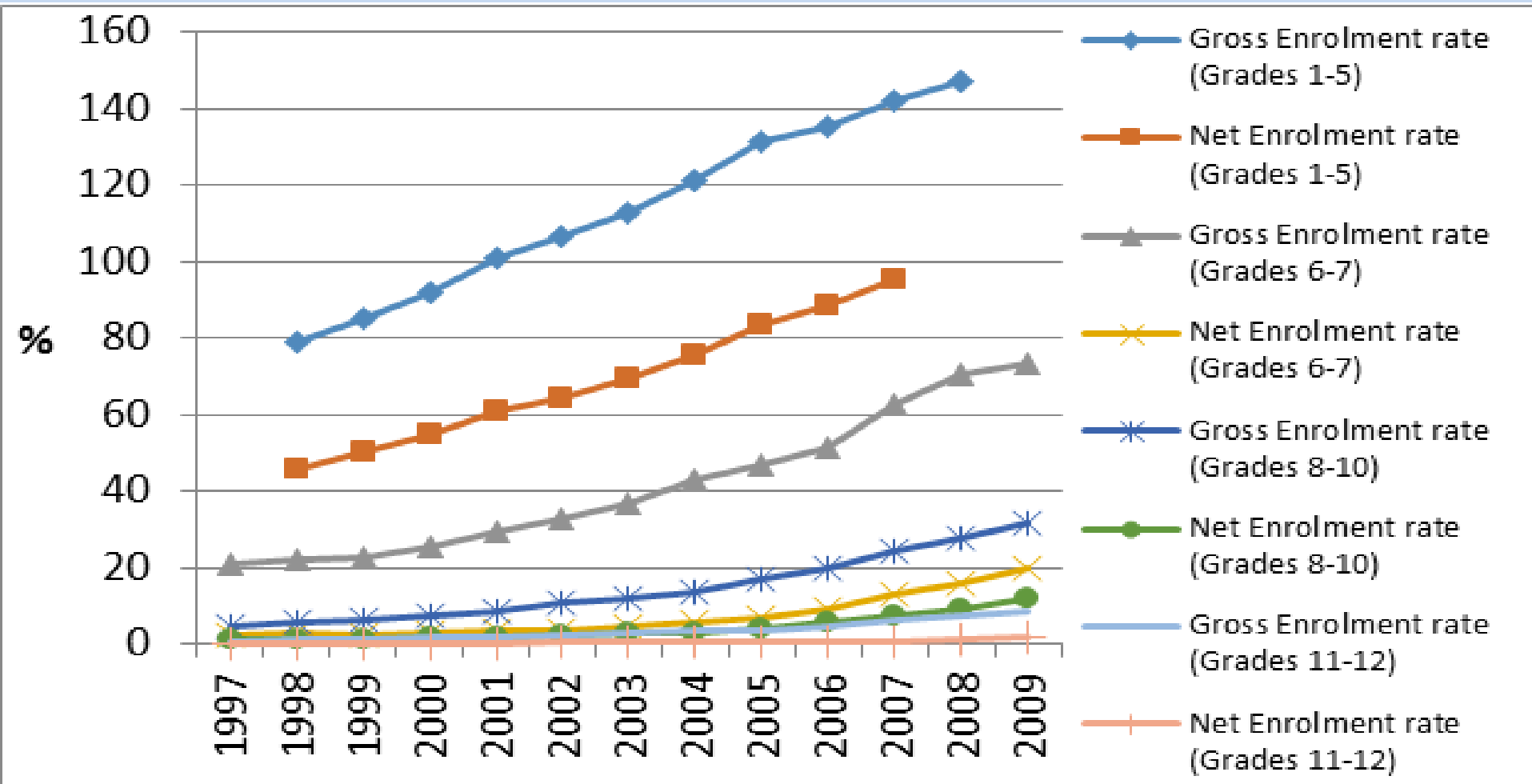
Age and number of births for different levels of mother's education



