

# **PROVINCE OF KWAZULU-NATAL**

# Socio-Economic Review and Outlook

# 2017/2018

**KwaZulu-Natal Provincial Government** 

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### List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANA	Annual National Assessment
ARVs	Anti-Retroviral
ATC	Accredited Tourism Centres
BCI	Business Confidence Index
BER	Bureau of Economic Research
CCI	Consumer Confidence Index
CHC	Community Health Centres
CPI	Consumer Price Index
DoBE	Department of Basic Education
DoE	Department of Education
EAP	Economically Active Population
EC	Easter Cape
EEA	Employment Equity Act
EMDEs	Emerging Market and Developing Economies
EU	European Union
FS	Free State
GDP	Gross Domestic Product
GDP-R	Regional-Gross Domestic Product
GP	Gauteng Province
HDI	Human Development Index Human Immune Virus
HIV IDZ	Industrial Development Zone
IMF	International Monetary Fund
IPAP	Industrial Policy Action Plan
IT	Information Technology
KZN	KwaZulu-Natal
LAR	Labour Absorption
LER	Learner-Education Ratio
LFPR	Labour Force Participation Rate
LP	Limpopo Province
LSR	Learner-to-School Ratio
MDDs	Millennium Development Goals
MERS	Middle East Respiratory Syndrome
MP	Mpumalanga Province
MPC	Monetary Policy Committee
MRIO	Multi-Regional Input-Output
MTSF	Medium-Term Strategic Framework
NC NDP	Northern Cape National Development Plan
NGP	New Growth Path
NSC	National Senior Certificate
NW	North West
OECD	Organisation for Economic Co-operation and Development
PGDP	Provincial Growth and Development Plan
PGDS	Provincial Growth and Development Strategy
PMI	Purchasing Manager's Index
PRB	Population Reference Bureau
PT	Provincial Treasury
QES	Quarterly Employment Statistics
QLFS	Quarterly Labour Force Survey
RDP	Reconstruction and Development Programme
SA	South Africa

South African Consumer Confidence Index
Southern Developing Community
South African Reserve Bank
Socio-Economic Review and Outlook
Special Economic Zone
Sustainable Development Goals
Small, Medium and Micro Enterprises
Statistics South Africa
Standard and Poor
Technical and Vocational Education and Training
United Kingdom
United Nations
United Nations Development Plan
United Nations Educational, Scientific and Cultural Organisation
United Nations Office on Drugs and Crime
United Nations International Children's Fund
Untied States
United States of America
United States Census Bureau
Western Cape
World Health Organisation
World Trade Organisation
World Travel and Tourism Council
World Travel and Tourism Council South Africa

It is with great pleasure that the Provincial Treasury (PT) of KwaZulu-Natal (KZN) presents the Socio-Economic Review and Outlook (SERO) for the financial year 2017/18 to all its relevant stakeholders. The publication provides a detailed analysis of the social and economic factors that influence the environment in which the provincial economy operates. The analysis provided herein is envisaged to facilitate the formulation of effective policies by the provincial administration to promote the efficient allocation of fiscal resources to government departments and public entities. The private sector and members of the general public who might be interested in knowing the state of the economy of KZN also stand to gain useful information out of this publication as it could influence their business and personal decision-making. Although municipalities are not direct benefactors of the PTs' budget, it would be prudent of them to utilise the information presented herein for effective planning towards the elimination of service delivery backlogs.

Chapter one of the publication is an introduction which gives a broad overview of the social and economic landscape of South Africa (SA) and KZN.

Chapter two focuses on population dynamics (demographic profile) and its broader effects on the populace. The demographic analysis begins with a global overview, where it focusses on world population in selected countries, displaying the percentage share of their populations, birth and death rates, and projections in respect of the size of the population in 2050 going forward. The selected countries have been divided into more and less developed countries. The analysis cascades down to SA and its provinces, with particular emphasis on the percentage share that each province retains over the years 2006, 2011 and 2016, as well as the growth rate over the period 2009 to 2016.

The bulk of the chapter focuses on KZN population dynamics, where it looks at population distribution by age and gender. Population theories should serve as "eye openers" to policy makers because population growth has the potential to threaten food security. The age profile of the populace also becomes relevant considering that the strength of the economy lies in the size and the physical and mental sturdiness of the economically active population to produce goods and services. It further highlights population distribution by race, where it is illustrated that 87.2 per cent of the population is made up of Africans. It cannot be disregarded that SA remains plagued by the crippling effects of the Human Immunodeficiency Virus (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) pandemic. In previous years, tuberculosis and pneumonia, amongst other AIDS-related illnesses, were identified as leading causes of death in KZN. Therefore, this publication highlights the aspects of fertility, mortality and life expectancy, specifically in KZN, which has the highest prevalence rates of HIV and AIDS in comparison to the rest of the country. The chapter concludes by looking at the migration rates,

where out-migration exceeds in-migration in KZN, which poses a threat when it comes to KZN's Equitable Share Grant allocation.

Chapter three focuses on the development indicators in SA and KZN, namely education, health, poverty, income distribution, human development, government grants and crime levels.

Poverty levels remain a challenge even though the statistics show a gradual decline. Unlike the income gap which is still wide at above 0.6 (Gini coefficient), the Human Development Index (HDI) is also below 0.6. This means that people have a lower standard of living. However, the South African government has implemented grant policies so the poor can benefit.

Aspects of education that have been reviewed include literacy rates, learner-educator ratio and matric results. In 2016, KZN had a pass rate of 66.4 per cent (marginally higher than in 2015 at 60.7 per cent) and was rated third to last out of the nine provinces in 2016. Matric results are the yardstick that measures learners' performance at their respective schools. However, these results, despite being better than in 2015, highlight that KZN's schools are in a state of deterioration.

The province's health is well managed, although HIV and AIDS still carry a stigma, with the percentage of AIDSrelated deaths marginally increasing from 38.1 per cent in 2013 to 39 per cent in 2015. Provincial crime levels are decreasing, with the exception of murder, burglary, robbery, driving under the influence, carjacking, and robbery of cash-in-transit. In respect of basic services, all show an improvement in KZN when comparing 2005 to 2015. More specifically, electricity increased from 68 per cent to 79.9 per cent, whilst water increased from 67.2 per cent to 71.3 per cent, and hygienic toilets (sanitation) improved from 58.3 per cent to 71.8 per cent.

Chapter four discusses the global, national and provincial economies. This chapter highlights the analysis of the world economic estimates and projections in different countries from 2013 to 2017 with a focus on countries that do business with SA. Emphasis is placed on advanced economies (United States, Euro Area and Japan), emerging countries (Brazil, Russia, India, and China), Sub-Saharan Africa, and SA. The analysis then cascades down to a national and provincial level. At a national level focus is placed on the GDP growth rate from Quarter 4 of 2013 to Quarter 3 of 2016, also the macroeconomic performance and projections for 2013 to 2019 are shown. The chapter further goes on to discussing the credit rating and debt to GDP ratio.

At a provincial level, the economic review and outlook compares the percentage share of national real GDP by province in 2015. This shows that KZN is the second largest contributor to GDP at 16 per cent after Gauteng at 35.3 per cent. Also, the economic growth rate of the province is displayed from quarter 1 of 2012 to quarter 3 of 2016, thereafter the projection of 2016 to 2017 are shown. The sector analysis section explains the contribution to GDP made by KZN and its main economic hubs, namely the districts of eThekwini, uMgungundlovu, Amajuba,

King Cetshwayo and ILembe. In this regard the Tertiary Sector is the largest contributor across all of the aforementioned. This sector constitutes trade, transport, finance, and community services.

Tourism is a growing industry worldwide, which contributes significantly towards GDP and job creation. In light of this, travel and tourism is discussed at a global, national and provincial level in this document. The discussion includes the number of jobs created by the industry as well as its contribution towards the world, national and provincial GDP. It also highlights the number of tourists that visited SA from the top ten overseas countries and top ten SADC countries in November 2015 and November 2016. It continues on to discuss visitor exports and investment in SA, after which emphasis is placed on KZN where analysis is on top ten countries visiting KZN.

KZN plays an extremely important role in international trade. This is because of its strategically located ports of Durban and Richards Bay which are the busiest and largest in the country. The country's international trade with the rest of the world is discussed in this publication along with the current account of the balance of payments, international commodity process, and KZN imports and exports. The chapter concludes with a discussion on the inflation rate in SA and its provinces.

Chapter five shows the direct relationship between the labour market and economic growth. The purpose of this chapter is to provide information concerning the labour market dynamics in KZN. The chapter starts by providing an outline of employment at both a national and provincial level then focusses on labour force characteristics in KZN from quarter 3 of 2015 to quarter 3 of 2016. It further looks at employment by sector across all provinces in 2015. The unemployment rate is discussed across all provinces, showing both official and expanded unemployment rates. Unemployment by age and gender is also mentioned. The chapter concludes by discussing the labour force participation and labour absorption rates, job scarcity, labour remuneration and productivity over the period 2005 through 2015.

Chapter six provides insight into the risk factors confronting the province. The provincial economic risk indices are also weighed using strategic sectors. The variables used to determine risk are: the interest and inflation rates, oil price, sugar price, gold price, credit extended to the domestic private sector, and physical volume of electricity supply. The chapter examines the behaviour of the economic risk or conditions variables, the economic risk or conditions monitor for KZN, the KZN risk index and KZN GDP, and finally the interpretation of the monitor. The results suggest that the economic risk to the province during 2016 increased significantly, especially when compared to previous years. In addition, the outlook looks somewhat bleak, with further deterioration over the first few months of 2017, with the major risk factors for 2017 being inflation, higher oil prices, and higher interest rates which will continue to put pressure on the fiscus.

Chapter seven provides a case study of KZN which seeks to analyse the multi-regional economic multipliers of the key economic hubs in the province, namely, Durban, Pietermaritzburg, Newcastle, Richards Bay and Port Shepstone. The case study is conducted with a modified Multi-Regional Input-Output (MRIO) model using the

Chenery-Moses model. Hence, a diacritical feature of the study is its deviation from a normal input-output approach of a single country that other researchers apply. To this end, it uses the MRIO model to link the five major regional economies in the province. The MRIO model utilises primary data collected from a special survey conducted specifically to develop the model.

The study showed the diversity of the various economic characteristics of the major regions, finding that the Richards Bay economy has the highest output multipliers as opposed to Port Shepstone and Newcastle which have the smallest multipliers. Furthermore, the economic relationship between the five regions was found to have a higher value of intra-trade than a value of inter-regional trade.

Chapter eight is a scientifically researched chapter, which highlights the influence of space on business confidence. A questionnaire was used in this study, and the result suggested that the spatial diversity and dispersal only mattered marginally regarding business sentiment and confidence at an urban level.

# Chapter 1: Introduction

The purpose of the Socio-Economic Review and Outlook (SERO) for the 2017/18 financial year is to unpack KwaZulu-Natal's (KZN's) socio-economic status. This publication is produced in an effort to share relevant information with stakeholders within and outside the province in order to facilitate decision-making within their respective organisations. The information contained herein can also benefit members of the general public who have an interest in understanding the dynamics within the provincial economy. It also offers a detailed analysis of the socio-economic indicators affecting the quality of life of the KZN populace, highlights the potential for and constraints to economic growth and development, and further offers policy recommendations.

South Africa (SA) is made up of nine provinces, namely North West (NW), Northern Cape (NC), Free State (FS), Western Cape (WC), Gauteng (GP), Mpumalanga (MP), Limpopo (LP), Eastern Cape (EC), and KZN. It has a diverse economic culture, made up of both rural and urban. In this regard it performs in all economic spheres, most notably Finance, Trade, Manufacturing and Mining. KZN is the second largest contributor to the economy of the country, after Gauteng, with Finance, Manufacturing, Trade and Transport being the largest contributors to the province's GDP.

This publication looks at the domestic economic growth which remains bleak, mainly due to external as well as internal factors. The decline in the commodity price is cited as one of the external factors affecting the domestic economy. The decline in commodity prices like gold, iron ore, coal and platinum is unfavourable as it reduces revenue for the country.

Regarding the social issues, the country continues to face pressure with regards to education, health, basic services and crime. As correctly indicated by Stats SA a lack of education is one of the main indicators that contributes towards unemployment, which in turn causes more people to live below the bread-line.

The publication comprises of eight chapters, where chapters two to eight focuses on: the demographic profile, development indicators, economic review and outlook, labour market, provincial economic risk index, multi-regional economic multipliers, and the influence of space on business confidence, respectively.

#### 2.1 Introduction

The population dynamics (including changes in the population growth rate, age structure, migration and urbanisation) are at the centre of developmental challenges in every society. Recognising and planning for demographic change is an essential prerequisite for sustainable development. This will ensure that the welfare of both the current and the future generation is promoted.

In analysing the population dynamics, it is essential to focus on factors such as urbanisation, fertility, mortality, life expectancy, as well as the gender and age structure of the population. These factors provide an indication regarding the total estimated number of people who are dependent on government for transfers as well as the number of people who are economically active. The analysis also plays a pivotal role in giving an indication of whether the country is predominantly comprised of youth or it has ageing population which will influence the implementation of relevant policies accordingly. If these factors are taken into account they can play a critical role in achieving efficient allocation of resources in all spheres of government.

This chapter therefore provides analysis of population dynamics on global, national and provincial perspectives. It begins with global and national population sizes, followed by national population growth rate. Provincial population dynamics ranging from population size, population distribution by age and gender as well as population distribution by race are discussed in this chapter. It further discusses fertility rate, mortality rate, life expectancy and conclude with migration as factors determining the population structure in the province.

#### 2.2 Global population growth

The International Monetary Fund (IMF) (2016) points that the world population has been growing at a faster pace in the past century as opposed to the 19<sup>th</sup> century and early 1920s when it was growing extremely slowly. Rapid population growth is undesirable due to various problems related to economic development and that most nations tend to have low human development. This emanates from the fact that workforce increases more rapidly than economic growth, such that available job opportunities need to be shared among the large number of people. The increase in the number of people will consequently lead to a reduction in labour productivity due to the fact that the physical capital stock required to produce goods and services is spread among the large number of people.

Table 2.1 provides a review of the world population dynamics for selected countries in 2016 and projected to 2050. The world population increased from 7.3 billion people in 2015 to approximately 7.4 billion in 2016. Less developed countries constitute approximately 84 per cent of the world population where Asia and Africa are the

most populous regions. Approximately 60 per cent of the world population reside in Asia with both China and India comprising of 36.5 per cent. This is followed by Africa which constitutes about 16.2 per cent of the total world population. America and Europe have the lowest population among the regions at 13.5 per cent and 10 per cent of the world population respectively.

The IMF (2016) expects the world population to grow steadily towards the year 2050; the faster pace of population growth is projected to be extensive mostly in less developed nations. It can be seen from table 2.1 that Africa is expected to record more than double its population size. It is not surprising that the population in Africa is expected to increase by approximately 1.3 billion people by 2050 which is more than double the current population of 1.2 billion. The number of births per 1 000 people and the number of deaths per 1 000 people are at 36 and 10 respectively. This trend is different to that of developed countries where a small increase of 68 million people is expected by 2050 (table 2.1). The report published by Population Reference Bureau (PRB) (2016) reveals that great proportion of growth anticipated in developed countries will be immigrants from less developed countries. This is even indicated by the number of births per 1000 and number of deaths per 1 000 which are currently reported at 11 and 10 in developed countries respectively, which is far below that of the world population at 20 and 8 respectively. All the other continents have lower birth and death rates per 1 000 population.

			2016		Population in 2050
	Population (million)	% Share of world population	Births per 1000 population	Deaths per 1000 population	(million)
World	7418	100	20	8	9869
More Developed	1254	16.9	11	10	1322
Less Developed	6164	83.1	22	7	8548
Less Developed (Excl. China)	4778	64.4	24	7	7195
Africa	1203	16.2	36	10	2527
Sub-Saharan Africa	974	13.1	37	11	2128
Nigeria	187	2.5	39	13	398
South Africa	56	0.8	22	10	75
Northern Africa	229	3.1	29	6	400
America	998	13.5	15	7	1221
Northern America	360	4.9	12	8	445
Latin America and the Caribbean	637	8.6	17	6	775
Asia	4437	59.8	18	7	5327
China	1378	18.6	12	7	1344
Japan	125	1.7	8	10	101
India	1329	17.9	22	7	1708
Europe	740	10.0	11	11	728
European Union	506	6.8	10	10	515
United Kingdom	66	0.9	12	9	77
Russia	144	1.9	13	13	136
Oceania	40	0.5	17	7	66
Australia	24	0.3	13	7	41

Table 2.1: World population and selected countries in 2016 and 2050

Source: Population Reference Bureau, 2016

Despite high population growth anticipated in the world, especially from the less developed nations, the problem of an ageing population remains the world's main concern. The United States Census Bureau (2016) states that an ageing population is prevalent in Asia and Europe with the regions projected to continue showing a high proportion of older people and thus reach 18.8 per cent and 20 per cent of the regional total population by 2050 respectively. The only exception to a rapidly ageing population is Africa with great a proportion of the region's population dominated by the youth rather than older people; the region is further expected to remain young until 2050 with those at older ages projected to be less than 7 per cent of the total regional population.

China is among the countries that are currently experiencing high rate of ageing population in Asia. This problem persists despite massive efforts attempted by the country (China) to change the one child policy which was cited as the main cause of the problem. The one child policy contributed to a dramatic decline on the fertility rate as couples were restricted to having one child, which in turn reduced the number of young people relative to older people. Hence, the country resorted to review the policy and introduced a two child policy in an attempt to rebalance the gap between older and younger people. It is still premature to conclude whether the newly implemented two child policy is producing the expected outcome with regard to increasing the number of children.

Though ageing population is undesirable as it increases the burden on the working population which is responsible for providing support to the older people, it is however argued by Acemoglu and Restrepo (2017) that a nation with ageing population tends to adopt technology which performs tasks previously undertaken by labour. Companies in these nations have resorted to using robots in the production process which assist in neutralising the negative effects of ageing population on economic growth. As a result, firms pay higher wages due to improvement in labour productivity emanating from the use of the combination of skilled labour and technology. However, Bengtsson and Scott (2010) argue that productivity improvements cannot be the only solution to the challenge of ageing since improvements in labour productivity tend to increase consumption more rapidly than production. The study suggests that the focus should be on improving the tax base by increasing the total number of hours worked which also increases average income.

#### 2.3 South African population

The South African total population comprises of four different racial groups, which contribute massively to wide variation in terms of cultural identities, languages and religious beliefs within the country. The population is domiciled across the nine provinces, namely the Eastern Cape (EC), Free State (FS), Gauteng (GP), KwaZulu-Natal (KZN), Limpopo (LP), Mpumalanga (MP), Northern Cape (NC), North West (NW) and the Western Cape (WC). The country is dominated by the African population group which constitutes approximately 80 per cent of the total population. Despite the differences with regards to ethnic groups, people migrate freely to all corners of the country in accordance to their preferences. Nonetheless, the total population has been increasing steadily at a slow pace over the years. According to Statistics South Africa (Stats SA) (2016), the national population

increased from 47.4 million in 2006 to 55.9 million in 2016; this translates to an annual average growth rate of 1.7 per cent. The Population Reference Bureau (2016) expects the population of SA to increase by approximately 33.9 per cent from 2016 to 2050 which is substantially lower than the percentage increase projected for Nigeria and the continent of Africa in particular. This is further confirmed by the lowest number of births and deaths per 1 000 people in SA when compared with those of Africa as a continent, and that of Nigeria as another African country (table 2.1).

	2006		2011		2016		
	Population	% Share of national population	Population	% Share of national population	Population	% Share of national population	
South Africa	47 390 900	100	50 586 757	100	55 908 865	100	
Eastern Cape	6 894 300	14.5	6 829 958	13.5	7 061 717	12.6	
Free State	2 958 800	6.2	2 759 644	5.5	2 861 618	5.1	
Gauteng	9 526 200	20.1	11 328 203	22.4	13 498 151	24.1	
KwaZulu Natal	9 924 000	20.9	10 819 130	21.4	11 079 717	19.8	
Limpopo	5 365 400	11.3	5 554 657	11.0	5 803 941	10.4	
Mpumalanga	3 508 000	7.4	3 657 181	7.2	4 328 256	7.7	
North West	3 374 200	7.1	3 253 390	6.4	3 790 614	6.8	
Northern Cape	1 094 500	2.3	1 096 731	2.2	1 191 651	2.1	
Western Cape	4 745 500	10.0	5 287 863	10.5	6 293 200	11.3	

Table 2.2: South African population by province in 2006, 2011 and 2016

Source: Stats SA, 2006, 2011 and 2016

Gauteng remains the most populous province in the country with 13.5 million people in 2016; hence the province constitutes 24.1 per cent of the national total population. This is marginally higher than 11.3 million people observed in 2011, which translated to 22.4 per cent of the national population. It is followed by KZN and the EC provinces which reveal a diminishing trend in terms of the provincial share of national total population over the period 2011 to 2016. However, the population size has been increasing in absolute numbers for both provinces. The major contributors to the declining population growth are the migration rate, a high mortality rate coupled with a low fertility rate and a high morbidity rate in these provinces. On the contrary, other provinces such as GP and WC experienced significant increase in population sizes which is not surprising given various economic activities taking place in these provinces; it is in this respect that people migrate from their provinces to seek better livelihood with greater employment opportunities.

#### 2.4 Population growth rate

Table 2.3 shows the South African population growth rate from 2009 to 2016. The population has been increasing steadily at a slow pace over the years. It increased at an average of 1.5 per cent per annum from 2009 to 2016. Furthermore, the growth rate of the children and the elderly have both sustained an increasing trend from 0.75 (2009-2010) per cent to 1.25 (2015-2016) per cent and 2.77 (2009-2010) per cent to 3.04 (2015-2016) per cent respectively. Conversely the youth population have been increasing at a diminishing rate from 1.63 per cent to 0.85 per cent in the same period under consideration. This could be caused by the fact that

young people especially males tend to engage in harmful activities such as drug and alcohol abuse, crime and irresponsible sexual activities which to large extent cause high mortality rate among the youth.

Table 2.3. National annual population growth rate (percentage), 2009 to 2010							
Period	Children (0 to 14 years	Youth (15 to 34 years)	Elderly (60 + years)	Total			
2009-2010	0.75	1.63	2.77	1.43			
2010-2011	0.83	1.51	2.82	1.46			
2011-2012	0.98	1.31	2.85	1.49			
2012-2013	1.17	1.11	2.89	1.52			
2013-2014	1.22	1.06	2.93	1.55			
2014-2015	1.27	1.01	2.98	1.59			
2015-2016	1.25	0.85	3.04	1.62			

Table 2.3: National annual population growth rate (percentage), 2009 to 2016

Source: Stats SA, 2016

#### 2.5 KwaZulu-Natal provincial population size

The province of KZN is the second most populated province in the country as it is home to 11.1 million people, which translates to 19.8 per cent of the provincial share of the national population. As indicated in this section KZN has experienced a significant decline in the provincial share of national population due to outward migration, low fertility and high mortality rates. It is within this context of out-migration that KZN shifted from the highest populous province in 2006 to the second most populated in 2011 to 2016. Among the factors attracting people to other provinces especially Gauteng (GP) are the job opportunities emanating from various economic activities in that geographic area, and the fact that GP is home to most national government departments which may contribute to the migration of people from other provinces looking for better jobs as government remain the largest employer in the country.

#### 2.5.1 Population distribution by age and gender

Figure 2.1 shows the population distribution of KZN by age and gender in 2016. An estimated 34.8 per cent of the population are children between 00 and 14 and about 36.7 per cent are the youth that are economically active (15-34). Collectively, children and young people account for an estimated 71.5 per cent of the total provincial population. The total provincial dependent population is estimated at 4 374 507, while the economically active population is estimated at 6 705 213. The implication of these estimates is a high dependency ratio of 65.2 per cent. A high dependency ratio burdens the working age population as it bears the greater responsibility of paying for public services. Another implication is a reduction in productivity due to a rise in non-productive population, and this could lead to a low long run trend of economic growth.

According to the World Bank (2012) the increase in the youth bulge is a common occurrence in many developing countries, and SA is no exception. It is due to a stage where a country is able to reduce infant mortality rate while there is high fertility rate. As the country's children enter the working age, dependency ratio will decline. If the

increase in the number of economically active population can be fully employed in the productive activities, the level of average income per capita will increase, thus resulting in a demographic dividend. However, if the majority of young people cannot find employment and earn income, the youth bulge could cause a demographic disaster. This majority of young people will become the potential source of social, economic and political instability.

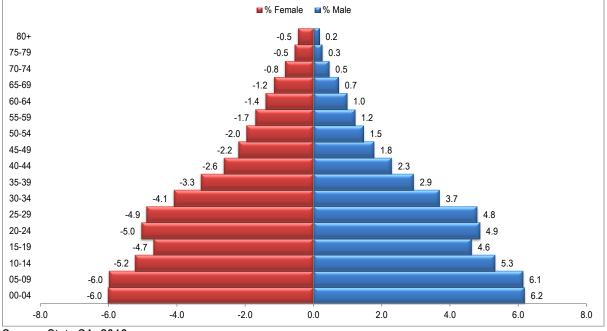


Figure 2.1: KZN population distribution by age and gender in 2016

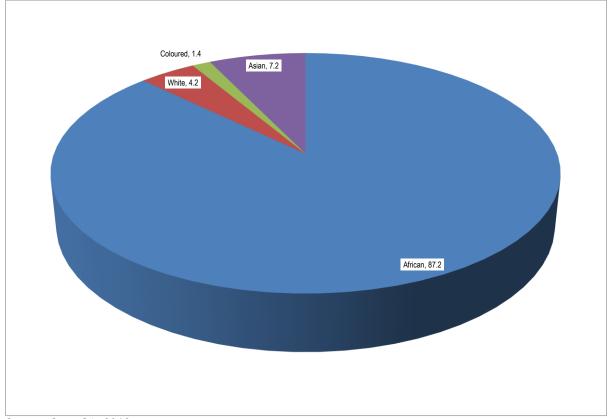
If government is unable to reduce high dependency ratio, there could be pressures on fiscus, thus leading to higher borrowing or increase in taxes which crowd out private sector investments and reduce consumers' disposable income. In addition, if the dependency ratio is to be reduced, economically active youth population should be provided with opportunities to develop skills that will ensure that they contribute productively in the economy either as entrepreneurs or in the work environment. It is critical to note that the benefit of the youth bulge cannot be achieved without providing quality education and making it accessible to all.

#### 2.5.2 Population by race

Similar to national population distribution by racial groups as indicated in preceding sections, KZN population is divided into four racial groups namely, Africans, Coloureds, Indian and Whites. Figure 2.2 illustrates KZN's population distribution by race in 2016. The province is largely dominated by Africans, constituting 87.2 per cent of the total KZN population in 2016, followed by Indians at 7.2 per cent, Whites at 4.2 per cent and Coloureds constitute the smallest percentage of the total provincial population at 1.4 per cent. The Africans population group constitutes approximately 80 per cent of the total population of SA.

