

KZN Economic Estimates for 2016



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Management and Economic Services
KZN Provincial Treasury**

South Africa

	2014	2014 Initial	2014 Adjusted	2015 Initial	2015 Adjusted	2016 Initial	2016 Adjusted
Outlook (%)	2014	2014 Initial	2014 Adjusted	2015 Initial	2015 Adjusted	2016 Initial	2016 Adjusted
Potential Growth							
Rate	3.5	3.5	3.5	3.5	3.5	3.5	3.5
World Bank	1.52	3.2	2.7	3.4	1.3	1.4	
IMF	1.52	2.8	2.3	2.7	2.0	1.5	0.7
Treasury	1.52	2.7	2.5	2.5	2.0		
SARB	1.52	3.0	2.6	3.1	2.2	2.9	2.4
FNB	1.52	2.7		3.2	1.4	1.2	
Old Mutual	1.52	2.7	2.5		2.5		
Standard Bank	1.52	2.7	2.2				
Capital Economics	1.52	2.3	2.3	2.5			
Trade Economics	1.52	2.0	2.0	2.5			
Investec	1.52	2.2	2.2	2.6	2.0	2.4	
Nedbank	1.52		2.6	2.9	1.5	0.2	
HSBC	1.52			2.0	1.6	2.2	1.9
Sub-Saharan	4.9	5.4	5.4	5.5	4.5	4.3	4.0
World	3.0	3.6		3.9	3.1	3.6	3.4
Developing		5.0	5.0	4.6	4.0	4.3	
Developed		1.9	1.9	1.8	1.9	2.1	

Spatial Dominance



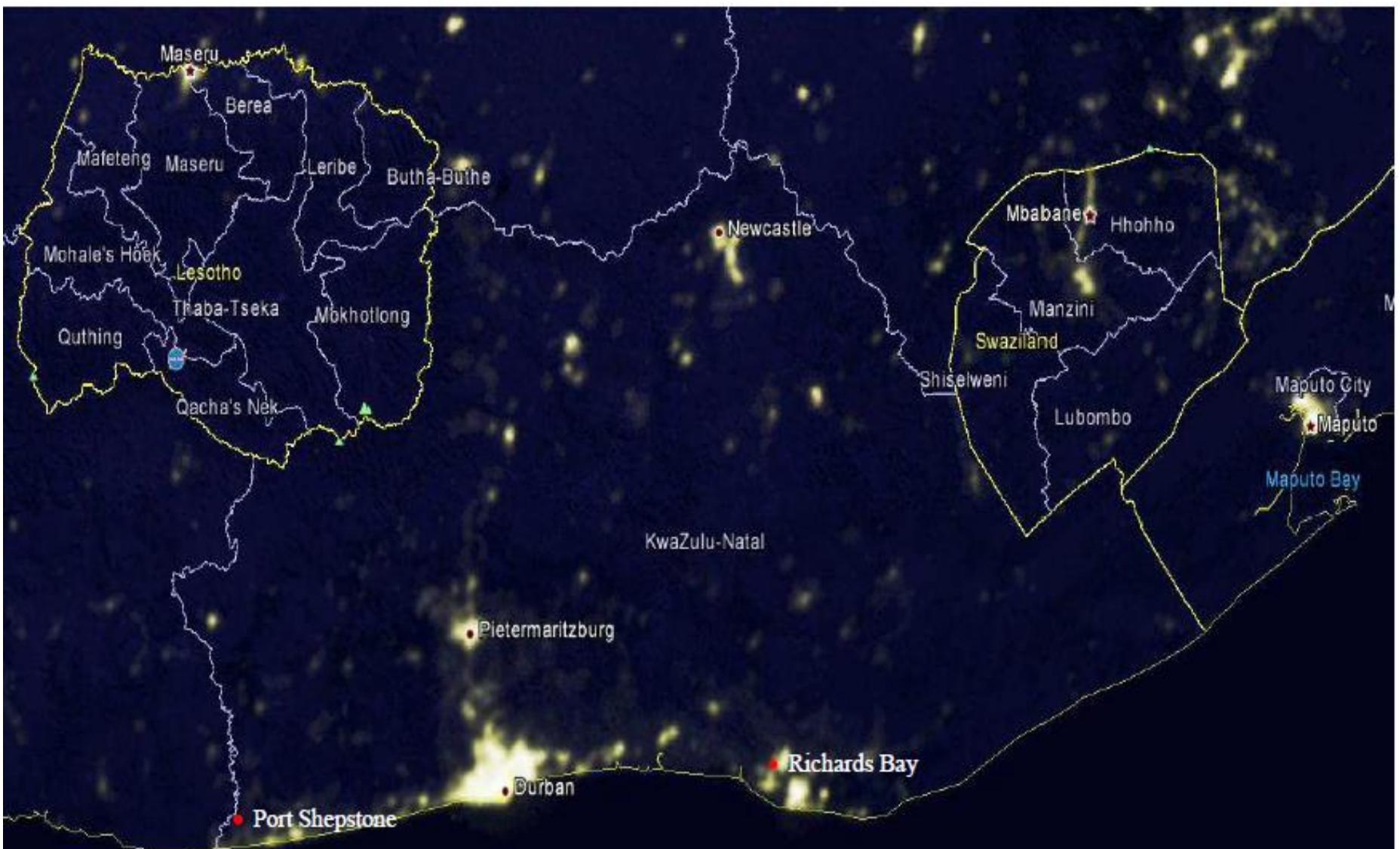
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

© 2012 Cnes/Spot Image

30°05'24.60" S 26°10'45.77" E elev 1448 m

Google™ earth

Eye alt 1540.79 km



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2012 Cnes/Spot Image
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28°29'36.41"S 30°47'42.28"E elev 1309 m

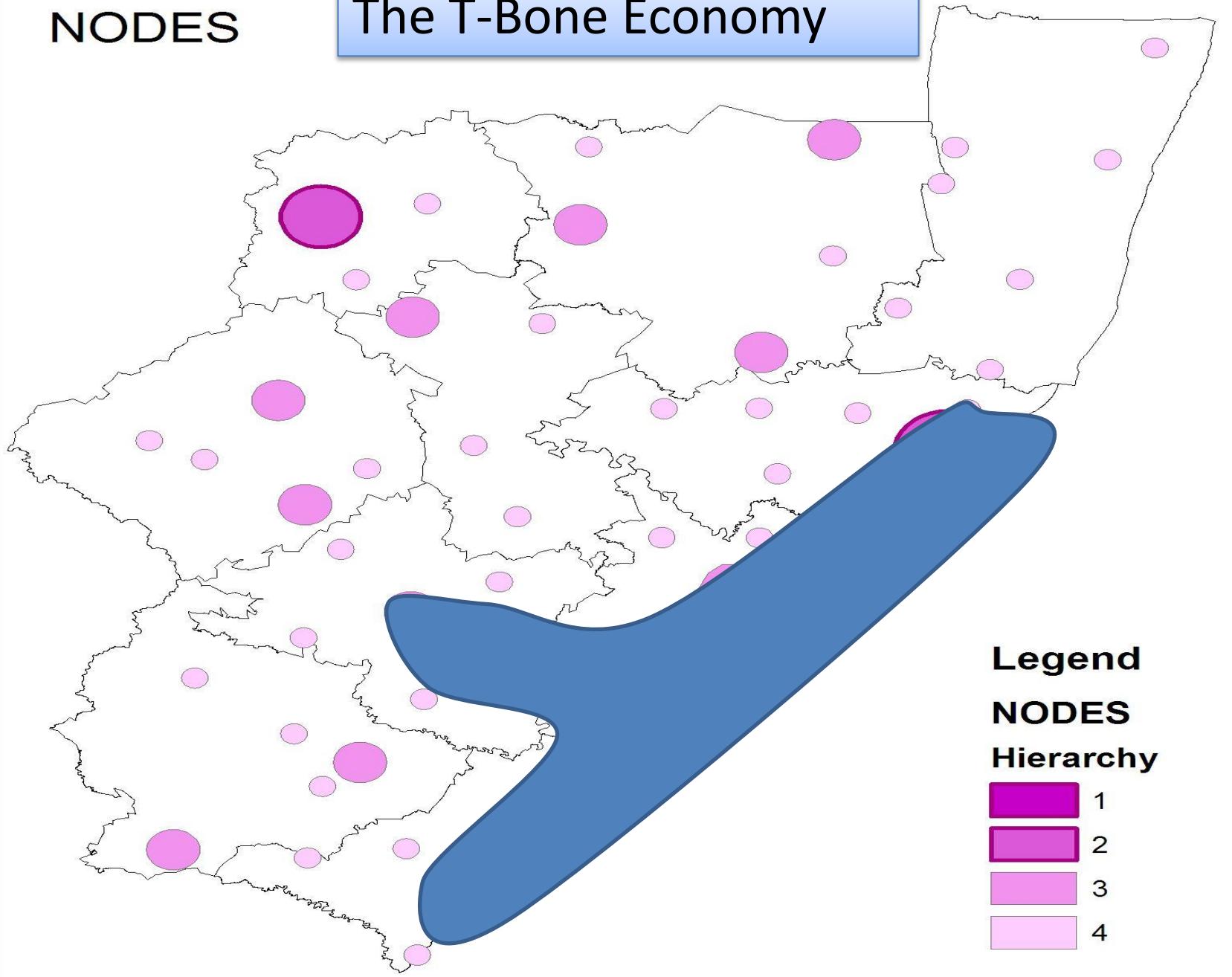
Google earth

Eye alt. 643.44 km

Total Space Expansion 2002 to 2013 Urban vs Rural	Urban Space Expansion, <i>m²</i>	Rural Space Expansion, <i>m²</i>	Total Provincial Space Expansion, <i>m²</i>	Urban (As a % of Total Space)	Rural (As a % of Total Space)
Dwellings less than 80m ²	1 212 559	3 550 973	4 763 532	25.46	74.54
Dwellings equal and more than 80m ²	3 075 741	1 796 221	4 871 962	63.13	36.87
Flats	882 761	461 692	1 344 453	65.66	34.34
Townhouses	1 923 880	719 808	2 643 688	72.77	27.23
Other residential buildings	467 360	137 653	605 013	77.25	22.75
Schools, nursery schools, crèches, hospitals	128 787	53 757	182 544	70.55	29.45
Churches, Sport and Recreation	193 641	50 079	243 720	79.45	20.55
Office & Banking Space	1 152 174	138 884	1 291 058	89.24	10.76
Shopping Space	2 441 235	666 340	3 107 575	78.56	21.44
Industrial & Warehouse Space	2 115 742	548 888	2 664 630	79.40	20.60