Source: Derived from DHS2011

EXPANSION OF ATTAINMENT AND ENROLMENT

Gross and Net Enrolment Rates, 1997- 2009



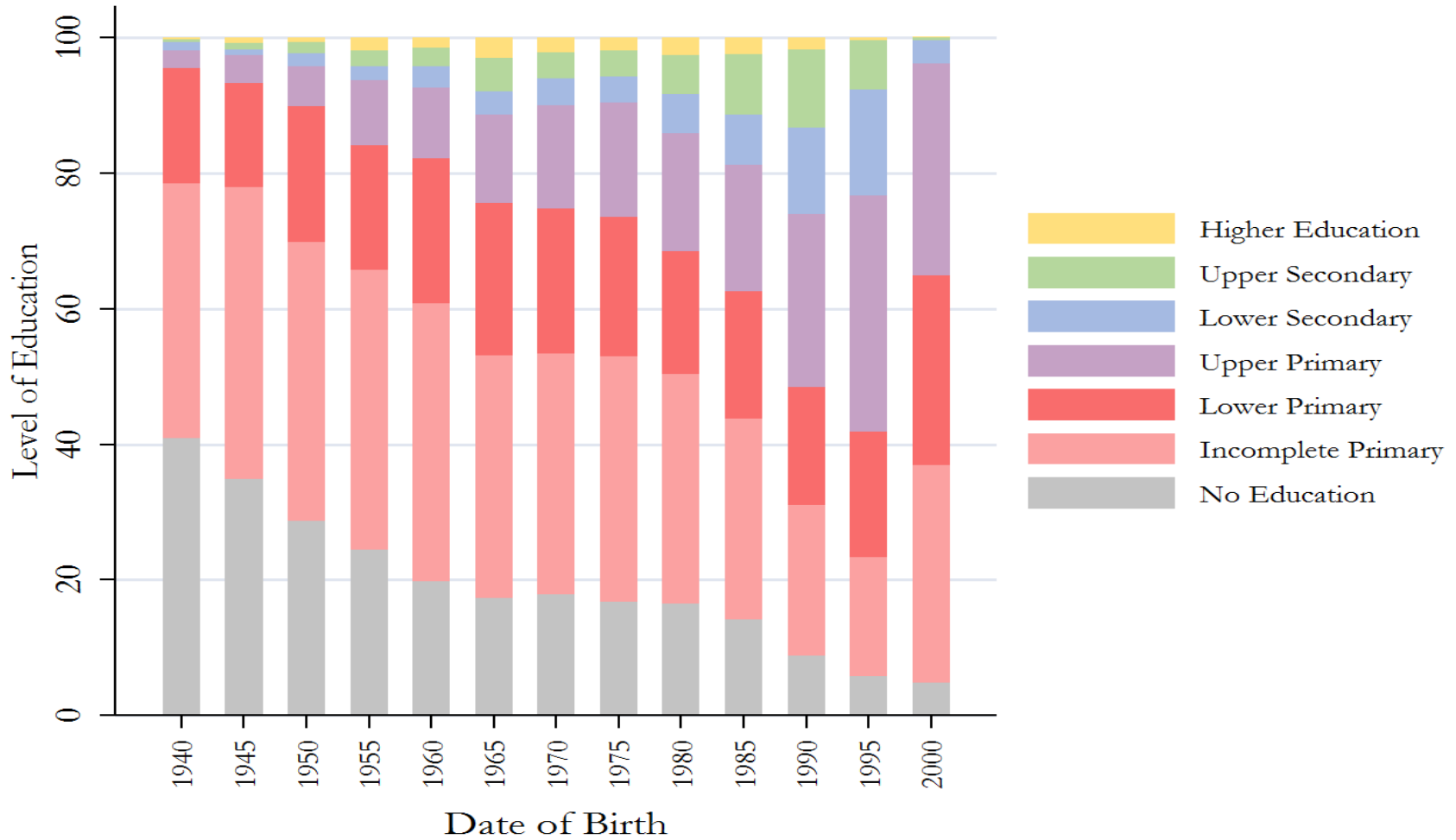
Source: Da Maia 2012, adapted using data from Mozambique Education Statistics 1998 – 2009

Number of Gr 6 pupils, SACMEQ II & SACMEQ III

Provinces	SACMEQ II 2000	SACMEQ III 2007	%-change
Niassa	5 317	13 944	162
Cabo Delgado	4 660	21 184	355
Nampula	14 514	40 692	180
Zambézia	13 722	46 396	238
Tete	7 269	23 561	224
Manica	7 986	23 786	198
Sofala	9 192	29 861	225
Inhambane	12 531	29 935	139
Gaza	12 063	27 059	124
Maputo Province	10 257	32 397	216
Maputo City	24 827	30 429	23
Total	122 338	319 243	161

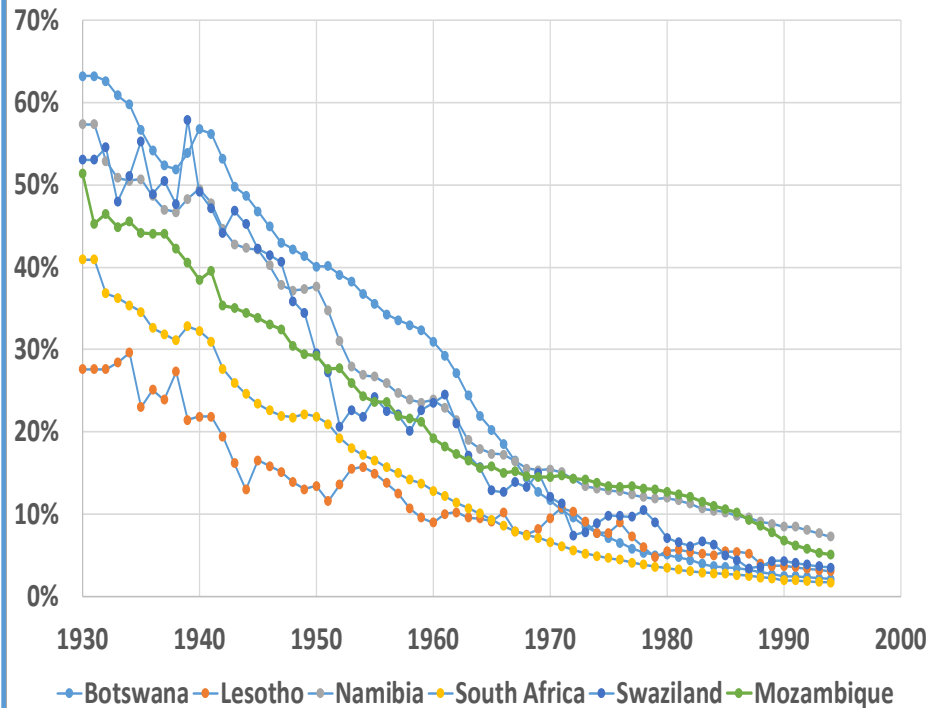
Source: Derived from SACMEQ II & SACMEQ III

