



provincial treasury  
MPUMALANGA PROVINCE  
REPUBLIC OF SOUTH AFRICA

# **ANALYSIS OF INCOME INEQUALITY IN MPUMALANGA, 1996-2014**



WHEN THE SUN RISES  
WE WORK HARD TO DELIVER

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## **COMPILED BY: ECONOMIC ANALYSIS**

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## KEY FINDINGS

- For Provincial Treasury to use a specific measurement of income inequality it is required that it must be updated annually and also available on local municipal level.
- The Gini-coefficient, the share of income of the poorest/bottom 40 per cent of households and the Palma ratio measurement of income inequality satisfies the two requirements raised above.
- Between 1996 and 2014, the Gini-coefficient in South Africa increased from 0.63 to 0.64, whereas the Gini-coefficient in Mpumalanga increased from 0.59 to 0.61.
- In 2014, Mpumalanga recorded the joint third lowest/best Gini-coefficient of 0.61 with Gauteng (0.65) registering the highest/worst level and Limpopo, jointly with Northern Cape, recording the lowest level of 0.60.
- In 2014, Ehlanzeni's Gini-coefficient was the highest at 0.62 with Gert Sibande and Nkangala recording a slightly less unequal income distribution of 0.61 each. All three districts experienced deterioration in income distribution between 1996 and 2014.
- In 2014, the Gini-coefficient in Dr JS Moroka (0.53) was the lowest and in Govan Mbeki (0.62) it was the highest. With the exception of Victor Khanye, all the local municipal areas experienced deterioration in income distribution between 1996 and 2014.
- Over the 18-year period, the income share of the bottom 40 per cent of households in South Africa and Mpumalanga declined to 6.6 per cent and 7.6 per cent, respectively.
- In 2014, Mpumalanga recorded the fourth lowest/worst income share of the bottom 40 per cent of households, Limpopo (8.8 per cent) the highest/best and Gauteng (5.4 per cent) the lowest.
- In 2014, the income share of the bottom 40 per cent of households in Nkangala (7.3 per cent) was the lowest/worst and that of Ehlanzeni (7.9 per cent) the highest. All three districts experienced deterioration in this indicator over the 18-year period.
- In 2014, Dr JS Moroka (11.4 per cent) recorded the highest/best income share of the bottom 40 per cent of households and Govan Mbeki (6.3 per cent) the lowest. This indicator deteriorated between 1996 and 2014 in all local municipal areas.
- Over the 18-year period, the Palma ratio in South Africa and Mpumalanga increased/deteriorated to 7.90 and 6.46, respectively. Therefore, for every R1 that the bottom 40 per cent of households earned in Mpumalanga, the top 10 per cent of households earned R6.46 in 2014.
- Among the nine provinces, Mpumalanga's Palma ratio was the sixth lowest with Limpopo (5.74) claiming the lowest/best and Gauteng (9.54) the highest/worst.
- In 2014, the Palma ratio in Nkangala (6.59) was the largest and in Ehlanzeni (6.31) it was the lowest.
- In 2014, the Palma ratio in Dr JS Moroka (3.73) was the lowest/best and in Govan Mbeki (7.32) it was the highest.

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## **1. INTRODUCTION**

Inequality has two important meanings. Firstly, inequality is closely linked to the notion of social exclusion in that unequal power relations may be linked to differential access to political or socio-economic rights. Inequality in this sense can't be directly measured. Inequality can also refer to the extent to which income is distributed in an uneven manner among a population. Unlike the sociological logic, income inequality can be directly measured. It is also in itself an important dimension of welfare in a group or region. It is often associated with the idea of income fairness and it is generally considered unfair if the rich have a disproportionately larger portion of a region's income compared to their population.

The purpose of the report is to provide an analysis of income inequality measures and to sketch an income inequality profile of Mpumalanga from 1996 to 2014. Data on income inequality measurements was mainly sourced from IHS Global Insight.

## **2. MEASUREMENT OF INCOME INEQUALITY**

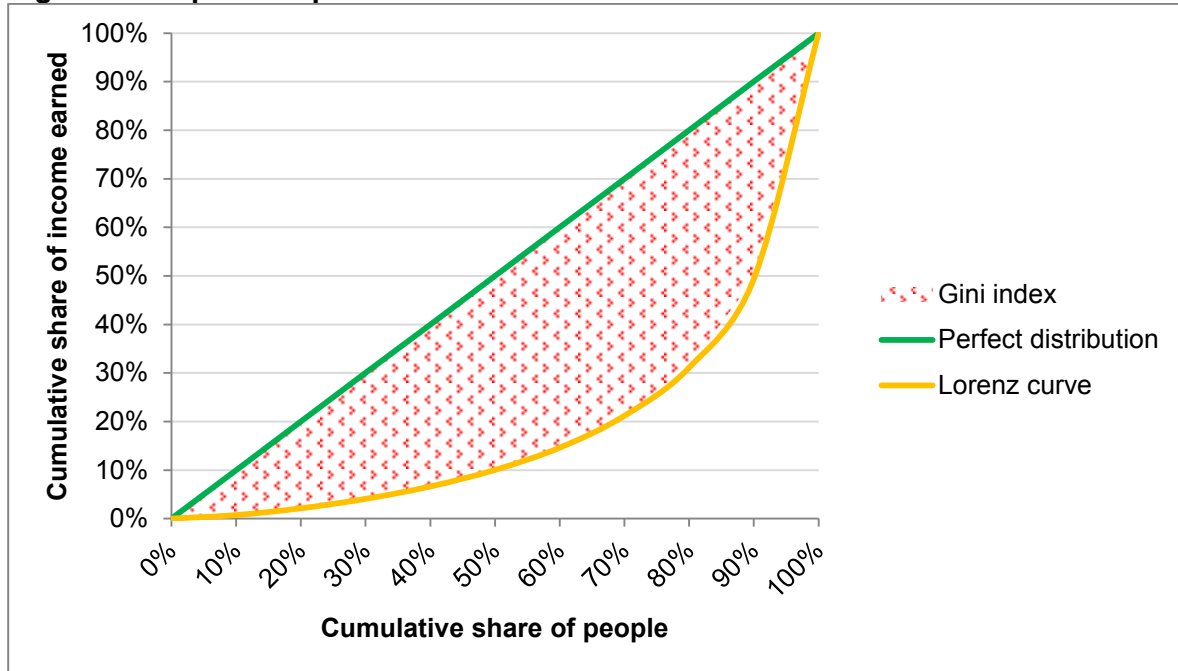
The following are some indicators that can be applied to measure the level of income inequality in a region. It is possible that different measures will rank the same set of distributions in different ways, because of their differing sensitivity to incomes in different parts of the distribution. The list is not exhaustive but rather collates the various measures of income inequality used in South Africa or that would be applicable to South Africa. Two decisive requirements of an income inequality measure for use by the Mpumalanga Provincial Treasury are that it must be available on an annual basis and available from the national level down to the local municipal level.