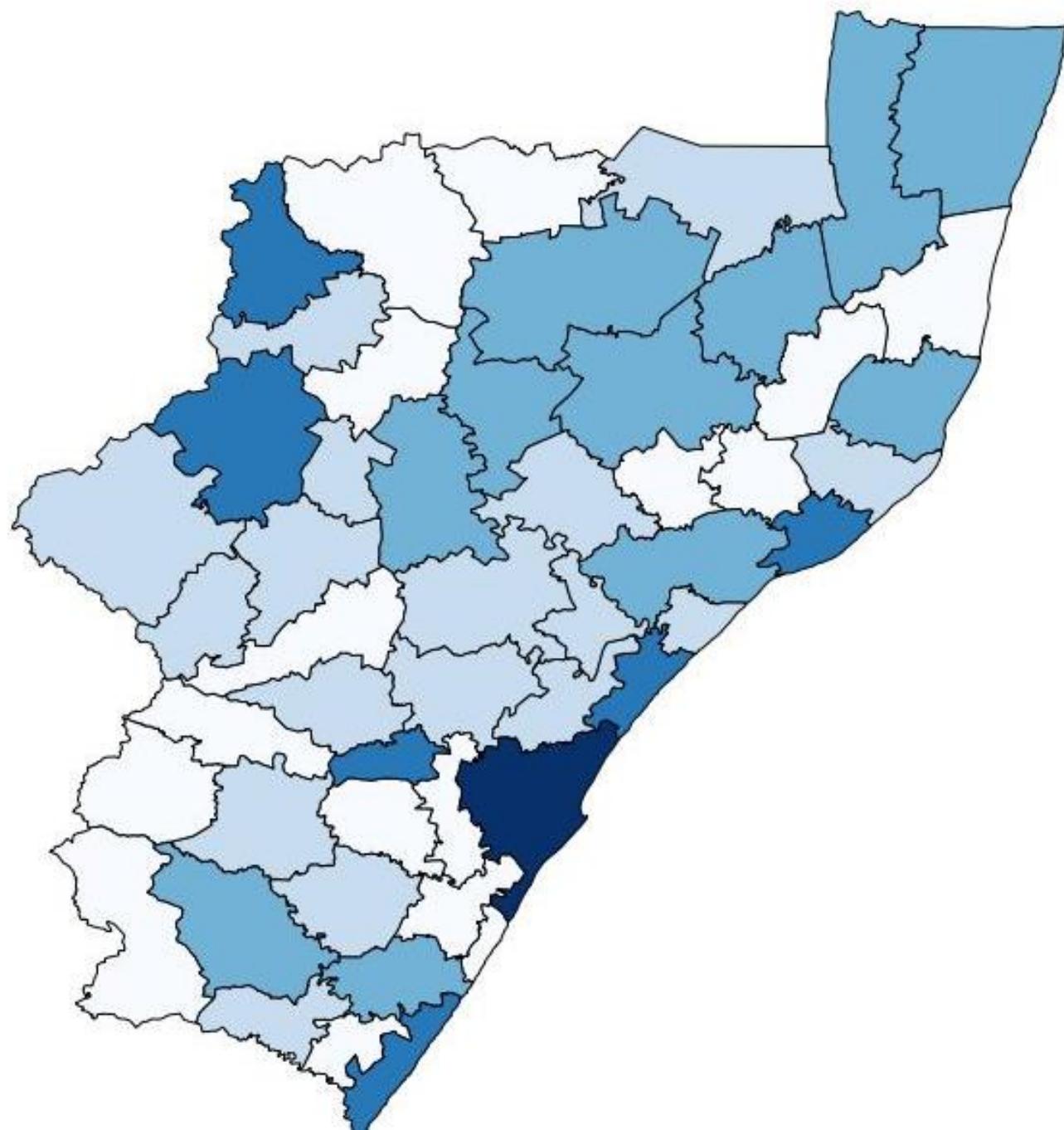
NODES

The T-Bone Economy

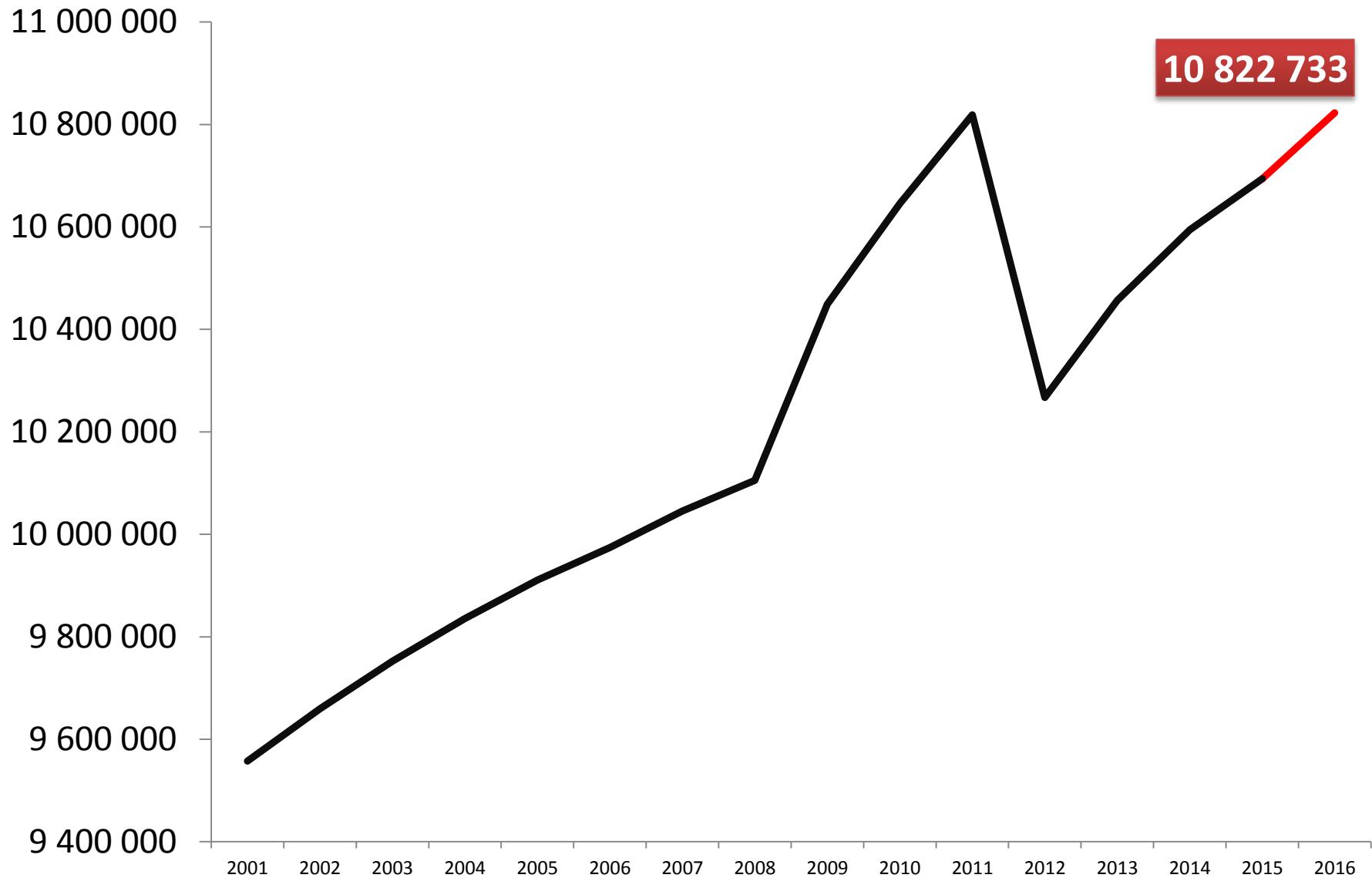


Population

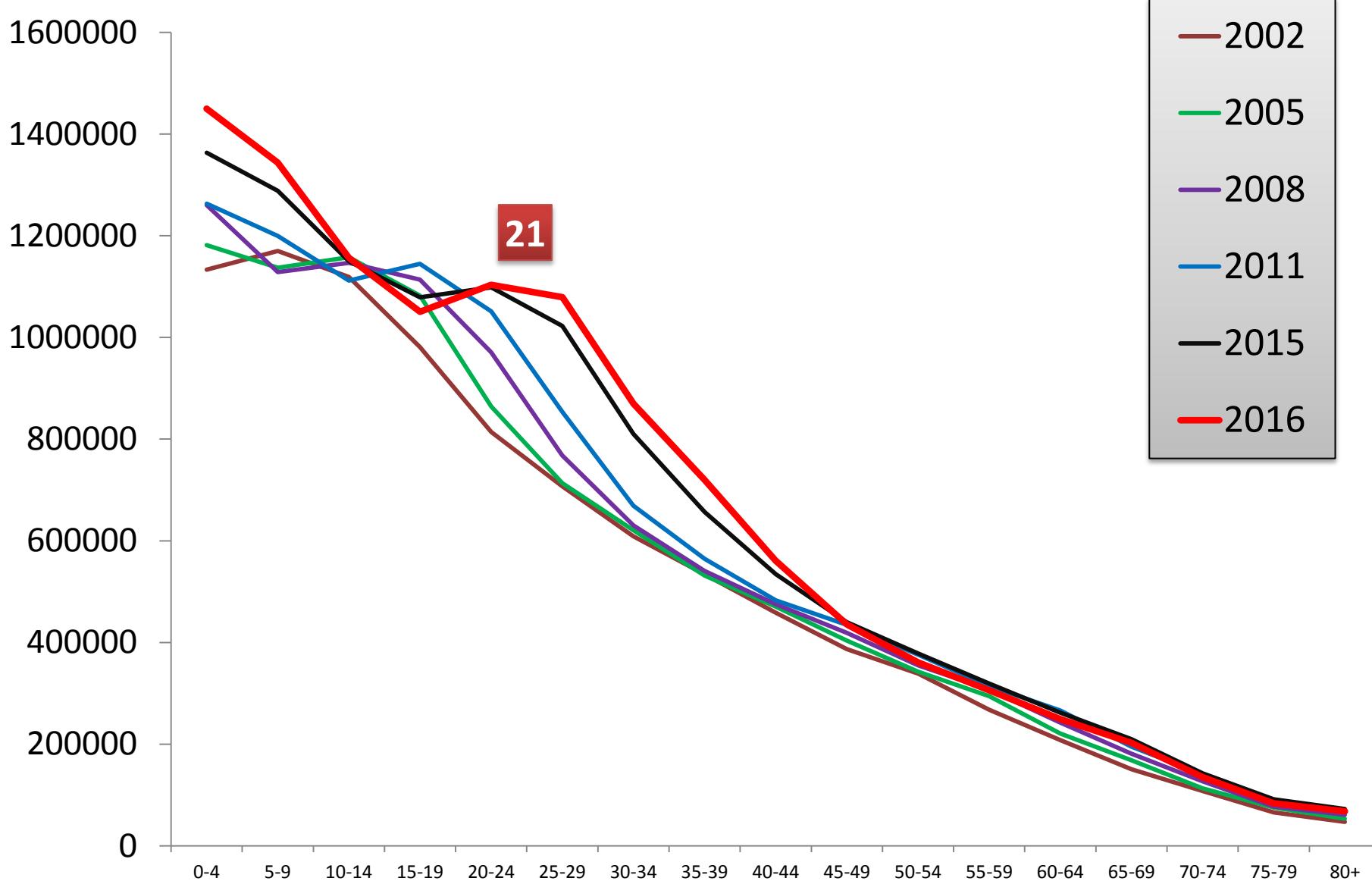
Population
Distribution in
KZN
Darker Shaded
= bigger