Level of education reached by birth year based on 2014/15 survey

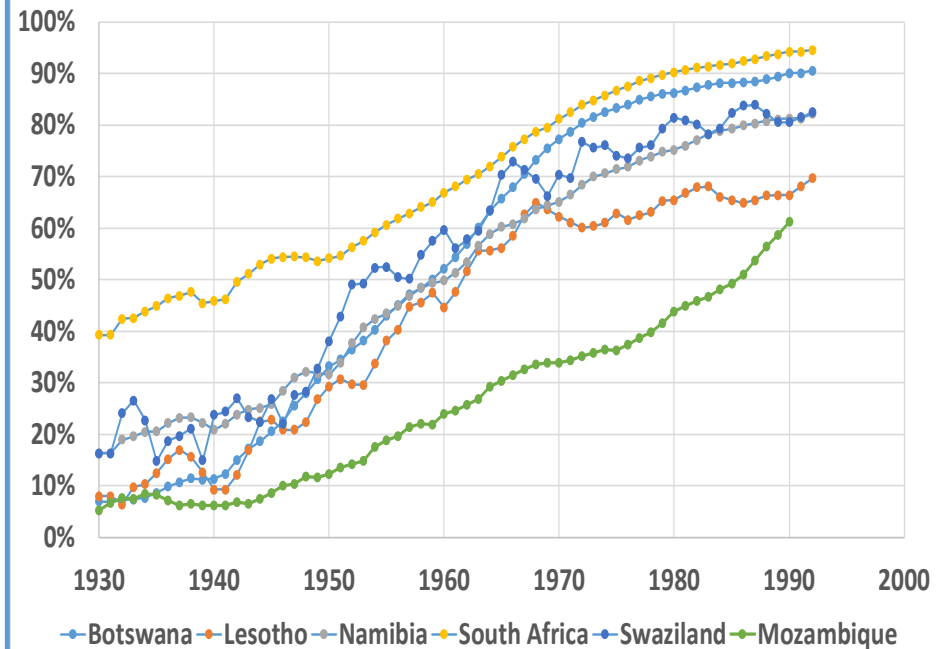


% of population never accessing school (Panel A) and completing at least primary school (Panel B) by birth cohort: Mozambique in regional context

% of population with no education by birth year



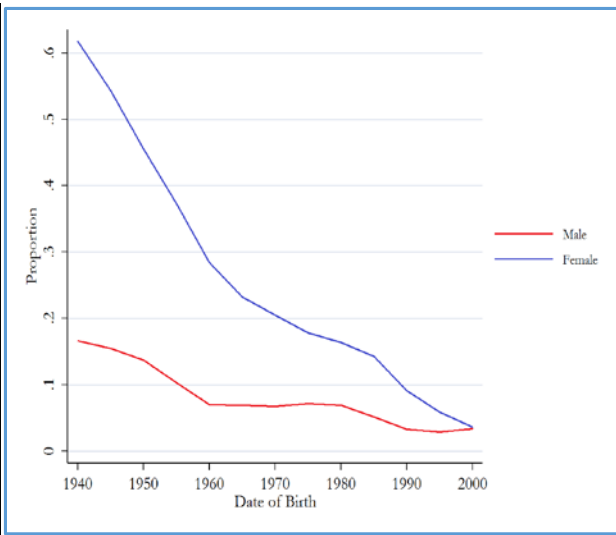
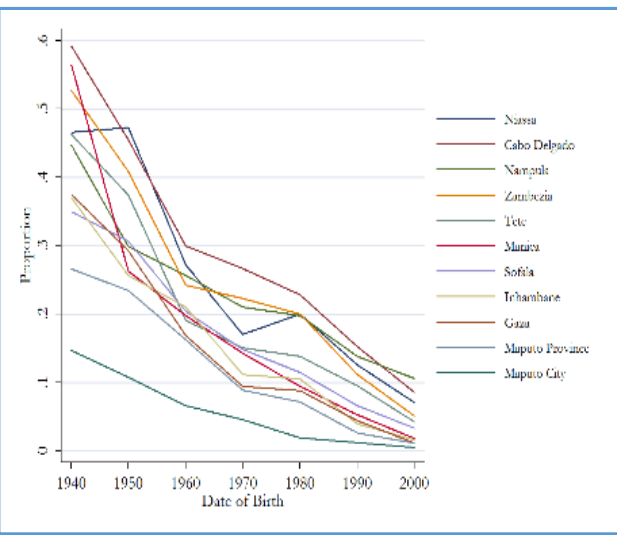
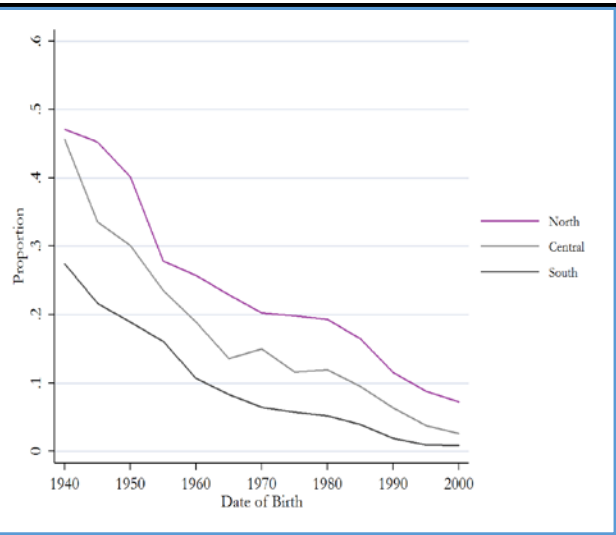
% that have completed primary education (Gr7) by birth cohort