Source: Stats SA, 2016

Figure 2.2: KZN's population by race in 2016



Source: Stats SA, 2016

#### 2.6 Fertility, mortality, life expectancy and migration

#### 2.6.1 Fertility<sup>1</sup>

Fertility analysis is of central importance in demographic analysis as births are a vital component of population growth. The subject of population growth, in turn, is one that is integral to the realisation of sustainable development.

In the two decades following the Second World War, high levels of fertility emerged as a potential constraint on economic development, at least in low-income or developing countries. Population growth increased in these poor countries from 0.5 per cent per year in 1900, to 1.2 per cent by 1940, and doubled again to 2.5 per cent by 1960. This increase in the rate of population growth, although due to improvements in health, which reduced mortality rather than increased fertility, seemed more likely to overwhelm these countries' capacity to accumulate capital than to employ their rapidly growing populations (Schultz, 2007).

<sup>&</sup>lt;sup>1</sup>The Total Fertility Rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates (<u>www.worldbank.org</u>).

Sustainable development represents a commitment to advance people's well-being, with the added constraint that this development needs to take place within the ecological limits of the biosphere (Moran et al., 2008). Sustainable development therefore hinges on two factors: consumption and population growth. High fertility rates (which lead to high population growth) burden the economy in terms of consumption. Further to this, the number of children women bear in their lifetime has a significant impact on the level of economic and social development that they can achieve. Generally, a woman who has a child or several children is bound to remain in the home to take care of them, which reduces her chances of seeking work or education outside of the home. This results in fewer opportunities for personal development on her part, and therefore perpetuates a cycle of poverty. The fertility rate can therefore be considered to be an indicator of the general health status of a population, and a specific indicator of maternal health, as it encompasses health initiatives such as family planning.

	SA	EC	FS	GP	KZN	LP	MP	NC	NW	WC
Total fertility rate (Stats SA)										
2006-2011	2.92	3.44	2.68	2.36	3.41	3.16	2.85	2.79	3.30	2.31
2011-2016	2.65	3.06	2.44	2.32	3.08	2.86	2.53	2.41	2.90	2.21
Infant mortality rate (deaths under										
1 year per 1 000 live births										
2013 ASSA2008	32.5	44.4	39.1	23.8	41.7	26.7	35.6	24.1	29.1	17.7
2014 ASSA2008	31.9	43.6	38.5	23.4	40.9	26.2	35.0	23.5	28.5	17.1
2015 ASSA2008	31.3	42.8	37.8	22.9	40.3	25.8	34.3	22.9	28.0	16.5
Under 5 mortality rate (deaths under 5 years per 1 000 live births)										
2013 ASSA2008	46.7	62.0	55.4	35.3	60.0	38.2	51.4	34.1	42.6	24.7
2014 ASSA2008	45.7	60.8	54.4	34.4	58.9	37.3	50.4	33.1	41.6	23.9
2015 ASSA2008	44.8	59.6	53.5	33.7	57.8	36.6	49.6	32.2	40.9	23.1
Maternal mortality ratio in facility (deaths per 1 000 live births)										
2014 DHIS	132.5	148.3	217.8	112.6	124.9	165.2	115.4	254.1	167.1	54.4
Life expectancy at birth (Stats SA)										
2011-2016 Female	61.8	58.9	58.0	65.8	58.7	64.0	60.6	60.9	59.9	69.0
2011-2016 Male	56.5	54.5	52.5	61.3	54.0	56.6	55.0	57.5	53.1	64.2

Table 2.4: Fertility, mo	ortality and life expectancy	y in KZN, 2006 to 2016
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Source: Health Systems Trust and Stats SA, 2016

According to Stats SA (2016), the fertility rate in KZN between 2011 and 2016 is projected to stand at 3.08 children; a marginal increase from the 2015 projections. This estimate sits above the national average of 2.92, and is the highest rate in the country. The province is closely followed by the EC (3.06) and the NW (2.90) (table 2.4). These aforementioned provinces are mainly characterised by their rural landscape, and low levels of human development.

#### 2.6.2 Mortality<sup>2</sup>

Within the realm of public health, mortality statistics are often used as a cornerstone in formulating health plans and policies to prevent or reduce premature mortality and improve quality of life.

According to UNICEF (2008), the health risks associated with pregnancy and childbirth are far greater in developing countries than in developed countries. They are especially prevalent in the least developed and lowest-income countries, and among less affluent and marginalized families and communities everywhere. Globally, efforts to reduce deaths among women from complications related to pregnancy and childbirth have been less successful than in other areas of human development – with the result that having a child remains among the most serious health risks for women. There are several indicators of mortality which are widely used to measure premature mortality at various stages of life. This section will look specifically into infant, children under five and maternal mortality.

According to the Organisation for World Overpopulation Awareness<sup>3</sup>, it has been shown that providing reproductive health care, lowering the infant mortality rate<sup>4</sup> and the maternal mortality rate<sup>5</sup> have had a positive correlation to reducing birth rates. In the case of infant mortality, when a woman thinks that many of her children will not survive childhood, she wants to have extra children as insurance that she will have enough children. When death rates are high, as with cases of HIV and AIDS, where there is no access to adequate health care, families try to have more children to replace family members who will die, even if the result is a growing population.

An examination of table 2.4 reveals that mortality rates have been on a general decline in KZN. Despite that being an achievement that should be applauded, it must also be noted that these mortality rates are still relatively higher than those of other provinces. KZN has been projected to have the second to highest infant (40.3 deaths per 1 000 live births and under five 57.8 deaths per 1 000 live births) mortality rates after the EC. The province is ranked as having the 4<sup>th</sup> lowest maternal mortality rates (124.9 deaths per 1 000 live births) after WC, GP and MP.

<sup>&</sup>lt;sup>2</sup>The mortality rate represents the average number of deaths in a particular area over a specified period of time.

<sup>&</sup>lt;sup>3</sup> http://www.overpopulation.org/

<sup>&</sup>lt;sup>4</sup> Probability of dying between birth and exactly one year of age (expressed per 1 000 live births). <u>www.UNICEF.org</u>

<sup>&</sup>lt;sup>5</sup> Refers to the death of a woman while pregnant or within 42 days of termination of pregnancy (irrespective of the duration and site of the pregnancy), from any cause related to or aggravated by the pregnancy or its management. This excludes accidental or incidental causes (www.who.int).

#### 2.6.3 Life expectancy

The United Nations Development Plan (UNDP) defines life expectancy at birth as the number of years a newly born infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life<sup>6</sup>. The indicator is an important yardstick for any economy as it gives an indication of its health status. The implications of low life expectancy include loss of a productive workforce, loss of tax revenue and a high dependency ratio. Being able to predict how a population will age has implications for the planning and provision of services. Increases in life expectancy could translate into large increases in the population. KZN is projected to have a slightly lower life expectancy (54.0 for males and 58.7 for females) than the national average (56.5 for males and 61.8 for females).

#### 2.6.4 Migration

An analysis of migration trends indicates the emergence of a new global migration age. Since the end of the colonial period, international migration has become a truly global phenomenon. Migration has seen a considerable increase in magnitude. The globalisation of migration means that all parts of the world are now affected to a greater or lesser degree, by international migration. There is hardly a village, town or city, much less a country, that is untouched by international migration, either as a sender or recipient of migrants or, in many cases, both (Crush and Frayne 1, 2007).

Table 2.5 shows that during 2011 to 2016, Gauteng continues to absorb the highest number of migrants (585 210) out of all other South African provinces. In contrast, KZN is projected to have a net outflow of people (684) which reduces the population figures. Net out-migration has also been projected in the EC, FS, LP and the NC. Migration is cited as one of the main factors contributing to the decline in KZN's share of the national population, and consequently its share of the equitable share grant.

		2006 - 2011		2011 - 2016					
	Out-migrants	In-migrants	Net migration	Out-migrants	In-migrants	Net migration			
Eastern Cape	247009	176522	-70487	247437	194507	-52930			
Free State	131603	120593	-11010	137367	133048	-4319			
Gauteng	575349	1105750	530401	631048	1216258	585210			
KwaZulu Natal	232248	220180	-12068	243439	242755	-684			
Limpopo	299419	236162	-63257	305030	266751	-38279			
Mpumalanga	183849	230290	46441	193363	254363	61000			
Northern Cape	71144	68785	-2359	77914	74759	-3155			
North West	180753	264678	83925	196223	291821	95598			
Western Cape	179443	330290	150847	194328	363114	168786			

 Table 2.5: Migration trends in KZN, 2006 to 2016

Source: Stats SA, 2016

<sup>6</sup> http://hdr.undp.org/en/69206

#### 2.6.5 Conclusion

According to the World Bank (2015), the impact of the population boom in Africa will depend on how each country in Africa responds today with policies. The policies should be such that they are able to transform the populace of a country into a healthy, educated and empowered labour force that contributes to real and sustained economic growth that will help fight the scourge of poverty.

KZN has one of the highest fertility rates in the country amid high poverty and unemployment rates. The province therefore has to take a solid stance in the promotion of primary health care initiatives, particularly directed at women and child health. Construction of health facilities such as Community Health Centres (CHCs) with mother and child centres should be prioritised. These should also promote family planning services. This measure will go a long way in reducing maternal mortality rates.

#### 3.1 Introduction

Neoclassical economics has traditionally posited that the process of development entails increases in incomes over time. Higher income levels achieved through positive economic growth, appropriately discounted for population growth, would constitute higher levels of development. As many have noted, however, particularly in Africa, the income measure fails to adequately reflect development. Per capita income, in terms of its levels or changes to it, does not sufficiently correlate with measures of human development, such as life expectancy, poverty, and literacy (Fosu, 2007).

The year 2015 marked the end of the Millennium Development Goals (MDGs) era. According to the World Health Organisation (WHO) (2015), progress towards the MDGs has been remarkable, for instance: poverty reduction, improvement in educational standards, and increased access to safe drinking-water all contributed positively to regional development. Progress on the three health goals and targets, namely reducing child mortality (MDG 4), improving maternal health (MDG 5), and combating HIV/AIDS, malaria and other diseases (MDG 6), has also been considerable. Globally, the HIV, tuberculosis (TB) and malaria epidemics were "turned around", child mortality and maternal mortality decreased greatly (53 per cent and 44 per cent respectively, since 1990), despite falling short of the MDGs targets. The MDGs have gone a long way to changing the way the world thinks and talks about itself; shaping the international discourse and debate on development.

On 25 September 2015, the United Nations (UN) General Assembly adopted the new development agenda "Transforming our world: the 2030 agenda for sustainable development". The new agenda is of unprecedented scope and ambition. The MDGs had a shortcoming in that even if they were met, they would not automatically shift the world onto a sustainable development trajectory, partially because the MDGs were weaker on environmental concerns. While poverty eradication, health as a basic human right, education, and food security and nutrition remain priorities as was the case with the MDGs, the Sustainable Development Goals (SDGs) comprise of a broad range of economic, social and environmental objectives, as well as offering the promise of more peaceful and inclusive societies.

Sustainable development is underpinned by five main principles, namely: natural, human, social, manufactured and financial capital. These are the five types of sustainable capital from which human beings derive the goods and services that they need to improve their quality of life. This chapter covers some of the topics that are integral to the attainment of sustainable development in KZN. These are namely poverty, income inequality, human development, grant beneficiaries, education, health, access to basic services and crime.

#### 3.2 Poverty

Countries where the level of poverty is relatively high tend to also exhibit low levels of human development (Fosu, 2007). Some people are born into poverty and have difficulty escaping because they do not enjoy the education, health or nutrition required to accumulate crucial physical stature and cognitive capacity early in life (Barrett, 2005).

	Poverty headcount	t (StatsSA defined)	Poverty intensity (StatsSA defined)			
	2011	2016	2011	2016		
South Africa	8.2%	7.7%	42.2%	42.2%		
Eastern Cape	14.4%	14.4%	41.9%	41.9%		
Free State	5.5%	5.5%	42.2%	41.7%		
Gauteng	4.8%	4.6%	43.8%	44.1%		
KwaZulu-Natal	10.9%	7.7%	42.0%	42.5%		
Limpopo	10.1%	11.5%	41.6%	42.3%		
Mpumalanga	7.9%	7.8%	41.8%	42.7%		
Northern Cape	7.1%	6.6%	42.1%	42.0%		
North West	9.2%	8.8%	42.0%	42.5%		
Western Cape	3.6%	2.7%	42.6%	40.1%		

Table 3.1: Poverty headco	ount and intensity	in South Africa, 2016
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Source: StatsSA, 2016

Similar to development, poverty is multi-dimensional; dependent on access to adequate health care, education facilities, and decent living standards (Alkire and Foster, 2007).

Poverty levels in KZN have been on a gradual decline over the years. A comparison of the proportion of people living in poverty in 2011 and 2016 reveals that a lower proportion of the provincial population was poor in 2016 (7.7 per cent) than in 2011 (10.9 per cent). Despite the proportion of poor people declining in the province, the proportion of those who experienced severe deprivation increased slightly from 42 per cent in 2011 to 42.5 per cent in 2016.

#### 3.3 Household income and income inequality

"Great and persistent inequality in the midst of plenty is a paradox of our times. Over the last few decades, innovation has exploded from our increasingly digital age, poverty rates have declined in every region of the world, and emerging market countries have experienced unprecedented growth. Global income inequality stands at very high levels, whereby the richest eight per cent of the world's population earn half of the world's total income, while the remaining 92 per cent of people are left with the other half. Such gaps have left many on the precipice of steep decline. With insecure livelihoods, volatile markets, and unreliable services, many people feel

increasingly threatened by the prospect of falling under poverty lines and into poverty traps; as many in fact have" (UNDP, 2013).

Income category	Income level	African	Asian	Coloured	White	Grand Total
Low er income	0 - 54	47.8%	4.3%	21.6%	1.0%	40.7%
Low emerging middle income	54 - 96	23.4%	8.2%	15.6%	3.2%	20.7%
Emerging middle class	96 - 360	23.7%	52.8%	44.0%	36.0%	27.3%
Realised middle class	360 - 600	3.3%	17.1%	11.9%	24.3%	6.0%
Upper middle class	600 -1 200	1.4%	12.7%	5.2%	24.0%	3.9%
Affluent	1 200 +	0.4%	4.7%	1.7%	11.5%	1.5%
Grand Total		100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.2: Income distribution by proportion of households in KZN, 2015

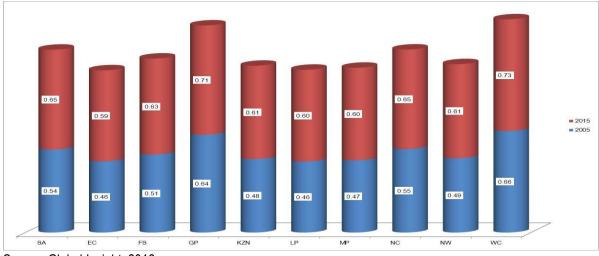
Source: Global Insight, 2016

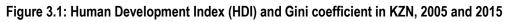
In 2015, 40.7 per cent of all KZN households were categorised as being lower income households, where the annual income was between R0 and R54 000. This was a slight decrease from 44.8 per cent in 2014. About 20.7 per cent were categorised as being low emerging middle income households earning between R54 000 and R96 000 per annum (p.a.), and roughly 27.3 per cent were emerging middle class (R96 000 – R360 000 p.a.). A small proportion of the province's households earned between R360 000 and R600 000 (6.0 per cent; an increase from 5.5 per cent in 2014) categorized as the realised middle class, and about 3.9 per cent were upper middle class households earning between R600 000 and R1.2 million. About 1.5 per cent of the total KZN population was considered to be affluent, earning in excess of R1.2 million per annum.

Much still needs to be done in addressing the stark reality that an estimated 47.8 per cent of African households in KZN were still categorised as low income earners in 2015, in contrast to only 21.6 per cent Coloured, 4.3 per cent Asian, and 1 per cent white households being categorized as lower income. This observation is further supported by KZN's Gini coefficient of 0.63 which is the second highest across all provinces after Gauteng (0.64).

#### 3.4 Human development

African countries have increased their levels of investment in education, health and nutrition; increased their participation in decision-making; and reduced military spending. However, the outcomes have been mixed, and there have been large variations in their poverty performance (Arimah, 2004). Despite the fact that poverty is being addressed in South Africa (SA), and the province of KZN, the high poverty figures indicate a high level of deprivation, and this in turn impacts negatively on the level of human development within the province as more people are unable to access quality services in the health and education sectors for a better quality of life.





Source: Global Insight, 2016

#### 3.5 Grant beneficiaries

According to the Health Systems Trust (2015), SA is regarded as being food secure; however, hidden hunger still affects many South Africans. The Trust further highlighted that poor communities do not have easy access to healthy food. Instead, they are more reliant on low-grade food resulting in both childhood stunting and adult obesity. Although the grant payment system was implemented to try and alleviate nutritional problems, sadly it is inadequate.

As it has become the norm in social grant trend analysis, KZN had the highest number of social grant beneficiaries as at 30 November 2016 on a national scale, with a total number of 3 919 059 beneficiaries. This figure equates to 22.8 per cent of the total national number of social grant beneficiaries. The province had the highest share of recipients of the Old Age Grant (657 525 beneficiaries, 20.1 per cent), Disability Grant (249 864 beneficiaries, 23 per cent), Grant-in-Aid (51 330 beneficiaries, 32.6 per cent), Care Dependency Grant (40 050 beneficiaries, 27.8 per cent) and the Child Support Grant (2 804 231 beneficiaries, 23.3 per cent).

Table 3.3: Number and	proportion of	grant beneficiaries	in KZN as at 30 November 2016
	p	9	

	Old Age	Grant	War Veteran's Grant		Disability Grant		Grant-in-aid		Care Dependency Grant		Foster Child Grant		Child Support Grant		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Total
South Africa	3 266 869	100.0	196	103.2	1 087 487	100.7	157 565	99.5	143 879	99.4	511 805	128.3	12 040 467	100.0	17 208 268
Eastern Cape	544 960	16.7	32	16.8	182 367	16.9	20 231	12.8	22 272	15.4	116 187	29.1	1 871 569	15.5	2 757 618
Free State	191 885	5.9	1	0.5	75 769	7.0	3 652	2.3	7 723	5.3	39 121	9.8	672 925	5.6	991 076
Gauteng	537 912	16.5	58	30.5	115 466	10.7	5 149	3.3	18 253	12.6	58 956	14.8	1 761 798	14.6	2 497 592
KwaZulu-Natal	657 525	20.1	27	14.2	249 864	23.1	51 330	32.4	40 050	27.7	116 024	29.1	2 804 231	23.3	3 919 051
Limpopo	448 316	13.7	8	4.2	96 477	8.9	34 970	22.1	14 778	10.2	56 932	14.3	1 765 183	14.7	2 416 664
Mpumalanga	238 706	7.3	7	3.7	77 658	7.2	9 198	5.8	10 807	7.5	37 173	9.3	1 061 970	8.8	1 435 519
Northern Cape	83 160	2.5	5	2.6	52 789	4.9	8 265	5.2	5 937	4.1	14 879	3.7	301 588	2.5	466 623
North West	245 333	7.5	3	1.6	79 836	7.4	9 164	5.8	9 996	6.9	39 811	10.0	824 637	6.8	1 208 780
Western Cape	319 072	9.8	55	28.9	157 261	14.6	15 606	9.9	14 063	9.7	32 722	8.2	976 566	8.1	1 515 345

Source: South African Social Security Agency (SASSA), 2016

In terms of growth in beneficiary numbers since 30 November 2015, the Old Age Grant (2.2 per cent), Grant-in-Aid (12.4 per cent) and the Care Dependency Grant (8.2 per cent) experienced declines while other grant types experienced an increase in numbers. The most notable increase was in the number of War Veteran's Grant beneficiaries<sup>7</sup> (14.8 per cent), followed by Foster Child Grant beneficiaries (12.4 per cent).

#### 3.6 Education

Education is essential for the enhancement of human capital, thus rendering a greater prospect for people to generate income. One of the Department of Education's (DoE's) strategic objectives is to extend a better quality of life to children of school-going age. According to Calman and Tarr-Whelan (2005)<sup>8</sup>, investing in early education generates economic development for communities in the short-term in the form of jobs, the purchase of goods and services and a more efficient workforce. In the long-term, quality early education builds an employable and educated workforce.

Heckman, Pinto and Savelyev (2013) further state that the holistic development of young children (physical, socio-emotional, language and cognitive) plays a critical role in shaping their subsequent school attainment, performance, health, and future earnings as well as assists in discouraging antisocial behavior. This is further supported by Georgieff (2007); Grantham et al (2007); Walker et al (2007) who argue that critical brain development occurs during the early years and nutritional deficiencies during this time are associated with delayed cognitive ability and hence negatively affect school progress. These studies provide evidence that early childhood development gives a good basic education foundation. It is from this backdrop that quality basic education is one of the fourteen national outcomes as indicated in the Medium Term Strategic Framework (MTSF) of SA.

It is therefore not surprising that education is receiving the largest allocation in the national budget. According to the National Treasury (2016) the national priorities for government in the years ahead include expanding access to education and quality early childhood development, overcoming institutional weaknesses in the basic education system, broadening access to effective vocational and technical skills, and improving the impact of resources devoted to vocational training.

In addition, the province of KZN allocates the highest of its budget to education. However, the quality of output does not match the extent of investment. It is therefore from this backdrop that this section will go into further details providing an analysis of learner educator ratio, learner school ratio, literacy rate and matric results.

<sup>&</sup>lt;sup>7</sup> Due to the War Veteran's Grant beneficiaries being of relatively low figures compared to other grant categories, minor changes in the figures tend to translate into significant percentages.

<sup>&</sup>lt;sup>8</sup>Calman L.J. &Tarr-Whelan L. Early childhood education for all. A wise investment. Available online: http://web.mit.edu/workplacecenter/docs/Full%20Report.pdf.

#### 3.6.1 School and educator: learner ratio

The learner-educator ratio (LER) is a general way to measure workloads and resource allocations in schools as well as the amount of individual attention a child is likely to receive from educators. Small classes are often seen as beneficial because they allow educators to focus more on the needs of the individual learners and thus reduce the amount of class time and effort devoted to managing disruptions.

Evidence by the OECD (2014) suggests a positive relationship between smaller classes and more innovative practices. As classes become overcrowded, learners may find it difficult to follow the lesson being taught or engage in innovative discussions and consequently end up not understanding the content of the lesson. Although 30 learners per class may be regarded as ideal LER, it, however, depends on the age of learners, academic needs of learners, experience, skills as well as effectiveness of educators in imparting knowledge.

Table 3.4 shows the number of learners, educators and schools across different provinces for the years 2011 and 2016. A comparison of the years under review indicates that there had been a marginal increase of 1.1 per cent in the KZN's number of learners from 2 847 378 in 2011 to 2 877 544 in 2016. However, this is in contrast to the drop in the number of educators and schools by 3.7 per cent and 0.6 per cent, respectively. This resulted in an increase in both the LER and the learner-to-school ratio (LSR) from 31 to 32 and 461 to 469 respectively. It appears that all the provinces recorded increasing LSRs and LERs except for GP which maintained 28 of LER for both years under consideration.

		2011		2016						
	Number of Learners	Number of Educators	Number of Schools	LER	LSR	Number of Learners	Number of Educators	Number of Schools	LER	LSR
South Africa	12 287 994	420 608	25 851	29	475	12 932 565	418 613	25 574	31	506
Eastern Cape	1 963 578	68 499	5 755	29	341	1 961 547	61 629	5 676	32	346
Free State	658 010	24 057	1 437	27	458	688 349	23 523	1 282	29	537
Gauteng	2 022 050	71 532	2 559	28	790	2 326 584	82 078	2 813	28	827
KwaZulu Natal	2 847 378	93 266	6 180	31	461	2 877 544	89 799	6 142	32	469
Limpopo	1 695 524	58 016	4 073	29	416	1 765 555	54 418	4 018	32	439
Mpumalanga	1 046 551	34 623	1 931	30	542	1 074 352	34 404	1 847	31	582
Northern Cape	274 745	8 899	611	31	450	291 515	9 136	574	32	508
North West	765 120	25 897	1 669	30	458	830 547	26 108	1 535	32	541
Western Cape	1 015 038	35 819	1 636	28	620	1 116 572	37 518	1 687	30	662

Table 3.4: Learner-educator ratio (LER) and learner-school ratio (LSR) by districts, 2011 and 2016

Source: Department of Basic Education, 2016

#### 3.6.2 Literacy rate and matric results

According to the World Bank, literacy rate<sup>9</sup> means people who are aged 15 and above, who can read and write with understanding a short simple statement on their everyday life. Literacy confers human development benefits, such as improved self-confidence, self-esteem and a feeling of greater self-empowerment. Literacy also has an influence on human capital and the ability of individuals, social institutions and nations to adapt and change along with technological and other developments in the global market. People that are literate tend to have a high social status (since they can obtain employment and earn income) and economic status (since they can be more productive as they are less costly to train and gain economic skills).

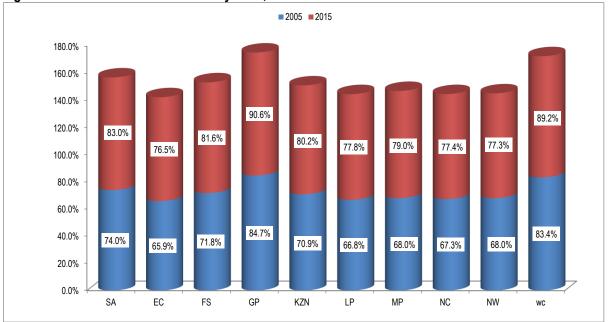


Figure 3.2: Provincial functional literacy rates, 2005 and 2015

Figure 3.2 shows the functional literacy rate in SA by provinces in 2005 and 2015. In KZN, the literacy rate increased from 70.9 per cent in 2005 to 80.2 per cent in 2015. However, it was still 2.8 percentage points below the national level of 83 per cent in 2015. In 2015, functional literacy was the highest in the GP (90.6 per cent) followed by the Western Cape (WC) (89.2 per cent). However, the provinces that fell below the literacy level of 80 per cent included the Eastern Cape (EC), Limpopo Province (LP), Mpumalanga Province (MP) Northern Cape (NC) and the North West (NW).