### **2.1 Gini-coefficient**

The Gini-coefficient is the most commonly used measure of inequality. The Gini-coefficient measures how much the distribution of income, or consumption expenditure, among individuals or households deviates from a perfectly equal distribution. Graphically, the Gini-coefficient can be easily represented by the area between the Lorenz curve and the line of perfect equality. The Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household.

The Gini-coefficient varies from 0 (in the case of perfect equality where all households earn equal income) to 1 (in the case where one household earns all the income). Figure 1 is a graphical representation of the perfect income distribution, an imperfect distribution as displayed by the Lorenz curve and the area which is used to calculate the Gini-coefficient.

**Figure 1: Graphical representation of a Gini-coefficient**



**Source: Own calculations**

A major advantage of the Gini-coefficient is that it is a measure of inequality by means of a ratio analysis that includes, and therefore represents, the total population and not just a part of the population. It may, however, be difficult to compare income distributions among countries because the benefit system may differ. For example, some countries give benefits in the form of social assistance grants (which may be counted as income) while others give food stamps, which may not be counted as income and therefore not taken into account in the Gini-coefficient of that country.

## **2.2 Share of income of the poorest 40 per cent of households**

A disadvantage of the Gini-coefficient is that it varies when the distribution varies, no matter if the change occurs at the top or at the bottom or in the middle. Any transfer of income between two individuals has an impact on the indices, irrespective of whether it takes place among the rich, among the poor or between the rich and the poor.

If a society is most concerned about the share of income of the people at the bottom, a better indicator may be a direct measure, such as the share of income that goes to the poorest 40 per cent. Such a measure would not vary, for example, with changes in tax rates resulting in less disposable income for the top 20 per cent at the advantage of the middle class rather than the poor. The National Development Plan (NDP) targets that the bottom 40 per cent of households in South Africa must earn at least 10 per cent of total income by 2030.

### **2.3 Palma ratio**

The Palma ratio (a particular decile dispersion ratio) is defined as the ratio of the top/richest 10 per cent of the population's share of gross national income divided by the bottom/poorest 40 per cent's share. It is based on the work of Chilean economist Gabriel Palma who found that middle class incomes almost always represent about half of gross national income while the other half is split between the top 10 per cent and the bottom 40 per cent, but the share of those two groups varies considerably across countries. This ratio is readily interpretable, by expressing the income of the rich as multiples of that of the poor.

The Palma ratio addresses the Gini-coefficient's over-sensitivity to changes in the middle of the distribution and insensitivity to changes at the top and bottom and therefore more accurately reflects income inequality's economic impacts on society as a whole. Palma has suggested that distributional politics pertains mainly to the struggle between the rich and poor, and who the middle classes side with.

### **2.4 Less common measurement tools**

The following indicators can be used to measure inequality and specifically income inequality. It is, however, not commonly used in South Africa and will only be discussed shortly and not analysed in the following section.

#### *Theil index*

While less commonly used than the Gini-coefficient, the Theil index of inequality has the advantage of being additive across different subgroups or regions in the country. The Theil index, however, does not have a straightforward representation and lacks the appealing interpretation of the Gini-coefficient.

#### *Robin Hood index*

The Robin Hood index (or Pietra ratio) is related to the Lorenz curve and the Gini-coefficient. This measure is equivalent to the maximum vertical distance between the Lorenz curve and the line of perfect equality. It is called the Robin Hood index because it can be interpreted as the portion of total income that would need to be transferred from those above the mean to those below the mean in order to achieve perfect equality. As such, a higher value indicates a more unequal society, wherein a larger share of income needs to be distributed to achieve equality.

#### *Atkinson index*

Atkinson values can be used to calculate the proportion of total income that would be required to achieve an equal level of social welfare if incomes were perfectly distributed.

For example, an Atkinson index value of 0.20 suggests that a region could achieve the same level of social welfare with only 80 per cent (1 minus 0.20) of income. The value of the Atkinson index can vary between 0 and 1. A lower Atkinson value represents an income distribution that is more equal. This measure also incorporates a sensitivity parameter which can range from 0 to infinity. As the sensitivity index approaches higher values, the Atkinson index becomes more sensitive to changes at the lowest income groups. As the sensitivity index approaches 0, the Atkinson index becomes more sensitive to changes in the income position of the higher income groups in a distribution.