INEQUALITY IN ATTAINMENT AND ENROLMENT

Percentage of population with no education by birth cohort

by main region (Panel A), by province (Panel B) and by gender (Panel C)



Net primary and secondary enrolment rates by gender and by region, 1997, 2003 & 2011

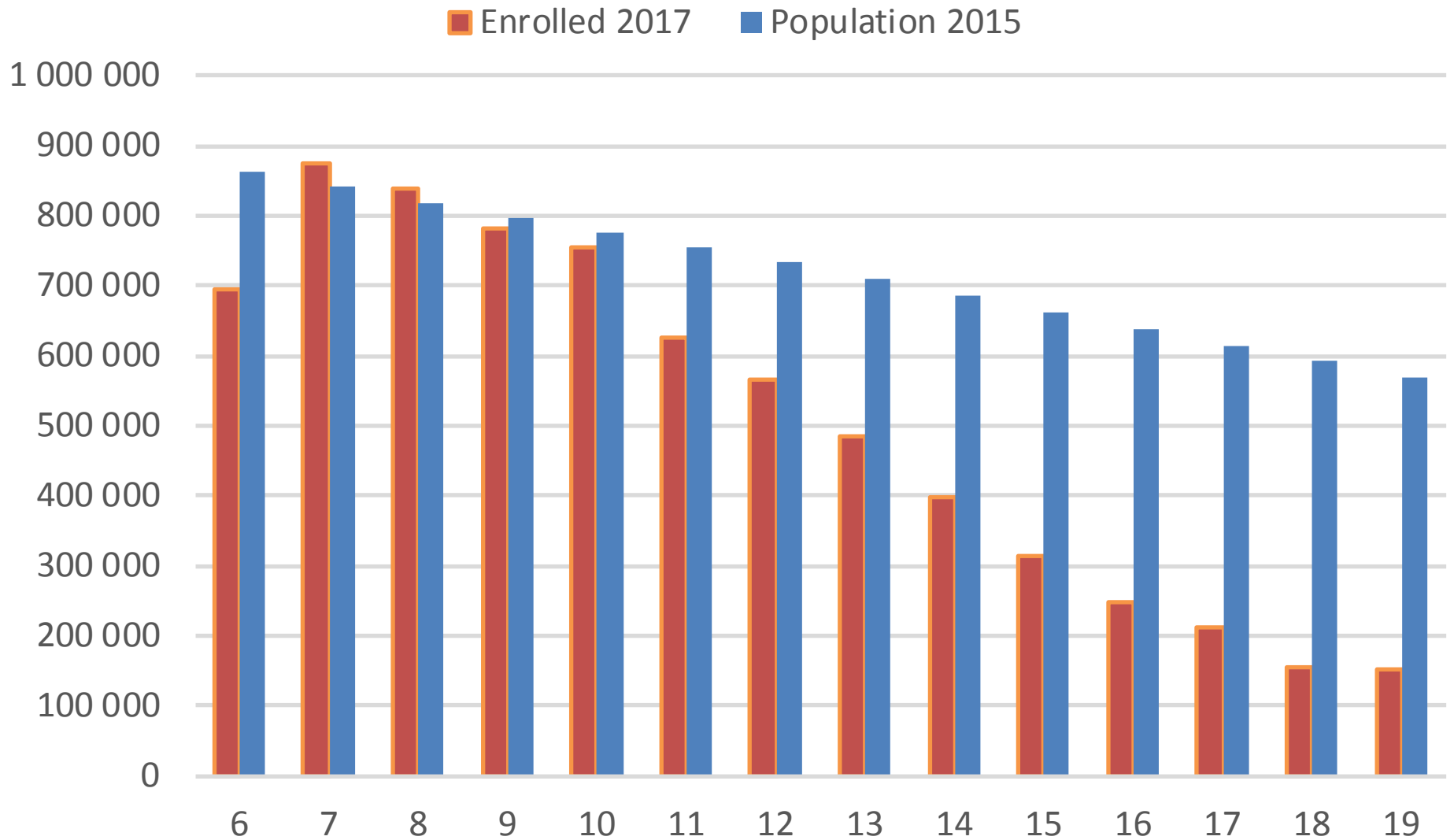
		Male	Female	North	Central	South	National
Primary schools							
EP1	1997	53.9%	48.4%	44.6%	42.2%	67.0%	53.9%
	2003	59.7%	53.3%	45.5%	56.6%	79.9%	59.7%
	2011	66.9%	67.3%	61.5%	66.5%	80.3%	66.9%
EP2	1997	8.3%	8.8%	6.5%	8.8%	11.4%	8.6%
	2003	11.4%	9.0%	6.3%	10.8%	17.5%	10.2%
	2011	23.4%	25.1%	15.5%	23.1%	43.9%	24.3%
Secondary schools							
ES1	1997	1.7%	1.9%	0.5%	1.3%	3.5%	1.8%
	2003	7.4%	6.9%	4.6%	4.8%	12.7%	7.2%
	2011	19.9%	21.3%	10.9%	18.2%	39.1%	20.6%
ES2	1997	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
	2003	1.3%	1.2%	0.5%	0.9%	2.5%	1.3%
	2011	6.4%	4.8%	3.9%	4.2%	10.3%	5.6%

Note: NER for EP1 is % of children aged 6-11 in Gr 1-5; for EP2, % of children aged 12-13 in Gr 6-7; for ES1, % of children aged 14-16 in Gr 8-10; for ES2, % of children aged 17-18 in Gr 11-12.

Source: Calculated from DHS surveys.