Source: Global Insight, 2016

<sup>&</sup>lt;sup>9</sup> Literacy rate is calculated by dividing the number of literate individuals aged 15 years and over by the corresponding age group population and multiplying the result by 100. Available on: <u>http://data.worldbank.org/indicator/SE.ADT.LITR.ZS</u>

	2005					2015				
	African	White	Coloured	Asian	Total	African	White	Coloured	Asian	Total
No schooling	18.4	0.9	3.2	4.5	15.5	10.2	0.4	1.4	2.4	8.8
Grade 0-6	19.4	1.1	6.9	8	16.8	14.6	1.3	4.3	7.1	13
Grade 7-11	37.4	21.1	48.7	37.2	36.3	40	17.8	38.8	31.3	38
Cert/ diploma without matric	0.6	3	1.5	1	0.8	0.3	1.4	0.7	0.5	0.4
Matric only	19.7	41	30.3	37.2	23.2	28	43.5	38.4	44.1	30.5
Higher	4.5	32.9	9.4	12.1	7.4	6.9	35.6	16.4	14.6	9.3
Total	100	100	100	100	100	100	100	100	100	100

Table 3.5: KZN's levels of education, 2005 and 2016

Source: Global Insight, 2016

Table 3.5 represents the level of education in KZN in 2005 and 2015. It is evident that the situation regarding the level of education in KZN improved over the 10-year period. In 2015, 8.8 per cent of the people who were 20 years and older had not received any schooling. This is an improvement from 15.5 per cent recorded in 2005.

The percentage of the population aged 20 years and above that completed secondary education (matric only) in KZN increased from 23.2 per cent in 2005 to 30.5 per cent in 2015. This is impressive since it is reflective of more people in the economically active population (EAP) having received a basic education and as such can be more productive members of society. It is encouraging to see that there has been an increase in the proportion of people who attained higher qualifications in 2015 (9.3 per cent) than in 2005 (7.4 per cent), although it was not a significant increase. It is worrying that the African population lag behind all other racial groups with regard to the level of education.

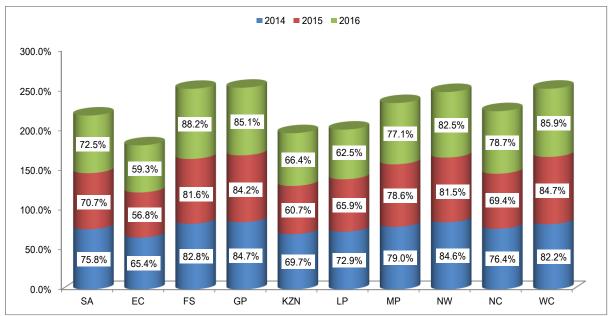


Figure 3.3: Comparison of national and provincial NSC achievements, 2014, 2015 and 2016

Source: Department of Basic Education, NSC Examination, 2016

Figure 3.3 compares the national senior certificate (NSC) achievements in SA and among provinces from 2014 to 2016. Learner achievement rates in KZN had increased from 60.7 per cent in 2015 to 66.4 per cent in 2016. This is however, below the percentage of 69.7 per cent achieved by the province in 2014. In comparison with other provinces, KZN was number three from the last after the EC and LP. This is however, disappointing as KZN had the largest number of matriculants out of all the provinces (147 648 representing 24.2 per cent) of the matriculants who wrote the NSC exam in 2016.

All the other provinces recorded an increase in their matric performance except the LP and MP which realised marginal decrease from 65.9 per cent to 62.5 per cent and 78.6 per cent to 77.1 per cent in 2015 and 2016 respectively. Nationally, the average performance increased by 1.8 per cent between 2015 and 2016 from a decline of 5.1 per cent recorded between 2014 and 2015.

		20	)15			20	)16	
	Accounting	Economics	Mathematics	Physical Science	Accounting	Economics	Mathematics	Physical Science
South Africa	36.2	39.1	31.9	36.1	44.9	36.4	33.5	39.5
Eastern Cape	29.2	26.6	21.8	24.8	36.4	25.7	22.2	27.7
Free State	47.4	32.5	46.0	43.3	61	33.9	48.6	50.2
Gauteng	49.6	52.5	49.8	46.1	60.6	51.7	49.6	46.7
KwaZulu Natal	29.3	33.0	20.0	30.2	36.1	38.3	23.0	36.4
Limpopo	29.4	39.5	32.4	35.4	37.7	26.1	33.6	37.9
Mpumalanga	38.4	38.3	36.0	38.5	46.5	35.7	34.2	39.6
North West	33.2	48.2	37.3	35.9	51.9	43.7	40.5	43
Northern Cape	34.1	42.1	36.1	33.1	47.7	39.8	40	34.1
Western Cape	51.0	52.9	57.3	54.7	58.4	43.7	60.3	56.4

 Table 3.6: Percentage of learners who achieved 40 per cent and above in selected subjects, 2015 and 2016

Source: Department of Basic Education, NSC examination, 2016

Table 3.6 compares the percentage of learners who achieved 40 per cent and above in selected subjects from 2015 to 2016. In respect of the learners' performance in the gateway subjects of Mathematics, Physical Science, Accounting and Economics, there has been an improvement; however, the change is from a very low base. These subjects showed a moderate increase in the province of KZN from 20 per cent to 23 per cent (Mathematics), from 30.2 per cent to 36.4 per cent (Physical Science), from 29.3 per cent to 36.1 per cent (Accounting) and from 33 per cent to 38.3 per cent for Economics between 2015 and 2016. Nationally, there was also an increase in the performance of learners, except for Economics which showed a marginal decrease in the pass rate from 39.1 per cent in 2015 to 36.4 per cent in 2016.

Several international studies and the Annual National Assessment (ANA) results indicate that the problem with mathematics has its roots in primary school, where many learners fail to gain basic mathematical skills<sup>10</sup>. The implication of this is that there is a low number of students who are able to get entrance to degree qualifications

<sup>&</sup>lt;sup>10</sup>http://www.amesa.org.za/AMESA2014/Proceedings/papers/Plenary%20Papers/3.%20Anne%20Maclean.pdf

which require mathematics. These degrees include among others, engineering, accounting, economics and the teaching profession. In addition, most of the students who achieved a Bachelor pass<sup>11</sup> cannot gain entrance to a university and therefore cannot necessarily address the skills challenge facing the economy. However, these learners can still be absorbed by the Technical and Vocational Education and Training (TVET) colleges whereby they will gain technical skills which will enable them to qualify as artisans in various fields. This in turn will enable them to work in a skilled position, thereby aiding the economy.

The research conducted by the Department of Basic Education (DBE) on progression suggests that in the South African schooling system there is a high drop-out rate. Approximately 60 per cent of learners that enter the schooling system complete grade 12. Often the learners that drop out of the system do so after repeated failure. After much consideration and having considered the international practice in countries like Finland, Sweden, Denmark, Japan, Korea, Kenya and the United Kingdom; in 2013 the Minister of Education approved a policy that allows learners that have failed a grade for the second time to be promoted to the next grade; provided he or she meets the specified criteria which indicate that she or he has a potential of coping in the next grade if provided with the necessary support.

		20	15			20	16			% Difference
	Number of Learners wrote	Number of Progressed Learners wrote	% Achieved	% Achieved - Progressed Learners excluded	Number of Learners wrote	Number of Progressed Learners wrote	% Achieved	% Achieved - Progressed Learners excluded	% Difference (Progressed Learners)	(Progressed Learners Excluded)
South Africa	644 437	58 656	37.6	74.1	610 178	67 510	43.5	76.2	5.9	2.1
Eastern Cape	87 022	11 705	22.4	62.2	82 902	9 163	27.4	63.3	5	1.1
Free State	31 187	5 105	50.9	87.7	26 786	5 282	68.1	93.2	17.2	5.5
Gauteng	108 438	4 568	47	85.9	103 829	7 404	61	87	14	1.1
KwaZulu Natal	162 649	10 070	47.3	61.6	147 648	12 983	34.6	69.5	-12.7	7.9
Limpopo	101 546	13 022	26.8	71.7	101 807	15 949	31.4	68.2	4.6	-3.4
Mpumalanga	54 979	5 091	45.0	82.1	54 251	8 604	54.6	81.3	9.6	-0.8
North West	13 202	3 543	59.9	77.2	32 045	4 653	61.1	86.2	1.3	9
Northern Cape	31 706	1 963	31.2	84	10 041	1 230	53.6	82.2	22.3	-1.8
Western Cape	53 708	3 589	39.1	88	50 869	2 242	46.9	87.7	7.8	-0.2

Table 3.7: Number of progressed learners wrote and achieved NSC, 2015 and 2016

Source: Department of Basic Education, NSC examination, 2016

When considering the progressed learners, KZN is the only province whose pass rate declined by 12.7 per cent. The NC had the highest gain in the pass rate of 22.3 per cent followed by the FS (17.2 per cent) and the GP at 14 per cent. Conversely, when progressed learners are excluded the pass rate improved in KZN by 7.9 per cent from 61.6 per cent in 2015 to 69.5 per cent in 2016. The province which recorded the highest improvement is the NW province at 9 per cent. The FS province recorded the highest percentage pass rate of progressed learners at 68.1 per cent in 2016 followed by the NW at 61.1 per cent. The province of KZN recorded 34.6 per cent pass rate for progressed learners which is the third from last after LP and the EC province.

<sup>&</sup>lt;sup>11</sup> A matric learner may achieve a Bachelor's pass; however, this does not automatically guarantee university entrance because University entrance requirements stipulate new students to have achieved certain points at matric level.

#### 3.7 Health

Arguably, health, reflected by mortality of infants and adults, affects economic performance through human capital investments, physical capital accumulation, population growth, productivity and female labour force participation (Strittmatter and Sunde, 2013). However, it must also be considered that the direction of causality may be two-directional where the state of the economy affects the health status of the population.

Although a lack of financial resources or information can create barriers to accessing services, the causal relationship between access to health services and poverty also runs in the other direction. When health care is needed but is delayed or not obtained, people's health worsens, which in turn leads to loss of income and higher health care costs, both of which contribute to poverty (Peters et al., 2008). Either way, there is consensus in theory that access to health care is an important facet of both human and economic development through reduced mortality.

#### 3.7.1 HIV and AIDS

Despite the strides that have been made in reducing mortality rates in KZN, the province seems to be grappling with obstinate Human Immunodeficiency Virus (HIV) and Acquired Immuno Deficiency Syndrome (AIDS) prevalence rates and high numbers of AIDS orphans. The good news is that the province is seeing less HIV and AIDS related deaths, which means that those living with the disease(s) are living longer. This implies that government is succeeding in its endeavor to improve the quality of life of the infected. However, efforts need to be intensified in preventing new HIV and AIDS infections within the province.

	SA	EC	FS	GP	KZN	LP	MP	NW	NC	WC
AIDS orphans (maternal										
orphans <18 years)										
2013 ASSA2008	1 351 144	181 485	90 299	276 490	413 145	102 965	138 031	112 088	13 673	52 397
2014 ASSA2008	1 379 917	184 941	90 480	281 811	416 079	107 574	139 608	112 733	14 563	55 869
2015 ASSA2008	1 400 267	187 391	90 079	284 602	416 265	111 858	140 340	112 672	15 365	58 905
AIDS deaths (%)										
2013 ASSA2008	31.9	27.0	31.8	35.5	38.1	25.6	36.6	36.2	20.9	16.7
2014 ASSA2008	32.4	27.7	31.8	35.5	38.6	26.4	37.0	36.3	21.5	17.2
2015 ASSA2008	32.8	28.5	32.0	35.4	39.0	27.2	37.4	36.4	21.9	17.6
HIV prevalence (%) (total										
population)										
2013 ASSA2008	11.2	11.0	12.1	11.2	15.2	7.3	12.8	12.5	6.9	5.2
2013 ASSA2008 female	13.0	13.1	13.8	12.6	17.3	9.6	15.7	13.9	8.4	6.5
2013 ASSA2008 male	9.3	8.6	10.4	9.8	12.9	4.6	9.6	11.1	5.3	3.9
2014 ASSA2008	11.3	11.2	12.2	11.1	15.3	7.4	12.9	12.5	6.9	5.2
2014 ASSA2008 female	13.1	13.4	13.9	12.6	17.5	9.8	15.9	14.0	8.5	6.5
2014 ASSA2008 male	9.3	8.7	10.4	9.7	12.9	4.7	9.7	11.1	5.3	3.9
2015 ASSA2008	11.3	11.4	12.3	11.1	15.4	7.5	13.0	12.6	7.0	5.2
2015 ASSA2008 female	13.2	13.6	14.0	12.5	17.6	9.9	16.1	14.1	8.5	6.5
2015 ASSA2008 male	9.3	8.9	10.4	9.6	13.0	4.8	9.7	11.0	5.3	3.9

#### Table 3.8: HIV and AIDS prevalence, 2013 to 2015

Source: Health Systems Trust, 2016

On a positive note, about 52.6 per cent of HIV positive people have been placed on anti-retroviral (ARV) treatment in the province. This rate is second only to the WC at 59.1 per cent. This means that more people may survive longer or be able to work longer and as such continue to contribute to the economy.

	SA	EC	FS	GP	KZN	LP	MP	NC	NW	WC
Total population	55 908 900	7 061 700	2 861 600	13 498 200	11 079 700	5 803 900	4 328 300	1 191 700	3 790 600	6 293 200
Estimated number of HIV+ people	5 879 181	796 634	366 895	1 229 068	1 680 200	461 927	520 480	82 723	451 339	289 915
HIV+ people (%)	10.5	11.3	12.8	9.1	15.2	8.0	12.0	6.9	11.9	4.6
Number of people on ARVs (April 2015)	3 103 902	320 062	168 877	730 576	951 462	232 506	284 984	43 054	191 612	180 769
Percentage of HIV+ people on ARVs	52.8	40.2	46.0	59.4	56.6	50.3	54.8	52.0	42.5	62.4

Table 3.9: HIV and AIDS prevalence, 2015

Source: Health Systems Trust, 2016

## 3.8 Crime

Table 3.10 reflects crime categories prevalent in KZN between the years 2013 and 2016. *Drug-related crime* overtook *theft* as the leading crime category in KZN in 2015/16 followed by *burglary at residential premises*. It is a well-known behavioral fact that drug addicts often steal in order to fund their drug habits. It could, therefore, be expected that with an increase in drug-related crime, burglary and theft would also be a prominent feature on the crime list.

According to the United Nations Office on Drugs and Crime (2014), drug use continues to exert a significant toll on the economy, with valuable human lives and productive years of many persons being lost. It is therefore highly disconcerting that drug-related crime has escalated to the levels that it has in over such a short period of time within the province. The abuse of drugs poses a threat to the social health of communities as it has the potential to cause an increase in the incidences of violent crime, and predisposes communities to the health risks of HIV and hepatitis C where the use of injectable drugs, specifically the sharing of needles, is concerned.

Data related to crime statistics for the main towns and cities in KZN is presented in the Appendix (table A3.2 to A3.10).

#### Table 3.10: Crime levels (per 100 000) and growth rates in KZN, 2013 to 2016

	April 2013 to	April 2014 to	April 2015 to	Comparis	on 2015-16
Crime Category	March 2014	March 2015	March 2016	Case Difference	% Change
CONTACT CRIME	S ( CRIMES AG	AINST THE PE	RSON)		
Murder	3 616	3 810	3 929	119	3.1%
Sexual Offences	9 889	9 079	8 947	-132	-1.5%
Attempted murder	3 835	3 918	4 041	123	3.1%
Assault with the intent to inflict grievous bodily harm	28 982	29 201	28 665	-536	-1.8%
Common assault	26 307	24 011	23 703	-308	-1.3%
Common robbery	8 397	7 857	7 524	-333	-4.2%
Robbery with aggravating circumstances	20 957	20 881	21 061	180	0.9%
Total Contact Crimes ( Crimes Against The Person)	101 983	98 757	97 870	-887	-0.9%
CON	TACT-RELATED	CRIMES			
Arson	896	854	825	-29	-3.4%
Malicious damage to property	14 954	14 605	14 709	104	0.7%
Contact-Related Crimes	15 850	15 459	15 534	75	0.5%
PROF	PERTY-RELATED	CRIMES			-
Burglary at non-residential premises	11 194	11 032	11 656	624	5.7%
Burglary at residential premises	43 969	43 274	42 429	-845	-2.0%
Theft of motor vehicle and motorcycle	8 674	8 404	8 673	269	3.2%
Theft out of or from motor vehicle	18 614	18 148	17 896	-252	-1.4%
Stock-theft	5 754	5 956	5 731	-225	-3.8%
Property-Related Crimes	88 205	86 814	86 385	-429	-0.5%
от	HER SERIOUS C	RIMES			8
All theft not mentioned elsew here	49 846	47 622	43 573	-4 049	-8.5%
Commercial crime	12 431	11 227	11 395	168	1.5%
Shoplifting	13 378	14 118	13 648	-470	-3.3%
Other Serious Crimes	75 655	72 967	68 616	-4 351	-6.0%
17 Community-Reported Serious Crimes	281 693	273 997	268 405	-5 592	-2.0%
CRIME DETECTE	D AS A RESULT	OF POLICE A	CTION		
Illegal possession of firearms and ammunition	4 586	4 081	3 908	-173	-4.2%
Drug-related crime	45 950	47 377	46 354	-1 023	-2.2%
Driving under the influence of alcohol or drugs	12 595	11 702	12 052	350	3.0%
Sexual offences as result of police action	1 765	2 258	2 561	303	13.4%
Crime Detected As A Result Of Police Action	64 896	65 418	64 875	-543	-0.8%
SUBCATEGOR	RIES OF AGGRA	VATED ROBBI	ERY		
Carjacking	2 262	2 190	2 493	303	13.8%
Truck hijacking	46	63	71	8	12.7%
Robbery of cash in transit	37	18	21	3	16.7%
Bank robbery	0	0	0	0	
Robbery at residential premises	4 099	3 958	4 082	124	3.1%
Robbery at non-residential premises	2 696	2 750	2 825	75	2.7%
Subcategories Of Aggravated Robbery	9 140	8 979	9 492	513	5.7%
Trio Crimes	9 057	8 898	9 400	502	5.6%

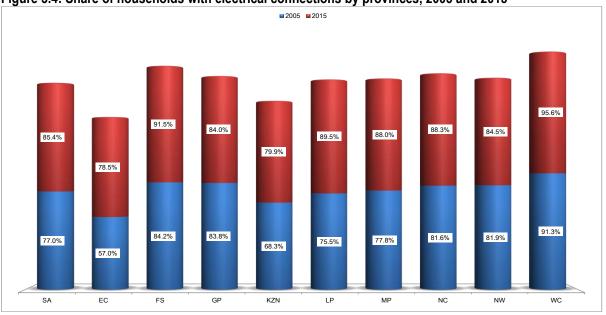
Source: SAPS, 2016

## 3.9 Access to basic services

#### 3.9.1 Access to electricity

While the availability of electricity by itself is not a panacea for the economic and social problems facing Africa, the supply of electricity is nevertheless believed to be a necessary requirement for Africa's economic and social development (Wolde-Rufael, 2006). It is a major input to industry for production, and output can be severely stunted without it, which would adversely affect economic growth. A more noble reason for ensuring the supply of safe and reliable electricity, however, is that of promoting social development in the communities through

infrastructure delivery; and household infrastructure in particular. With access to electricity, households can benefit through lighting; this will enable children of school-going age to complete homework, care-givers can complete household chores such as cooking so the family can be fed properly. Electricity also serves as a safety mechanism through government installing street lights to promote visibility.





The load shedding schedule of electricity which had been engrained as part of South African citizens between 2008 and 2015 is now a thing of the distant past. This about turn has reinstated the confidence of business owners and ordinary citizens in the sustainability of the power utility, which bodes well for investment prospects in the country.

KZN was trailing behind most other provinces in the country in respect of connecting households with electricity in 2015. Even so, 79.9 per cent of KZN households now have electricity; a 1 per cent improvement from 2014 figures.

# 3.9.2 Access to water and sanitation

According to the United Nations (UN)<sup>12</sup>, water is at the core of sustainable development and is critical for socioeconomic development, healthy ecosystems and for human survival. The resource is vital for reducing the global burden of disease and improving the health, welfare and productivity of the population.

Source: Global Insight, 2016

<sup>&</sup>lt;sup>12</sup> http://www.un.org/waterforlifedecade/water\_and\_sustainable\_development.shtml

Water is a critical input to the agricultural sector. It is an essential input for the survival of both livestock and crop, and by implication for food security for human beings and animals. The UN estimates that by 2050, world agriculture will need to produce 60 per cent more food globally, and 100 per cent more in developing countries to sustain the growing population. It is further estimated that industry, energy, and households together account for 30 per cent of water demand. More developed countries have a much larger proportion of freshwater withdrawals for industry than less developed countries, where agriculture dominates.

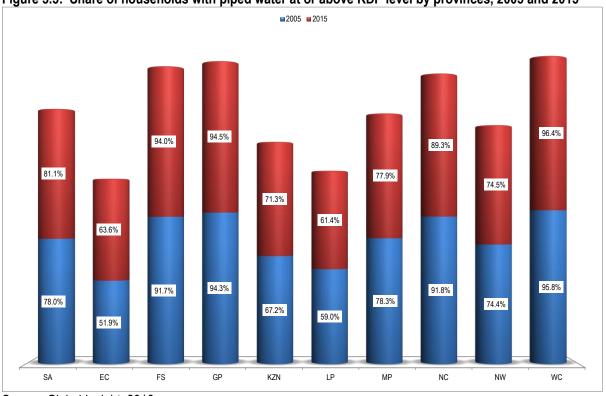


Figure 3.5: Share of households with piped water at or above RDP level by provinces, 2005 and 2015

The high rate of urbanisation further exacerbates the problem for municipalities, who require water for sanitation and to prevent or eradicate slums. Environmental sustainability for communities therefore hinges mainly on the provision of housing, water and sanitation services. Sanitation<sup>13</sup> is the safe removal of human waste as well as the maintenance of hygienic conditions.

The relationship between adequate sanitation and health is well documented. Slum dwellers have higher rates of child malnourishment; prevalence of diarrhoea, malnutrition and hunger; prevalence of HIV and AIDS; and, as a result, lower life expectancy (Isunju et al., 2011). The Global Burden of Disease study undertaken by the World Bank indicates that 15 per cent of all deaths in children below 5 years of age in low- and middle-income countries are directly attributable to diarrhoeal disease. Close to 90 per cent of the diarrhoeal disease burden is caused by

Source: Global Insight, 2016

<sup>13</sup> http://www.who.int/topics/sanitation/en/ [Accessed 30 January 2015]

unsafe sanitation, water and hygiene. KZN had one of the lowest proportions of households with access to piped water and hygienic toilets in the country, at 71.3 per cent and 71.8 per cent respectively.

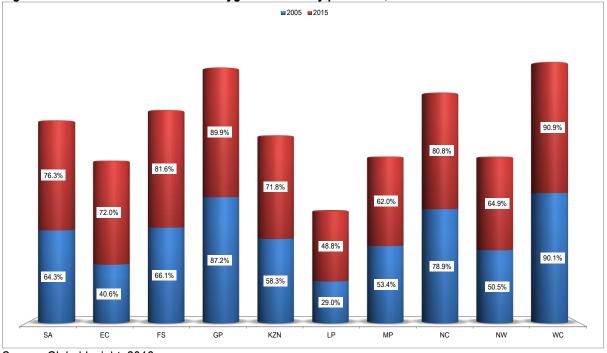


Figure 3.6: Share of households with hygienic toilets by provinces, 2005 and 2015

Source: Global Insight, 2016

## 3.10 Conclusion

Poverty in KZN is on a steady decline due to a concerted effort by the government to secure the futures of the people who are struggling to meet their basic needs. The most dented type of poverty is that which is associated with food shortage, although the quality of food afforded by the poor is not sufficient to meet the nutritional needs of children. Income distribution remains a pertinent problem within the province as much of the wealth remains in the hands of the White and Asian segments of the population. Most African households earn a low income, which is barely enough to sustain their existence. This in turn leads to high deprivation levels.

## 4.1 Introduction

Projections by the global financial organisations such as the International Monetary Fund (IMF), World Bank and the Organisation for Economic Co-operation and Development (OECD), indicate that the global economic outlook remains subdued in 2017 and 2018. This trend is also pertinent in advanced economies reflecting a severe sluggish outlook following the United Kingdom (UK) vote in June 2016 in favour of leaving the European Union (Brexit) and the assumption of a changing policy mix, most especially under a new administration in the United States (US).

The economic performance and outlook in the emerging markets and developing economies (EMDEs) is uneven and generally weaker though expected to pick up modestly (IMF, 2017). Sub-Saharan Africa is the region that has been hardest hit by the persistently low commodity prices and severe drought. The economy of the region is however, expected to gain momentum and rise slightly in 2017 and 2018 (IMF, 2016).

Similar to the global economic performance, South African economic outlook also remains subdued. The sluggish economic outlook has detrimental effects on the successful implementation of the national and provincial priorities as outlined in the National Development Plan (NDP) and the Provincial Growth and Development Strategy (PGDS). The lacklustre economic performance is also not boding well with the four major sovereign credit rating agencies<sup>14</sup>, which have since maintained a negative economic growth rate for South Africa (SA).

The rating agencies are also concerned that the continued accumulation of public debt and contingent liabilities in terms of gross domestic product (GDP) could make it difficult for the country to be able to make future payments on its debts. As of the end of the third quarter of 2016, the country was also faced with the challenge of a current account deficit emanating from the weaker international demand for domestically produced goods. This is further exacerbated by the strengthening of the exchange rate of the rand, which more than offset the benefit arising from higher international commodity prices. However, after nearly six years of decline in commodity prices, they have recently rebounded somewhat albeit from low levels. Travel and tourism has, over the last few years, become one of the most important economic sectors in respect of contributing towards GDP in most countries including SA. Tourism has a direct contribution in an economy of the country through investment spending and job creation.

<sup>&</sup>lt;sup>14</sup> The four major global sovereign credit rating agencies are Moody's, Standard & Poor (S&P), Fitch and Rating & Investment Information (R&I).

Taking into account both the global and national economic performance, this chapter provides the economic review and outlook of the province of KwaZulu-Natal (KZN). The chapter begins with an economic review and outlook from global, national and provincial levels. This is then followed by the brief review of the sectorial analysis including tourism. The chapter concludes by providing an analysis of international trade and inflation rate at both national and provincial levels.

#### 4.2 Global economic outlook

The International Monetary Fund (IMF, 2016), World Bank (2017) and the Organisation for Economic Cooperation and Development (OECD, 2016), project the global economy to remain in a low-growth trap in 2017 and 2018. The IMF (2017) expects the global economic performance to remain subdued at 3.4 per cent and 3.6 per cent in 2017 and 2018 respectively. These projections are slightly higher than 2.7 per cent and 2.9 per cent projected by the World Bank. Over the same period, the OECD projects these rates to be slightly lower at 2.9 per cent and 3.3 per cent (table 4.1). The Goldman Sachs<sup>15</sup> report, however, projects a slightly higher growth rate of 3 per cent and 3.5 per cent in 2017 and 2018, respectively, driven largely by a positive impulse from financial conditions in the US and other parts of the emerging world.