population



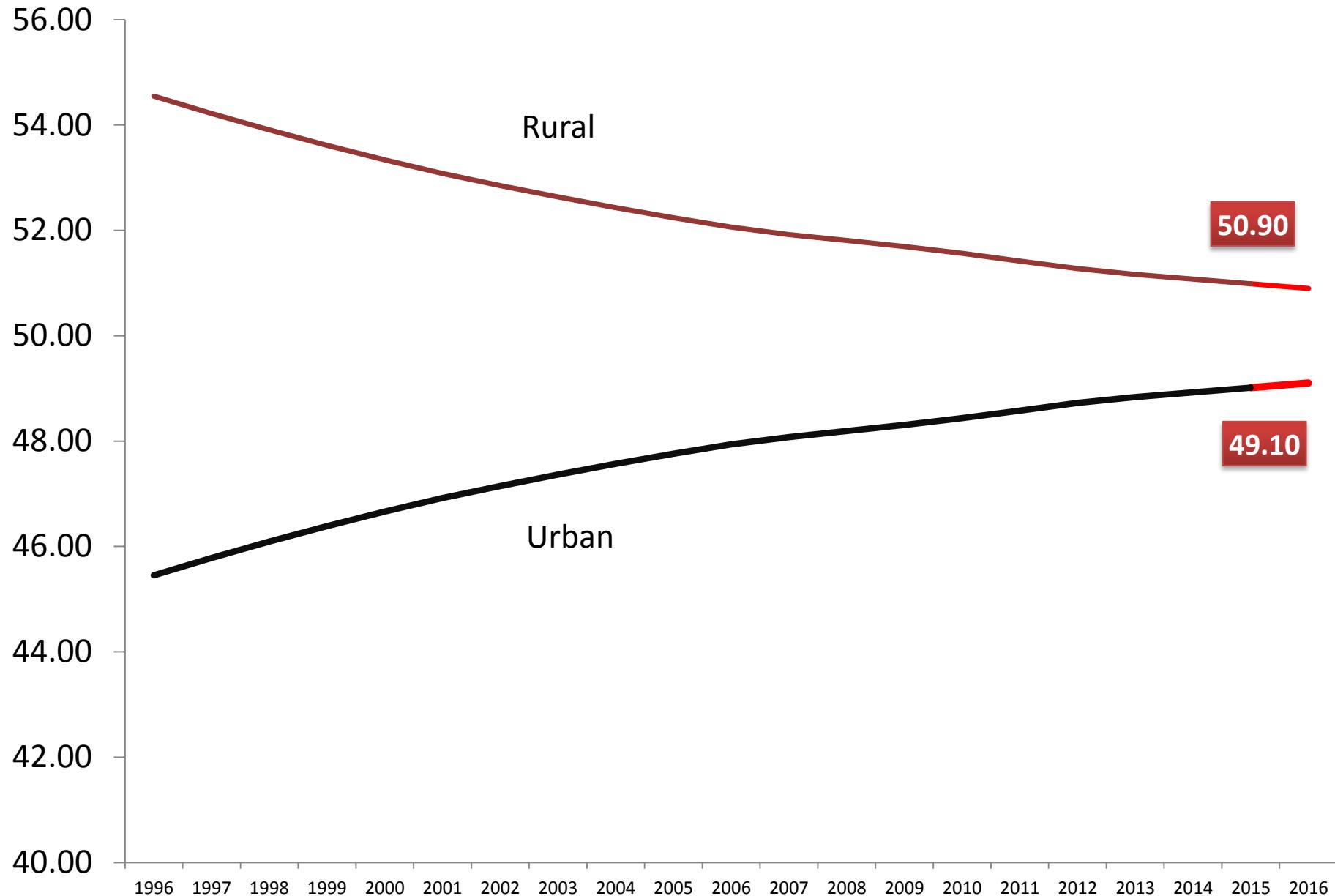
KZN Outlook (Population)



Aging Population (Total Population per Age Cohort per year)

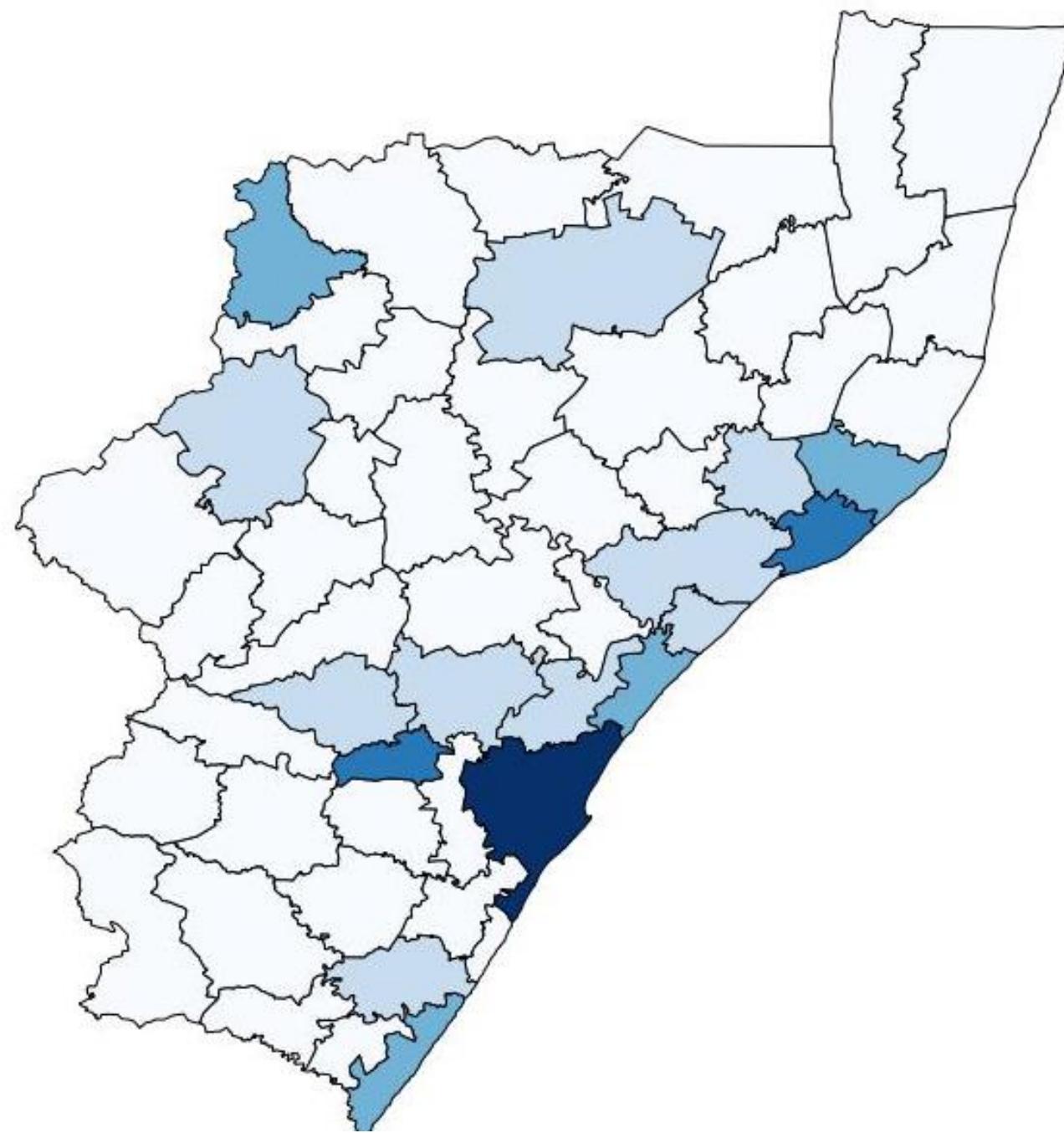


Urbanization Continuing (% Relative)