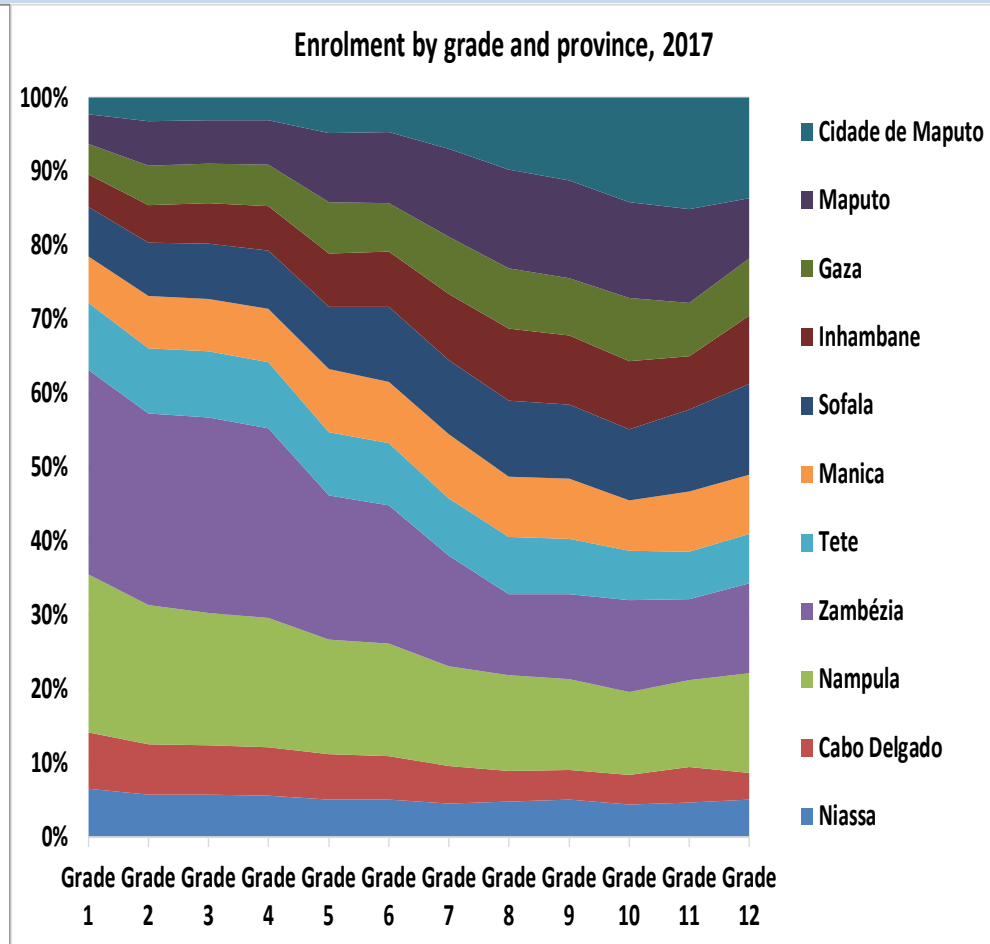
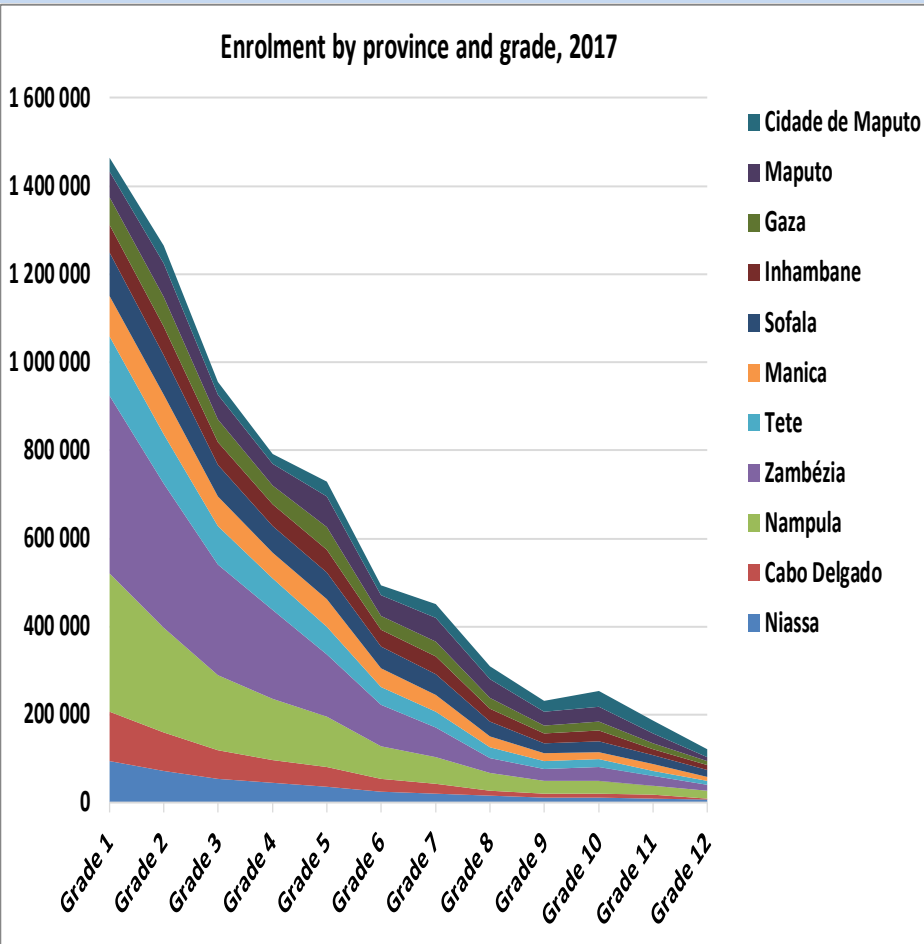
PROBLEMS IN EXPANSION OF ENROLMENT