#### *Coefficient of variation*

This measure of income inequality is calculated by dividing the standard deviation of the income distribution by its mean. More equal income distributions will have smaller standard deviations and the coefficient of variation will be smaller in more equal societies. Despite being one of the simplest measures of inequality, use of it has been fairly limited in research on income inequality. This may be attributed to the fact that it does not have an upper bound, making interpretation and comparison somewhat difficult. Low and high income values can also exceedingly influence the coefficient of variation and it would therefore not be an appropriate measure if the data did not approach a normal distribution.

#### *Generalised entropy index*

The theoretical range of Generalised entropy values is between 0 and infinity, with 0 being a state of equal distribution and values greater than 0 representing increasing levels of inequality. A beneficial property of the Generalised entropy measure is that it is decomposable, that is, it can be broken down to component parts such as population subgroups. This index is closely related to the Theil-index.

#### *Sen poverty measure*

Nobel Prize laureate Amartya Sen has developed an interesting measure that incorporates the Gini-coefficient for people living below the poverty line along with the headcount ratio of poverty and the average income of those below the poverty line. This measure has not been utilised in the study of income inequality, however, given the renewed worldwide interest in inequality, the Sen poverty measure may yet make a meaningful contribution.

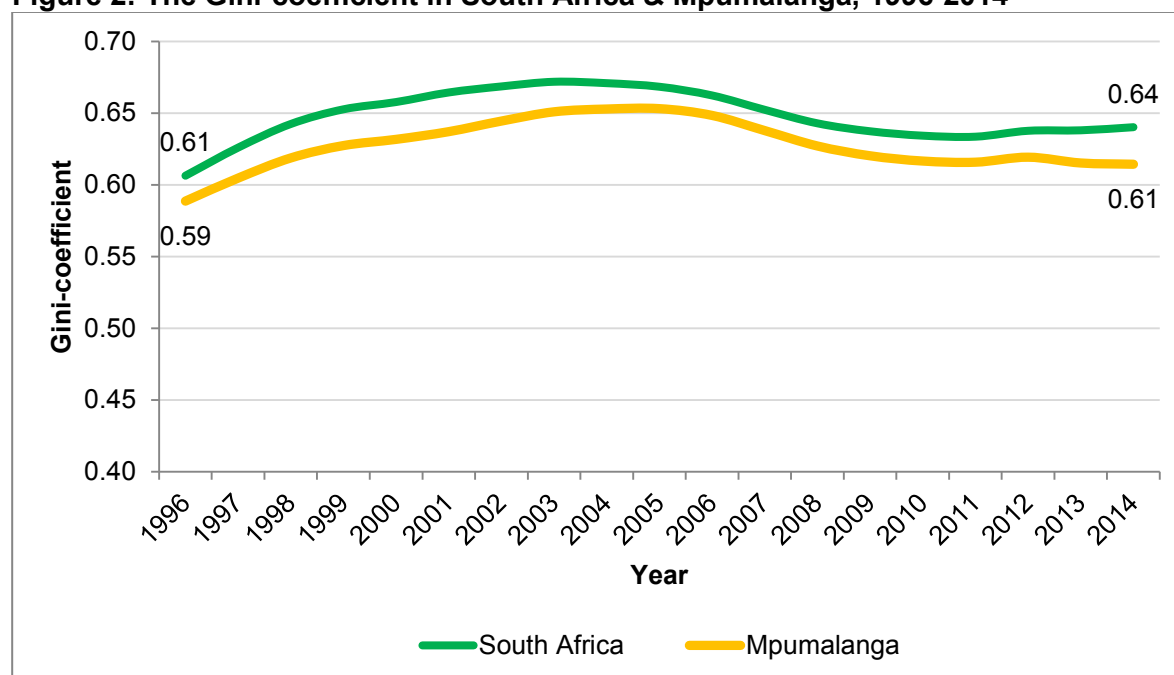
### **3. ANALYSIS OF THE GINI-COEFFICIENT IN MPUMALANGA**

The Gini-coefficient in South Africa increased from 0.63 in 1996 to 0.64 in 2014. Similarly, the Gini-coefficient in Mpumalanga increased from 0.59 in 1996 to 0.61 in 2014. The income distribution, in South Africa and Mpumalanga, was therefore marginally more unequal in 1996 than in 2014. Between 1996 and 2014, the Gini-coefficient in Mpumalanga was consistently lower than in South Africa. South Africa's Gini-coefficient



was the highest/worst in 2003 at 0.67, whereas Mpumalanga's income distribution was the most unequal in 2005 with a Gini-coefficient of 0.65. Although, the South African coefficient improved considerably since 2003, it is evident from Figure 2 that it has worsened/increased again somewhat since 2012. Figure 2 depicts the changing Gini-coefficient in South Africa and Mpumalanga between 1996 and 2014.

**Figure 2: The Gini-coefficient in South Africa & Mpumalanga, 1996-2014**



**Source: IHS Global Insight – ReX, June 2015**

In 2014, Mpumalanga (0.61) recorded the joint third lowest/best Gini-coefficient among the provinces with Gauteng (0.65) registering the most unequal income distribution and Limpopo and Northern Cape, jointly, recording the lowest/best Gini-coefficient of 0.60. Mpumalanga improved its ranking from the joint fifth lowest/best Gini-coefficient in 1996. Not once during the 18-year period did Mpumalanga register the most unequal income distribution (or highest Gini-coefficient) among the nine provinces. Table 1 displays the fluctuating Gini-coefficients among the nine provinces between 1996 and 2014.