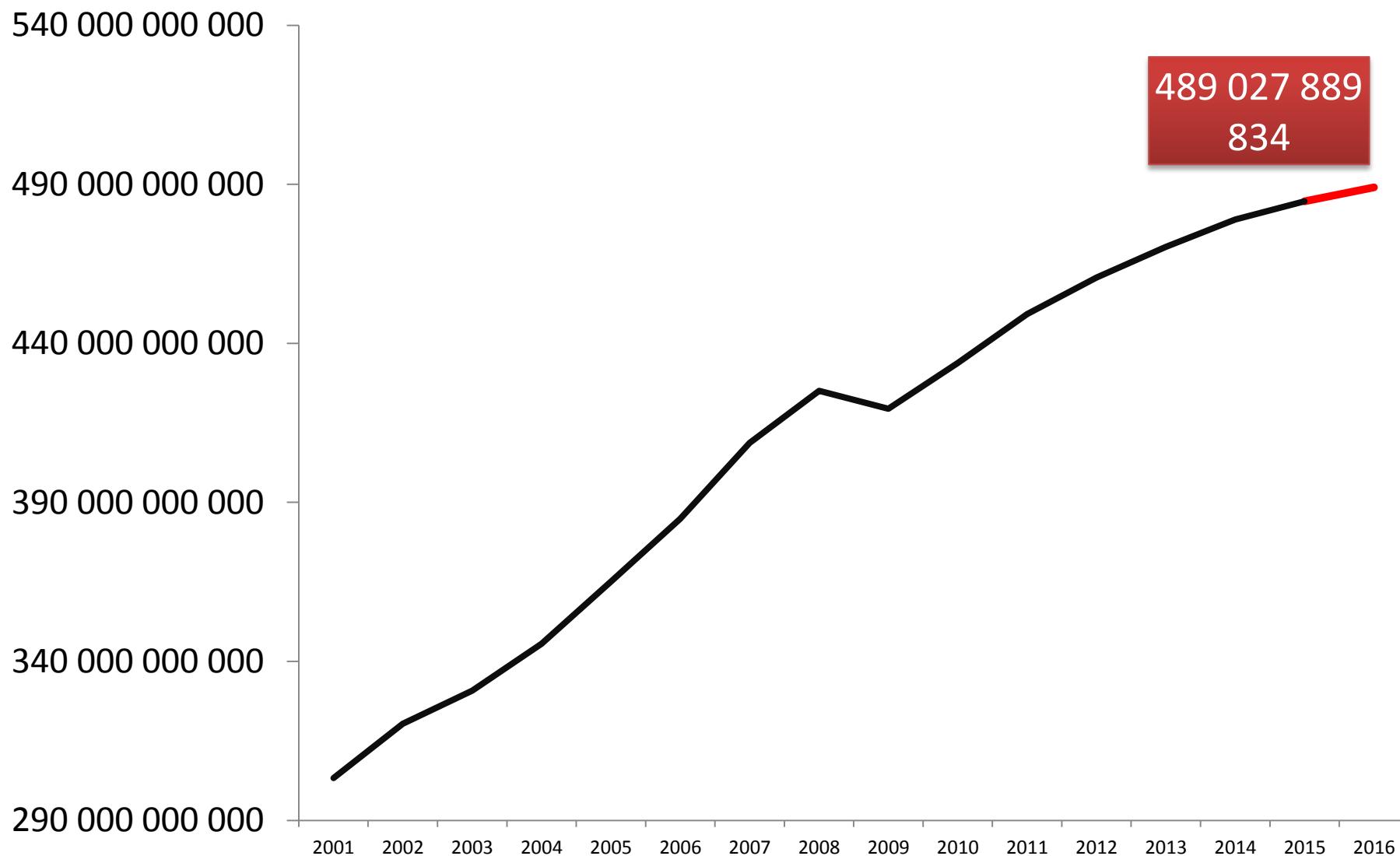


Gross Domestic Product

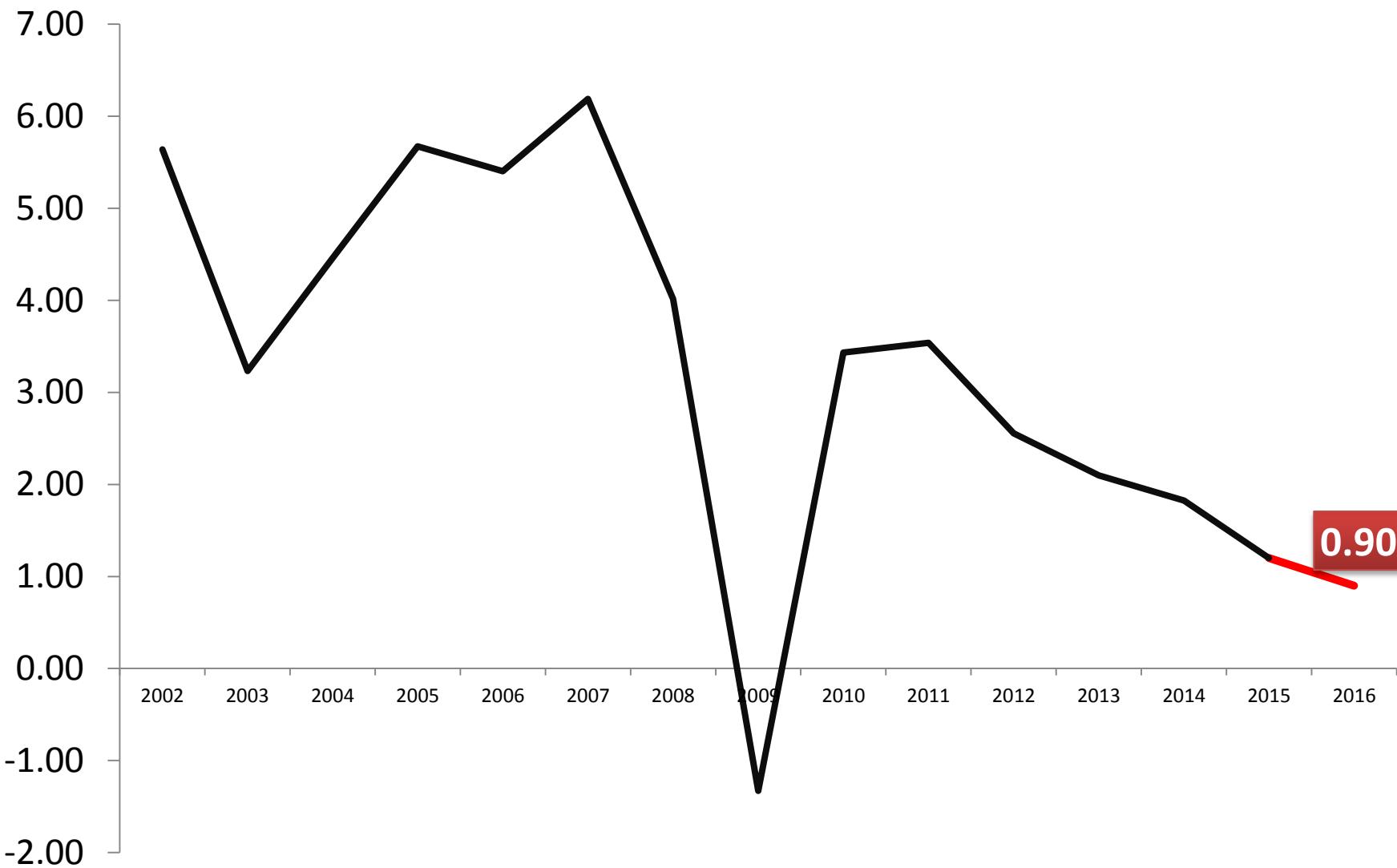
GDP
Distribution in
KZN
Darker Shaded
= larger GDP



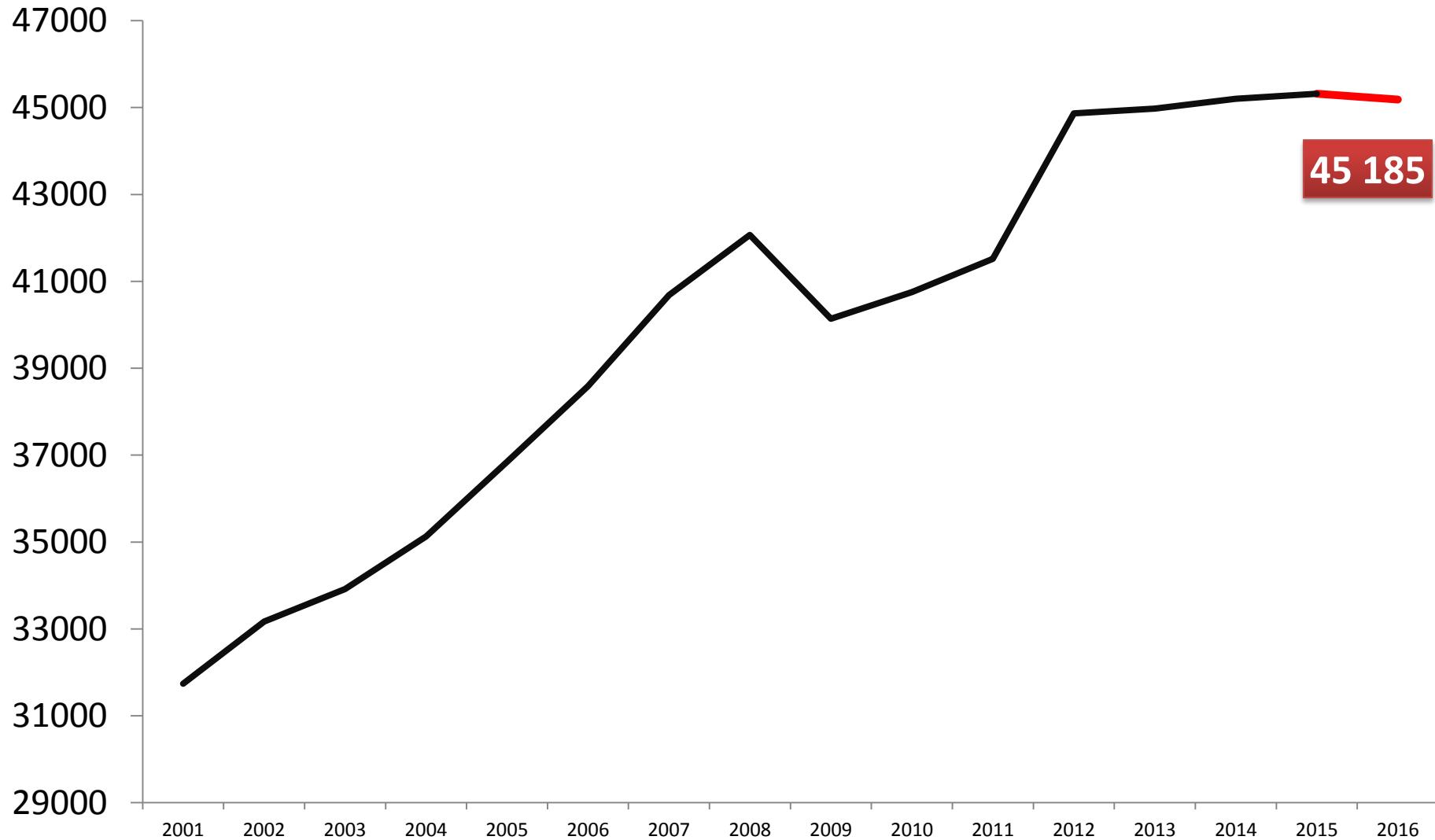
KZN Outlook (GDP, 2010 prices)