Enrolment by age, 2017



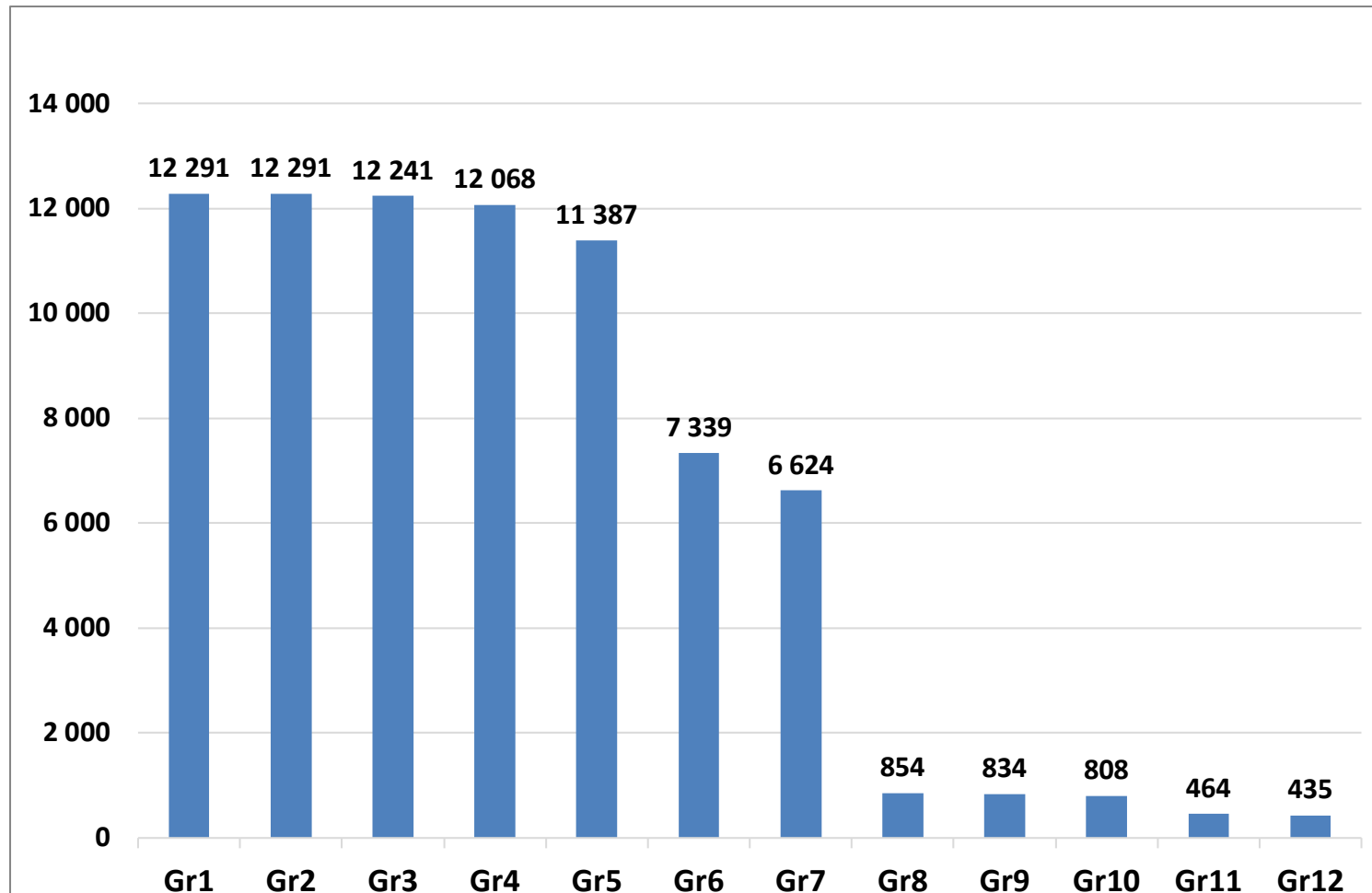
Enrolment by province, 2017

Panel A – Numbers; Panel B – Percentages



Source: Own calculations from Annual School Census (EMIS)

Number of schools offering various grades, 2017



Source: Own calculations from Annual School Census (EMIS)

- In Zambia, 3252 schools offer Grade 1, but only 85 offer Grade 8 and 40 offer Grade 12

Main reason for not studying (females aged 15-25)

	1997	2003
Got pregnant	10.4	12.1
Got married	16.7	27.9
Take care of children	2.1	7.0
Help family	2.8	2.9
No money	27.3	26.0
Needed to work	1.4	2.0
Studied enough	2.1	1.0
Did not pass admission	8.0	0.4
Does not like to study	6.8	7.1
Does not know	22.4	13.8
Total	100	100

Source: Demographic and Health Surveys

Enrolment, teachers & pupil-teacher ratio by region, 2017

	Enrolment	Teachers (incl. private schools & night shift)	Pupil-teacher ratio
Niassa	402 137	8 324	48
Cabo Delgado	457 718	8 720	52
Nampula	1 244 154	22 105	56
Zambézia	1 618 156	28 981	56
Tete	617 175	12 152	51
Manica	538 003	12 546	43
Sofala	592 257	11 727	51
Inhambane	459 336	10 570	43
Gaza	430 388	9 180	47
Maputo Province	546 133	10 911	50
Maputo City	350 656	7 197	49
Total	7 256 113	142 413	51