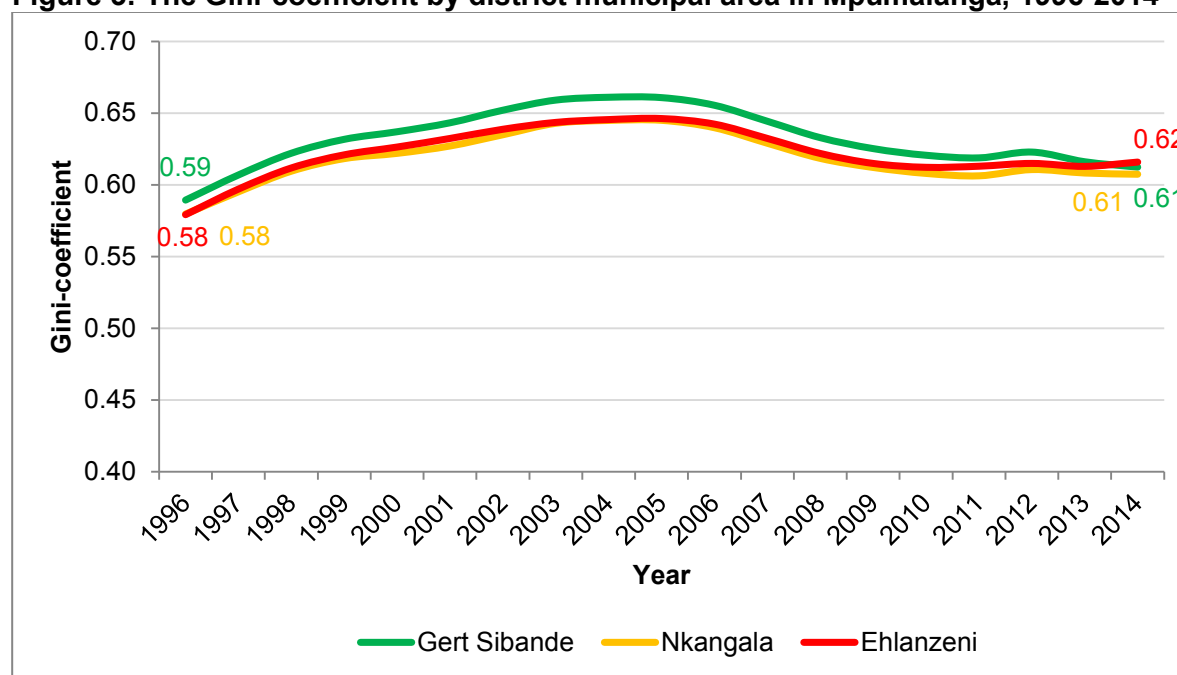
**Table 1: The Gini-coefficient by province, 1996-2014**

Province	1996	1999	2004	2009	2014
Western Cape	0.56	0.60	0.62	0.59	0.61
Eastern Cape	0.60	0.64	0.66	0.62	0.62
Northern Cape	0.58	0.62	0.64	0.59	0.60
Free State	0.58	0.63	0.65	0.61	0.61
KwaZulu-Natal	0.60	0.64	0.66	0.63	0.63
North-West	0.57	0.61	0.64	0.60	0.61
Gauteng	0.59	0.64	0.67	0.64	0.65
Mpumalanga	0.59	0.63	0.65	0.62	0.61
Limpopo	0.59	0.63	0.64	0.60	0.60
Total	0.61	0.65	0.67	0.64	0.64

**Source: IHS Global Insight – ReX, June 2015**

Among the three districts in 2014, the Gini-coefficient was the highest in Ehlanzeni (0.62) and jointly the lowest in Gert Sibande and Nkangala (0.61). Figure 3 depicts the varying Gini-coefficients of the three districts between 1996 and 2014. For the majority of the 18-year period, Gert Sibande recorded the most unequal income distribution with Ehlanzeni surpassing Gert Sibande only in 2014.

**Figure 3: The Gini-coefficient by district municipal area in Mpumalanga, 1996-2014**



Source: IHS Global Insight – ReX, June 2015

**Table 2: The Gini-coefficient by local municipal area in Mpumalanga, 1996-2014**

Local municipal area	1996	1999	2004	2009	2014
Dr JS Moroka	0.52	0.57	0.58	0.53	0.53
Thembisile Hani	0.51	0.56	0.58	0.52	0.55
Bushbuckridge	0.55	0.59	0.60	0.55	0.57
Emakhazeni	0.51	0.56	0.61	0.58	0.57
Dipaleseng	0.54	0.58	0.63	0.58	0.58
Nkomazi	0.56	0.60	0.62	0.58	0.58
Lekwa	0.56	0.60	0.63	0.60	0.58
Steve Tshwete	0.55	0.60	0.63	0.60	0.58
Msukaligwa	0.55	0.60	0.64	0.60	0.59
Chief Albert Luthuli	0.55	0.60	0.63	0.57	0.59
Umjindi	0.55	0.59	0.63	0.60	0.59
Victor Khanye	0.59	0.62	0.64	0.61	0.59
Mkhondo	0.57	0.61	0.63	0.59	0.59
Emalahleni	0.54	0.59	0.64	0.61	0.60
Thaba Chweu	0.54	0.59	0.64	0.61	0.61
Dr Pixley Ka Isaka Seme	0.59	0.62	0.66	0.62	0.61
Govan Mbeki	0.59	0.64	0.67	0.63	0.62
Mbombela	0.59	0.63	0.65	0.63	0.62