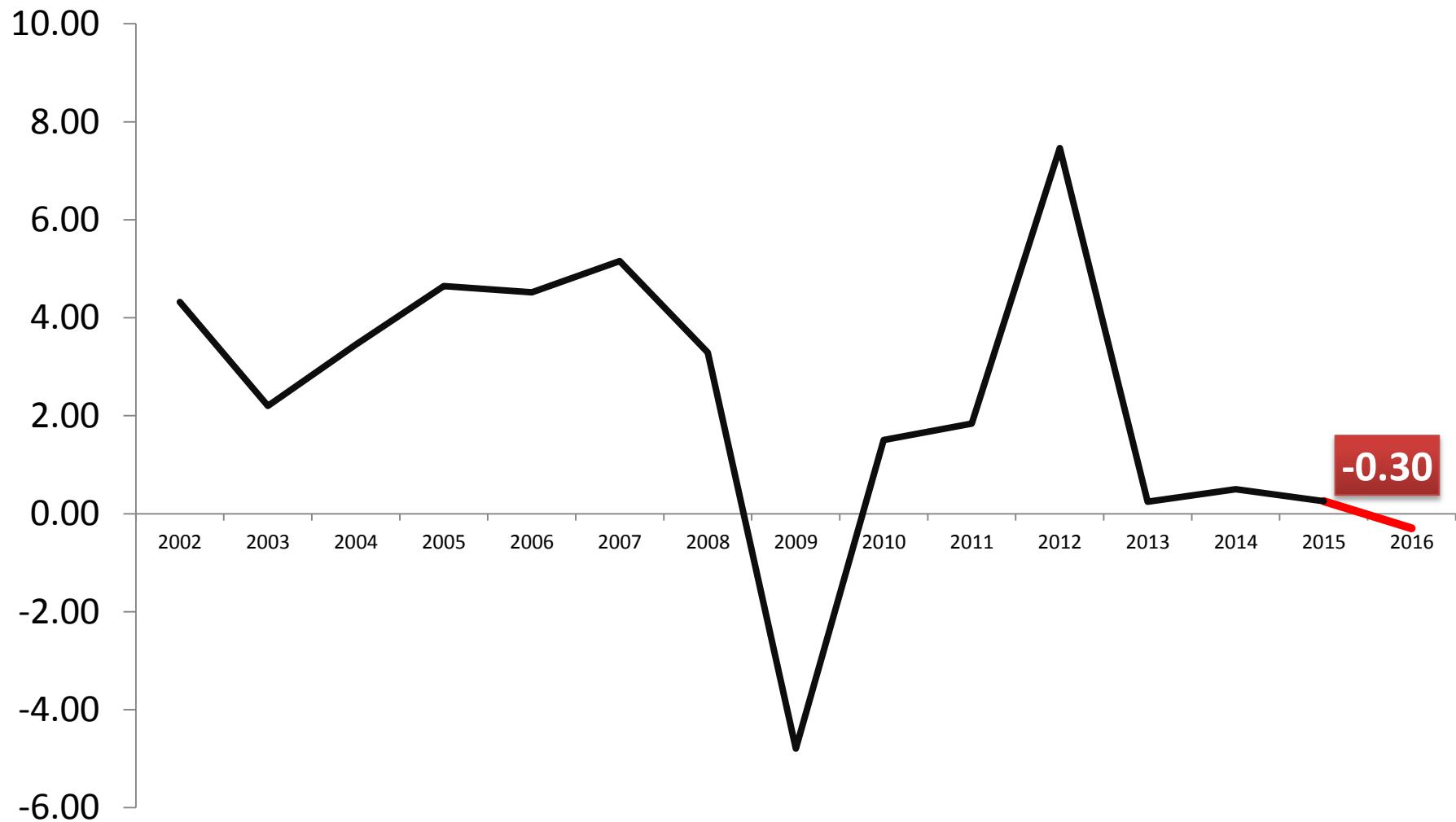
KZN Outlook (GDP, annual %)



KZN Outlook (GDP per Capita, 2010 prices)

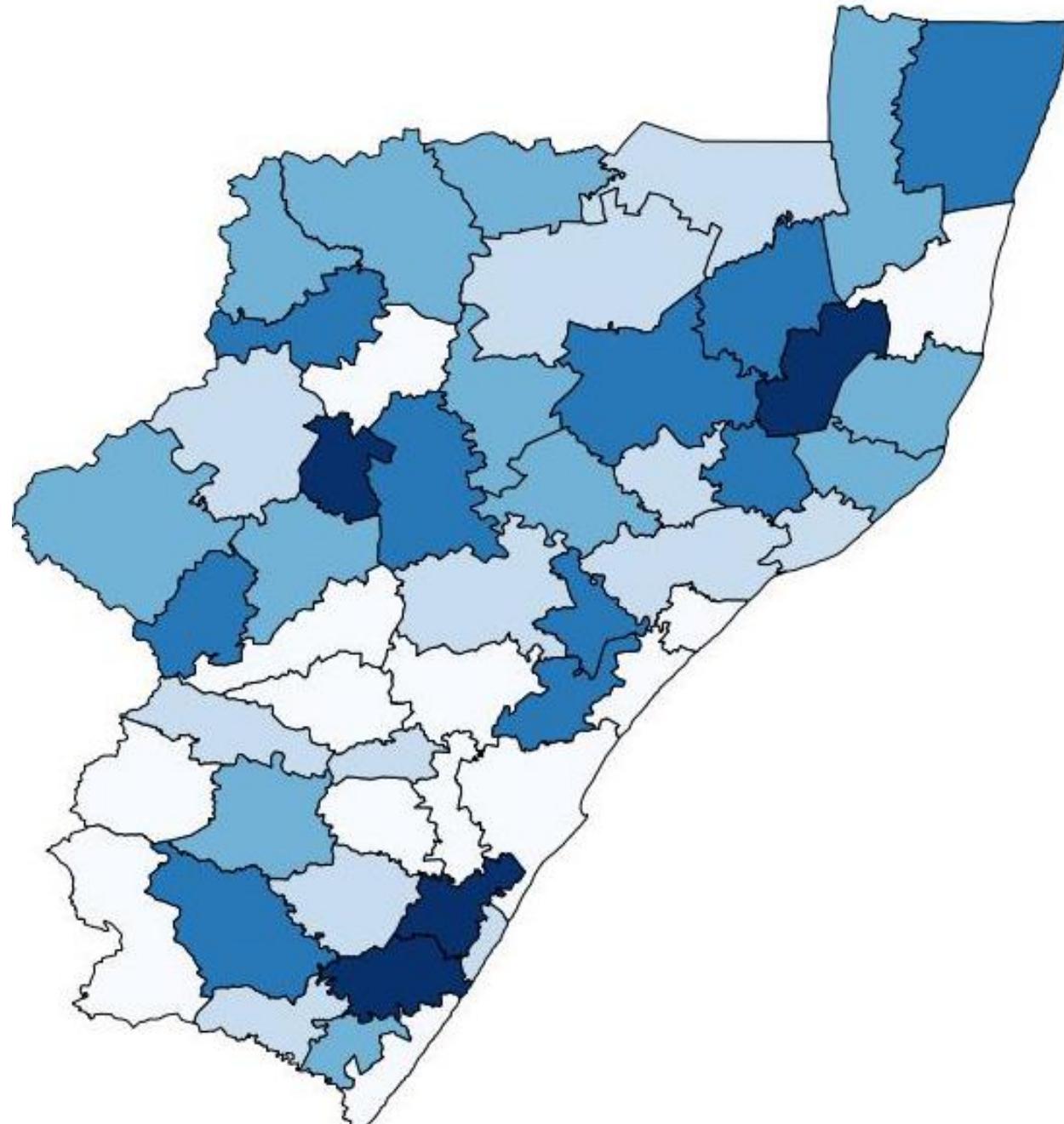


KZN Outlook (GDP per Capita, annual %)

