



WHEN THE SUN RISES  
WE WORK HARD TO DELIVER

# PRACTICAL MEASURES OF INEQUALITY

PSEF  
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27 November 2015



provincial treasury  
MPUMALANGA PROVINCE  
REPUBLIC OF SOUTH AFRICA



- The National Development Plan is a plan for the country to eliminate poverty and reduce inequality by 2030.... ~ *NDP 2030, p1*
- The Plan in Brief ~ *NDP 2030, p34*
  - By 2030
    - Reduce inequality – The Gini coefficient should fall from 0.69 to 0.60
  - Enabling milestones
    - Increase the share of national income of the bottom 40% from 6% to 10% (lower bound poverty line)

# Income share of bottom 40%

ReX675 [Compatibility Mode] - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	IHS Global Insight					Code	HP08								
2	Regional eXplorer 920 (2.5q)						Mpumalanga								
3															
4	<b>Income &amp; Expenditure</b>														
5	<b>Number of households by income category</b>														
6	<b>Total</b>														
7	<b>2014</b>														
8		0-2400		MHHA14			1 037								
9		2400-6000		MHHB14			9 063								
10		6000-12000		MHHC14			43 851								
11		12000-18000		MHHD14			63 505								
12		18000-30000		MHHE14			127 444								
13		30000-42000		MHHF14			140 690								
14		42000-54000		MHHG14			126 759								
15		54000-72000		MHHH14			127 184								
16		72000-96000		MHHI14			109 558								
17		96000-132000		MHHJ14			100 909								
18		132000-192000		MHHK14			94 593								
19		192000-360000		MHHL14			117 945								
20		360000-600000		MHHM14			62 483								
21		600000-1200000		MHHN14			36 472								
22		1200000-2400000		MHHO14			8 530								
23		2400000+		MHHP14			1 396								
24		Total		MHHTOT14			1 171 420								



# Income share of bottom 40%

IncomeShares SA - PSEF - Microsoft Excel

Input Data		Arbitrary Quantiles				
Lower Bound	Upper Bound	Households	Income	Quantile	Earning Income	Interpret
R 0	R 2 400	8 951	R 10 741 397	0.00%	0.0%	
R 2 400	R 6 000	24 264	R 101 910 132	10.00%	1.1%	The poorest 10.% of households consume 1.05% of all the income.
R 6 000	R 12 000	83 146	R 748 314 815	20.00%	3.7%	The poorest 20.% of households consume 3.73% of all the income.
R 12 000	R 18 000	53 951	R 809 271 870	30.00%	6.6%	The poorest 30.% of households consume 6.61% of all the income.
R 18 000	R 30 000	54 595	R 1 310 276 495	40.00%	9.6%	The poorest 40.% of households consume 9.59% of all the income.
R 30 000	R 42 000	24 346	R 876 439 059	50.00%	14.4%	The poorest 50.% of households consume 14.38% of all the income.
R 42 000	R 54 000	11 007	R 528 330 344	60.00%	19.8%	The poorest 60.% of households consume 19.82% of all the income.
R 54 000	R 72 000	8 483	R 534 456 590	70.00%	27.5%	The poorest 70.% of households consume 27.48% of all the income.
R 72 000	R 96 000	7 948	R 667 601 779	80.00%	36.6%	The poorest 80.% of households consume 36.59% of all the income.
R 96 000	R 132 000	8 065	R 919 438 459	90.00%	51.0%	The poorest 90.% of households consume 51.05% of all the income.
R 132 000	R 192 000	5 613	R 909 361 416	100.00%	100.00%	The poorest 100.% of households consume 100.% of all the income.
R 192 000	R 360 000	3 305	R 912 243 154			
R 360 000	R 600 000	944	R 453 247 705			
R 600 000	R 1 200 000	283	R 255 101 327			
R 1 200 000	R 2 400 000	75	R 134 920 501			
R 2 400 000	R 4 800 000	18	R 65 447 086			