Source: IHS Global Insight – ReX, June 2015

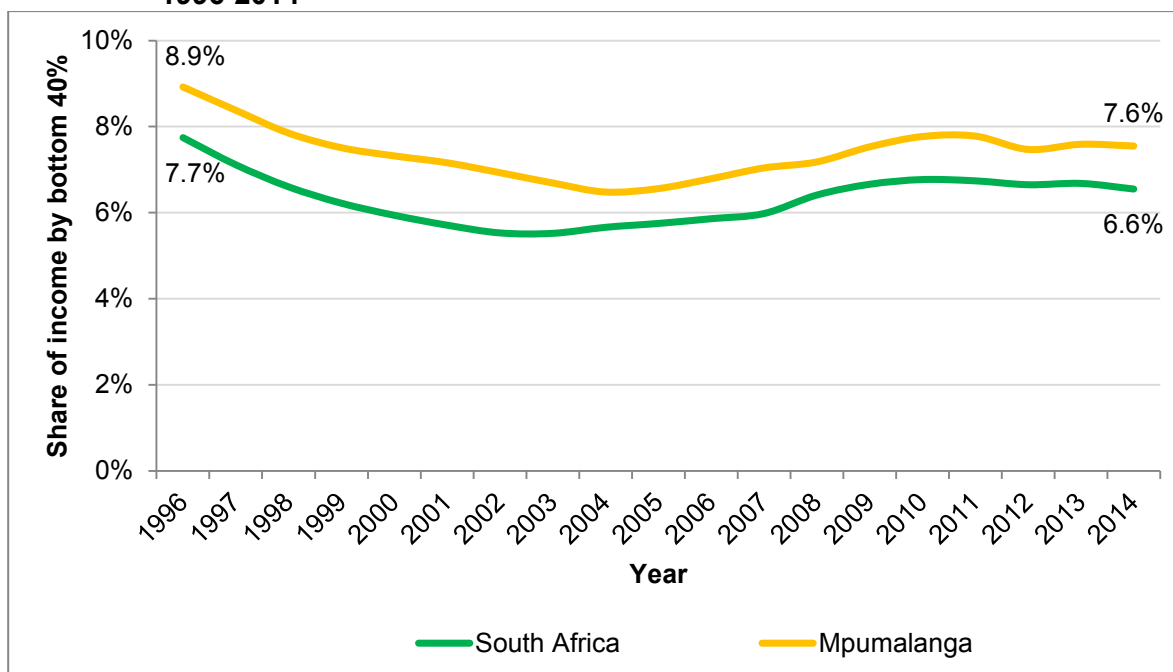
Table 2 depicts the changing Gini-coefficients in the 18 local municipal areas between

1996 and 2014. Among the 18 local municipal areas in 2014, Dr JS Moroka (0.53) registered the lowest/best Gini-coefficient and Govan Mbeki jointly with Mbombela the highest/worst at 0.62. With the exception of Victor Khanye, the income inequality deteriorated in all the municipal areas over the 18-year period under review. Emalahleni and Thaba Chweu registered the highest deterioration in income distribution between 1996 and 2014.

#### 4. ANALYSIS OF THE SHARE OF INCOME OF THE BOTTOM 40 PER CENT OF HOUSEHOLDS IN MPUMALANGA

According to this indicator of income inequality, the share of the bottom 40 per cent in South Africa declined/worsened from 7.7 per cent in 1996 to 6.6 per cent in 2014. Likewise between 1996 and 2014, the share of the bottom 40 per cent in Mpumalanga declined from 8.9 per cent to 7.6 per cent. The bottom 40 per cent in South Africa and Mpumalanga, respectively reached its lowest/worst shares in 2002 and 2004. Both shares improved since then, however, it stagnated since 2009 and largely drifted sideways and even declined slightly between 2013 and 2014. Figure 4 depicts the changing income shares of the bottom 40 per cent in South Africa and Mpumalanga between 1996 and 2014.

**Figure 4: The share of income by the bottom 40% in South Africa & Mpumalanga, 1996-2014**



**Source: IHS Global Insight – ReX, June 2015**

Among the provinces in 2014, Mpumalanga (7.6 per cent) recorded the fourth lowest/worst share of income by the bottom 40 per cent of households poverty rate with Limpopo (8.8 per cent) registering the highest/best share and Gauteng (5.4 per cent), the lowest

share. In 2014, the share of the bottom 40 per cent in Mpumalanga was 1.3 percentage points lower than in 1996, the joint fourth smallest decline among the provinces. Between 1996 and 2014, Western Cape's share of the bottom 40 per cent declined by 3.2 percentage points, which was the largest deterioration in income distribution among the nine provinces. Limpopo and Eastern Cape (0.9 percentage points), jointly, registered the smallest decline over the period under review. Table 4 displays the changing income shares of the bottom 40 per cent of households in the nine provinces between 1996 and 2014.