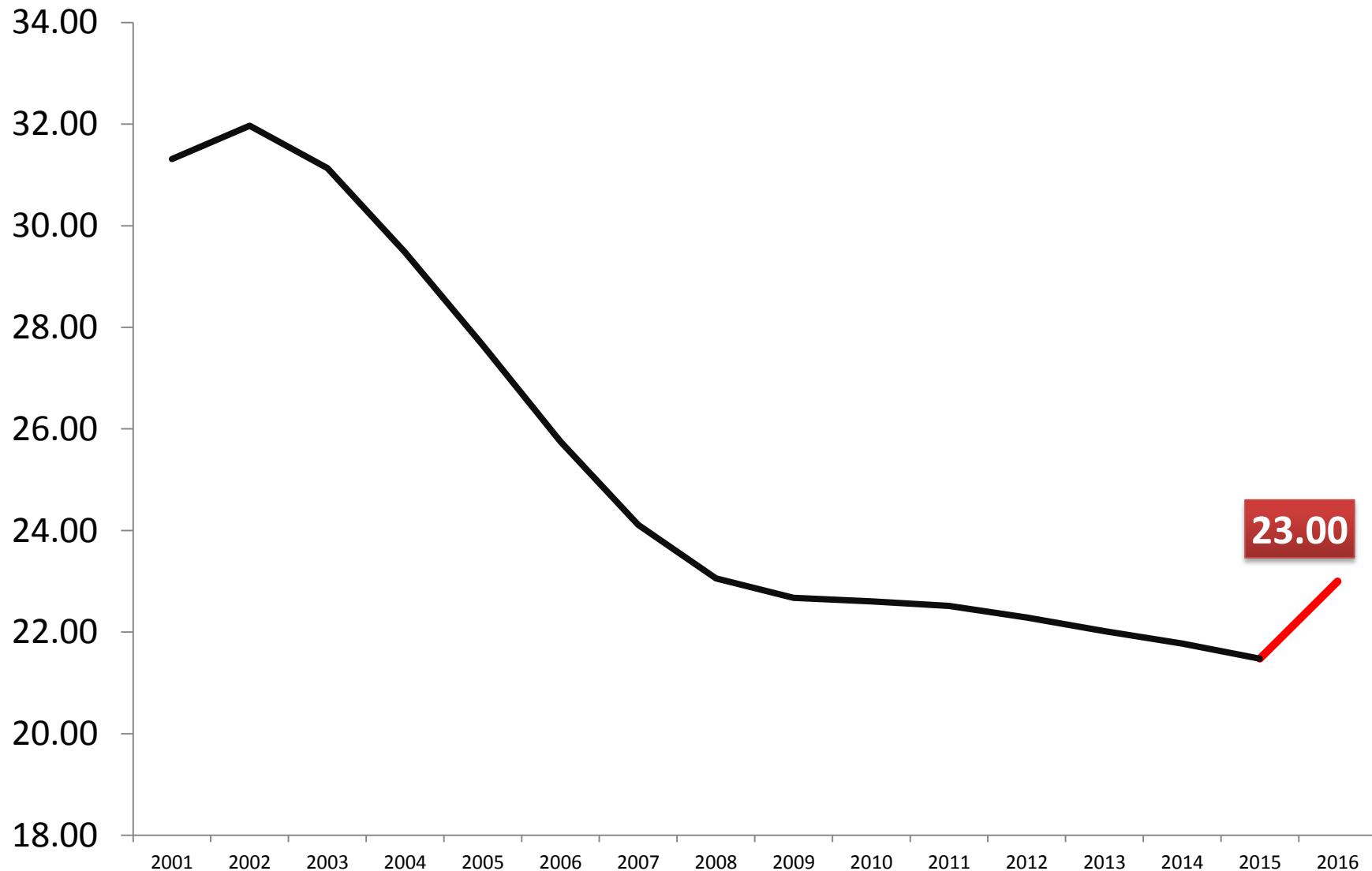


Labour Market

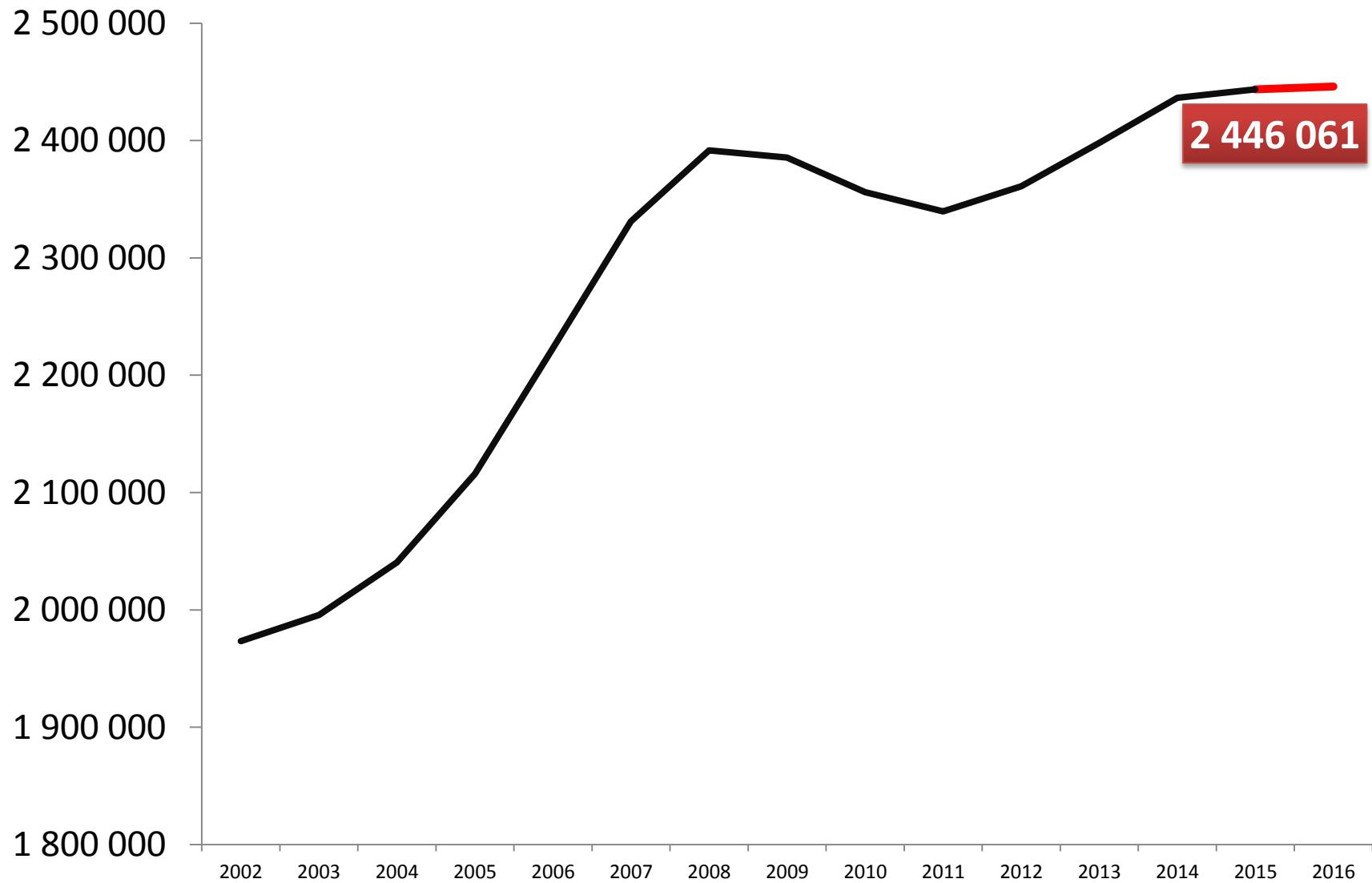
Unemployment
Distribution in KZN
Darker Shaded =
higher
unemployment



KZN Outlook (Unemployment, %)

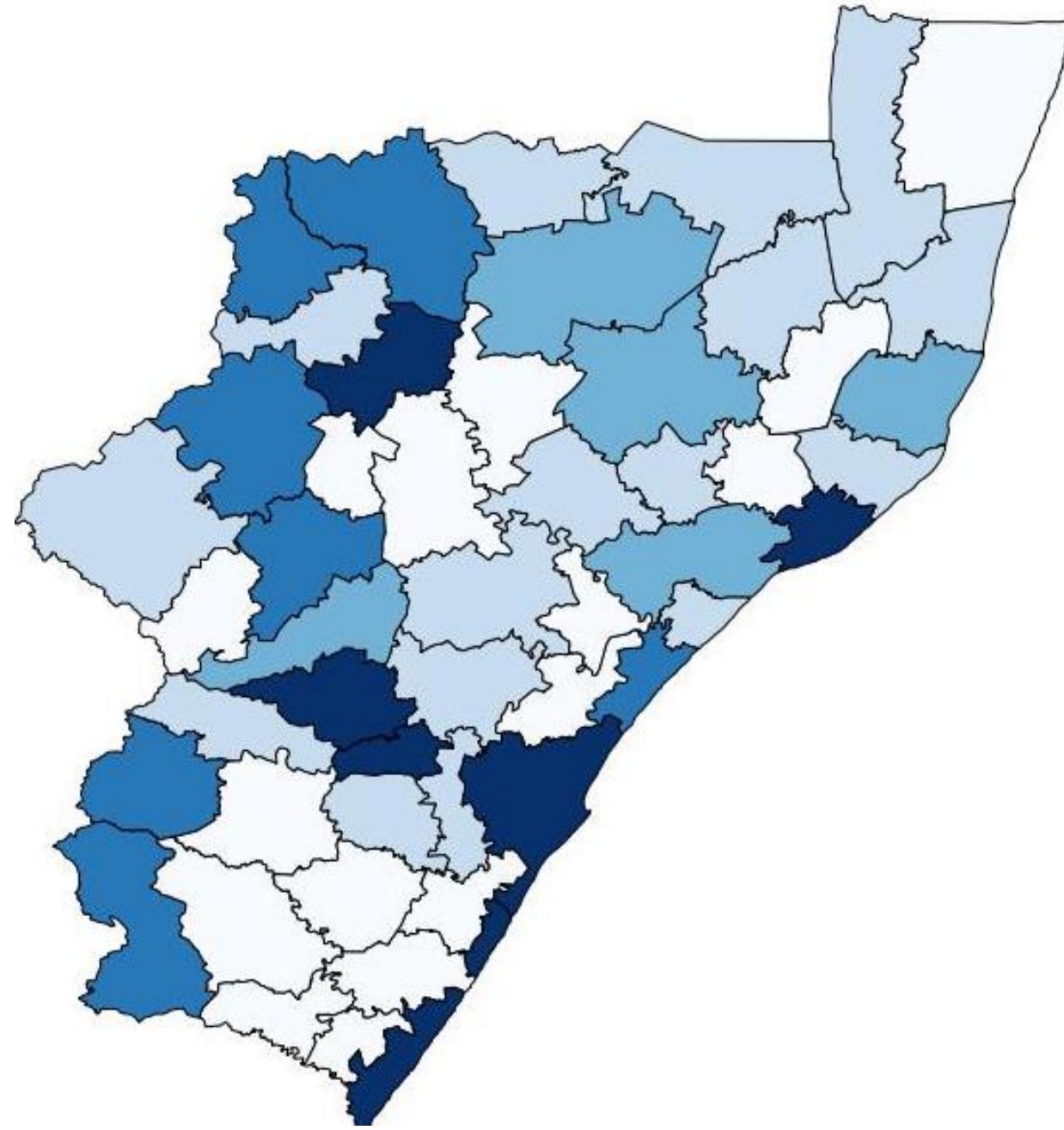


KZN Outlook (Employment, q)