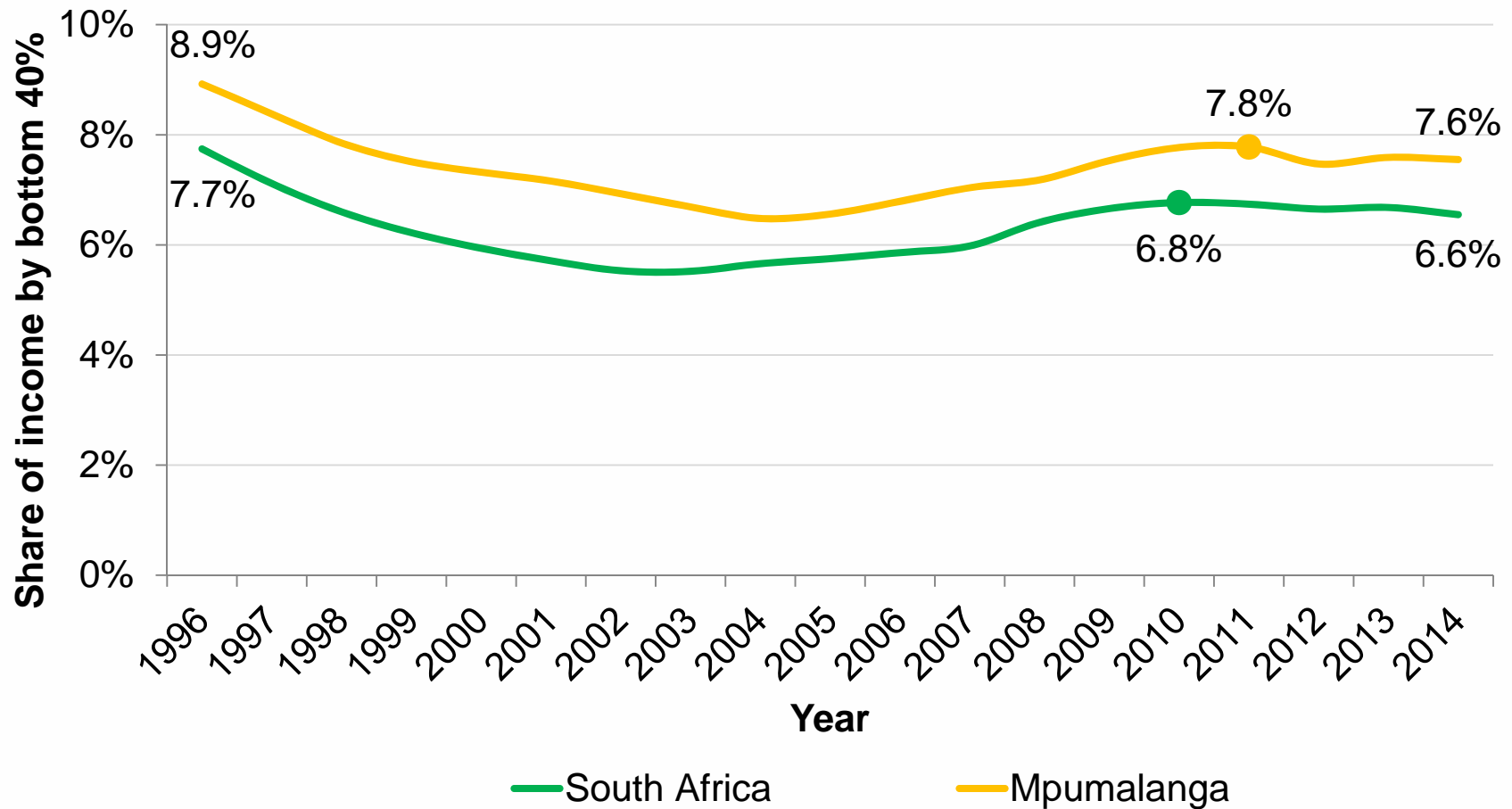
Quantile Size: 10.00%

Quantile: 40.00%

Earning Income: 9.6%

Interpret: The poorest 40.% of households consume 9.59% of all the income.

# Income share of bottom 40%



# Income share of bottom 40%

- Mpumalanga has 3 local municipal areas where bottom 40% exceeds 10% NDP target already = ★, however,
  - These 3 are rural areas with high poverty & unemployment rates
  - Contributes 7% to Mpumalanga GDP
- The 4 local municipal areas with the lowest bottom 40% share = 🐶, however,
  - Low poverty & unemployment rates
  - Contributes 70% to Mpumalanga GDP

# Palma ratio

- Gabriel Palma observed that changes in income inequality are almost exclusively due to changes in the share of the richest 10% and poorest 40%
- Express income of the rich as multiples of that of the poor e.g. For every R1 that the bottom 40% earned, the top 10% earned R8
- Internationally, a Palma ratio of more than 3 would place a region in the most unequal quartile & less than 1.5 in the least unequal quartile.
- Using World Bank indicators of 2010, Cobham and Sumner (2013) calculated a Palma ratio of 7.05 for SA