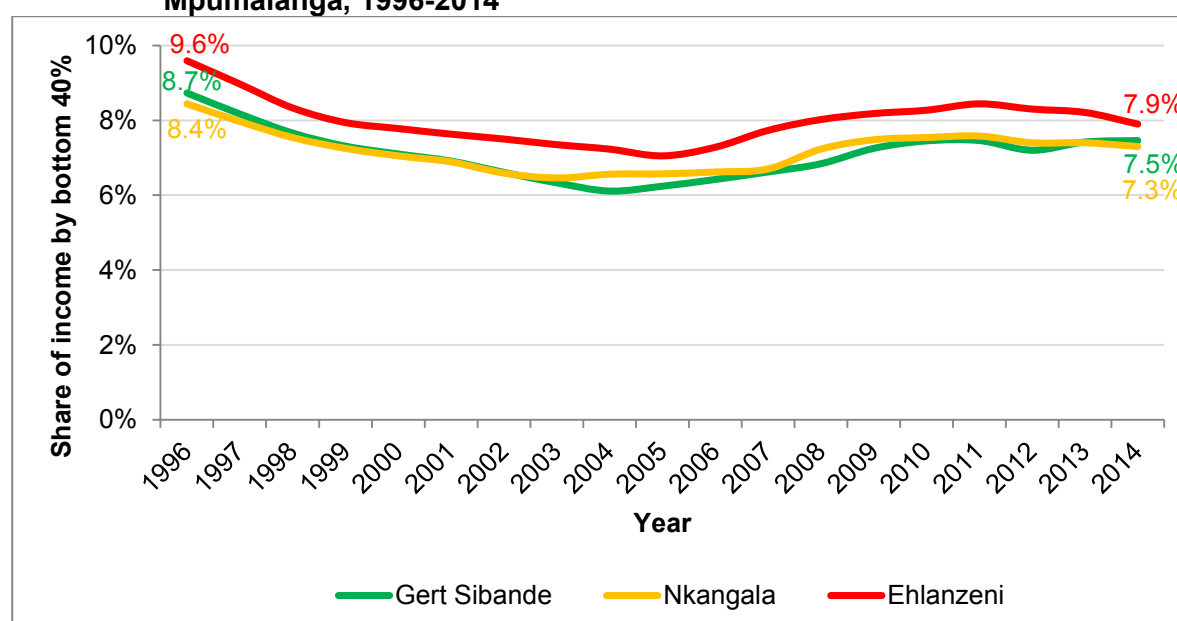
**Table 3: The share of income by the bottom 40% by province, 1996-2014**

Province	1996	1999	2004	2009	2014
Western Cape	9.6%	7.6%	6.5%	7.1%	6.4%
Eastern Cape	8.9%	7.2%	6.7%	8.1%	8.0%
Northern Cape	9.4%	7.8%	6.5%	8.0%	7.9%
Free State	9.4%	7.6%	6.4%	7.9%	8.1%
KwaZulu-Natal	8.1%	6.7%	5.9%	7.3%	7.1%
North-West	9.6%	7.9%	6.8%	8.1%	7.8%
Gauteng	8.0%	6.2%	5.0%	5.5%	5.4%
Mpumalanga	8.9%	7.5%	6.5%	7.5%	7.6%
Limpopo	9.7%	8.1%	7.4%	9.1%	8.8%

*Source: IHS Global Insight – ReX, June 2015*

Among the three districts in 2014, the bottom 40 per cent's share of income in Nkangala (7.3 per cent) was the lowest/worst and the highest in Ehlanzeni (7.9 per cent). Over the 18-year period under review, the share of income of the bottom 40 per cent of households declined in all three districts with Ehlanzeni recording the largest decline of 1.7 percentage points. Figure 5 depicts the changing income shares of the bottom 40 per cent in the three districts between 1996 and 2014.

**Figure 5: The share of income by the bottom 40% by district municipal area in Mpumalanga, 1996-2014**



*Source: IHS Global Insight – ReX, June 2015*

Among the 18 local municipal areas in 2014, the income share of the bottom 40 per cent in Dr JS Moroka (11.4 per cent) was the highest/best and that of Govan Mbeki (6.3 per cent), was the lowest/worst. Table 5 depicts the changing income shares of the bottom 40 per cent of households in the 18 local municipal areas between 1996 and 2014. Over the 18-year period under review, the income share of the bottom 40 per cent in Thaba Chweu deteriorated by 3.8 percentage points, which was the largest decline among the local municipal areas.

**Table 5: The share of income by the bottom 40% by local municipal area in Mpumalanga, 1996-2014**

Local municipal area	1996	1999	2004	2009	2014
Dr JS Moroka	11.5%	9.7%	9.0%	11.1%	11.4%
Thembisile Hani	11.4%	9.5%	9.1%	10.8%	10.2%
Bushbuckridge	11.7%	9.8%	8.3%	10.9%	10.1%
Nkomazi	11.3%	9.4%	8.4%	9.9%	9.7%
Chief Albert Luthuli	11.7%	9.4%	7.9%	9.8%	9.1%
Mkhondo	10.0%	8.4%	7.6%	8.9%	8.9%
Dipaleseng	11.5%	9.7%	7.4%	8.8%	8.8%
Emakhazeni	12.4%	10.3%	8.5%	8.8%	8.8%
Msukaligwa	9.7%	8.3%	6.9%	7.8%	8.4%
Lekwa	10.0%	8.4%	7.3%	8.0%	8.3%
Umjindi	10.5%	8.9%	7.7%	8.2%	8.2%
Dr Pixley Ka Isaka Seme	9.1%	7.8%	6.6%	7.7%	8.0%
Victor Khanye	8.9%	8.0%	7.2%	7.8%	8.0%
Thaba Chweu	11.6%	9.7%	7.7%	8.1%	7.8%
Steve Tshwete	8.6%	7.4%	6.2%	6.8%	7.1%
Mbombela	9.2%	7.9%	6.9%	7.3%	7.0%
Emalahleni	9.3%	7.6%	6.1%	6.8%	6.7%
Govan Mbeki	7.8%	6.3%	5.6%	6.0%	6.3%