			Estimates							Projections			
		IMF			World Bank			ИF	World	d Bank			
	2014	2015	2016	2014	2015	2016	2017	2018	2017	2018			
World	3.4	3.2	3.1	2.7	2.7	2.3	3.4	3.6	2.7	2.9			
Advanced Economies	1.8	2.1	1.6	1.9	2.1	1.6	1.9	2.0	1.8	1.8			
United States of America	2.4	2.6	1.6	2.4	2.6	1.6	2.3	2.5	2.2	2.1			
Euro Area	0.9	2.0	1.7	1.2	2.0	1.6	1.6	1.6	1.5	1.4			
Japan	0	1.2	0.9	0.3	1.2	1.0	0.8	0.5	0.9	0.8			
Emerging countries	4.6	4.1	4.1	4.3	3.5	3.4	4.5	4.8	4.2	4.6			
Russia	0.6	-3.7	-0.6	0.7	-3.7	-0.6	1.1	1.2	1.5	1.7			
China	7.3	6.9	6.7	7.3	6.9	6.7	6.5	6.0	6.5	6.3			
India	7.3	7.6	6.6	7.2	7.6	7.0	7.2	7.7	7.6	7.8			
Brazil	0.1	-3.8	-3.5	0.5	-3.8	-3.4	0.2	1.5	0.5	1.8			
Sub-Saharan Africa	5.0	3.4	1.6	4.7	3.1	1.5	2.8	3.7	2.9	3.6			
South Africa	1.5	1.3	0.3	1.6	1.3	0.4	0.8	1.6	1.1	1.8			

Table 4.1: World economic estimates and projections, 2014 to 2018

Source: IMF and World Bank, 2016

Around the world, private investment has been weak, public investment has slowed, and global trade growth has decreased, all of which have limited the improvements in employment, labour productivity and wages needed to support sustainable gains in living standards (OECD, 2016). These factors, either individually or collectively have detrimental effects to the subdued global economic outlook, which according to the IMF (2016) was to a larger extent, due to softer activity in advanced economies.

<sup>&</sup>lt;sup>15</sup> See Global Outlook by Goldman Sachs (2017), available from http://www.goldmansachs.com/our-thinking/pages/outlook-2017/index, accessed on 17/01/2017.

Similar to the subdued global economic outlook, major advanced economies are estimated to have recorded slow rate of 1.6 per cent in 2016. This growth rate is however, expected to increase slightly to 1.9 per cent in 2017 and 2 per cent in 2018. According to the IMF (2016 & 2017), the projected subdued outlook in advanced economies reflects a severe sluggish outlook following the United Kingdom (UK) vote in June 2016 in favour of leaving the European Union (Brexit) and weaker-than-expected growth in the (US). These developments, according to the IMF have put further downward pressure on global interest rates, as monetary policy is now expected to remain accommodative for longer. Although the market reaction to the Brexit shock was reassuringly orderly, the ultimate impact remains very unclear, as the fate of institutional and trade arrangements between the UK and the European Union is uncertain (IMF, 2016).

Economic growth in the US is estimated to have moderated at 1.6 per cent in 2016 but projected to gain momentum and record 2.3 per cent and 2.5 per cent in 2017 and 2018 respectively. This is due to the anticipated fiscal stimulus boosts to the economy and the effects of the US dollar appreciation. It is largely expected that the new Administration will begin implementing its policy priorities in 2017 and in this context the fiscal stance is projected to become more expansionary as public spending and investment rise, while taxes are cut. This will provide a boost to the economy, particularly in 2018 (table 4.1, IMF, 2017 & OECD, 2016a).

Gross domestic product (GDP) growth in the eurozone is projected to remain subdued at 1.6 per cent in 2017 and 2018 respectively, slightly up from 1.6 per cent estimated in 2016. The sluggish economic outlook is due to the persistent week investment, reflecting low demand, banking sector fragilities and uncertainties about European integration (OECD, 2016b). The OECD further expects high unemployment and modest wage growth to hold back private consumption. This, according to the OECD, will be exacerbated by soft global trade and by weaker growth in the UK.

The World Bank (2017) forecast indicates that Japan's economic growth is estimated at 1 per cent in 2016 but is projected to slow down slightly to 0.9 per cent and 0.8 per cent in 2017 and 2018 respectively (table 4.1). The OECD (2015c) cites pausing fiscal consolidation as helping Japan to cope with the impact of the yen appreciation. Private consumption is projected to continue rising in the context of labour shortages and the historically high level of corporate profits. The IMF (2016) maintains that lower oil prices and accommodative financial conditions are also key drivers in the Japanese economic performance. According to the World Bank (2016), despite weak growth, labour market conditions continue to show signs of tightening against the backdrop of an aging population.

Economic performance in emerging markets and developing economies (EMDEs) is expected to pick up modestly from 4.1 per cent in 2016 to 4.5 per cent and 4.8 per cent in 2017 and 2018, respectively. However, according to the IMF (2016), the outlook for these economies is uneven and generally weaker. This is further confirmed by data from IMF's (2017) global outlook which clearly shows that growth prospects in these regions have marginally worsened partly due to generally tightened financial conditions.

India is not only remaining the fastest growing economy in EMDEs, but also in G20<sup>16</sup> countries. As indicated by OECD (2016d), private consumption in India is expected to be supported by the hike in public wages and pensions and by higher agricultural production, on the back of a return to normal rain fall. The report further maintains that private investment is anticipated to revive gradually as excess capacity in some sectors diminishes, while infrastructure projects mature, and the banks cleaning their loan portfolios. The IMF (2017) has however, reduced India's forecast down to 7.2 per cent in 2017 and 7.7 per cent in 2018 due to the temporary negative consumption shock induced by cash shortages and payment disruptions associated with the last quarter of 2016 currency note withdrawal and exchange initiative. These growth rates are nonetheless still slightly higher than 6.6 per cent estimated in 2016.

Following the 3.7 per cent contraction in 2015, Russia is estimated to have suffered another negative growth rate of 0.6 per cent in 2016. The country is however projected to record positive growth rates of 1.1 per cent and 1.2 per cent in 2017 and 2018 respectively. The OECD (2016e) expects higher real wages to boost private consumption and lower interest rate support investment. The OECD however, maintains that structural bottlenecks will continue to hamper further diversification of the economy. It further argues that the strength of the recovery will also remain dependent on the rebound of oil prices. Similar to Brazil, Russia continues to face a combination of external and domestic headwinds, which have resulted in deep recessions (World Bank, 2016). This sentiment is also echoed by the IMF (2016).

Economic growth in China continued to slow down to 6.7 per cent in 2016, compared to 6.9 per cent in 2015, a trend that is expected to persist in 2017 and 2018. The World Bank (2017) maintains that growth in China in 2016 was supported by fiscal and credit-based stimulus measures, focusing on infrastructure investment and on efforts to stimulate household credit. Nonetheless, despite being supported by both the expansionary fiscal and monetary policy stimulus, economic growth in China is projected to edge down further to 6 per cent in 2018 (OECD, 2016f).

Brazil continues to face challenging macroeconomic conditions, but its outlook has strengthened somewhat from severe recessions of 3.8 per cent in 2015 and 3.5 per cent in 2016 to moderate positive growth rates of 0.2 per cent and 1.5 per cent in 2017 and 2018, respectively (table 4.1). Political uncertainty has diminished, consumer and business confidence are rising and investment has strengthened. However, unemployment is projected to continue rising until 2017 and decline gradually thereafter (OECD, 2016g). As correctly indicated by the IMF (2016), political uncertainty in Brazil might delay the approval of key policy initiatives needed to regain investors' confidence.

<sup>&</sup>lt;sup>16</sup> The G20 was originally a forum for finance ministers and central bank governors, whose meetings aimed to improve cooperation on issues relating to the international finance system. During the dramatic financial crisis of 2008, it became apparent that the crisis coordination required would have to take place at top political level. As a result, the existing meeting was lifted to the level of heads of state and government. The list of G20 countries include Brazil, China, India, Japan, Russia, SA, US, UK and others, 20https://www.g20.org/Webs/G20/EN/G20/Participants/participants\_node, (accessed on 5 December 2016).

Economic growth in sub-Saharan Africa region slowed noticeably to 3.4 per cent in 2015, down from 5.1 per cent in 2014. The economy of the region is estimated to have further dropped to 1.6 per cent in 2016. This was the worst performance since 1994 (World Bank, 2017). The slowdown, particularly in 2016, was most severe in oil exporting countries such as Angola and Nigeria, where low oil prices sharply slowed down economic activity. The decline in metal prices led to a substantial fall in revenues and exports in non-energy mineral exporting countries (World Bank 2016). The economy of the region is however, expected to gain momentum and rise to 2.8 per cent in 2017 and 3.7 per cent in 2018.

In Angola alone, the decline in oil revenue of about 20 percentage points of GDP was partially offset by a cut in current and capital spending totalling as much as 15 percentage points, underpinning a substantial adjustment in the non-oil fiscal position (IMF, 2016a). The persistently low commodity prices, a severe drought in parts of Sub-Saharan Africa, natural disasters, security and political challenges are major factors that took a toll on activity in low-income countries. Current account positions weakened among oil exporters, and deficits remain large among some metal exporters. Activity weakened in sub-Saharan Africa, led by Nigeria, where production was disrupted by shortages of foreign exchange, militant activity in the Niger Delta, and electricity blackouts (IMF, 2016).

## 4.3 South African economic outlook

Similar to the global economic performance, South African economic growth outlook remains subdued. The economy of the country grew by 1.3 per cent in the first quarter of 2016, easing from a moderate 0.6 per cent expansion in the final quarter of 2015. This growth rate was however, short-lived as the national GDP plunged to negative 1.3 per cent in the second quarter before elevating unexpectedly by 3.3 per cent in quarter three of 2016.

Startlingly, the national economy grew at a slower pace than expected in the third quarter, with seasonally adjusted and annualised growth of 0.2 per cent (figure 4.1). Statistics SA (2016a) indicates that *mining* & *quarrying*, (5.1 per cent) *finance, real estate* & *business services* (1.2 per cent) and *general government services* (1.8 per cent) were the main contributors to GDP. The moderate contribution by *mining* & *quarrying* was largely due to higher production in the mining of iron ore.

Data by Stats SA, further shows that *manufacturing* was one of the four industries that contracted during the third quarter. This industry contracted by a staggering 3.2 per cent; while *forestry & fishing* lost 0.3 per cent, *electricity, gas & water* fell by 2.9 per cent and *trade, catering & accommodation* declined by 2.1 per cent. Meanwhile, *agriculture, forestry & fishing* has been in decline for seven consecutive quarters. As a result of the performance in these sectors, the economy of the country is estimated to have slowed down to 0.3 per cent in 2016 (table 4.1). According the World Bank (2017), this sluggish economic performance reflects the effects of low commodity prices, among others.

Table 4.1 indicates that, akin to most emerging market economies, output growth in SA continues to slow down. According to the South African Reserve Bank (SARB)<sup>17</sup>, the national economy grew by an estimated 0.4 per cent in 2016. This is slightly higher than 0.3 per cent estimated by the IMF, but less than 0.5 per cent by the National Treasury. It must be noted that inherently, lower economic growth implies lower revenue collection, higher personal income taxes, rising inflation and interest rates, lower real personal disposable income, pressure on consumer spending, alarming currency depreciation, limited export demand (particularly for manufactured goods) and fewer employment prospects among others .

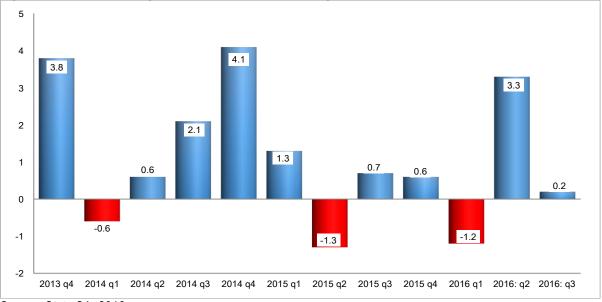


Figure 4.1: South African gross domestic product (GDP) growth rate, 2013:Q4 to 2016:Q3

The projected subdued growth rate in the national economic performance is further confirmed by seasonally adjusted Barclays Purchasing Managers' Index (PMI)<sup>18</sup>, which declined to 46.7 index points in December 2016, from 48.3 in November. The fifth straight month contraction in the PMI reading of the factory activity indicates the persisting weakness of domestic demand. Data provided by Trading Economics (2017)<sup>19</sup>, indicates that Manufacturing PMI in South Africa averaged 51.5 from 1999 until 2016, reaching an all-time high of 64.2 in July of 2006 and a record low of 34.2 in April of 2009.

Source: Stats SA, 2016

<sup>&</sup>lt;sup>17</sup> SARB, (2016): *Statement of the Monetary Policy Committee*, Issued by Lesetja Kganyago, Governor of the South African Reserve Bank, Available online, www.resbank.co.za, accessed on the 24 November 2016.

<sup>&</sup>lt;sup>18</sup> Barclays PMIis an indicator of activity in the manufacturing sector. The index provides leading indications of business conditions in the sector, where a level below 50 suggests a contraction in activity while one above 50 points suggests expansion (www.ber.ac.za) (accessed on 20/01/2017).

<sup>&</sup>lt;sup>19</sup> See Economics Trading (2016): South Africa Manufacturing PMI, available online: http://www.tradingeconomics.com/south - africa/manufacturing-pmi, accessed on 20/01/2017.

The SARB composite business cycle indicator<sup>20</sup> improved marginally in 2016, confirming the subdued economic outlook. The sluggish economic performance is also reflected by low consumer and business confidence<sup>21</sup>. This is obviously not boding well for the unemployment rate which is estimated at 27.1 per cent as at the end of the third quarter of 2016 (Stats SA, 2016b).

According to the OECD (2016h), falling investment and persistent drought are driving down growth, but economic growth in the country is projected to rebound and strengthen slightly to 0.8 per cent in 2017 and 1.6 per cent in 2018, driven by household consumption and investment (also see table 4.1). The report further states that, improvement in electricity supply will remove production bottlenecks and that could boost investment confidence. The sentiment about subdued economic performance in SA is further echoed by the World Bank (2016), which maintains that the dire situation is exacerbated by weak investor sentiment amid policy uncertainty, and by the anticipated tightening of monetary and fiscal policies.

		Actual		Estimate		Forcast	
	2013	2014	2015	2016	2017	2018	2019
Final consumption expenditure by households: Total (PCE)	2.0	0.7	1.7	0.9	1.3	2.0	2.3
Final consumption expenditure by government	3.8	1.8	0.2	1.4	0.9	0.0	0.4
Gross fixed capital formation (Investment)	7.0	1.5	2.5	-3.6	1.5	1.6	2.8
Gross domestic expenditure (GDE)	2.8	0.5	1.7	-0.3	1.3	1.8	2.2
Exports of goods and services	3.6	3.3	4.1	-1.2	1.9	4.9	5.0
Imports of goods and services	5.0	-0.5	5.3	-3.6	2.0	4.3	4.9
Real GDP growth	2.3	1.6	1.3	0.5	1.3	2.0	2.2
GDP inflation	6.6	5.7	4.0	7.2	6.4	5.9	5.8
Gross domestic product at current prices (R billion)	3 549.2	3 812.6	4 013.6	4 322.3	4 657.5	5 029.9	5 440.6
Headline CPI inflation (Dec 2012=100)	5.8	6.1	4.6	6.4	6.4	5.7	5.6
Current account balance (percentage of GDP)	-5.9	-5.3	-4.3	-4	-3.9	-3.7	-3.8

Table 4.2: Macroeconomic performance and projections, 2013 to 2019

Source: National Treasury, 2017

Table 4.2 reflects on some key national macro-economic indicators. The expenditure on consumption by households is one of the key components of GDP. The households' expenditure on consumption constitutes approximately 61 per cent of the total South African GDP. Real final consumption expenditure by households continues to drop from 2 per cent recorded in 2013 to 1.7 per cent in 2015 and is estimated to dwindle further to 0.9 per cent in 2016. It is nonetheless expected to gain momentum and moderate to 1.3 per cent in 2017 before rising further to 2 per cent in 2018. However, despite having increased from negative 11 in the second quarter of

<sup>&</sup>lt;sup>20</sup> The composite business cycle leading indicator shows the direction of economic activity in the next 6 to 9 months, available online: https://www.resbank.co.za/Publications, accessed on 20/12/2016.

<sup>&</sup>lt;sup>21</sup> For an in-depth analysis of both business and consumer confidence, see Trading Economics (2016), South Africa Business / Consumer Confidence, available online: http://www.tradingeconomics.com/south-africa/business-confidence, accessed on 15/12/2016.

2016 to minus 3 in quarter three, consumer confidence index (CCI), as compiled by the Bureau for Economic Research (BER)<sup>22</sup> indicates that consumer sentiment remained in negative territory.

According to Trading Economics (2016)<sup>23</sup>, CCI will be well below the long-term average reading of 4, suggesting households remain concerned about the outlook for the economy. In SA, CCI averaged 1.37 from 1982 until 2016, reaching an all-time high of 23 in the first quarter of 2007 and a record low of negative 33 in the second quarter of 1985. The uptick in consumer sentiment during quarter three is attributed to an improved willingness of consumers to spend, but consumers' ability to spend, as measured by their household income and access to credit remains under considerable pressure.

The upward improvement in consumer spending is also confirmed by the SARB (2016), which maintains that, growth in real disposable income of households accelerated from an annualised rate of 1.7 per cent in the second quarter of 2016 to 2 per cent in the third quarter. Disturbingly, as a percentage of annualised disposable income, household debt remains high at 74 per cent in the third quarter. While measured as a percentage of GDP, gross saving by the household sector is still low at an estimated 1.1 per cent in the third quarter of 2016. Also measured as a percentage of GDP, gross saving in the country stood at 16.4 per cent in the third quarter of 2016. However, a substantial amount of this saving came from the corporate sector at 14.6 per cent, while government contributed a mere 0.8 per cent (SARB, 2016).

#### Credit rating and debt-to-GDP ratio

The positive sentiments by the OECD about SA's moderate growth rate of 1.2 per cent were also evident towards the end of the final quarter of 2016, whereby the big three international credit rating agencies; namely: Fitch, Moody's and Standard & Poor (S&P) Global Ratings reaffirmed SA's credit rating. In November 2016, the sovereign credit ratings firm, Moody's Investors Service kept SA's sovereign rating unchanged at Baa2, two levels above sub investment grade or junk status, with a negative outlook<sup>24</sup>. Over the same period (November 2016), Fitch Ratings changed the country's economic outlook on its BBB- rating, which is one level above junk, to negative from stable. Fitch's move puts it on par with S&P, which also has SA's foreign currency rating at just one above sub-investment grade and on negative outlook. A junk status rating inherently raises borrowing costs and deters investment.

<sup>&</sup>lt;sup>22</sup> See FNB/BER Consumer Confidence Index, Issued by First National Bank, accessed on 20 December 2016 and available from www.ber.ac.za.

<sup>&</sup>lt;sup>23</sup> See Economics Trading (2016): South Africa Consumer Confidence, available online: http://www.tradingeconomics.com/ south- africa/consumer-confidence, accessed on 19/12/2016 (ibid).

<sup>&</sup>lt;sup>24</sup> Baa2 rating according NASDAQ (2016) is the ninth highest rating in Moody's Long-term Corporate Obligation Rating. A country rated at Baa2 is subject to moderate credit risk, which may possess certain speculative characteristics. See NASDAQ, available online: http://www.nasdaq.com/investing/glossary/m/moody-long-term-ratings, accessed on 13/12/2016. Also see https://www.moodys.com/sites/products/AboutMoodysRatingsAttachments/MoodysRatingSymbolsandDefinitions, accessed on 13/12/2016.

As correctly pointed out by Moody's (2016), the Baa2 rating, with a negative outlook on SA reflects risks related to the implementation of structural reforms aimed at restoring confidence and encouraging investment. The report by Moody's further maintains that, the negative outlook also recognizes the downside risks associated with political uncertainty and low business confidence as well as the challenging external environment characterised by low growth, investment and trade. The rating agency is also concerned that the continued accumulation of public debt and contingent liabilities as a percentage of GDP would also put downward pressure on ratings.

In SA, government debt increased from an average of 37.9 per cent as a percentage of GDP in 2000 to a record of 50.1 per cent in 2015. The low record of 27.8 per cent was posted in 2008. Government debt as a percentage of GDP is inherently used by investors to measure a country's ability to make future payments on its debt, thus affecting the country borrowing costs and government bond yields.<sup>25</sup> It must be noted that a low debt-to-GDP ratio indicates an economy that produces and sells sufficient goods and services to pay back debts without incurring further debts. Hence a debt-to-GDP ratio of 50 per cent is sustainable in any country, particularly in SA, whereby unemployment, poverty and inequality levels are so high.

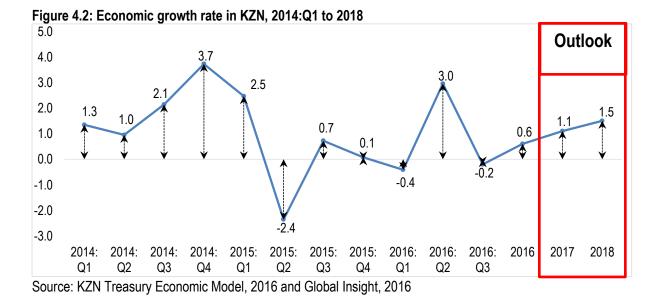
Using data from Bloomberg, Gumede (2016)<sup>26</sup>, maintains that only six of 20 countries reduced below investment grade by S&P over the last 30 years have regained good sovereign credit rating, and that took from 13 months to more than 11 years. He further argued that, should SA be downgraded to junk status, it could take between three to five years before it could possibly get upgraded again.

#### 4.4 KZN economic review and outlook

In line with both the global and national trends, the provincial economy is estimated to have recorded a seasonally adjusted increase of 0.6 per cent in 2016, compared to -0.2 per cent contraction suffered in the third quarter of 2016. Similar to the national projections, the provincial economic outlook is in a subdued trajectory but expected to grow at 1.1 per cent and 1.5 per cent in 2017 and 2018 respectively. These growth rates are, however, below the targeted 5 per cent required to achieve job creation as outlined in both the National Development Plan (NDP) and the Provincial Growth and Development Plan (PGDP, 2014). This, therefore, signals a steeper trajectory ahead in terms of addressing poverty, unemployment, inequality and other socio-economic challenges facing the province.

<sup>&</sup>lt;sup>25</sup> See South Africa Government Debt to GDP available onlie:http://www.tradingeconomics.com/south-africa/government-debt-to-gdp, accessed on 13 December 2016.

<sup>&</sup>lt;sup>26</sup> See Gumede, A. (2016): Junk Rating for South Africa Might Be Hours Away and Last Years, Bloomberg's newspaper article available online: https://www.bloomberg.com/news/articles/2016-12-01/junk-rating-for-south-africa-might-be-hours-away-and-last-years, accessed on 13/12/2016.



KZN is one of the key provinces in the national economy in terms of GDP contribution. The estimated real GDP generated by the province amounted to approximately R487.94 billion in 2015, making KZN the second largest contributor to the economy of the country at 16 per cent, after GP with 35.3 per cent. This was, however, slightly above 13.8 per cent recorded in the WC province (figure 4.2).

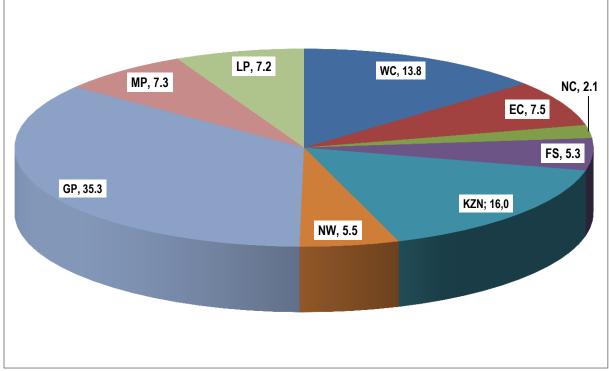


Figure 4.3: Percentage share of the national real GDP by provinces, 2015

Source: Global insight, 2016

Given the economic activities that take place within eThekwini<sup>27</sup>, it is therefore not surprising that the total provincial output is predominantly concentrated in the Metro at 57.2 per cent. This is followed by uMgungundlovu with 10.2 per cent and uThungulu with 8 per cent. The least contributing districts are Umzinyathi, Harry Gwala and Umkhanyakude at the estimated rate of 1.6 per cent, 2 per cent and 2.5 per cent, respectively (figure A4.1 in the appendix A).

#### 4.4.1 Sector analysis

Table A4.1 in the appendices indicates that the average annual growth rate by the primary sector in KZN is estimated at 4.7 per cent between 2005 and 2016. The highest growth rate of 6.9 per cent was recorded in Harry Gwala District Municipality<sup>28</sup>. The primary sector's contribution to the provincial real GDP remained constant at 6.2 per cent over the same period (table 4.3). Given the severity of drought experienced by the province over the last two years, it is therefore of no surprise that growth rate for this sector contracted to -5.8 per cent in 2015 (table A4.2).

Although **agriculture** reported moderate annual average growth rate of 3.9 per cent over the ten year period under review, it lost momentum and contracted by 4.8 per cent in 2015 (tables A4.1 & table 4.2 in appendices). The moderate performance by agriculture over the ten year period under review was to a large extent, due to the robust growth rate in *Fishing & operations of farms* at 5.3 per cent, *Agriculture & hunting* (4.1 per cent) and *Forestry & lodging* (3.3 per cent) (table A4.3 in appendices).

Though rain started to fall towards the end of 2016 and January 2017, the effects of the disturbing drought that has crippled the national economy will be felt for years, particularly by the agricultural sector. The effects of drought thus demand that, there should be a comprehensive and sustainable programme by government and other stakeholders, which could assist in re-establishing food production.

With a growth rate of 0.8, **mining** contributed significantly towards the lackluster performance by the primary sector between 2005 and 2015 (table A4.1 in appendices). Contribution by the mining sector to the provincial economy subsequently dropped slightly from 2.1 per cent in 2005 to 1.8 per cent in 2015 (table 4.3). The decline in the mining sector was to a large extent, due to a sharp contraction of 6.3 per cent in the *mining of gold & uranium ore* (table A4.3 in appendices). This trend persisted in 2015, whereby the mining sector contracted by 1 per cent, largely to a negative growth rate of 6.7 per cent posted by *the mining of metal ores* (table A4.4).

<sup>&</sup>lt;sup>27</sup> KZN province has one metro (eThekwini) ten district municipalities which are: Ugu, uMgungundlovu, uThukela, uMzinyathi, Amajuba, Zululand, uMkhanyakude, King Cetshwayo and iLembe.

<sup>&</sup>lt;sup>28</sup> KZN consists of eleven district municipalities including eThekwini one Metropolitan Municipality.