# Palma ratio

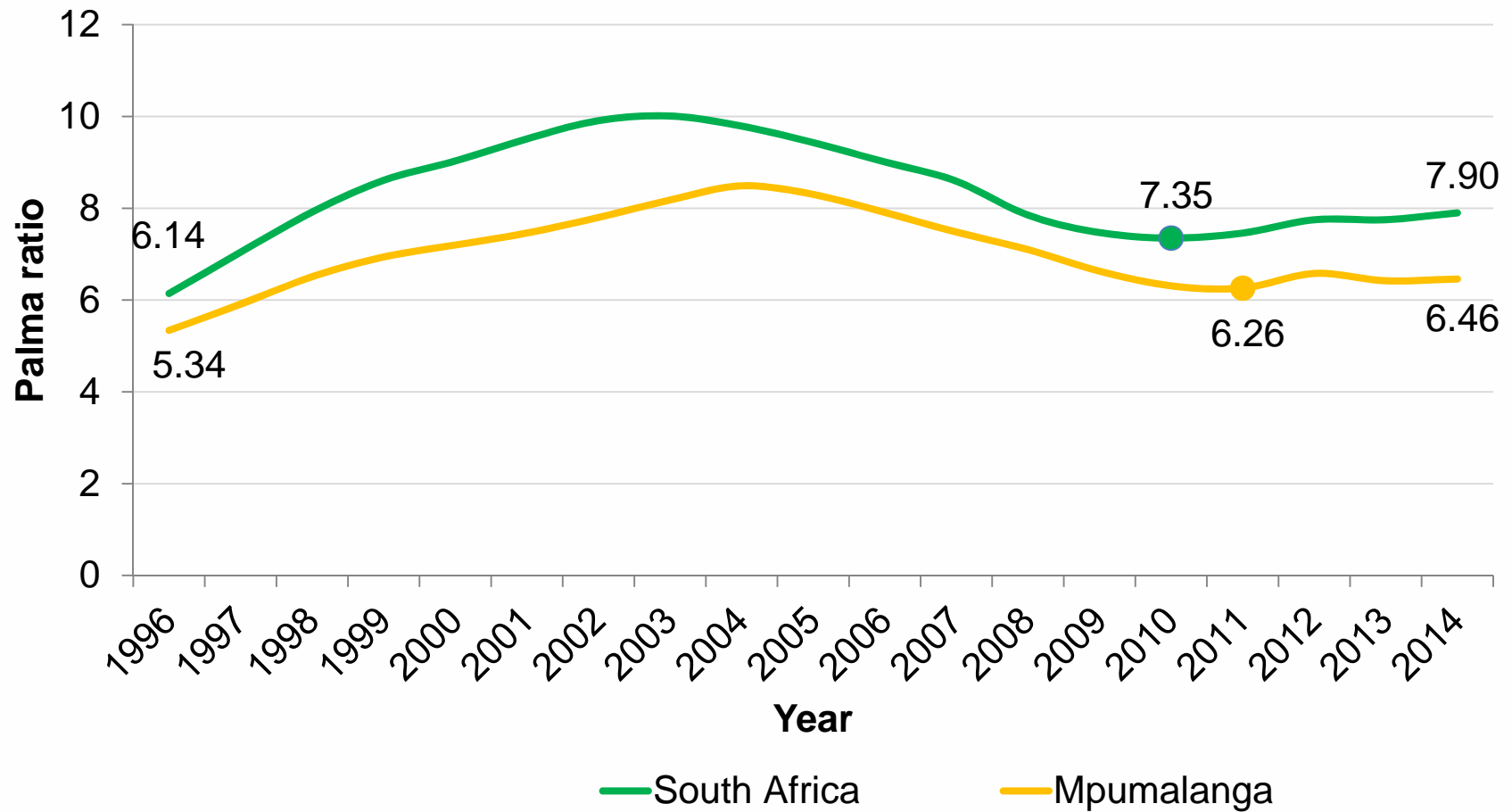
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# Palma ratio



# Palma ratio

- Same 3★ local municipal areas have the lowest/best Palma ratio in Mpumalanga
  - 9% of all jobs in Mpumalanga & 6% of all new jobs since 2011
  - Bottom 3<sup>rd</sup> in terms of household services
  - Palma ratio above 3
- 3 of the 4🐕 have again worst Palma ratio, however,
  - 56% of all jobs in Mpumalanga & 62% of all new jobs since 2011
  - Top 3<sup>rd</sup> in terms of household services

# Conclusion & recommendation

- Not all  are  & not all  are 
- Fiscal redistribution through social grant system has had some success in reducing income inequality.
  - However, fiscal and state capacity sets limits to such redistribution as grant spending already constitutes a high proportion of GDP & social grants need to compete with other public spending.
- Considerable improvements in education & skills are necessary to remove/reduce the premium for skilled labour most effectively.