**Source: IHS Global Insight – ReX, June 2015**

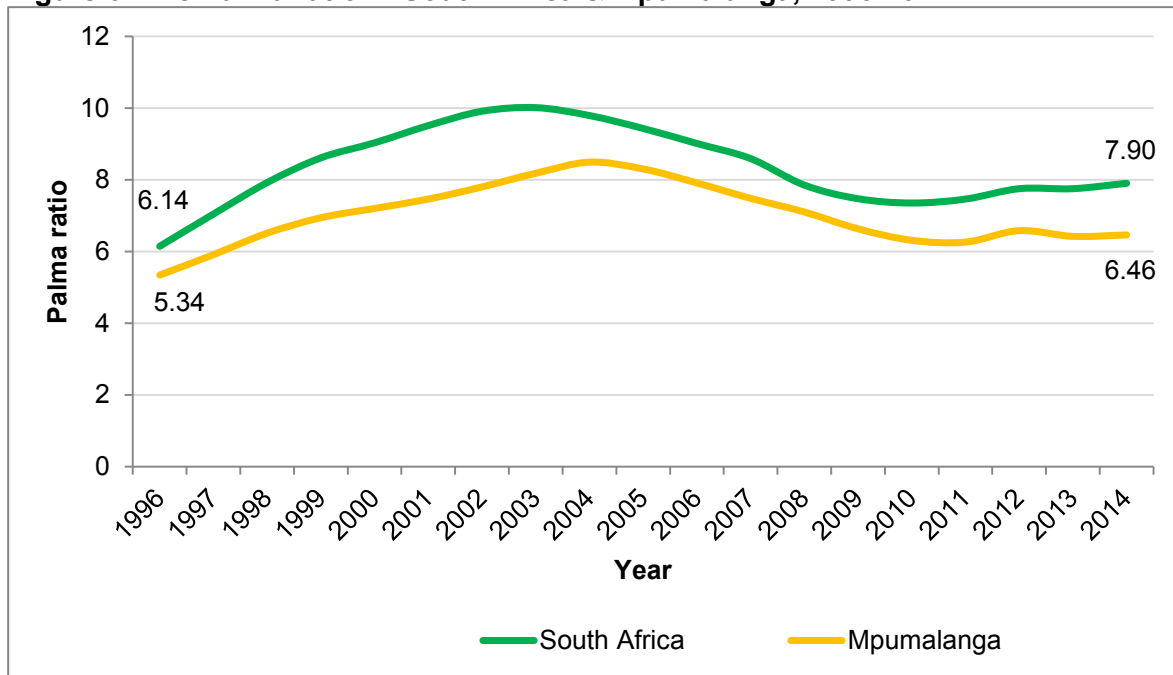
## 5. ANALYSIS OF THE PALMA RATIO IN MPUMALANGA

The Palma ratio in South Africa increased (deteriorated) from 6.14 in 1996 to 7.90 in 2014. Therefore, for every R1 that the bottom 40 per cent of households earned, the top 10 per cent of households earned R7.90 in 2014. Similarly, the Palma ratio in Mpumalanga deteriorated from 5.34 in 1996 to 6.46 in 2014. Over the 18-year period under review, the Palma ratio in South Africa was the highest/worst in 2003 (10.01), whereas in Mpumalanga it was the highest in 2004 (8.49). Although, the two ratios improved/declined considerably since then, it is evident from Figure 6 that it has increased/worsened again somewhat since 2010. Figure 6 depicts South Africa and Mpumalanga's changing Palma ratios between 1996 and 2014.

Among the nine provinces, Mpumalanga's Palma ratio was the sixth lowest with Limpopo (5.74) claiming the lowest/best and Gauteng (9.54) the highest. Among the nine provinces, Mpumalanga's Palma ratio registered the fourth smallest increase with Gauteng

recording the highest/worst increase and Limpopo the smallest over the 18-year period. Table 6 portrays the changing Palma ratios of the nine provinces between 1996 and 2014.

**Figure 6: The Palma ratio in South Africa & Mpumalanga, 1996-2014**



*Source: IHS Global Insight – ReX, June 2015*

**Table 6: The Palma ratio by province, 1996-2014**

Province	1996	1999	2004	2009	2014
Western Cape	4.40	6.71	7.09	6.20	7.42
Eastern Cape	5.63	7.56	8.44	6.37	6.31
Northern Cape	5.03	6.64	8.00	5.59	6.21
Free State	4.94	6.90	8.62	6.22	5.97
KwaZulu-Natal	5.83	7.87	9.37	6.78	7.32
North-West	4.94	6.38	7.79	6.02	6.37
Gauteng	5.52	7.88	10.08	8.88	9.54
Mpumalanga	5.34	6.94	8.49	6.63	6.46
Limpopo	5.15	6.65	7.48	5.53	5.74

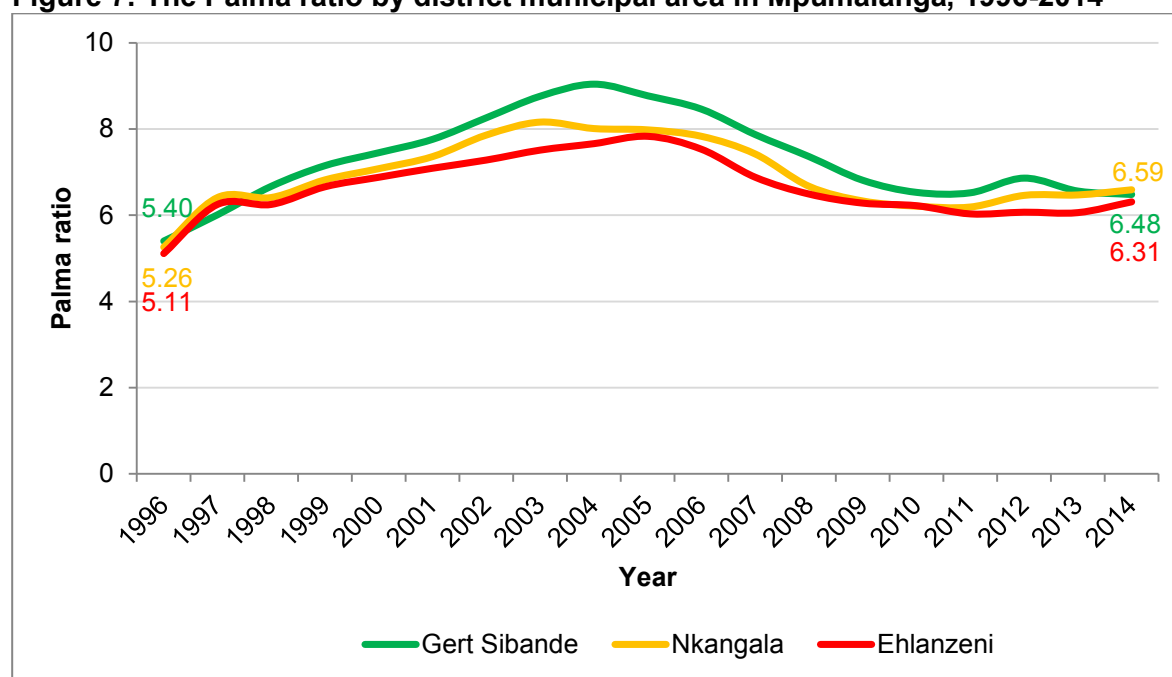
*Source: IHS Global Insight – ReX, June 2015*