	Se	ctors contri	bution to G	DP	•	e share of ectors by				Percentage	e share of K	ZN sectors	by districts			
	South	Africa	KwaZu	lu-Natal	KZN Ethekwini		uMgung	jundlovu	Ama	juba	King Cetshwayo		iLembe			
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
Primary Sector	12.9	9.9	6.2	6.2	28.5	33.9	20.7	16.2	21.7	23.5	24.5	24.4	46.0	48.7	12.9	12.8
Agriculture	2.4	2.3	4.0	4.4	25.1	30.0	10.4	8.4	18.2	19.7	3.1	3.2	10.5	11.0	11.5	11.4
Mining	10.4	7.6	2.3	1.8	3.4	3.9	10.3	7.7	3.5	3.8	21.3	21.2	35.6	37.7	1.4	1.4
Secondary Sector	19.4	18.2	25.0	22.8	56.4	55.8	149.7	152.7	35.4	37.2	11.2	9.9	25.4	24.2	13.3	12.6
Manufacturing	14.0	12.4	18.9	16.3	20.9	21.0	59.7	57.0	8.0	9.1	3.7	3.7	11.6	12.2	5.9	6.3
Electricity	2.8	2.2	2.9	2.1	16.3	15.6	41.0	34.4	14.9	18.2	4.0	3.4	5.2	5.3	2.6	2.8
Construction	2.6	3.6	3.3	4.3	19.2	19.2	49.0	61.3	12.4	9.8	3.5	2.7	8.6	6.7	4.8	3.5
Tertiary Sector	58.5	62.7	59.6	62.1	65.7	66.6	251.9	257.8	40.0	39.6	11.6	11.2	23.0	22.3	10.1	9.8
Trade	13.3	13.8	13.9	14.1	16.1	16.4	62.7	64.2	9.5	9.5	2.6	2.5	5.0	4.8	2.9	2.7
Transport	8.2	8.6	10.9	11.4	20.6	21.3	66.9	66.4	8.6	9.3	2.4	2.5	7.1	7.3	2.3	2.3
Finance	17.4	19.9	15.4	16.6	13.6	13.4	69.6	70.4	9.2	8.9	2.8	2.7	4.6	4.4	2.2	2.5
Community services	19.6	20.6	19.4	20.0	15.2	15.5	52.6	56.8	12.7	12.0	3.9	3.6	6.3	5.8	2.7	2.3

Table 4.3: Sector contribution to GDP in KZN, 2005 to 2015

Source: Global Insight, 2017

**Manufacturing** grew moderately at 1.5 per cent in the province between 2005 and 2015 (table A4.1, in appendices). Similar to most industries, a substantial proportion of manufacturing production (57 per cent) comes from eThekwini (table 4.3). The sub-industries with major contribution to manufacturing are *electronic, sound/vision, medical* & *other appliances* (4.1 per cent), *electrical machinery* & *apparatus* (3.9 *per cent*) and *textile, clothing* & *other leather goods* (2.6 *per cent*). Disturbingly, data released by Stats SA in January 2017, suggests that the national manufacturing sector is likely to contract in quarter 4 of 2016.

**Manufacturing** exhibited the fastest growth rates in Harry Gwala and uMgungundlovu District Municipalities, growing at an estimated annual average rate of 4 per cent and 2.8 per cent, respectively over the same period. The key sectors contributing to these growth rates in both districts *are electronic, sound/vision, medical & other appliances; electrical machinery and apparatus; textiles, clothing and leather goods* and transport equipment (table A4.3, in appendices).

The **electricity sector** suffered a setback and contracted by an annual average growth rate of 0.2 per cent in KZN between 2005 and 2015 (table A4.1). This growth rate is estimated to have contracted further by 0.7 per cent in 2015 (table A4.2, in appendices).

**Construction** was the fastest growing sector (5.7 per cent) over the period 2005 to 2015 (table A4.1, in appendices), but recorded a mere 1.3 per cent growth rate in 2015. Moderate growth rates above the provincial aggregate level in construction in 2015 were only recorded in eThekwini (1.9 per cent) and Harry Gwala (1.6 per cent). The rest of the remaining districts in the province posted performances below the average provincial growth rate, with Uthukela (-0.3 per cent) and Amajuba (-0.1) recording negative growth rates (table A4.2, in appendices).

**Trade** showed a positive average growth rate of 3.1 per cent over the ten year period under review. This solid trend was, however, abruptly interrupted and moderated to 1 per cent in 2015, largely due *sale* & *repairs of motor vehicles, sale of fuel* (-4.9 per cent) and *hotels* & *restaurants* (-0.6 per cent). The robust performance in trade over the ten year period was enhanced by the *sale and repairs of motor vehicles, sale of fuel* at 4.4 per cent and *retail trade and repairs of goods* at 3.1 per cent (tables A4.3 & 4.4, in appendices).

**Transport** (3.4 per cent) has been one of the fastest growing industries in the province over the 2005 to 2015 period (table A4.1, in appendices). However, it slowed down moderately to 1.8 per cent in 2015. *Air transport & transporting* activities (6.2 per cent) led the growth trajectory, followed by *post & telecommunication* at 6 per cent (table A4.3, in appendices).

**Finance** (3.7 per cent) was the third fastest growing sector in the province between 2005 and 2015, but slowed down to 2.9 per cent in 2015 (tables 4.1 & 4.2 in appendices). The robust performance in the finance sector was by far supported by growth in the *finance and insurance* subsector at 5.6 per cent (table A4.3, in appendices).

**Government** exhibited moderate growth of 3.2 per cent over the period under review, but this slowed to 1.1 per cent in 2015 (table A4.1, in appendices). In terms of sector contribution towards provincial real GDP, government makes up an estimated 20.6 per cent (table 4.3). It is also important to note that at the national level, a larger proportion of GDP-R and employment in KZN emanates from the tertiary sector. This sector had grown between 2005 and 2015, while the primary sector remained constant and secondary sector's contributions to GDP and employment had been declining<sup>29</sup>. This indicates that the economy is converging towards being a tertiary sector-based economy, which is skilled-labour intensive, but a large majority of South African population lack skills.

#### 4.5 Travel and tourism

Travel and tourism has, over the last few years, become one of the most important economic sectors in respect of contributing towards GDP in most countries the world over. This is confirmed by statistics displayed by the World Travel and Tourism Council (WTTC) (2016) which indicates that in 2015, travel and tourism contributed \$7.2 trillion to the world GDP (a sizeable percentage of 9.8 per cent of global GDP). This contribution is made up of both direct and indirect activities. The indirect contribution includes investment spending such as the construction of new hotels and the purchase of aircrafts and other assets that promote tourism; government spending that assists in promoting travel and tourism is also considered as an indirect contributor towards tourism<sup>30</sup>. Indirect contribution also consists of the purchases of fuel by airlines, the purchase of cleaning materials by hotels, and information Technology (IT) services by travel agents (WTTC, 2016). Direct contribution

<sup>&</sup>lt;sup>29</sup> See Section 5.2.1 (Chapter 5) of this publication for details in employment by sector.

<sup>&</sup>lt;sup>30</sup> Indirect contribution in tourism is when the tourism industry promotes domestic purchases where sectors that deal with tourism purchase food, fuel and catering services by airlines and other domestic services, such as administration and other services that supplement tourism.

includes accommodation, transportation, attractions, entertainment, food and beverage services, retail trade, etc. This sub-section deals with an overview of world, national and KZN tourism.

#### 4.5.1 World travel and tourism

According to the WTTC (2016), the direct contribution by the industry towards the global GDP was estimated at 2.8 per cent in 2015 and this is projected to rise to 3.3 per cent in 2016. The publication also projects that in ten years from now the industry is expected to grow its direct contribution towards the global GDP to 4.2 per cent per annum.

The sectors that are seen as main contributors to the growth of travel and tourism over the world are hotel occupancy and global air passenger demand; with the latter growing by 6.5 per cent as a whole in 2015 (WTTC, 2016). The leading global countries that benefited the most from travel and tourism in 2015 were Southeast Asia (7.9 per cent), South Asia (7.4 per cent), the Middle East (5.9 per cent), the Caribbean (5.1 per cent), Sub-Saharan Africa (3.3 per cent), North America (3.1 per cent), and Europe (2.5 per cent) (WTTC, 2016).

Despite the fact that the Travel and Tourism Sector is one of the major contributors to global GDP, and the fact that it outpaced the wider global economy in 2015, a range of unforeseen events had a negative impact on the sector during 2015. More specifically, in 2015 there were a number of terrorist attacks across the globe which automatically reduced the number of tourists wanting to visit these countries; these being in Egypt, France, Tunisia, Kenya, Nigeria, Indonesia and Thailand. In addition, the Middle East Respiratory Syndrome (MERS)<sup>31</sup> outbreak in South Korea, and the flight bans from Russia to Egypt and Turkey negatively impacted travel and tourism (WTTC, 2016).

It is projected that global economic growth for 2016 will be at 2.9 per cent; down by 0.3 percentage points from 2015 at 3.2 per cent. The global direct travel and tourism contribution to GDP was at 2.8 per cent in 2015 and is projected to rise to 3.3 per cent in 2016. The domestic travel and tourism contribution to GDP is expected to rise from 3 per cent in 2015 to 3.9 per cent in 2016, with all major components of the sector expected to record higher growth in 2016. The international tourism consumption grew in absolute terms over the period 2010 through 2015 from \$3.816 billion to \$4.729 billion in 2015. This is further expected to grow in 2016 to \$4.882 billion (WTTC, 2016).

The travel industry plays a significant role when it comes to global employment. In 2015 the sector supported 284 million jobs (one in eleven jobs in the world). More specifically, the sector generated 108 million jobs directly in 2015, and this is projected to increase to 110 million in 2016 (WTTC, 2016). Overall, Travel and Tourism's

<sup>&</sup>lt;sup>31</sup> MERS is a "severe acute respiratory illness with symptoms of fever, cough and shortness of breath. About three to four out of every ten patients reported with MERS have died" (Centers for Disease Control and Prevention, 2016).

contribution to employment grew by 2.6 per cent in 2015. Further to this, it is projected that by 2026 (ten year period), this sector will support 370 million jobs worldwide (WTTC, 2016).

The money spent by foreign visitors around the world is the key component of the direct contribution of \$1.3 billion in 2015. The industry is projected to generate expenditure of \$2.1 billion in 2026. Capital investment attracted by this industry in Real terms in 2015 was \$775 billion in 2015 and is projected to rise by 4.5 per cent per annum over the period 2016 to 2026 (ten year period) to \$1.254 billion. The information in this section gives a clear indication that tourism industry is one of the dominating sectors in the economy of the world.

#### 4.5.2 Travel and tourism in SA

South Africa is rated among the 184 countries in the world that consider tourism as an important contributor towards GDP. Out of the 184 countries, South Africa is ranked 40<sup>th</sup> in terms of its direct contribution to GDP, with Travel and Tourism contributing 9.3 per cent to GDP in 2015 and creating over 1 557 000 jobs to the South African economy.

The introduction of new visa laws in October 2014, which required children under the age of 18 travelling in and outside of the country to carry unabridged birth certificates detailing information of both parents, and requiring visitors to South Africa to apply for a visa in person at South African embassies, negatively impacted on the tourism industry in 2015. These Laws have since been amended. In this regard, children travelling over South African borders must "have their parents' identification and citizenship details printed in their passports" (Revisions to South Africa's amended visa regulations, 2016), and parental consent affidavits; unabridged birth certificates are no longer required. Further, amendments to the visa laws allow people from abroad, who do not have South African embassies nearby to post their application to enter South Africa to the department of Home Affairs.

The implementation of the new visa laws, which commenced late in October 2016 are expected to be completed over the next year. Over and above the visa changes, the Department of Home Affairs will be introducing an Accredited Tourism Company (ATC) Programme to enhance investment by international companies into South Africa. The ATC Programme will be implemented for China, Russia and India, with "possible extension to other visa requiring countries" (Revisions to South Africa's amended visa regulations, 2016). Also, Visa Facilitation Centres (VFC) are to be increased over the period October through December in "China, India, United Kingdom, Nigeria, Democratic Republic of Congo, Angola, Ghana, Kenya and Uganda, while VFCs have been fast-tracked for November in Zimbabwe, United Arab Emirates and Botswana" (Revisions to South Africa's amended visa regulations, 2016).

Figure 4.4 shows the number of tourists visiting South Africa from the ten leading overseas countries in November 2015 and November 2016.

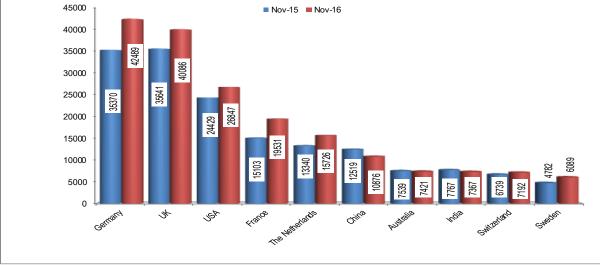


Figure 4.4: Number of tourists from ten leading overseas countries, November 2015 and November 2016

Source Stats SA, 2016

Figure 4.4 shows that Germany has been leading with the number of tourist visits to South Africa in 2016 at 42 489 people visiting South Africa, followed by the United Kingdom (UK) at 40 086, and the United States of America (USA) at 26 847. When comparing trends from November 2015 to November 2016, the number of tourists increased for seven of the ten leading overseas countries, namely France, Sweden, Germany, The Netherlands, UK, USA and Switzerland, and decreased for the other three, namely China, India and Australia. France had the largest increase at 29.3 per cent, while China had the largest decrease of 13.1 per cent.

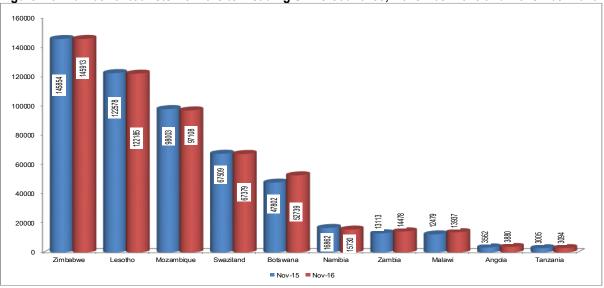


Figure 4.5: Number of tourists from the ten leading SADC countries, November 2015 and November 2016

Figure 4.5 shows that Zimbabwe has been leading with the number of tourist visits to South Africa in both 2015 and 2016 at 145 854 and 145 913, respectively. This was followed by Lesotho at 122 185 in 2016 and Mozambique at 97 108 in the same year. When comparing trends from November 2015 to November 2016, the

Source: Stats SA, 2016

number of tourists increased for six of the ten leading SADC countries, namely Zimbabwe, Botswana, Zambia, Malawi, Angola and Tanzania, and decreased for the other four, namely Lesotho, Mozambique, Swaziland and Namibia. Malawi had the largest increase at 11.7 per cent, while Namibia had the largest decrease at -6.7 per cent.

Tourism has contributed towards GDP, employment, exports and investment. According to WTTC SA (2016), the total contribution towards GDP by the industry in 2015 was R375.5 billion (9.4 per cent of the GDP). This contribution is projected to grow in 2016 by 3 per cent to R386.8 billion. The publication also forecasts that over the next ten years (2026) Travel and Tourism's contribution will rise by 3.7 per cent per annum which amounts to R555.1 billion by 2026 (10.6 per cent of the GDP).

The industry also contributes quite significantly towards job creation in South Africa. In 2015, the industry contributed 9.9 per cent of total employment (1 554 000 jobs). This is expected to rise by 0.2 per cent to 1 557 000 jobs in 2016 (9.8 per cent of total employment). By 2026, the estimation is a 3.8 per cent rise per annum which constitutes a total of 2 260 000 jobs (11.9 per cent) of total employment (WTTC, 2016).

#### 4.5.2.1 Visitor exports and investment

Visitor export refers to money spent by foreign visitors in a country. This is a key component of the direct contribution of Travel and Tourism. In 2015, visitor exports in South Africa amounted to R115 billion. It is estimated that in 2016 this will grow by 5.1 per cent (WTTC, 2016). Tourism has also attracted capital investment directly and indirectly to South Africa. In 2015, capital investment attracted by the Travel and Tourism sector reached R63.7 billion. This is expected to rise by 4 per cent in 2016 (R66.2 billion) and by 2.8 per cent per annum over the period 2016 through 2026 to R87.7 billion in the last year.

#### 4.5.3 Travel and tourism in KZN

KZN is South Africa's second domestic top holiday destination after Gauteng. KZN as a province hosts some of the most popular tourists' attractions in South Africa. The spectacular Drakensberg Mountains provide not only fantastic scenery, but also tourists can enjoy hiking, water rafting, a number of hotels and bed and breakfasts (B&Bs), and many more activities. The golden beaches of the Indian Ocean with its warm current, runs from the south to the north coast and has a number of areas with shark nets, making water sports safe. Tourists can partake in a number of water sports including surfing, body boarding and swimming.

Ushaka Marine World is a venue where tourists can enjoy Zulu culture, water world, an aquarium, restaurants and shopping. The northern part of the province is home to both private and public game reserves such as the luxurious Phinda Private Game Reserve and the KZN Wildlife Hluhluwe Game Reserve, where tourists can spot the Big Five (leopard, lion, elephant, buffalo and rhino). The area also hosts the world heritage site of

iSimangaliso wetlands which has been declared by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as being one of the Worlds Heritage sites.

The Oribi Gorge, in the south of the province is a must see, with spectacular views, scenery, and a number of sporting activities, such as rock climbing, abseiling and "the wild swing". The province is comprised of important historic battles such as the Anglo-Boer War, the Battle of Isandlwana (between AmaZulu and the British), and the Battle of Blood River. Tourists can visit the "Battlefields" in Dundee with guided tours.

In September 2015, it was announced that the KZN province will be host to the Common Wealth Olympic Games. This is a popular and wonderful event as people will come from all over the world to either spectate or be part of the games. This will be the first time this event is taking place on an African soil. This will create numerous job opportunities and put KZN on the world map. This event will attract many more world events into the country. There is a strong possibility that the province could be the preferred country to host the world Olympic Games as the country successfully hosted the World Cup in 2010.

# 4.5.3.1 Contribution to GDP, total tourism spend as a percentage of GDP and employment by the tourism industry in KZN

In 2015 the number of people directly employed by tourism industry in KZN was approximately 87 670, whilst the industry's total contribution to employment was estimated at 200 466 during the same period. In terms of its contribution to GDP, KZN's total contribution to national GDP (inclusive of both foreign and domestic) in 2015 was R20.4 billion (3 per cent) (Zulu Kingdom, 2016).

Figure 4.6 shows the total tourism expenditure as a percentage of GDP in KZN. The spending on tourism in the province marginally deteriorated from 2008 to 2011 from 7.7 per cent to 6.8 per cent. It then increased in 2012 to 7 per cent, before showing a slight decrease over the period 2013 through 2015. The reason for this trend is that GDP is increasing at a much faster pace than the corresponding increase in tourism.

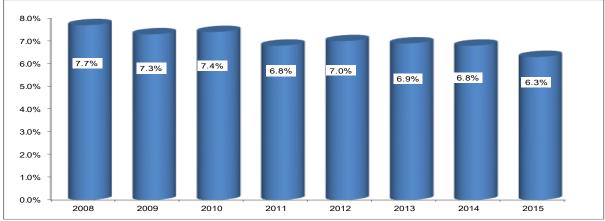


Figure 4.6: Total tourism spend as a percentage of GDP in KZN, 2008 to 2015

Source: Global Insight, 2016

#### 4.5.3.2 Tourists visiting KZN by country of origin

Figure 4.7 shows the tourists who visited KZN in 2015. Six out of the ten of these are from outside Africa; these being India, The Netherlands, France, Germany, the USA, and the UK. The remaining four countries come from within Africa and are, Swaziland, Lesotho, Zimbabwe and Mozambique. The highest proportion of visiting tourists is from Swaziland at 33.4 per cent. The highest proportion of visiting tourists from overseas come from India followed by the Netherlands, France, Germany, USA and the UK at 22.0 per cent, 16.8 per cent, 16.0 per cent, 15.3 per cent, 12.1 per cent, and 11.2 per cent, respectively. It is impressive that five of the most developed countries in the world visit SA, in this respect of this between 11 and 16 per cent of these countries share their visitation to KZN. Their spending has an impact on the provinces GDP because of their strong currencies.

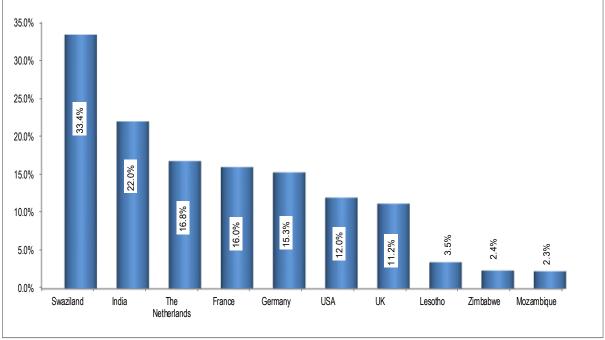


Figure 4.7: Tourists visiting KZN by country of origin in percentages, 2015

#### 4.5.3.3 Most visited attractions in KZN in 2015 and 2016

Figure 4.8 shows the activities undertaken by tourists in the KZN province in 2015 and 2016. It shows that the beach in both years was the main reason for visitors to come to KZN, at 36.7 per cent and 33.2 per cent, respectively. This was followed wildlife (23.8 per cent) and theme parks (23.1 per cent) in 2015, and by Adventure (16.8 per cent) and by Cultural, historical and heritage and Theme parks (16.3 per cent) in 2016. The statistics show that the main reason for people to visit KZN is for holiday purposes. After holidays, the main reason for visitors to come to the province is for education, health and social visits.

Source: Zulu Kingdom, 2016

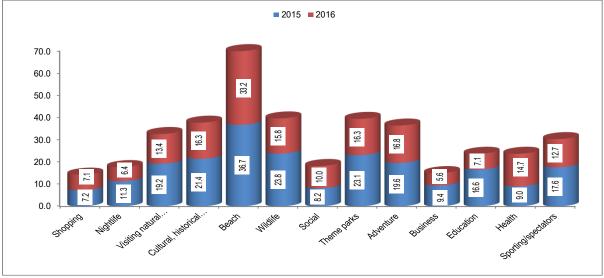


Figure 4.8 Most visited attractions in KZN, 2015 and 2016

Considering the contribution by tourism to the world, country and province of KZN, it is important that the industry should be seen as one of the more strategic industries. To this end, this sector needs improvement by paying greater attention to safety measures in road transport where accidents are high, especially during peak seasons. The ongoing revamping of KZN airports is also an additional means of transport towards promoting and eliminating driving during peak season tourism in the province. The partial relaxation of the visa laws in 2016 going forward will also assist in more tourists coming to SA.

# 4.6 International trade

International trade has become a fundamental tool to fuel economic growth in most countries including SA. This was firstly argued by classical economists Adam Smith and David Ricardo who explicitly advocated that a country could benefit from specialising and exporting more of a commodity or service in which it possess comparative advantage over its trading partners. Consequently, SA made significant progress towards improving international trade since the adoption of trade liberalisation in 1995; this includes participating in different trade organisations such as the World Trade Organisation (WTO). The country has also diversified and reinforced relationships with other regions by engaging in regional trade agreements and trade blocs such as the Southern African Customs Union (SACU) and Southern African Development Community (SADC). These trade blocs facilitate more efficiently all forms of trade especially flow of goods between partner countries. Furthermore, the country has developed strong partnership with various nations such as China, USA and Germany which currently constitute key trading partners of the country (WTO, 2015).

Despite the remarkable progress the country has made with regards to international trade, it however remains with a huge challenge of reducing the current account deficit. This requires extreme production of exportable goods and competitiveness of domestic exports so as to ensure that exports exceed imports and thus shrink the

Source: SAT, 2016

deficit. However, due to the exchange rate volatility which is the key factor that determines trade patterns in international markets, it might be difficult to achieve a low current account deficit as it has been the case for SA and KZN in the past few years. It therefore becomes imperative that policy makers continue to establish and reinforce sound corrective measures aimed at enhancing international trade in an economy. This should encompass measures directed at promoting export incentive schemes so as to narrow the current account deficit.

This section therefore provides a rigorous analysis of international trade with reference to exports, imports, percentage share of South African exports by provinces as well as exports as a percentage of GDP-R. International trade is one of the factors that make KZN a key contributor to SA's economy. This is by no surprise given that the province is home to the busiest and largest ports of Durban and Richard's bay. This section thus predominantly concentrates on KZN which is the second largest contributor to the economy of the country; it further reports on national issues related to international trade.

# 4.6.1 Current account of the balance of payments

Table 4.4 provides the balance of payments on current account in 2015 and the first, second and the third quarters of 2016. It can be observed from the table that the South African current account recently improved from a deficit reported in 2015 which averaged at R34 billion to a revised surplus of R48 billion in the second quarter of 2016. The South African Reserve Bank (SARB, 2016) states that among the contributory factors to this substantial improvement in the current account was the lagged effect of the depreciation of the South African rand, the increase in global demand for domestically produced goods and weak growth in domestic demand which led to a decline in merchandise import volumes. However, in the third quarter of the same year, the surplus on the trade account switched significantly into a current account deficit of –R4 billion. According to the SARB (2016) this current account deficit realised in the third quarter emanates from the weaker international demand for domestically produced goods and the strengthning of the exchange rate of the rand which more than offset the benefit arising from higher international commodity prices.

The value of merchandise exports dropped by 7.2 per cent in the third quarter of 2016 having increased by 10.6 per cent in the second quarter. The decrease emanates from the export value of mining as well as the manufacturing sector. In the mining sector, declines were recorded in the export value of base metals, precious stones as well as platinum group metals. By contrast, the value of iron ore as well as coal exports picked up in the same period. In the manufacturing sector, declines were registered in the export value of vehicles and transport equipment, machinery and electrical equipment and prepared foodstuffs.

The improvement in the trade balance coupled with the marginally smaller deficit on the services, income and current transfer account significantly narrowed the deficit on the current account as a percentage of GDP to a revised -2.9 per cent in the second quarter of 2016 from -5.3 per cent realised in the first quarter of the same

year. It has however, widened from -2.9 per cent in the second quarter to -4.1 per cent in the third quarter of 2016.

		20	15		Veer		2016	
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Year	1st Qtr	2nd Qtr	3rd Qtr
Merchandise Exports	940	984	984	988	974	1 005	1 112	1 033
Net Gold exports	63	71	65	72	68	52	55	47
Merchandise imports	-1 070	-1 050	-1 082	-1 101	-1 076	-1 105	-1 119	-1 083
Trade balance	-68	5	-34	-41	-34	-48	48	-4
Net service, income and current transfer payments	-134	-128	-148	-150	-140	-174	-171	-172
Balance on current account	-202	-123	-182	-191	-174	-221	-123	-176
As a percentage of GDP	-5.1	-3.1	-4.5	-4.6	-4.3	-5.3	-2.9	-4.1

Table 4.4: Balance on current account (R billion, seasonally adjusted and annualised), 2016

Source: SARB Quarterly Bulletin, December 2016

## 4.6.2 International commodity prices

Figure 4.9 shows international commodity prices from 2010 to 2016 for gold, iron ore, platinum and coal. All these commodities have declined notably since 2011 to 2015. The drop in the commodity prices continued in 2015, owing to reduced demand from China and a global oversupply of many commodities. The pace of job-shedding in the mining sector accelerated in the third quarter of 2015, particularly in the non-gold mining sector which was affected by retrenchments in the platinum-mining sector as well as the closure and downscaling of some coal and chrome mines. Employment levels in the gold-mining sector decreased only marginally in the third quarter of 2015, having remained unchanged in the previous quarter.