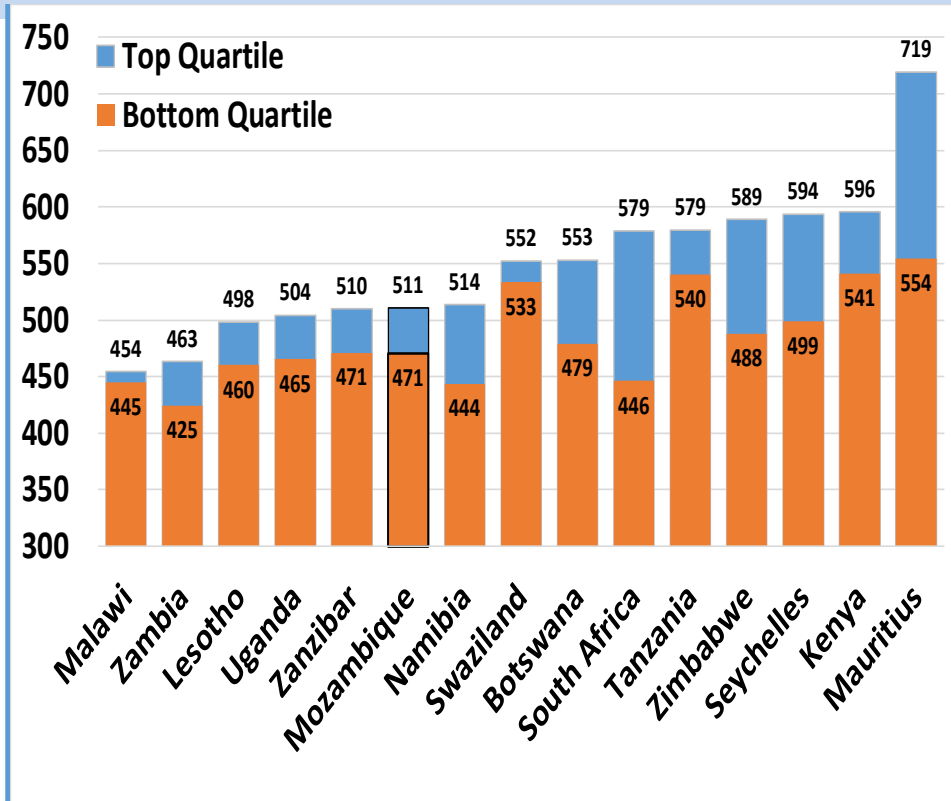
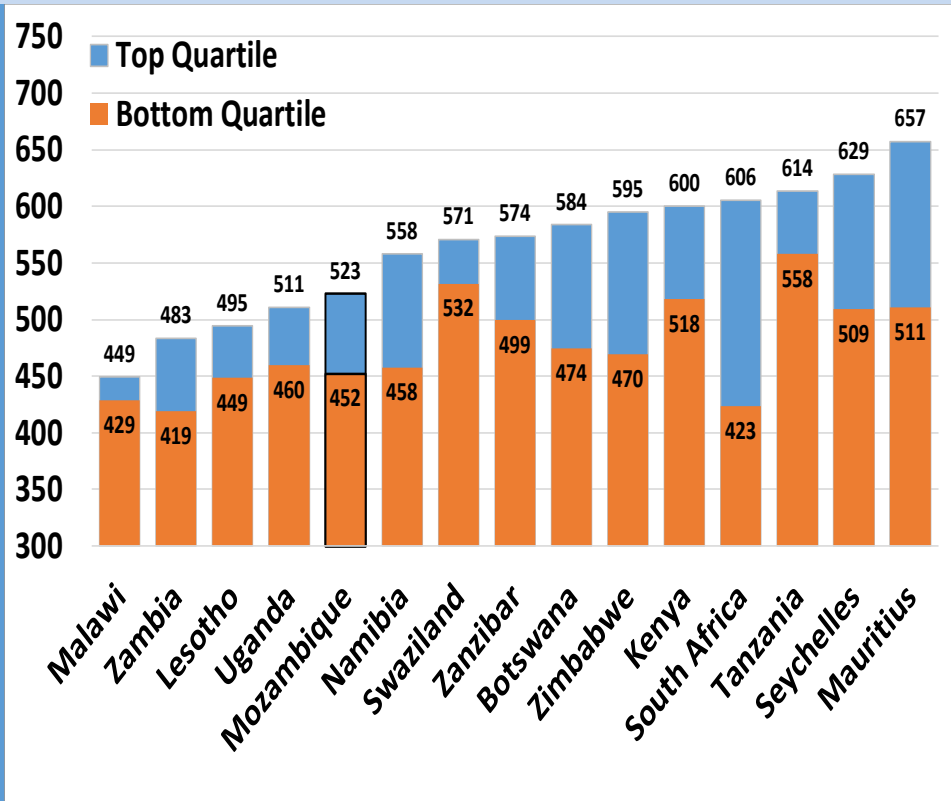
Source: Own calculations from Annual School Census