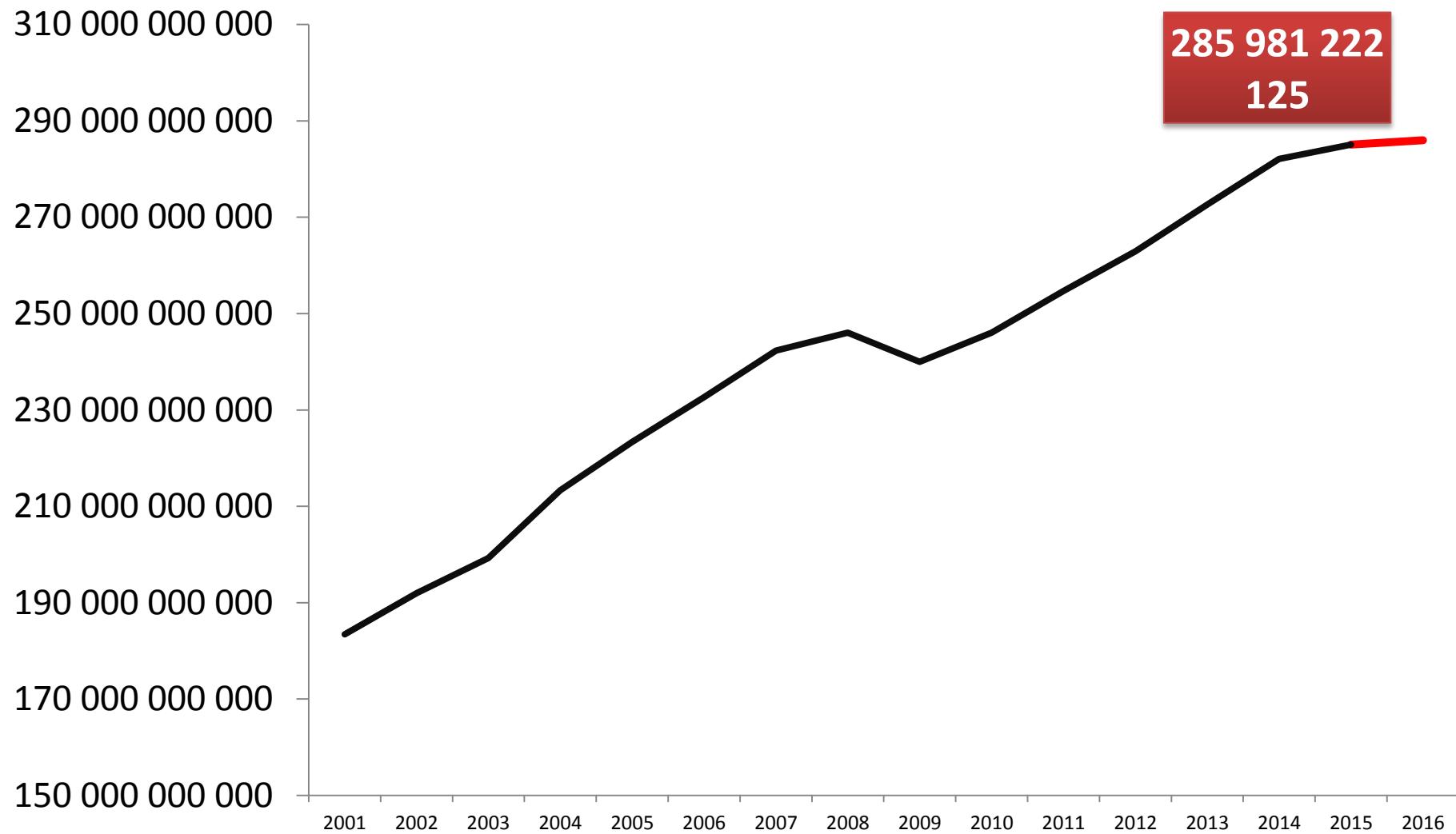


Income

Income
Distribution in KZN
Darker Shaded =
higher income
growth

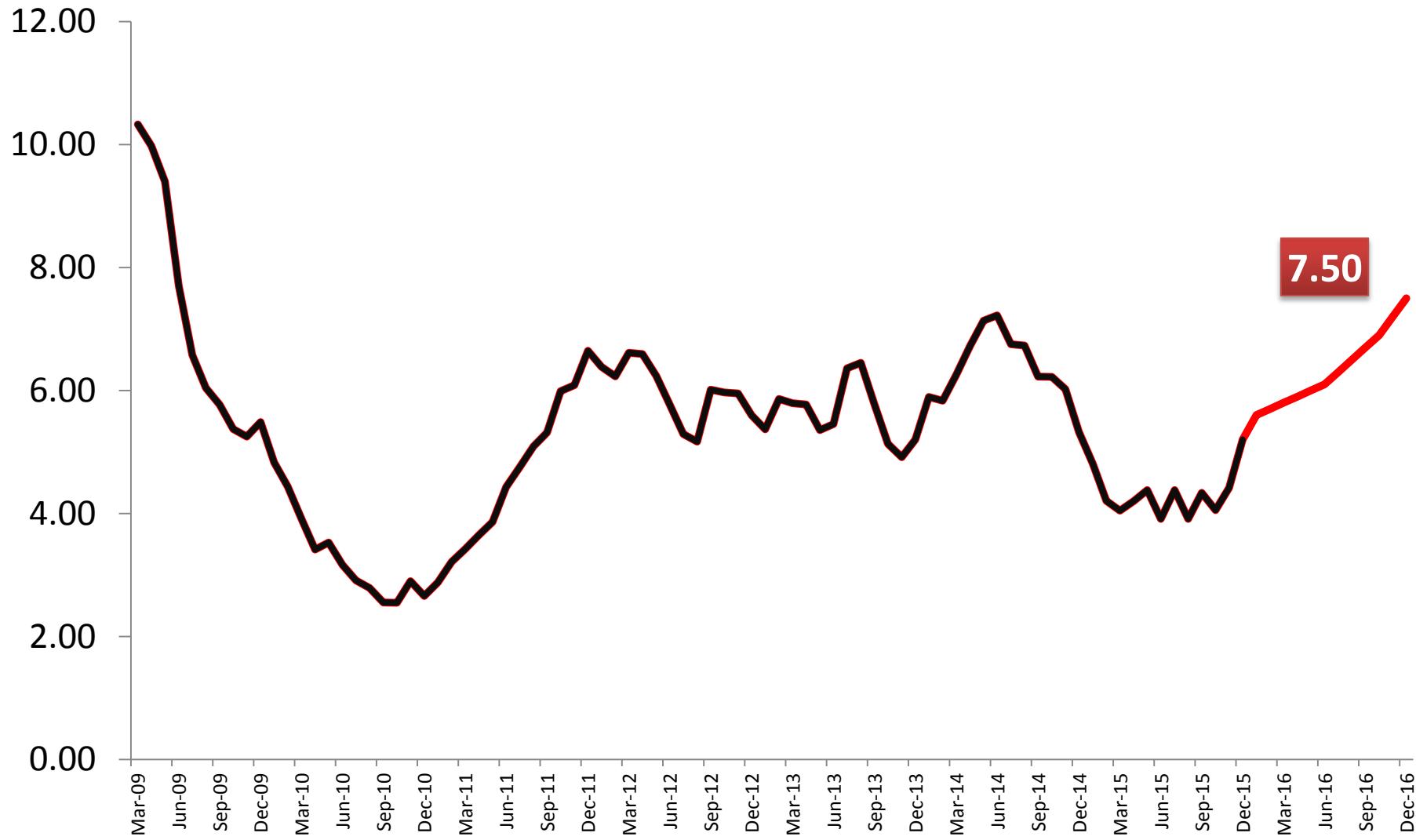


KZN Outlook (Disposable Income, 2010 prices)



Inflation

KZN Outlook (Inflation, %pa)



The economic outlook for the province is “**somewhat**” less optimistic than last year (2015) despite the lower oil prices and optimistic US economic growth. The lower oil prices will continue to support the Current Account. The “**end**” of loadshedding is also good news.

The “**sinking**” exchange rate and commodity prices, “**weak**” Chinese economic outlook and “**increasing**” public and household debt burdens will continue to be a significant constraint on the domestic economy.

The SA economy is by no means down and out. However, the punches are getting harder and faster. How long can the SA economy withstand these punches is the “**key**” question???