However, after nearly six years of decline in commodity prices, these prices have recently rebounded somewhat albeit from low levels. This provided some relief to commodity-exporting countries including SA, alongside the widespread depreciation of currencies which helped to buffer the impact of subdued international demand for commodities. Nevertheless, commodity-exporting economies like Nigeria and Angola continue to face headwinds, which impacted on economic growth and external and fiscal balances as oil proceeds account for more than 90 per cent of exports and over 70 per cent of the national budget in these countries. Commodity price instability has a negative impact on economic growth, countries' financial resources, and income distribution, and may lead to increased poverty (IMF, 2016).

According to the SARB (2017) the benefits from increase in commodity prices could be threatened by protectionist policy uncertainty from the US administration which could undermine world trade and cause adverse effect to emerging markets. These countries are also highly dependent on Chinese growth, which is expected to remain slightly above the 6 per cent level (figure 4.1). However, given the credit-driven nature of recent Chinese

growth, there are fears of an unsustainable credit bubble which could expose financial sector vulnerabilities, and undermine the growth outlook.

According to the United Nations (2016) developing economies in general would need to find new sources of growth domestically or regionally to escape the potential downward spiral emanating from commodity prices and exchange rate related shocks. This would require governments to pursue comprehensive structural transformation and industrial policies that would mobilise domestic savings and investment, improve institutions and corporate governance and reduce transaction costs and increase competitiveness.

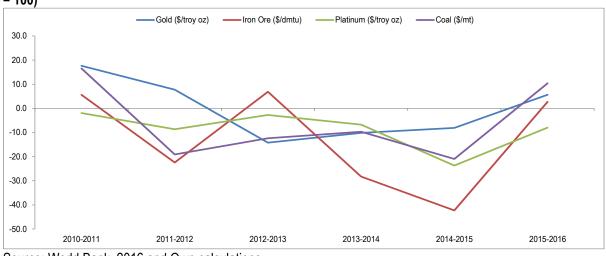


Figure 4.9: Real percentage change in selected commodity prices, 2010 to 2016 (US dollar indices: 2010 = 100)

Source: World Bank, 2016 and Own calculations

# 4.6.3 South Africa and KwaZulu-Natal exports

South Africa's exports comprise mostly of mineral products, precious metals, vehicles and aircraft vessels, iron and steel products, machinery and chemicals. In 2015, 9 per cent of total exports were traded to countries such as China, the US (8 per cent), Germany (6.5 per cent), Botswana (5.1 per cent), Namibia (5.1 per cent) and Japan (4.9 percent); other countries include the UK, India, Belgium and Zambia<sup>32</sup>.

Table 4.5 shows the value of exports in SA by provinces for the year 2005 and 2015. Although exports in KZN have been trending behind that of the GP, it has increased and more than doubled to an estimated R122.8 billion recorded in 2015 from an estimated R46.6 billion in 2005. This is a contribution of 18.9 per cent as a proportion of GDP as compared to 47.7 per cent recorded by the GP in 2015. This constitutes 11.8 per cent of South African exports which is second after Gauteng (64.3 per cent). It has to be noted that given the comparative

<sup>32</sup> http://www.tradingeconomics.com/south-africa/exports

advantage of the province of KZN with regard to having the largest and busiest ports as indicated above, the province has a potential of increasing its exports even further<sup>33</sup>.

		2005			2015	
	Exports (R1000)	% Share of South African exports	Exports as % of GDP	Exports (R1000)	% Share of South African exports	Exports as % of GDP
South Africa	358 360 999	100	21.9	1 041 437 998	100	25.9
Eastern Cape	25 425 535	7.1	20.2	47 207 000	4.5	15.3
Free State	4 250 210	1.2	5.0	9 619 768	0.9	4.9
Gauteng	209 105 796	58.4	36.3	669 857 780	64.3	47.7
KwaZulu-Natal	46 631 330	13.0	17.2	122 837 717	11.8	18.9
Limpopo	3 817 139	1.1	3.5	15 680 956	1.5	5.5
Mpumalanga	6 335 419	1.8	5.9	18 553 703	1.8	6.2
Northern Cape	8 633 758	2.4	25.6	12 065 041	1.2	14.6
North-West	15 355 363	4.3	16.2	23 716 878	2.3	9.9
Western Cape	38 806 452	10.8	16.3	121 899 156	11.7	22.2

Table 4.5: South African exports by provinces, 2005 and 2015

Source: Global Insight, 2016

## 4.6.4 South Africa and KwaZulu-Natal imports

Imports to South Africa dropped by 19.6 per cent in December 2016, as purchases went down for: machinery and electronics (-24 per cent), equipment components (-53 per cent), chemical products (-20 per cent), base metals (-29 per cent), textiles (-38 per cent) and plastic and rubber (-30 per cent). Meanwhile, mineral products imports rose by 10 per cent. The main sources of imports to the country were from China (16.9 per cent of total imports), Germany (8.3 per cent), Saudi Arabia (6.9 per cent), the US (6.9 per cent) and France (6.6 per cent)<sup>34</sup>.

Table 4.6 depicts the value of imports and percentage share of South African imports by provinces in 2005 and 2015. KZN imported an estimated value of R125.8 billion worth of goods in 2015 which grew by 159.2 per cent from imports realised in 2005 (R48.5 billion). As expected the GP was the largest importer with an estimated value of R680.9 billion in 2015 which was 63.3 per cent of South African imports. In contrast the province of KZN (11.7 per cent of South African imports) had the third largest imports after GP and the WC (18.3 per cent of South African imports). The least contributor of all provinces was Limpopo with a mere 0.1 per cent of South African imports.

<sup>&</sup>lt;sup>33</sup> It must be noted that some of the commodities are produced from other provinces yet exported in KZN via the ports of Durban and Richards Bay

<sup>34</sup> http://www.tradingeconomics.com/south-africa/imports

		2005		2015
	Imports (R000)	% Share of South African imports	Imports (R000)	% Share of South African imports
South Africa	360 361 997	100	1 075 891 997	100
Eastern Cape	26 749 560	7.4	54 068 186	5.0
Free State	2 030 429	0.6	4 324 601	0.4
Gauteng	206 897 002	57.4	680 903 034	63.3
KwaZulu-Natal	48 510 334	13.5	125 757 938	11.7
Limpopo	1 025 979	0.3	1 036 666	0.1
Mpumalanga	1 946 969	0.5	5 944 179	0.6
Northern Cape	1 442 204	0.4	1 354 682	0.1
North-West	1 669 063	0.5	5 652 685	0.5
Western Cape	70 090 458	19.5	196 850 027	18.3

Table 4.6: Percentage share of South African imports by provinces, 2005 and 2015

Source: Global Insight, 2016

## 4.7 Inflation rate

Inflation measures a sustained increase in the general level of prices for goods and services. A rise in inflation leads to a decrease in consumer's purchasing power and thus impinges negatively on consumption. It is therefore not by default that inflation is unequivocally one of the key macro-economic indicators that affect the economic performance of a country. High inflation generally leads to a lower aggregate demand in an economy, particularly in SA whereby the economy is under severe strain. In SA, the Monetary Policy Committee (MPC)<sup>35</sup> of the SARB carefully monitors inflation trends both globally and nationally and then applies appropriate monetary policy instruments to drive back inflation to the targeted rate of 3 per cent to 6 per cent.

The SARB (2016)<sup>36</sup> maintains that inflation dynamics have remained more or less in line with expectations, but risks to the inflation outlook have increased moderately. According to Stats SA (2017), the year-on-year inflation rate as measured by the consumer price index (CPI) for all urban areas accelerated to 6.8 per cent in December 2016, up from and 6.6 per cent in November 2016. This was the highest inflation rate since February as the cost of transport increased at a faster pace.

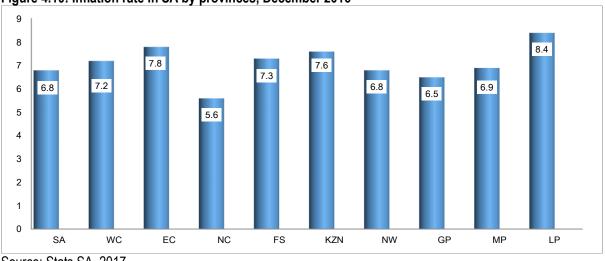
As indicated by Stats SA (2017), average annual consumer price inflation (in urban areas) remained above the target band of 3 to 6 per cent (6.4 per cent) in 2016.<sup>37</sup> This was 1.8 percentage points higher than the corresponding average of 4.6 per cent in 2015. The SARB (2016a) projects annual inflation to average 5.8 per cent in 2017 before slowing further down to 5.5 per cent in 2018. Disturbingly, CPI for rural areas has increased by 8.4 per cent when compared to November 2015. The key driver of higher inflation rate is food and non-alcoholic beverages which accelerated to 11.7 per cent, year-on-year (Stats SA, 2017).

<sup>&</sup>lt;sup>35</sup> According to the SARB, MPC in SA is responsible for the decision-making on appropriate monetary policy stance. The primary objective of monetary policy in SA is to achieve and maintain price stability in the interest of sustainable and balanced economic development and growth, see the SARB, available online: https://www.resbank.co.za/Monetary Policy/Pages/MonetaryPolicy-Home.aspx), accessed on 20/12/2016.

<sup>&</sup>lt;sup>36</sup> See footnote number 3 in section 4.3 of this publication.

<sup>&</sup>lt;sup>37</sup> Higher inflation than the targeted inflation might prompt the SARB to increase interest rates before the end of 2017.

The CPI for all goods increased by 7.7 per cent, while services increased by 5.9 per cent. The year-on-year, transport costs rose by 5.7 per cent, while costs for basic education (primary and secondary) went up by 8 per cent. Meanwhile, prices for water and other services have increased by 8.1 per cent, when compared to the rise of 7.4 per cent for electricity and other fuels (Stats SA, 2017).





Source: Stats SA, 2017

Similar to provinces such as Limpopo (8.4 per cent), Eastern Cape (7.8 per cent) and others, inflation rate in KZN (7.6 per cent) was disappointingly above the national average headline inflation rate of 6.6 per cent in December 2016. The Northern Cape and the Gauteng were the only two provinces recording inflation slightly below the national average rate at 5.6 per cent and 6.5, respectively. North West was the only province recording inflation similar to the national average rate (Figure 4.10).

#### 4.8 Conclusion

In conclusion, the chapter has shown that the global economic performance remains subdued. The economy of the sub-Saharan Africa is the hardest hit region by persistently low commodity prices and severe drought. These developments have adverse effects on the national economy, particularly given the fact that SA trades with the rest of the world. The sluggish national economic outlook has also compelled the sovereign rating agencies to raise concerns about the country's continued accumulation of public debt and contingent liabilities in terms of GDP, arguing that this could make it difficult for SA to be able to make future payments on its debts.

As indicated in this chapter, sectors such as agriculture have lost momentum in KZN over the years. This is largely due to exogenous factors such as drought; it is thus recommended that government continues to provide form of assistance in this regard through government subsidies. The mining sector has performed moderately due to a sharp contraction in the *mining of gold & uranium ore*. However, trade and finance sectors showed robust growth rates in excess of 3 per cent.

Another challenge facing the country relates to current account deficit emanating from the weaker international demand for domestically produced goods and the strengthening of the exchange rate of the rand which more than offset the benefit arising from higher international commodity prices. The recent (January 2017) rebound in the prices of commodities, though at low levels is expected to boost the most needed foreign income. This will provide some relief to commodity-exporting countries including SA, alongside the widespread depreciation of currencies which helped to buffer the impact of subdued international demand for commodities.

Considering the contribution by tourism to the world, country and province of KZN, it is imperative that the industry should be seen as one of the more important industries in the world. This calls for the government to put greater safety measures in place when it comes to the security of the tourist. The act of terrorism that has been experienced in a number of countries poses a threat to all and must be condemned at all costs. On the positive side, partial relaxation of the visa laws in 2016 going forward will also assist in more tourists coming to SA.

#### 5.1 Introduction

Since the inception of democracy in 1994, radical measures aimed at transforming the South African labour market into an inclusive environment have been continuously implemented by government in collaboration with other stakeholders such as civil society, labour movement and businesses. These include different legislative frameworks directed at enhancing working conditions, improving skills and so on. However, the labour market continues to experience various challenges including shortage of skilled employees, low labour productivity, mismatch between the skills needed by the employers and those available in the workforce and inability of the economy to generate adequate opportunities for the labour force. These are some of the problems perpetuating high unemployment in the country. Furthermore, the recently passed minimum wage legislation will also have an impact on the labour market. Although the standard of living is expected to improve slightly as a result of this legislation, it is anticipated to exacerbate the scourge of high unemployment rate especially among young people within the country.

The purpose of this chapter is to provide the labour market dynamics in KwaZulu-Natal (KZN). The chapter starts by providing an outline of the national labour market, focusing mainly on employment and unemployment rates. It proceeds by providing an analysis of both labour force participation, labour absorption rates and job scarcity. Furthermore, the chapter also discusses the relationship between labour remuneration and productivity in the section prior to policy recommendations which are alluded to in the conclusion.

#### 5.2 Employment

The Quarterly Labour Force Survey (QLFS) published by Stats SA (2016b) reveals that the national working-age population increased by 0.4 percentage point from 36.8 million in the third quarter to 36.9 million in the fourth quarter of 2016. Although the workforce has increased, it is disturbing that only 16 million people managed to sustain their employment over this period. Nonetheless, the total number of people employed increased by 235 000 in the fourth quarter of 2016. The recorded increase on total employment was however insufficient to translate into a significant reduction in the unemployment rate. Compared to the same period in 2015, employment remained modest and only improved marginally by 51 000 (0.3 per cent).

Despite numerous initiatives enforced by the government in an attempt to address different forms of inequalities among the citizens, there is still more work that needs to be done to reduce the gap that exists among races in terms of employment within the country (Stats SA, 2016b). This is evident from the QLFS, which reflects that highly skilled occupations are predominantly held by Whites and Indian or Asian population groups relative to

African and Coloured population groups. This could however be attributed to shortage of tertiary qualifications and relevant skills to most of young people among the African and Coloured population groups.

Stats SA (2016b) further highlights that White and Asian population groups constitute the largest proportion of people employed who have tertiary qualifications. Conversely, half of the employed African and Coloured population have an educational level less than matric. The share of Whites and Asians employed in the fourth quarter of 2016 who had tertiary qualifications was 49.5 per cent and 30.3 per cent respectively. This was in contrast with 17.0 per cent and 13.0 per cent of African and Coloureds employed who had tertiary qualifications over the same period respectively.

The report further shows that, employment levels increased in six of the nine provinces, and only plummeted in three provinces between third and fourth quarters of 2016. The largest quarterly employment gains were observed in the Western Cape (WC) with 70 000 people having absorbed by the economy. This was followed by the Limpopo and the North West (NW) provinces, where 64 000 and 60 000 people were employed respectively. Conversely, the Free State (FS), Mpumalanga (MP) and Northern Cape (NC) provinces recorded job losses of 24 000, 19 000 and 10 000 respectively. The province of KZN was among the provinces that experienced moderate employment gains with 45 000 people being absorbed by the economy.

Table 5.1 illustrates labour force characteristics in KZN from the fourth quarter of 2015 to fourth quarter of 2016. As can be observed from the table, the total working-age population in the province was estimated at 6.84 million in the fourth quarter of 2016, up from 6.81 million recorded in the third quarter. However, only 2.54 million people succeeded in securing their employment over the same period. The provincial employment increased slightly by 1.8 percentage point between third and fourth quarters of 2016. Although employment has increased between the two quarters, this was inadequate to shrink the unemployment rate in the province. When compared to the same period in 2015, employment in the province increased by 0.5 per cent (table 5.1). This reveals a gloomy picture about provincial economic capacity to create employment opportunities for the workforce and also points to a significant need for development of relevant strategies aiming to improve employment rate in the province.

	Oct-Dec 2015	Jan-Mar 2016	Apr-Jun 2016	Jul-Sep 2016	Oct-Dec 2016	Qtr-to-qtr change	Year-on-Year change	Qtr-to-qtr change	year-on-yea change
				Thousand				Percentage	
KZN									
Population 15-64 yrs	6 739	6 764	6 789	6 815	6 841	26	102	0.4	1.5
Labour force	3 181	3 272	3 204	3 262	3 340	78	158	2.4	5.0
Employed	2 529	2 515	2 479	2 496	2 541	45	12	1.8	0.5
Unemployed	652	757	726	766	7 99	32	147	4.2	22.5
Not economically active	3 558	3 493	3 585	3 553	3 501	-52	-57	-1.4	-1.6
Rates (%)									
Unemployment rate	20.5	23.1	22.6	23.5	23.9	0.4	3.4		
Employed/ population rate (Absorption)	37.5	37.2	36.5	36.6	37.1	0.5	-0.4		
Labour force participationa rate	47.2	48.4	47.2	47.9	48.8	0.9	1.6		

Table 5.1 Labour force characteristics in KZN, 2015:Q4 to 2016:Q4

Source: Stats SA, 2016

It is worth noting that the South African labour force is highly formalised such that total employment comprises mostly of formal employed people as opposed to those employed under the informal sector. The large gap between formal and informal employment shows that the workforce concentrates more on formal work rather than informal employment. This could be one of the factors causing high unemployment rate in the country as people take long time searching for formal employment which result to the frictional unemployment<sup>38</sup>. This problem of huge gap between formal and informal employment is also applicable to both provincial and district levels. In KZN this problem is prevalent to all district municipalities including the metro. Nonetheless, both formal and informal employment in all districts including eThekwini metro has increased significantly over the period 2005 to 2015. The metro has the largest proportion of people employed compared to other districts municipalities (table A 5.1)

#### 5.2.1 Employment by sector

The Quarterly Employment Statistics (QES) by Stats SA (2016c) reveals that formal employment increased by 93 000 from 9.2million in the second quarter to 9.3 million in the third quarter of 2016. However, total employment improved slightly in September 2016 (9.3 million) compared to 9.2 million observed during the same period in 2015. According to Stats SA (2016c) the improvement on employment as recorded in the third quarter of 2016 was largely driven by massive contribution by industries such as community services at 3.1 per cent (78 000), construction at 1.1 per cent (6 000), trade at 0.4 per cent (7 000). Conversely, the manufacturing and transport were the only industries which reported negative contribution at 0.3 per cent and 0.7 per cent respectively. This calls for a significant need for policy makers to establish measures aiming to address problems which caused a decline in employment especially in the manufacturing industry as the most labour intensive sector of the economy.

Table 5.2 compares employment by sector in KZN and other provinces for the year 2015. Similar to the national trend and across most provinces, the largest proportion of all jobs in the province of KZN emanate from the government (23.4 per cent), followed by the trade sector at 21.6 per cent. The only exception to dependence of provinces on government for job opportunities was the provinces of the WC and GP. The largest employer in Gauteng was the finance sector at 24.2 per cent and the trade sector at 20.9 per cent. On the other hand, employment in the WC concentrated greatly on the trade and finance sectors at 21.3 per cent and 19.5 per cent respectively. This is opposed to the other provinces including KZN, where employment is mainly generated by government. Interestingly, KZN had the largest proportion of employment contributed by the manufacturing sector at 12.5 per cent compared to other provinces. This was followed closely by the Western Cape (12.1 per cent) and Gauteng (11.8 per cent) provinces (table 5.2).

<sup>&</sup>lt;sup>38</sup>Frictional unemployment indicates that employment is present but people do not lack information about vacant positions and therefore spend time, effort, and expense attempting to get jobs.

	South Africa	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	Northern Cape	North-West	Western Cape
Primary Sector	8.4	6.3	13.3	2.5	5.2	16.7	14.9	24.0	24.6	8.7
Agriculture	5.3	6.2	8.6	0.9	4.9	9.6	7.8	12.7	5.5	8.6
Mining	3.2	0.1	4.6	1.6	0.4	7.0	7.1	11.3	19.0	0.1
Secondary Sector	18.7	20.0	14.8	18.8	22.1	16.5	17.6	11.3	12.5	19.8
Manufacturing	10.3	9.4	7.8	11.8	12.5	5.8	7.9	3.1	6.6	12.1
Electricity	0.6	0.4	0.8	0.6	0.5	0.8	1.8	0.7	0.3	0.5
Construction	7.7	10.2	6.2	6.4	9.1	10.0	7.9	7.6	5.6	7.2
Tertiary Sector	72.9	73.7	72.0	78.6	72.7	66.8	67.5	64.7	62.9	71.5
Trade	21.2	21.7	21.4	20.9	21.6	23.2	21.4	16.2	18.3	21.3
Transport	5.5	4.9	4.2	6.6	6.3	3.8	4.7	2.9	3.3	5.2
Finance	16.3	10.4	9.6	24.2	12.6	7.6	12.7	8.5	10.2	19.5
Community services	21.8	27.8	25.8	19.4	23.4	23.4	20.1	28.0	22.1	18.9
Households	8.2	8.8	11.1	7.6	8.8	8.8	8.7	9.0	9.1	6.6

Table 5.2: Employment by sectors in SA, 2015

Source: Global Insight, 2016

#### 5.3 Unemployment

Unemployment is one of the social problems that contribute poverty and inequality thus having a direct effect on the standard of living in the country. It has been fluctuating around 25 per cent over the past two decades without a significant decline (SARB, 2015). These challenges persist despite efforts devoted by national government towards curtailing their effects to the society.

The QLFS shows that, the national official unemployment rate decreased marginally by 0.6 percentage points, from 27.1 per cent in the third quarter to 26.5 per cent in the fourth quarter of 2016. The official unemployment rate accelerated moderately by 2.0 per cent in the fourth quarter of 2016 compared to the same period in 2015. The decline in unemployment is relatively low; this is however not surprising given the ailing economic performance as shown in chapter four of this publication.

In addition, the SARB (2015) states that high unemployment in the country also emanates from a combination of structural changes in labour demand, an increase in capital intensity and skill biased technical progress and institutional constraints on the labour supply side. According to the SARB, institutional constraints include among others downward wage rigidities due to bargaining institutions such as trade unions and relatively high reservation wages.

On the other hand the expanded unemployment rate decreased slightly by 0.7 percentage point between the third and fourth quarters of 2016, but increased moderately by 1.8 per cent from December 2015 to the end of December 2016 (table 5.3). Though the national average unemployment rate has declined, but some provinces had higher rates than the national average rate of 26.5 per cent over the period.

The highest official unemployment rate above national average was recorded in the Free State, where 34.7 per cent of people remained unemployed during the fourth quarter of 2016. This was closely followed by the NC and MP at 32 per cent and 31 per cent respectively over the same period. Although the rate is still high, but at

23.9 per cent, KZN was among the provinces that recorded relatively low official unemployment rate such as the WC at 20.5 per cent and LP at 19.3 per cent. Hence, the province recorded the third lowest unemployment rate in the fourth quarter; this was slightly higher than 23.5 per cent estimated in the third quarter.

KZN experienced a marginal unemployment increase of 0.4 percentage point between the third and fourth quarters of the same year. However, the unemployment rate increased shockingly by 3.4 per cent compared to the same period in 2015. The province has a high rate of discouraged work-seekers compared to those actively searching for employment, this emanates from a considerably high expanded unemployment rate of 40.7 per cent recorded in the fourth quarter of 2016.

		Officia	al unemploy	ment rate			Expand	ed unemploy	yment rate	
	Oct-Dec 2015	Jul-Sep 2016	Oct-Dec 2016	Qtr-to-qtr change	Year-on-year change	Jul-Sep 2015	Jul-Sep 2016	Oct-Dec 2016	Qtr-to-qtr change	Year-on-year change
		Per cent		Percent	age points		Per cent		Percent	age points
South Africa	24.5	27.1	26.5	-0.6	2.0	34.4	36.3	35.6	-0.7	1.8
Eastern Cape	27.4	28.2	28.4	0.2	1.0	40.3	41.3	41.3	0.0	1.0
Free State	29.8	34.2	34.7	0.5	4.9	36.3	40.4	40.9	0.5	4.6
Gauteng	27.6	29.1	28.6	-0.5	1.0	30.2	32.8	32.1	-0.7	1.9
KwaZulu-Natal	20.5	23.5	23.9	0.4	3.4	36.8	40.4	40.7	0.3	3.9
Limpopo	19.8	21.9	19.3	-2.6	-0.5	38.6	36.3	34.1	-2.2	-4.5
Mpumalanga	25.7	30.4	31.0	0.6	5.3	39.4	41.4	42.1	0.7	2.7
Northen Cape	25.8	29.6	32.0	2.4	6.2	38.9	41.8	43.3	1.5	4.4
North West	23.9	30.5	26.5	-4.0	2.6	38.9	44.6	40.9	-3.7	2.0
Western Cape	19.4	21.7	20.5	-1.2	1.1	22.0	24.8	23.6	-1.2	1.6

Table 5.3: Unemployment rate (official and expanded) in SA and KZN, 2015: Q4 to 2016:Q4

Source: Stats SA, 2016

Although the province of KZN experiences lower rates of unemployment when compared to other provinces as depicted in table 5.3, it however, remained with enormous challenge of exceedingly high unemployment rate in other district municipalities especially those that are more rural. Among the districts which recorded substantively high unemployment rate in 2015 is Uthukela at 32.3 per cent, Umkhanyakude at 31.5 per cent and Zululand at 31.4 per cent. As expected the eThekwini Metro recorded the lowest unemployment rate at 15.9 per cent, this is followed by uMgungundlovu and iLembe at 22.2 per cent and 23.2 per cent respectively (table A 5.2). The districts that recorded lower unemployment rate are those that contributed significantly to provincial GDP as various economic activities taking place in these municipalities have a positive impact on unemployment.

Government is committed to continue implementing the National Development Plan (NDP<sup>39</sup>), the New Growth Path (NGP<sup>40</sup>), Industrial Policy Action Plan (IPAP<sup>41</sup>) and the creation of Special Economic or Industrial

<sup>&</sup>lt;sup>39</sup> The National Development Plan (NDP) is a plan to unite South Africans, unleash the energies of its citizens, grow an inclusive economy, build capabilities, and enhance the capability of the state and leaders working together to solve complex problems.

<sup>&</sup>lt;sup>40</sup> New Growth Path (NGP) was adopted by government as the framework for economic policy and the driver of the country's jobs strategy.