In 2014 among the three districts, the Palma ratio in Nkangala (6.59) was the highest and in Ehlanzeni (6.31), it was the lowest. Figure 7 depicts the changing Palma ratio of the three districts between 1996 and 2014. Over the 18-year period under review, the Palma ratio increased in all three districts with Nkangala recording the largest increase/deterioration and Gert Sibande the smallest. Despite a fair improvement since 2003/2004, the Palma ratios of Nkangala and Ehlanzeni have increased/worsened again over the last two years.

Among the 18 local municipal areas in 2014, the Palma ratio of Dr JS Moroka (3.73) was the lowest/best and that of Govan Mbeki (7.32) the highest/worst. Therefore, for every R1 that the bottom 40 per cent of households earned in Dr JS Moroka and Govan Mbeki,

respectively, the top 10 per cent of households in Dr JS Moroka and Govan Mbeki earned R3.73 and R7.32. Table 7 depicts the changing Palma ratios of the 18 local municipal areas between 1996 and 2014. Over the 18-year period under review, the Palma ratio in Dr JS Moroka increased/worsened the least, whereas it increased the most in Emalahleni.

**Figure 7: The Palma ratio by district municipal area in Mpumalanga, 1996-2014**



Source: IHS Global Insight – ReX, June 2015

**Table 7: The Palma ratio by local municipal area in Mpumalanga, 1996-2014**

Local municipal area	1996	1999	2004	2009	2014
Dr JS Moroka	3.65	4.76	5.28	3.78	3.73
Thembisile Hani	3.59	4.69	5.12	3.80	4.35
Bushbuckridge	4.00	5.15	6.08	4.17	4.70
Emakhazeni	3.39	4.54	6.03	5.13	4.94
Nkomazi	4.22	5.43	6.30	4.86	5.00
Dipaleseng	3.88	4.93	6.98	5.22	5.09
Chief Albert Luthuli	4.02	5.48	6.88	4.85	5.31
Msukaligwa	4.46	5.84	7.64	5.96	5.32
Lekwa	4.31	5.75	7.03	5.69	5.38
Mkhondo	4.67	6.16	7.14	5.50	5.47
Umjindi	4.16	5.53	6.76	5.69	5.59
Victor Khanye	5.40	6.64	7.51	6.20	5.74
Steve Tshwete	4.61	6.14	7.72	6.69	6.08
Dr Pixley Ka Isaka Seme	5.29	6.80	8.56	6.73	6.10
Thaba Chweu	3.89	5.11	6.99	6.01	6.24
Emalahleni	4.11	5.87	8.06	6.70	6.84
Mbombela	5.23	6.71	8.06	6.86	7.11
Govan Mbeki	5.74	7.98	9.47	8.17	7.32

Source: IHS Global Insight – ReX, June 2015

## 6. CONCLUSION

Three indicators of income distribution are employed by Provincial Treasury as it satisfy the requirements of regular, annual updates and disaggregation down to local municipal level. For Provincial Treasury, the income share of the bottom 40 per cent of households is the most appropriate measure of income inequality as it describes a particularly relevant portion of income distribution and is principally easy to explain. The Palma ratio is also very descriptive and puts income distribution into perspective. The Gini-coefficient is widely used, relatively easy to calculate and comparable with other regions.

According to all three indicators, the income distribution in Mpumalanga was more unequal in 2014 than it was in 1996, however, it was slightly less unequally distributed in Mpumalanga than in South Africa. All three indicators portray that income inequality worsened up until 2003/2004 and then started to improve steadily. What is worrying from the analysis is that improvements halted around 2009/2010 and income inequality has drifted sideways and in some instances even turned more unequal again.

After the political transition of 1994, government social spending per person increased in real terms and also became much better targeted at the marginalised and disadvantaged. Fiscal redistribution through the social grant system has had some success in reducing income inequality as is observed in the improvement experienced since 2003/2004. However, fiscal and state capacity sets limits to such redistribution as grant spending already constitutes a high proportion of gross domestic product (GDP) and social grants need to compete with other public spending. The impact of grants as a tool to address income inequality has probably reached its limit as can be observed by the sideways drift in income inequality measurements over the last three of four years.

Without improved education outcomes, job creation, though crucial for poverty reduction, will do little to reduce overall income inequality. The low education and skill levels of those that are currently unemployed would not assure them of high labour market earnings. Consequently, even if they were employed, it would probably be at low wages, thus leaving aggregate income inequality high. Without improvements in education and skill levels, direct interventions to artificially change labour market outcomes also hold little prospect of improving income distribution and may reduce the efficient functioning of the labour market. Considerable improvements in education and skills is necessary to remove the premium for skilled labour most effectively and thus improve the distribution of income and economic inclusion.