Teacher issues

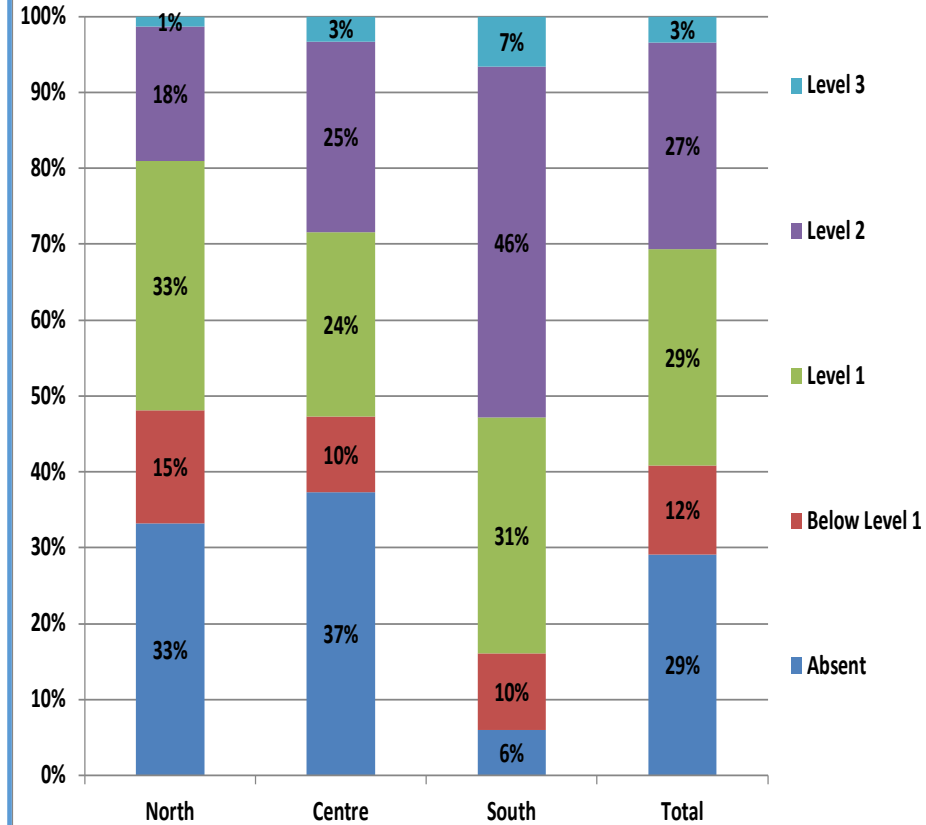
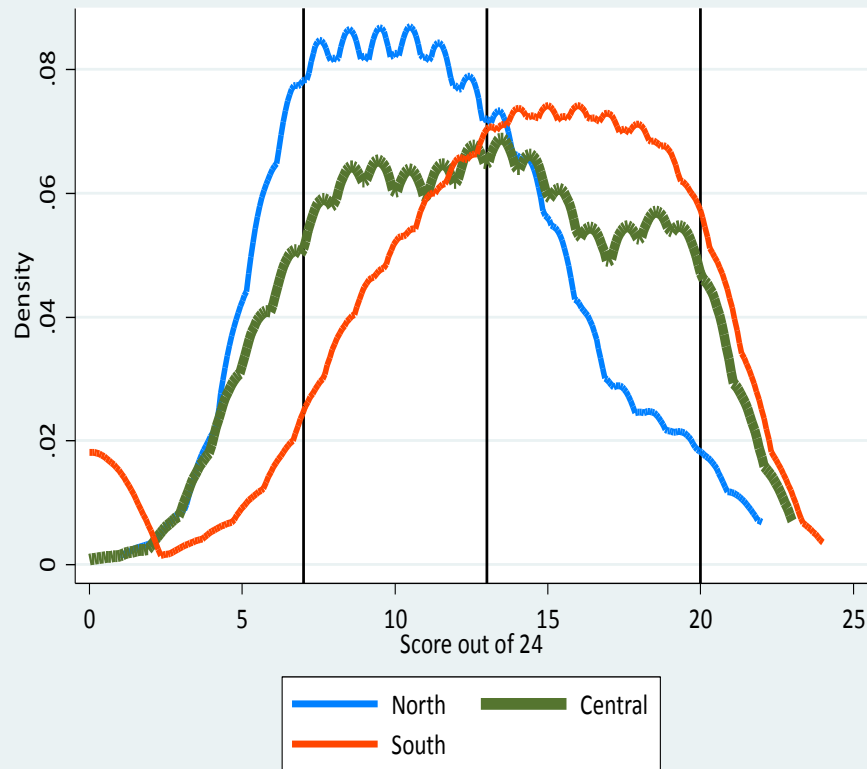
- 45% of teachers absent, another 21% not in class teaching (Molina & Martin 2015: vii)
- 44% of directors absent (Molina & Martin 2015: ix)
- Only 60% of lower primary teachers could give the correct answer to a simple subtraction problem, $86 - 55$ (Molina & Martin 2015: 14)
- Teacher pedagogy also weaker than in other African countries where Service Delivery Indicators were developed by World Bank (Molina & Martin 2015: ix)
- Decomposition of SACMEQ II & III scores shows a drop in intercept, i.e. lower efficiency of school system (Da Maia 2012)

QUALITY OF EDUCATION / COGNITIVE OUTCOMES

Maths & Language scores of top & bottom quarter in SACMEQ III



Performance in Gr.3 Portuguese test (marks out of 24)



Source: Derived from 2016 Grade 3 test data

In conclusion

- Inequality in education is part of the picture – but the dominant picture is one of high drop-out, constraints to access, and low performance of the education system
- The major dimension of inequality is by location
- Even the wealthy generally only get limited education of low quality
- Thus it is more a case of '*poverty of education*' than inequality in education