Development Zones (SEZs / IDZs<sup>42</sup>) as means to ensure inclusive economy that will create opportunities for the workforce (KZN Treasury, 2015). Moreover, public and private companies are also committed to continue providing relevant skills required to young people through internships and graduate programme in the labour market. However, the recently recorded high unemployment rate shows that more work still needs to be done with regards to skills development for the youth especially in respect of scarce skills that are required in most industries such as manufacturing and mining. Scarce skills include among others knowledge of toolmaking, machinist and polymer technicians in the field of science, technology and engineering which are important to ensure productivity in respective industries and increase production thereof.

#### 5.3.1 Unemployment by age and gender

According to Stats SA (2016c), the national unemployment rate among women was higher at 28.9 per cent compared to that of men at 24.5 per cent as at the end of the third quarter of 2016. The persistently higher unemployment rate among women is further highlighted by the low absorption rate compared to their male counterparts. However, evidence indicates that the gap between women and men with regards to unemployment narrowed substantially between 2003 and 2013; this could be attributed to, among others, the effective implementation of the labour laws such as the Employment Equity Act no 55 of 1998 (EEA).

Stats SA further indicates that the unemployment rate is high among youth aged between 15 and 24 at 50.9 per cent, followed by those aged between 25 and 34 at 31.9 per cent. This provides evidence that unemployment is exceedingly high among youth in the country as opposed to those aged from 35 years and above. According to the QLFS unemployment is relatively low among the people aged between 45 and 54 years at 15.1 per cent, followed by those aged between 55 and 64 years at 8.1 per cent (Stats SA, 2016d).

Mncayi (2016) highlights that the high unemployment among the youth especially graduates emanate from various problems which includes among others lack of skills and/ skills mismatch, high wage expectations, lack of information about available jobs and so on. This was also correctly pointed out by the social profile of the youth conducted by Stats SA, (2016c) that South African youth is highly unskilled compared to the older generation of the working age, this in turn contribute to them being unemployable.

These harsh realities are therefore an indication that more work needs to be done to reduce the unemployment rate, particularly among the youth. Given that unemployment is a social problem facing the entire country, it thus becomes imperative to work diligently towards achieving strategic objectives of the Provincial Growth and

<sup>&</sup>lt;sup>41</sup> The Industrial Policy Action Plan (IPAP) is one of the key pillars of radical transformation in South Africa, based on inclusive growth in the productive sectors of the economy.

<sup>&</sup>lt;sup>42</sup> Special Economic Zone (SEZ)/ Industrial Development Zones (IDZs) programme was established by government in an effort to reposition itself in the world economy. The programme's main focus was to attract Foreign Direct Investment and export of value-added commodities.

Development Strategy (PGDS) in order to close the gender gap and reduce unemployment among the youth. The strategic objectives as stipulated in the PGDS aim to: 1.3 *Enhance spatial economic development*, 1.4 *Improve the efficiency, innovation and variety of Government-led job creation Programmes*, 1.5, *Promoting Small, Medium and Micro Enterprise (SMME) and Entrepreneurship and Youth Development* as well as 2.2 *Support skills development to economic growth* and 2.3 *Enhance youth and adult skills development and life-long learning* (KZN, 2016).

#### 5.4 Labour force participation rate

The labour force participation rate (LFPR)<sup>43</sup> shows the extent to which the working age population is economically active. It thus comprises of people who are actively participating in the economy either employed or unemployed and excludes those non-economically active. A lower LFPR indicates a decrease in the number of persons who are economically active, hence a rise in the number of discouraged work seekers, and the opposite is expected with a higher LFPR. Technically, this leads to a decrease in the labour force as the discouraged workers are counted as neither employed nor unemployed.

Table 5.4 demonstrates the labour force participation rate in SA and provinces for the period 2005 to 2015. Although the LFPR in the country has been unstable over the period, but it continued to revolve around the average rate of 36 per cent. Gauteng, Western Cape and Free State provinces had higher LFPR over the period and recorded 49.3 per cent, 47.2 per cent and 40.1 per cent in 2015 respectively. This was followed by Northern Cape at 37.6 per cent, Mpumalanga at 37.4 per cent and North West at 32.9 per cent. The figure further indicates that LFPR in KZN is estimated at 30.6 per cent which is far below the national average rate of 36 per cent and most provinces as mentioned above. However, the LFPR of KZN was marginally higher than those of the EC at 28.7 per cent and LP at 26.6 per cent which recorded a very low LFPR over the same period (table 5.4).

Among the eleven district municipalities within the province of KZN<sup>44</sup>, eThekwini Metro had the highest LFPR at 39.2 per cent which is not surprising as the Metro is the economic hub of the province. This was followed by uMgungundlovu and iLembe at 37.4 per cent and 29.7 percent respectively. The district municipalities with the lowest LFPR were uMzinyathi (17.5 per cent), followed by uMkhanyakude (17.8 per cent) and Zululand (18 per cent) (table A 5.3).

<sup>&</sup>lt;sup>43</sup>The labour force participation rate is defined as the percentage of working-age persons in an economy who are employed or unemployed but looking for a job. Generally, *"working-age"* persons, refer to people between the age cohort of 16 and 64. Available online <u>http://economics.about.com/od/unemploymentrate/f/labor\_force.htm</u>, Accessed on the 4<sup>th</sup> of February 2014.

<sup>&</sup>lt;sup>44</sup> KZN province has ten district municipalities and one metro (eThekwini metro).

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
South Africa	36.2	36.6	37.2	37.5	36.8	35.7	35.6	35.8	36.3	37.2	37.7
Western Cape	46.4	46.8	47.2	47.5	47.3	46.8	47.0	47.0	47.1	47.3	47.2
Eastern Cape	28.0	28.5	28.6	28.3	27.4	26.3	26.1	26.4	27.2	28.3	28.7
Northern Cape	35.8	36.4	36.7	36.6	35.3	34.1	34.3	35.2	36.4	37.4	37.6
Free State	38.4	38.2	38.2	38.5	38.0	37.3	37.4	37.6	38.3	39.4	40.1
KwaZulu-Natal	32.5	32.8	33.0	32.6	31.1	29.3	28.8	28.9	29.6	30.4	30.6
North-West	34.4	34.8	35.1	34.9	33.5	31.3	30.1	30.0	30.9	32.3	32.9
Gauteng	47.3	47.7	48.9	50.2	50.0	49.2	48.9	48.6	48.5	48.9	49.3
Mpumalanga	33.6	34.2	34.8	35.3	34.9	34.2	34.6	35.4	36.4	37.3	37.4
Limpopo	23.6	23.9	24.5	24.8	23.9	22.6	22.3	22.8	23.8	25.3	26.6

Table 5.4: Labour force participation rate in SA and KZN, 2005 to 2015

Source: Global Insight, 2016

#### 5.5 Labour absorption rate

The labour absorption rate (LAR) is generally defined as the percentage of the working age population that is currently employed. It provides an alternative indication to the unemployment rate regarding the lack of job opportunities in the labour market. In SA, the average absorption rate was estimated at 43.5 per cent in the fourth quarter of 2016. This was followed by the Western Cape (36.8 per cent) and Gauteng (36.7 per cent) provinces which probably had the highest LAR compared to other provinces. The LFPR in KZN shows a huge variation over the years under review. The provincial LAR had been increasing between 2005 and 2008. It however started to decline to 24.6 per cent in 2009. Since then, it has never returned to pre-global economic recession's upward trend. However, the LAR recorded in KZN was higher than those of the Eastern Cape, Limpopo and North-West at 20.4 per cent, 21.6 per cent and 22.2 per cent respectively (table 5.5).

Table 5.5: Labour absorption rate in SA and KZN, 2005 to 2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
South Africa	26.6	27.2	28.0	28.7	28.0	26.9	26.7	26.8	27.2	27.9	28.0
Western Cape	38.2	38.7	38.7	38.7	37.8	36.6	36.3	36.1	36.2	36.7	36.8
Eastern Cape	20.0	20.6	20.8	20.8	20.1	19.1	18.9	18.9	19.3	20.0	20.4
Northern Cape	24.6	25.2	26.1	26.9	26.1	24.8	24.9	25.4	26.1	26.5	26.4
Free State	27.6	27.7	28.2	28.9	28.4	27.2	26.8	26.2	26.1	26.8	27.3
KwaZulu-Natal	22.4	23.1	24.2	25.2	24.6	23.4	23.1	23.1	23.4	23.9	24.0
North-West	23.4	23.8	24.1	24.0	22.8	21.1	20.5	20.6	21.0	21.9	22.2
Gauteng	36.4	37.2	38.5	39.7	38.8	37.1	36.7	36.7	36.9	37.0	36.7
Mpumalanga	23.0	23.6	24.4	25.2	24.8	23.7	23.6	24.1	24.9	25.7	25.9
Limpopo	16.4	16.6	17.0	17.6	17.5	17.0	17.4	18.1	19.2	20.7	21.6

Source: Global Insight, 2016

The eThekwini Metro had the highest LAR at 34.4 percent, followed by uMgungundlovu at 28.8 per cent. Despite higher LAR recorded by key economic players of KZN, other district municipalities especially the rural areas had the lowest LAR such as uMzinyathi at 16.8 percent, uMkhanyakude at 11.5 percent and Zululand at 12.2 per cent. This is not surprising given the limted economic activities taking place in geographic areas of these districts which in turn push people to migrate to other regions searching for employment (table A 5.4).

#### 5.6 Job scarcity

Job scarcity is one of the important indicators in the analysis of labour market conditions. Akin to other indicators, such as poverty and education, job scarcity plays an integral role in the high levels of the unemployment rate. Table 5.6 presents job scarcity in KZN and district municipalities over the period 2005 to 2015. It is worth noting that the province made momentous progress in reducing job scarcity between 2005 and 2011 as evidenced by a decreasing trend from 31.2 per cent to 19.6 per cent respectively. However, this was a short-term achievement as the trend began to increase again from 2012 to 2015. This indicates lower job creation capacity of the economy. This is not surprising as GDP growth has been sluggish in consecutive years after the global financial crisis and shows a slow recovery. Nonetheless, job scarcity in the province is increasing slowly compared to other provinces.

Among the district municipalities in the province, Umzinyathi had the highest job scarcity over the years and recorded 40.6 per cent in 2015. This was followed by Zululand and Umkhanyakude at 36.7 per cent and 36.1 per cent, respectively over the same period. EThekwini had the lowest job scarcity during the same period, and recorded 12.2 per cent in 2015. Considering the link between unemployment and job scarcity, it is evident that unemployment is prevalent in the rural areas compared to urban areas as most district municipalities that are rural in nature have higher job scarcity. This originates from the fact that high job scarcity tends to be accompanied by high unemployment rate, hence district municipalities with high job scarcity also have high unemployment rate.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
KwaZulu-Natal	31.2	29.6	26.8	22.9	20.8	20.0	19.6	20.2	20.8	21.3	21.5
eThekwini	23.8	22.1	19.1	15.2	13.2	12.4	11.7	11.7	11.3	11.3	12.2
Ugu	34.8	33.5	30.9	26.9	24.8	24.2	24.1	25.1	26.9	27.8	27.3
uMgungundlovu	30.6	29.3	26.7	23.2	21.5	21.1	21.0	21.9	23.0	23.2	22.9
uThukela	37.4	35.3	32.0	27.7	25.4	24.8	24.7	26.6	29.3	29.9	29.3
uMzinyathi	51.1	49.5	46.6	42.6	40.3	39.2	38.7	39.6	40.8	41.2	40.6
Amajuba	39.3	38.3	35.8	31.6	29.5	28.8	28.5	29.3	30.6	30.7	30.5
Zululand	47.0	45.4	42.5	38.2	36.0	35.2	35.0	35.9	37.3	37.5	36.7
uMkhanyakude	43.7	41.7	38.9	35.5	33.9	33.8	34.5	35.5	36.7	37.1	36.1
King Cetshwayo	33.5	32.3	29.8	25.8	23.8	23.5	23.8	24.6	26.1	26.4	25.7
iLembe	36.9	35.6	33.5	30.5	28.9	28.4	28.2	29.6	30.8	31.3	30.9
Harry Gwala	38.7	36.9	34.0	30.0	27.9	27.1	26.9	27.7	28.8	29.1	27.9

Table 5.6: Job scarcity in KZN and districts, 2005 to 2015

Source: Global Insight, 2016

#### 5.7 Labour remuneration and productivity

Barker (1998) defines labour productivity as an instrument commonly used to measure output produced by workers in various sectors of the economy with available inputs. It highlights the extent to which inputs are utilized efficiently in an economy to produce goods and services. An increase in output without changes in inputs indicates an improvement in productivity; the opposite is expected with a decrease in output without changes in inputs. Productivity therefore serves as one of the important indicators which reflects performance of the economy as it directly links with several economic indicators such as economic growth, labour force skills, and competitiveness within an economy.

Labour remuneration is the cost of producing output in terms of salaries and wages. It normally depends on the effectiveness of labour to produce output with available inputs (productivity). The marginal productivity theory states that highly productive employees tend to be rewarded with high remunerations and less productive employees are less remunerated. Hence, labour remuneration should have a positive relationship with labour productivity. The theory further highlights that if labour remuneration increases without substantial improvement in productivity, the labour cost will increase to a threshold where companies respond by factor substitution from labour to capital. But an increase in remuneration accompanied by exceedingly high level of productivity leads to an increase in the number of labour that industries can add due to high marginal productivity of labour. This implies that highly productive employees are more desirable and have strong bargaining power as opposed to those with low productivity (Tsoku, 2014).

The level of productivity is one of the challenges currently propelling the staggering high unemployment rate in the South African labour market. This emanates from the shortage of skilled labour in the country especially among the youth. The social profile of the youth conducted by Stats SA (2016d) correctly pointed that young people are highly unskilled compared to their elders of the working age. This according to the Department of Labour (2014) results in investors resorting to withdrawal of their investments due to unproductive labour accompanied by high remuneration as perpetuated by labour legislative frameworks and bargaining power of unions. This in turn has a negative effect on the economy such that it becomes less competitive internationally and locally.

Figure 5.1 provides a review of the trend between productivity and remuneration of labour in KZN for the period 2005 to 2015. Similar to the national trend, the growth rate in labour remuneration has out-performed productivity growth in KZN over the period under review. An ideal situation is for both the productivity and remuneration curves to be closer to each other, meaning that the gap between the two variables should be minimal. Interestingly, the gap between these variables started widening between 2007 and 2009<sup>45</sup>.

<sup>&</sup>lt;sup>45</sup> It must be remembered that this was during the time of the global economic recession which led to a slow pace of recovery.



#### Figure 5.1: Labour remuneration and productivity in KZN, 2005 to 2015

#### 5.8 Conclusion

The labour market indicators presented in this chapter provide evidence of a serious problem facing the country in terms of poor economic capacity to generate enough job opportunities for the labour force, shortage of skilled labour and others. Consequently, this calls on the current dispensation to develop policy measures aimed at addressing these problems. These are some of the problems that cause a scourge of higher unemployment rate despite the availability of policies and programmes that are pro job creation. Moreover, it is disturbing that both KZN and SA depended vastly on the community services sector to provide employment, considering that government's responsibility should ideally be that of creating a conducive environment for businesses to thrive. It is therefore important to promote and incubate small medium and micro enterprises if the economy is to address the problem of unemployment. This calls for changing the mindset of people to be job creators rather than job seekers.

It is also essential to ensure that compensation of workers is according to how productive they are. The remuneration and productivity trend analysis reveals an unpleasant picture about these two variables which should move together in an ideal situation. The improvement in labour productivity has a positive contribution towards the country's economic growth.

#### 6.1 Economic risk or conditions variables

The economic risk monitor comprises of various economic risk or condition variables, those variables are depicted in table 6.1. The relative sector weights for the economic risk or condition variables are also displayed and add up to a 100 per cent. The weights at this stage are purely assumed weights and not based on any econometric modelling or calculations simply because of a lack of sufficient time series data. However, it must be mentioned that various weightings have been modelled with very little impact on the overall results.

Table 6.1: Included economic risk/condition variables and their associated sector weights

Relative Economic Sector Impact	Rand/Dollar (Rand per Dollar	Interest rate (R157=%)	Inflation (pa %)	Oil Price (USD)	Sugar price (US cent per pound)	Gold price (USD)	Credit extended to the domestic private sector (Rm)	Physical volume of electricity production (2005=100)
Agriculture, forestry and fishing	20.00	10.00	5.00	17.00	30.00	0.00	10.00	8.00
Mining and quarrying	30.00	0.00	0.00	10.00	0.00	40.00	0.00	20.00
Manufacturing	35.00	20.00	5.00	10.00	0.00	0.00	10.00	20.00
Electricity, gas and water	10.00	5.00	5.00	20.00	0.00	0.00	10.00	50.00
Construction	10.00	30.00	10.00	15.00	0.00	0.00	30.00	5.00
Wholesale & retail trade, hotels & restuarents	10.00	35.00	20.00	10.00	0.00	0.00	25.00	0.00
Transport, storage and communication	10.00	20.00	10.00	30.00	0.00	0.00	20.00	10.00
Finance, real estate and business services	10.00	35.00	10.00	10.00	0.00	0.00	30.00	5.00
Personal and general government services	10.00	35.00	20.00	0.00	0.00	0.00	30.00	5.00

Source: Own calculations using KZN Economic Model, 2017

#### Table 6.2: Implications of a change in the economic risk/condition variables

	Unit	Movement	Decreasing risk	Increasing risk
Rand/Dollar exchange rate	Rand per 1USD	Appreciate or Depreciate	Depreciate	Appreciate
Interest rate	Percentage R157 Bond	Increasing or Decreasing	Decrease	Increase
Inflation rate	Percentage per annum	Increasing or Decreasing	Decrease	Increase
Oil price	USD per Barrel	Increasing or Decreasing	Decrease	Increase
Sugar price	US cents per pound	Increasing or Decreasing	Increase	Decrease
Gold price	USD per Ounce	Increasing or Decreasing	Increase	Decrease
Credit extended to the domestic private sector	Rand million	Increasing or Decreasing	Increase	Decrease
Physical volume of electricity production	Index, 2005=100	Increasing or Decreasing	Increase	Decrease

Source: Own calculations using KZN Economic Model, 2017

The theoretical impact of a change in each of the economic risk or condition variables are illustrated in table 6.2. For example, when the rand dollar exchange rate depreciates the risk associated to the provincial economy is

<sup>&</sup>lt;sup>46</sup>The views expressed in this chapter are those of the author and do not necessarily represent those of the KZN Provincial Treasury.

assumed to be decreasing because of the potential improvement in the economic conditions associated with a depreciating currency (increased exports for example).

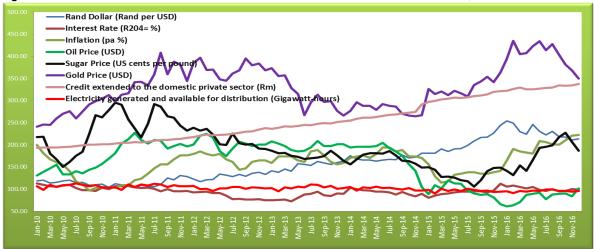
#### 6.2 Behaviour of the economic risk or conditions variables

The behaviour or movement of the economic risk or condition variables during 2016 are displayed in table 6.3.

_	Rand/Dollar (Rand per USD)	Interest rate (R186 = %)	Inflation (pa %)	Oil price (USD)	Sugar price (US cents per pound)	Gold price (USD)	Credit extended to the domestic private sector (Rm)	Electricity generated and available for distribution (Gigawatt-hours)
16-Jan	16.2	8.5	5.6	33.9	14.3	1 774	3 104 644	3 428
16-Feb	15.9	8.7	6.5	35.1	13.3	1 956	3 144 521	3 259
16-Mar	14.7	8.4	6.3	39.3	15.4	1 821	3 179 020	3 459
16-Apr	14.3	8.2	6.2	48.1	14.2	1 831	3 139 373	3 382
16-May	15.7	8.4	6.1	49.3	16.7	1 901	3 142 291	3 489
16-Jun	14.7	7.9	7.1	50.6	19.4	1 952	3 154 134	3 452
16-Jul	14.2	7.7	7.0	42.7	19.7	1 863	3 172 121	3 576
16-Aug	14.7	8.0	6.8	48.4	20.0	1 923	3 176 159	3 551
16-Sep	13.9	7.7	6.8	49.2	21.9	1 815	3 222 722	3 445
16-Oct	13.9	7.7	7.2	49.7	22.9	1 717	3 219 693	3 459
16-Nov	13.5	8.0	7.5	46.4	20.9	1 658	3 223 483	3 397
16-Dec	13.6	7.9	7.6	56.1	18.8	1 574	3 252 356	3 443

Table 6.3: Behaviour of the economic risk or conditions variables, 2016

Source: Own Calculation using KZN Economic Model, 2017





Source: Own calculations using KZN Economic Model, 2017

Figure 6.1 indicates the behaviour of the economic risk variables in index format (2005 = 100) from January 2010 to December 2016. It can be realised from both table 6.3 and figure 6.1 and 6.2 that on average during 2016 the risk index was adversely or positively influenced by the following variables:

- The rand dollar exchange rate has appreciated (x)
- Interest rates have decreased  $(\sqrt{})$

- Inflation has increased (x)
- Oil prices have increased (x)
- ✤ Sugar prices have increased (√)
- Gold price has decreased (x)
- ✤ Credit extended has increased (√)
- Electricity supply has increased (1)

#### 6.3 Economic risk or conditions monitor for KZN

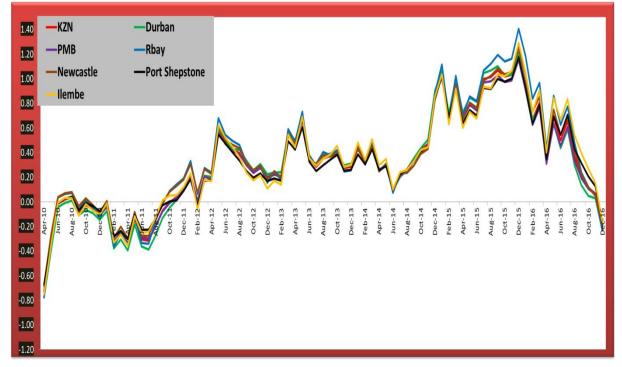
The results for the province and each of the six regions are displayed in figure 6.2 and table 6.4. The results have been smoothed using a twelve month moving average method because of the inclusion of monthly data in the calculations. The economic risk monitor should be interpreted as follows:

- Positive Number: Low or Decreasing Risk
- Zero:
- Negative:

Neutral Risk

High or Increasing Risk

#### Figure 6.2: Economic risk or conditions monitor, April 2010 to December 2016



#### Source: Own calculations using KZN Economic Model, 2017

Table 6.4: Economic risk or conditions monitor, 2015 and 2016
---------------------------------------------------------------

	KZN	Durban	РМВ	Rbay	Newcastle	Port Shepstone	llembe
15-Jan	2.7	2.6	2.5	3.5	3.0	2.6	2.6
15-Feb	-3.1	-3.1	-3.0	-3.7	-3.1	-3.1	-3.6
15-Mar	2.7	2.7	2.6	3.3	2.9	2.3	2.7
15-Apr	-2.7	-2.7	-2.6	-3.2	-2.7	-2.6	-3.0
15-May	1.4	1.4	1.3	1.7	1.5	1.3	1.5
15-Jun	-0.4	-0.3	-0.4	-0.4	-0.4	-0.4	-0.5
15-Jul	2.8	2.8	2.7	3.1	2.7	2.6	3.0
15-Aug	1.3	1.3	1.2	1.8	1.5	1.0	1.1
15-Sep	1.1	0.9	1.0	1.2	1.1	1.3	1.6
15-Oct	0.6	0.3	0.5	0.6	0.6	0.8	1.1
15-Nov	1.5	1.5	1.4	1.4	1.3	1.6	1.8
15-Dec	3.2	3.1	2.9	3.9	3.3	3.1	3.6
16-Jan	1.6	1.6	1.5	2.1	1.8	1.5	1.7
16-Feb	-1.1	-1.0	-1.1	-1.0	-0.9	-1.1	-1.5
16-Mar	-1.4	-1.6	-1.2	-1.9	-1.6	-1.1	-1.2
16-Apr	-3.4	-3.4	-3.3	-3.6	-3.2	-3.5	-3.9
16-May	1.8	1.5	1.7	2.4	2.1	2.0	2.8
16-Jun	-1.0	-1.2	-1.0	-1.3	-1.1	-0.7	-0.8
16-Jul	1.7	1.7	1.6	1.5	1.4	1.7	1.7
16-Aug	-1.0	-1.0	-0.9	-0.8	-0.7	-1.0	-0.8
16-Sep	-0.8	-0.8	-0.7	-1.4	-1.1	-0.5	-0.8
16-Oct	-0.2	-0.2	-0.1	-0.3	-0.3	-0.1	0.0
16-Nov	-0.1	0.1	-0.1	-0.3	-0.3	-0.2	-0.5
16-Dec	-2.0	-1.9	-1.8	-2.2	-1.9	-2.2	-2.4

Source: Own calculations using KZN Economic Model, 2017

The average risk index for the province and each of the regions for the period 2010 to 2016 are displayed in tables 6.5.

	KZN	Durban	РМВ	Rbay	Newcastle	Port Shepstone	llembe
2010	-0.28	-0.33	-0.26	-0.28	-0.23	-0.25	-0.27
2011	-0.16	-0.2	-0.15	-0.13	-0.1	-0.12	-0.12
2012	0.3	0.31	0.29	0.34	0.33	0.26	0.27
2013	0.37	0.39	0.37	0.38	0.37	0.33	0.37
2014	0.37	0.38	0.36	0.37	0.35	0.36	0.39
2015	0.94	0.97	0.91	1.02	0.94	0.89	0.91
2016	0.43	0.39	0.4	0.53	0.47	0.46	0.55

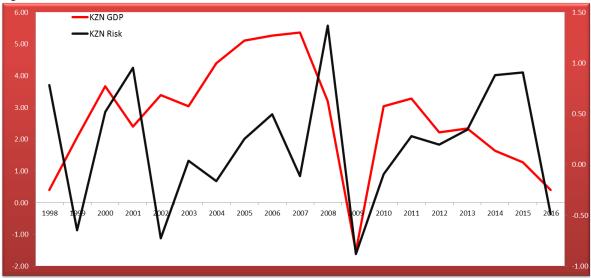
Table 6.5: Average economic risk or conditions monitor – smoothed, 2010 to 2016

Source: Own calculations using KZN Economic Model, 2017

#### 6.4 KZN risk index and KZN GDP

Figure 6.3 portrays the behaviour of the KZN Risk index (value) and KZN GDP growth from 1998 to 2016. Prior to 2013, there had only been three years where the provincial risk index was actually higher than the provincial GDP that was in 1998, 2001 and 2008. Both years 1998 and 2008 were characterised by very low economic output followed by strong economic recovery. In addition, the year 2001 was characterised by a significant depreciation of the exchange rate of rand. Post the year 2013 KZN's risk has been higher than provincial GDP.