Stagflation



Stagflation

A situation in which the inflation rate is high, the economic growth rate slows, and unemployment remains steadily high

Stagflation

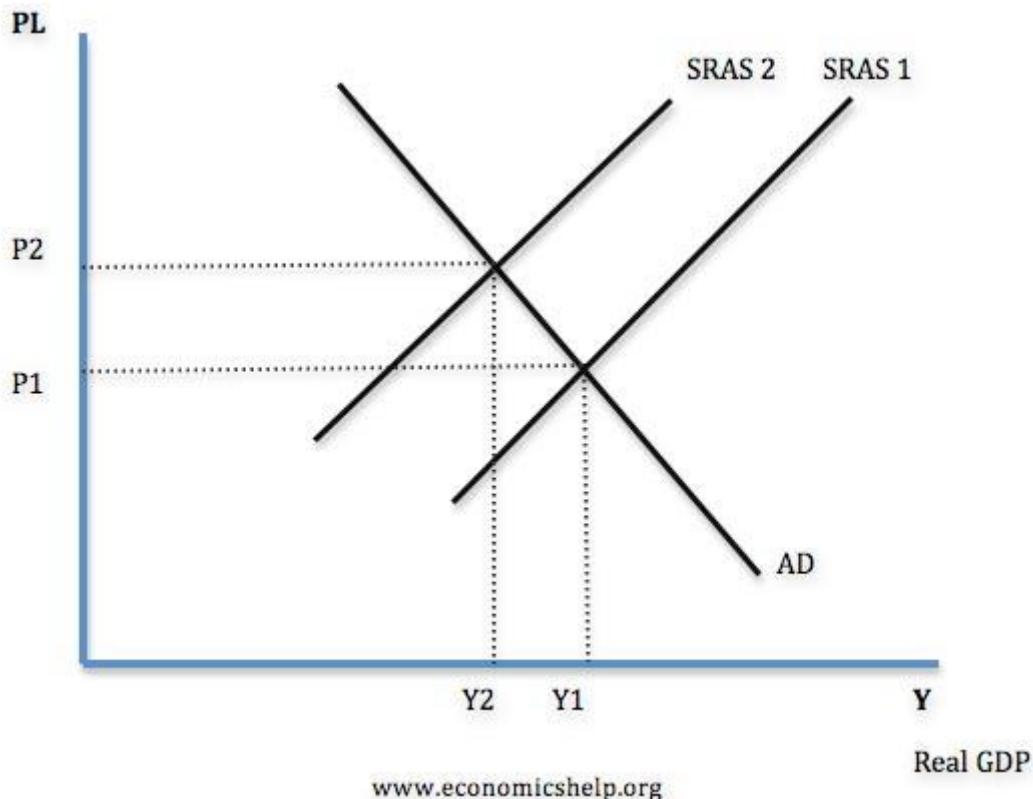
The US had withdrawn from the Bretton Woods agreement in 1971, which had used the gold standard to set exchange rates for currencies in most of the world.

Most countries did the same and currencies were allowed to float on world markets, which resulted in inflation.

During this time, and Arab-Israeli war began and the American support caused OPEC to impose a 5 month embargo in the US and Netherlands, and reduced oil production, which forced the price of oil to quadruple. This made goods more expensive and rose.

With energy costs and interest rates high, business investment languished and unemployment rose to uncomfortable levels.

Stagflation



Demand Side

Vs

Supply Side

Solutions

Stagflation

This period of stagflation was caused by:

Higher oil prices

Higher food prices

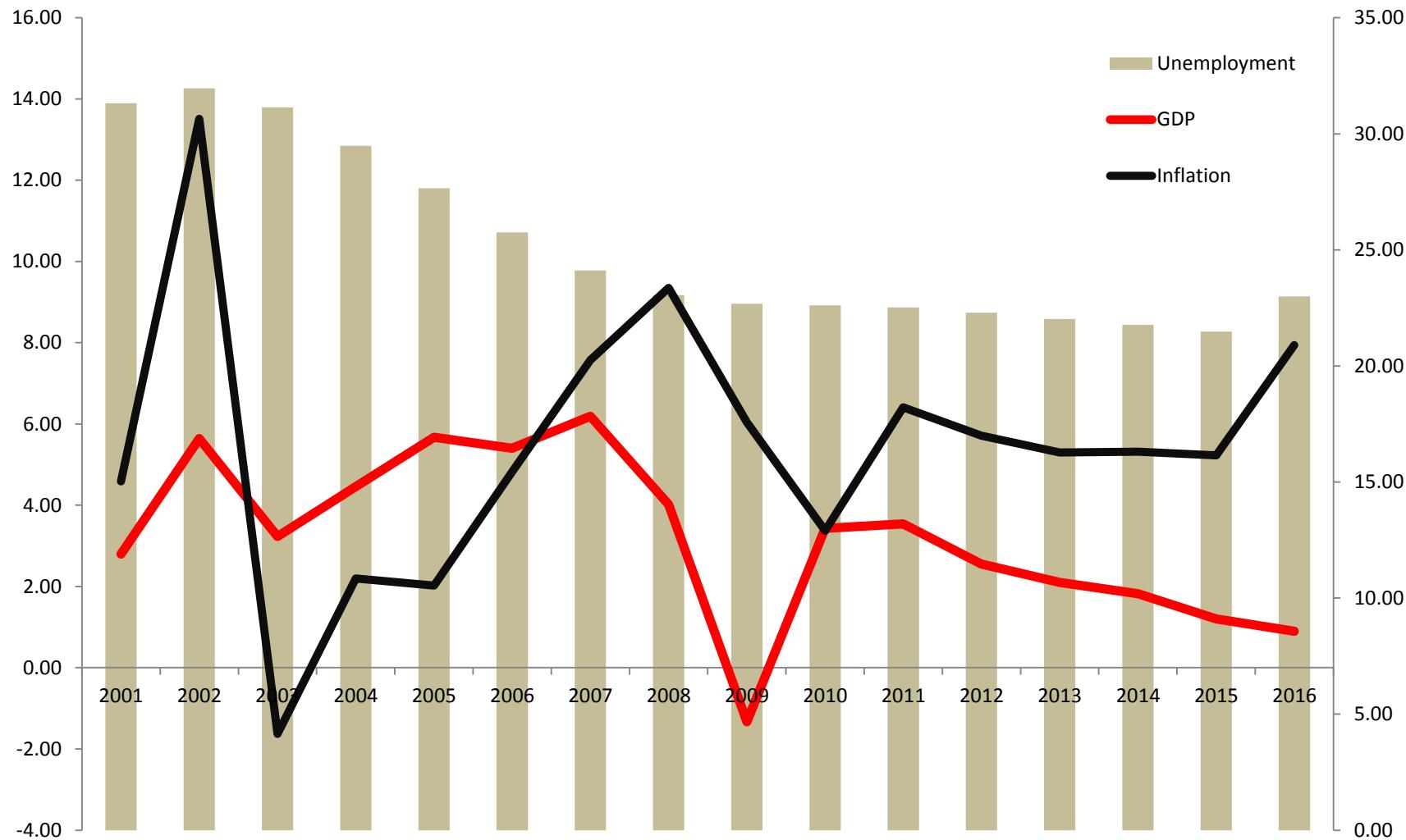
Impact of devaluation in the value of the currency
increasing import prices.

Impact of higher taxes, which increased inflation
but reduced living standards.

Stagflation

	GDP	Unemployment	Inflation
2001	2.80	31.31	4.59
2002	5.64	31.97	13.51
2003	3.23	31.13	-1.63
2004	4.46	29.48	2.2
2005	5.67	27.65	2.02
2006	5.40	25.75	4.82
2007	6.19	24.11	7.57
2008	4.02	23.06	9.35
2009	-1.33	22.67	6.04
2010	3.43	22.61	3.37
2011	3.54	22.51	6.41
2012	2.55	22.29	5.71
2013	2.10	22.02	5.3
2014	1.82	21.77	5.32
2015	1.20	21.48	5.23
2016	0.90	23.00	7.94

Stagflation



Stagflation

	GDP	INFLATION	UNEMPLOYM...
Mean	3.226250	5.481875	25.17563
Median	3.330000	5.310000	23.03000
Maximum	6.190000	13.51000	31.97000
Minimum	-1.330000	-1.630000	21.48000
Std. Dev.	2.029134	3.366462	3.812964
Skewness	-0.434396	0.275275	0.785874
Kurtosis	2.746111	4.025319	1.968596
Jarque-Bera	0.546172	0.902923	2.356127
Probability	0.761027	0.636697	0.307874
Sum	51.62000	87.71000	402.8100
Sum Sq. Dev.	61.76078	169.9960	218.0804
Observations	16	16	16

Stagflation

Covariance Analysis: Ordinary

Date: 03/29/16 Time: 09:54

Sample: 2001 2016

Included observations: 16

Covariance	GDP	INFLATION	UNEMPLOYM...
Correlation	3.860048		
t-Statistic	1.000000		
GDP	-----		
INFLATION	0.470251	10.62475	
	0.073430	1.000000	
	0.275494	-----	
UNEMPLOYMENT	3.404802	-1.816898	13.63002
	0.469404	-0.150981	1.000000
	1.989110	-0.571471	-----

Stagflation

Correlations are asymptotically consistent approximations

GDP,INFLATION(-i)	GDP,INFLATION(+i)	i	lag	lead
-	-	0	0.0734	0.0734
-	-	1	-0.435...	-0.042...
-	-	2	-0.323...	0.0051
-	-	3	-0.040...	-0.028...
-	-	4	0.0507	0.0336
-	-	5	0.2520	0.0474
-	-	6	0.3007	0.0935
-	-	7	-0.475...	-0.104...
-	-	8	-0.026...	-0.045...
-	-	9	0.1190	0.0892
-	-	1...	0.1510	0.0448
-	-	1...	0.1587	0.0494
-	-	1...	0.1148	0.0261

Correlations are asymptotically consistent approximations

GDP,UNEMPLOYMENT(-i)	GDP,UNEMPLOYMENT(+i...)	i	lag	lead
-	-	0	0.4694	0.4694
-	-	1	0.6225	0.2687
-	-	2	0.5760	0.1034
-	-	3	0.6019	-0.009...
-	-	4	0.5110	-0.087...
-	-	5	0.3214	-0.128...
-	-	6	0.1114	-0.140...
-	-	7	-0.122...	-0.219...
-	-	8	-0.207...	-0.314...
-	-	9	-0.066...	-0.276...
-	-	1...	-0.187...	-0.205...
-	-	1...	-0.298...	-0.140...
-	-	1...	-0.332...	-0.082...