Source: Own calculations using KZN Model, 2017

#### 6.5 Conclusion

The results suggest that the economic risk in the province increased significantly during 2016, especially compared to the previous years. The risk index suggests that economic conditions in the province are not favourable for the economy to grow at the required level which will address the challenges faced by the province. Unfortunately the outlook is anticipated to deteriorate in 2017 given the major risk factors of increasing inflation, increasing Brent crude oil price, interest rates and the continuous fiscal pressure.

# Chapter 7: Multi Regional Economic Multipliers

#### 7.1 Introduction

A regional economy is an agglomeration of numerous economic factors and markets packed into a densely populated geographic area and with a large number of complex and interrelationships between internal and external markets. An analysis of the macroeconomic variables of a regional economy requires an approach embodying greater detail of the economic factors such as regional economic input-output approach.

The regional economic input-output approach is a well suitable instrument to analyse regional economy due to its capacity to describe detailed transactions among economic units. Essentially, input-output is a method of tracing and using information about transactions between buyers and sellers. Furthermore, the input-output approach is a theoretical framework that consists of a set of assumptions, well defined mathematical properties, and close relation to the general equilibrium models of Walras and Cassel (Hirsch, 1973). Schaffer (1999) argues that a regional input-output model traces the interactions of regional industries with each other, with industries outside the region, and with final demand sectors.

There are different techniques introduced recently in this approach which include among others: survey, semisurvey, and non-survey. Each technique has its specific advantage over the other; for instance the survey based approach is accurate but incurs high cost, non-survey based incurs low cost but it is less accurate, semi survey based technique is at the middle of two mentioned techniques as it incurs less cost and is less accurate (Bazzazan et al, 2005).

This study seeks to provide a detailed review on the technique of constructing a regional input-output model for the province of KwaZulu-Natal (KZN), focusing on the five major regional economies namely; Durban, Pietermaritzburg, Newcastle, Richards Bay and Port Shepstone. For this purpose, the study explores the economic structure of these five regional economies. This is followed by discussion of the technique used in the construction of the regional input-output table, before further articulating on the overview of multi-regional input-output models. The analysis of the regional model and the multipliers calculated from the model are also alluded to in the study. It concludes with the analysis of empirical findings of the study.

#### 7.2 Socio-economic structure of the five regional economies

The economy of KZN is concentrated vastly in the five regions as indicated in the introduction above. These five regional economies dominate the economic landscape of the province due to various economic activities that take place in their geographic areas. Hence, the provincial gross domestic product (GDP) of approximately 80 per cent is produced in these regions. Further, due to inward migration of people from other corners of the

province searching for employment in these key provincial economic players, the higher proportion of approximately 55 per cent of the provincial total population resides within these regions. This translates to a more than doubled personal per capita income. Moreover, it is within that context of high per capita income that poverty levels are almost half in these regions compared to other municipalities within the province.

These regions cover only about 8.5 per cent of the total provincial land which result to a population density of more than 12 times compared to other regions in the province. These regions account for about 93 per cent, 86 per cent and 78 per cent of all new office and banking space, shopping space and industrial and warehouse space over the period 2001 to 2008 respectively. Although the regions constitute almost 55 per cent of the provincial population collectively, the population size however differs significantly in all regions. Durban is the most populous region compared to the other four regions as indicated in chapter two of this publication.

This is not surprising due to different factors that attract people. This include especially economic activities which generate job opportunities for the people such that others migrate from their regions in search for employment as a result that Durban is economic hub of the province (table 1). It is followed by Pietermaritzburg and Richards Bay, which also can be attributed to inward migration to these regions due to economic activities such as manufacturing companies in Richards Bay and the fact that Pietermaritzburg is the capital city of KZN, and therefore consists of many people employed by various government departments located in the city. Coetzee (2015), however, indicates that the size distributions of the five regions have not changed noticeably over the period. This suggests that the relative population distributions for the five regions have stayed fairly constant over the period.

	KwaZulu-Natal	Durban	Pietermaritzburg	Richards Bay	Newcastle	Port Shepstone
2006	9 550 057	3 210 688	644 108	551 632	318 266	404 620
2007	9 674 667	3 250 440	656 066	558 369	322 908	409 692
2008	9 803 621	3 291 265	668 326	565 380	327 704	415 158
2009	9 937 725	3 333 336	680 955	572 727	332 684	421 057
2010	10 077 996	3 376 806	694 053	580 529	337 898	427 482
2011	10 223 270	3 422 487	707 714	588 647	343 316	434 373
2012	10 373 800	3 469 797	721 712	596 897	348 882	441 674
2013	10 530 745	3 518 477	736 127	605 553	354 674	449 556
2014	10 694 434	3 568 897	750 992	614 510	360 669	457 915
2015	10 919 077	3 621 022	766 370	623 908	366 915	466 871

Table 7.1: Population size in KZN by regions, 2006 to 2015

Source: Stats SA, 2016, Global Insight, 2016 and Own calculations

These five regions also differ significantly in terms of their economic structure. Table 7.2 displays the annual average contribution rates for each economic sector for each of the five regions compared to the national and

provincial economies over the period 2006 to 2015. The structural differences are fairly evident, for example Richards Bay and Newcastle are "production" economies as confirmed by higher contributions by their manufacturing sectors. On the other hand, Pietermaritzburg and Port Shepstone are "consumer" economies as shown by high contributions by their wholesale, finance and services sectors. Durban has a much more diversified economy which is fairly similar to the national economy.

	South Africa	KwaZulu-Natal	Durban	Pietermaritzburg	Richards Bay	Newcastle	Port Shepstone
Agriculture, forestry and fishing	2.44	4.34	1.18	4.25	2.89	2.06	7.66
Mining and quarrying	6.87	1.81	0.27	0.43	8.77	1.22	1.99
Manufacturing	16.39	21.32	21.06	12.81	39.03	31.49	12.24
Electricity, gas and water	2.09	2.24	2.44	2.77	0.58	2.1	1.69
Construction	2.46	2.34	2.52	2.29	1.93	1.9	4.05
Wholesale & retail trade; hotels & restaurants	12.07	12.43	14.15	11.05	6	8.72	16.67
Transport, storage and communication	8.37	11.18	13.05	10.71	9.77	7.72	9.19
Finance, real estate and business services	18.51	15.63	18.06	19.07	9.44	13.37	18.71
Personal and General Government Services	19.77	17.7	16.3	26.69	9.85	20.44	17.04

 Table 7.2: Annual average contribution rates, 2006 to 2015

Source: Stats SA, 2016, Global Insight, 2016 and Own calculations

Table 7.3 displays annual real GDP and average annual economic growth rate for the country, province and the regional economies over the period 2006 to 2015. The real GDP and economic growth rates of the five regions have also been fairly varied. It is evident from the table that total economic output differs substantially despite marginal economic growth rate disparities. The regional economic growth rates have been much more volatile than the national and provincial growth rates with an exception of Pietermaritzburg and Port Shepstone which showed sustainable trend over the period. Coetzee (2016) indicates that the GDP distributions of the five regions have not changed markedly over the period.

	South Africa	KwaZulu-Natal	Durban	Pietermaritzburg	<b>Richards Bay</b>	Newcastle	Port Shepstone
2006	2 491 296	385 398	220 577	30 952	23 884	11 769	10 926
2007	2 624 841	408 910	234 033	32 841	25 341	12 487	11 592
2008	2 708 601	424 640	245 609	33 589	27 805	12 578	11 995
2009	2 666 940	418 879	235 790	35 344	24 206	13 237	11 871
2010	2 748 008	433 846	247 805	35 259	26 787	13 272	12 284
2011	2 838 257	449 826	256 758	36 703	27 738	13 769	12 732
2012	2 901 078	461 604	262 330	38 042	27 879	14 279	13 073
2013	2 968 682	472 217	269 210	38 608	28 931	14 502	13 370
2014	3 017 037	482 953	275 156	39 563	29 513	14 851	13 674
2015	3 055 192	489 208	278 552	40 127	29 801	15 067	13 852
Average	2.97	3.27	3.3	3.49	3.33	3.39	3.32
St. Dev	1.91	2	2.67	1.92	5.73	1.96	1.92

Table 7.3: Annual GDP (R1000, 2010 constant prices), 2006 to 2015

Source: Stats SA, 2016, Global Insight, 2016 and Own calculations

#### 7.3 Input-output approach

An input-output model consists of a system of linear equations, in which each equation describes the distribution of an industry's economy. It is constructed from observed data for a specific economic area. The economic activity in the area must be divisible into a number of segments or producing sectors. These inter-industry or inter-sectoral flows are measured for a particular time period in monetary terms, commonly known as transaction table. The transaction table consists of a group of industries and sectors which shows the inter-sectoral flows, and provide links between different industries and sectors within the economy. Generally, the table comprises of equal rows and columns; rows represent the sectoral output whilst columns represent sectoral purchases. Hence, figures entered in each row indicate what is happening to the sectoral output, whereas figures in each column describe the input structure of the corresponding sector (Bazzazan et al, 2005).

The table also consists of final demand and value added, as in an economy there are sales to purchasers who are more external to the industrial sectors that constitute the producers in the economy, for example households, government and foreign trade. The demand for these units and the magnitudes of their purchases from each industrial sector are generally determined by unrelated considerations to the amount being produced in each of the units. Final demand which normally refers to the demand for the external units covers total consumption (private or public), capital formation and exports. According to Bazzazan et al (2005) a combination of final demand and intermediate demand added row-wise equals the gross value of production. Similarly, the columns of intermediate demand added with value added equals the gross values of production of an industry. Table 4 illustrates the input-output coefficients of three industries including the value added and net final demand.

	Industry 1	Industry 2	Industry 3	Net final demand
Industry 1	<i>a</i> <sub>11</sub>	<i>a</i> <sub>12</sub>	<i>a</i> <sub>13</sub>	$V_1$
Industry 2	<i>a</i> <sub>21</sub>	<i>a</i> <sub>22</sub>	<i>a</i> <sub>23</sub>	$V_2$
Industry 3	<i>a</i> <sub>31</sub>	<i>a</i> <sub>32</sub>	a <sub>33</sub>	$V_3$
Value added	<i>V</i> <sub>1</sub>	$V_2$	$V_3$	

 Table 7.4: Input-output coefficients in general terms

Source: United Nations, 1999

The input-output table could also make it possible to compute a table of inputs or technical coefficients. Pissarenko (2003) defines technical coefficients as the quantity of inputs required from the industry to produce output worth some monetary terms. As it represents the entire domain of wealth-producing activities, computation of the technical coefficients is only restricted to the processing sector industries. The coefficients can be denominated in either monetary or physical units, using the following basic formula.

$$a_{ij} = x_{ij} / x_j$$

Where  $a_{ij}$  is the input coefficient of industry *i* into industry *j*,  $x_{ij}$  represents the amount of industry *i* s output used by industry *j*. On the other hand  $x_j$  is the total output from industry *j*. Using this formula, the coefficient  $\alpha_{ij}$  can be obtained for all the industries in an input-output table. Once a transaction table of direct and indirect coefficients (or a coefficient matrix) have been obtained, several common economic analyses can be performed.

#### 7.4 Multi regional input-output model (MRIO)

There are numerous variations of input-output analysis at the regional level. The input-output studies with a regional orientation can be classified in a number of ways. One major distinction is between interregional and regional models. In the former, a single model includes more than one region, while regional models are similar to national models except that they cover a smaller geographic area. Chenery (1953) and Moses (1955) developed the first version of a MRIO model, which used the following simplification: The interregional trade flows are only specified by region of origin and region of destination, and ignore the specific industry of destination. MRIO analysis allows users to define a large region and capture leaked impacts while maintaining the specificity and individual identities of the direct impact location and each of the linked regions of interest.

According to Sargento (2009) the MRIO model is based on the notion that when one region increases its production as a reaction to some exogenous change in final demand; for example, some of the inputs needed to answer the production augment will come from the remaining regions, originating from an increase of production in these regions, the so called spill-over effects. The remaining regions may need to import inputs from other regions including the first region to use in their own production. These involve the concept of interregional feedback effects: those which are caused by the first region in itself, through the interactions it performs with the remaining regions (Miller, 1998). The MRIO model is therefore useful in the analysis of interregional feedback effects and the degree to which change originating in one region has capacity to influence activity levels of another region in turn, will affect activity back in the region of origin.

#### 7.4.1 Constructing the multi-regional input-output model

The standard input-output approach as discussed can be used to estimate how changes in one regional economy affect other regional economies, commonly referred to as estimating inter-regional interdependence. The purpose of a regional input-output table is to estimate the inter-relationships that exist between different regional economies. This emanates from the argument that regional economies are not closed economies but open economies. Thus, there is a constant flow of goods and services between the various regional economies they buy and sell each other. Hence, the output of any regional economy is needed as an input to other regional economies, or even for that regional economy itself. Therefore, the level of regional economic output will depend on the input requirements of all the n regional economies. For instance, the output of other regional economies.

will enter into the Pietermaritzburg economy as inputs. Hence, the correct levels of other regional economies will depend partly upon the input requirements of the Pietermaritzburg economy.

The annual regional economic business confidence surveys that have been conducted since 2005 contain a question relating to the proportion of products and services sold by businesses in a particular regional economy to the other regional economies. The surveys are conducted through the various local chamber of business and other local business organisations operating in the five economic regions (only three urban centres from 2005 to 2010). The survey is an online anonymous business survey designed specifically to generate data and information on a number of local economic characteristics and trends, and the general level of business confidence in the particular urban centre. The numbers in the table tell how much output from each region a given region requires in order to produce one of its own output.

		Regional economy of Production							
	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle				
Pietermaritzburg	0.444	0.100	0.038	0.033	0.026				
Durban	0.060	0.494	0.093	0.014	0.023				
Richards Bay	0.037	0.059	0.617	0.007	0.048				
Port Shepstone	0.04	0.116	0.018	0.416	0.011				
Newcastle	0.023	0.099	0.014	0.012	0.352				
Total	0.604	0.867	0.779	0.481	0.459				

#### Table 7.5: Production and output matrix

Source: Own calculations

The Newcastle respondents, for example, will therefore indicate the proportion of their total sales (exports) to the other four regional economies. The yearly proportions (2011 to 2015) have been averaged in order to minimize the risk of outliers and are displayed in matrix format in table 6.5. The totals are not equal to one hundred because it excludes the proportions of the total sales that are sold outside of the five regional economies, for example to the rest of the province or else other provinces. The matrix I-A in table 6.6 is derived from the production and output matrix for regional economies.

#### Table 7.6: I-A Matrix (sales)

	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle
Pietermaritzburg	0.556	-0.100	-0.038	-0.033	-0.026
Durban	-0.06	0.506	-0.093	-0.014	-0.023
Richards Bay	-0.037	-0.059	0.383	-0.007	-0.048
Port Shepstone	-0.04	-0.116	-0.018	0.584	-0.011
Newcastle	-0.023	-0.099	-0.014	-0.012	0.648

Source: Own calculations

The inverse of the I-A matrix is indicated in table 7.7, representing the values which are also known as multipliers. This means for example that when the demand for goods and services in the Pietermaritzburg economy increases by one rand (R1), the production of goods and services in Pietermaritzburg, Durban, Richards Bay, Newcastle and Port Shepstone economies will increase on average by R1.88, R0.28, R0.24, R0.20 and R0.12, respectively (spill-over effects).

	Inverse matrix							
	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle			
Pietermaritzburg	1.881	0.457	0.306	0.122	0.115			
Durban	0.279	2.138	0.553	0.074	0.129			
Richards Bay	0.243	0.425	2.746	0.060	0.229			
Port Shepstone	0.194	0.475	0.216	1.737	0.069			
Newcastle	0.119	0.362	0.160	0.050	1.574			

 Table 7.7: Regional economic multipliers (sales)

Source: Own calculations

#### An elementary example

Let's assume final demand in the Pietermaritzburg economy increases with one hundred rands (R100) for whatever reason with no change in final demand in the other four regional economies. Applying the regional multipliers (interdependence coefficients), table 7.7 provides the estimates of both direct and indirect effects of changes in final demands for products and services in the Pietermaritzburg economy. The cumulative production (intra and interregional flow of final goods and services) that has taken place in the five regions combined to meet the increase in final demand is calculated at R271.65.

Using the technical coefficients as displayed in table 7.5, the intra and interregional flows (value of the deliveries or sales) are calculated as shown in table 7.8. The rows contain the output of a region, the value of the deliveries or sales of a region to the different regions. Pietermaritzburg delivers goods and services with a value of R83.48 to Pietermaritzburg, R2.78 to Durban, R0.92 to Richards Bay, R0.64 to Port Shepstone, R0.30 to New Castle and R100 of final demand. Value of total production of Pietermaritzburg is R188.12.

	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle	Final demand	Final output
Pietermaritzburg	83.478	2.784	0.918	0.636	0.303	100	188.119
Durban	11.334	13.790	2.255	0.262	0.273	0	27.914
Richards Bay	6.984	1.636	14.991	0.131	0.569	0	24.312
Port Shepstone	7.556	3.233	0.425	8.069	0.129	0	19.413
Newcastle	4.350	2.767	0.348	0.237	4.186	0	11.889
Primary Inputs	74.417	3.703	5.374	10.078	6.428	-	100.000
Total Inputs	188.119	27.914	24.312	19.413	11.889	-	271.647

Source: Own calculations

For each region to increase their production to the new total output levels as indicated above each region has to buy intermediate goods and services (raw materials and semi-finished) from itself and from other regions (columns). For example for a production of R188.12, Pietermaritzburg spends R83.48 in Pietermaritzburg, R11.33 in Durban and the primary costs (capital and labour) are R74.42. The total value of intermediate inputs purchased for Pietermaritzburg is R113.70.

Table 7.9 displays the comparative results of a R100 increase in final demand in each of the regions individually (ceteris paribus). The cumulative effect is the highest when final demand increase in Richards Bay and the lowest when final demand increases in Port Shepstone.

	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle
Pietermaritzburg	188.119	45.666	30.557	12.191	11.487
Durban	27.914	213.759	55.284	7.411	12.896
Richards Bay	24.312	42.462	274.636	5.993	22.859
Port Shepstone	19.413	47.455	21.582	173.714	6.948
Newcastle	11.889	36.168	16.028	4.973	157.370
Primary Inputs	100.000	100.000	100.000	100.000	100.000
Total Inputs	271.647	385.51	398.086	204.282	211.561

Table 7.9: Cumulative impact of a R100 increase in final demand per region (R)

Source: Own calculations

Table 7.10 displays some further statistics with respect to the total impact derived from a R100 increase in final demand in each of the regions individually (ceteris paribus). It shows that an increase in final demand in Durban has the largest impact on the remaining four regions collectively at R171.75 whereas an increase in final demand in Port Shepstone has the smallest impact on the remaining four regions collectively at R30.57 in rand value terms.

Table 7.10: Domestic versus external impact (R)
-------------------------------------------------

	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle
Multipliers	2.716	3.855	3.981	2.043	2.116
Final Demand	100.000	100.000	100.000	100.000	100.000
Total Impact	271.647	385.51	398.086	204.282	211.561
Domestic Impact	188.119	213.759	274.636	173.714	157.370
External Impact	83.528	171.751	123.451	30.568	54.191

Source: Own calculations

Table 7.11 displays the domestic and regional trade flows, value added and total domestic production with respect to the total impact derived from a R100 increase in final demand in each of the regions individually (ceteris paribus). Durban export and import the most whilst Port Shepstone export and imports the least. Port Shepstone has the largest value whilst Durban has the smallest.

	U				
	Pietermaritzburg	Durban	<b>Richards Bay</b>	Port Shepstone	Newcastle
Domestic Sales	83.478	105.597	169.347	72.207	55.414
Exports	4.641	8.162	5.288	1.507	1.956
Total Sales	88.119	113.759	174.636	73.714	57.370
Domestic Purchases	83.478	105.597	169.347	72.207	55.414
Imports	30.224	79.803	44.58	11.326	16.871
Total Purchases	113.702	185.401	213.927	83.533	127.699
Value Added	74.417	28.359	60.708	90.181	85.085
Total Production	188.119	213.759	274.636	173.714	157.37

Table 7.11: Domestic and regional trade flows (R)

Source: Own calculations

#### 7.5 Summary and Conclusions

The main objective of the well-known input-output model, developed by Leontief in the late 1930s, is to study the interdependence among the different sectors in any economy. This tool holds upon a very simple, yet essential notion, according to which the output is obtained through the consumption of production factors (inputs) which can be, in their turn, the output of other industries. The original applications of the input-output model were made at a nation-wide level. However, the interest in extending the application of the same framework to spatial units different from the country (usually, sub-national regions) led to some modifications in the national model, originating a set of regional input-output models.

This study has developed a modified MRIO model for the province of KZN using the Chenery-Moses model. A diacritical feature of this study is that, unlike most other studies that construct input-output model for a single country, the MRIO model was developed to link the five major regional economies in the province. A survey approach was used to construct the MRIO model. This essentially involved using primary data collected from a specially conducted survey to develop the MRIO model.

As can be observed above, a MRIO model can be used for various applications such as multiplier, linkage, and impact analyses as well as estimation of interregional spill-over and feedback effects. The multiplier analysis found that the Richard Bay economy had the highest output multipliers whilst Port Shepstone had the smallest. The analysis of the economic relationship between the five regions found that the value of intra-trade of these five with the regions was much higher (in varying degrees) than the value of the inter-regional trade.

Durban seems to have a fairly open economy trading significantly with the other four regions followed by Pietermaritzburg and Richards Bay. Port Shepstone and Newcastle seems to be fairly closed economies trading predominantly internally. This explains the reason why the multiplier analysis found that the Port Shepstone and Newcastle economies had the smallest output multipliers. The results suggest that there is indeed some flow of final and intermediate goods and services between the five regions. Consequently, the estimated interregional spill over and feedback effects seem to be rather negligible.

# Chapter 8: The influence of space on business confidence

#### 8.1 Introduction

This study presents the comparative findings of an annual business survey conducted in the five major urban centres (Durban, Pietermaritzburg, Richards Bay, Newcastle and Port Shepstone) in the province of KwaZulu-Natal (KZN), since 2011. These cities are, however, economically diverse from a structural perspective and spatially fairly dispersed and it could be argued that such urban diversity and dispersal result in spatially-induced differences in business sentiments and confidence.

The cities differ from each other in terms of geographical location, business mix, population size, demographics and natural resources for example (local factors). Nonetheless, these cities share similar characteristics, such that they operate within the context of the national economy, share the same tax and interest rate regimes, business and labour laws and electricity supply. The study will therefore attempt to determine whether or not the main factors supporting or explaining city business sentiment and confidence are local factors or national factors.

The study focuses on five factors covered in the annual business survey, namely: Present business or trading conditions, expected sales performance over the next year, expectations to expand business operations during the year, expanding the workforce during the year and whether an increase in economic activity in the local economy during the past year was experienced.

The main purpose of this study is therefore to determine and compare the perceptions of the business community regarding the prevailing economic conditions in their particular urban centre. This will address the question as to whether space matters in relation to business sentiment and confidence.

#### 8.2 Background of the study

According to Van Rooyen (2011) business confidence helps to explain the sentiments of business owners or managers towards current and future business conditions. It is mostly surveyed at the nation-state level rather than at the level of municipalities or towns. Kershoff (2000) and Pellissier (2002) further state that business confidence is an important consideration for future entrepreneurs and policy-makers as it indicates perceptions about the potential profitability of business in a specific locality.

The Bureau for Economic Research (BER) and the South African Chamber of Commerce and Industry (SACCI) are both responsible for conducting business surveys within the country. The BER (2016) states that a business survey is designed to meet the needs of short-term analysis of business conditions in the trade, manufacturing,

construction and financial sectors. Despite the fact that both the BER and SACCI focus on the national economy, it however use two very different methodologies to measure business confidence. The BER rely mostly on surveys that are conducted through questionnaires and disseminated to a panel of respondents whilst the SACCI use monthly Business Confidence Index (BCI) as a measure of business confidence within the South African economy. The SACCI therefore does not depend on actual questionnaires. It however utilises various economic and market indicators to compile the 13 sub-indices that make up their monthly business confidence index (SACCI, 2016).

#### 8.3 Methodology

The survey of this study follows the methodology applied by the BER in that a questionnaire is disseminated annually to a panel of potential respondents. The questionnaire contains 25 questions with additional seven more questions compared to the survey of 2007. The surveys are circulated through the various local chambers of commerce and other local business organisations operating in the five urban centres using online systems to ensure anonymity. As such it is an internet-based survey conducted through the various chambers of commerce and other business organisations with the use of a web link including a cover letter explaining the main purpose of the survey. Moreover, the surveys are normally conducted at the same time each year to ensure consistency (during March and April) and closed after two months to start processing. Each survey is designed specifically to generate data and information on a number of local economic characteristics, trends and the general level of business confidence in the particular urban centre.

#### 8.4 Research results (2011 to 2015)

Generally, the response rate on average is between 2 per cent and 5 per cent of the total membership of the various chambers of commerce and business organisations, totalling between 150 and 200 respondents over the five urban centres. This is not an ideal situation, since a response rate closer to 10 per cent would improve the statistical significance of the survey. Nonetheless, the results show some interesting and significant trends that are fairly representative of the wider business sentiment and confidence in these five urban centres.

#### 8.4.1 Present business and trading conditions

The responses to the current business and trading conditions range between the following options, "Excellent, Good, Fair, Poor and Very Poor". The sentiment was fairly negative in that 72 per cent and 28 per cent of the respondents opted for "Fair" or "Poor" respectively in these urban economies over the period. However, these responses were very consistent and fairly independent from a spatial point of view, resulting in little difference between the average responses in the five urban economies over the period under review.

#### 8.4.2 Expected sales performance

The expectations of respondents on future sales performance ranged between the following options: "Much Better, Better, Same, Worse and Much Worse". The sentiment was positive to neutral in that the options with the most responses were "Better" and "Same" for the period under consideration. Therefore, fairly significant differences between the five urban economies were observed, such that the majority of respondents in Durban expected better sales whereas the majority of respondents in Port Shepstone expected the current sales performance to continue. The majority of responses in Richards Bay varied substantially from year to year in contrast to Durban where responses were consistent over the same period.

#### 8.4.3 Expectations to expand business operations

The expectations of respondents to expand their business operations during the next year included the following options: "Yes Definitely, Yes, Maybe, No and Downsizing". The results were mixed varying from year on year and there were also significant spatial differences, except for 2015 when all businesses irrespective of location responded in the majority with no plans to expand. Hence, it is estimated that 44 per cent opted "no", while 32 per cent did expect to expand. Furthermore, 20 per cent opted for "maybe" and 4 per cent opted for "yes definitely" in Port Shepstone for the year 2012. Thus the Richards Bay had most positive responses, Port Shepstone the most "no expectations" responses and Pietermaritzburg had the most "maybe expand" responses. Newcastle had the most volatility in the responses, as no consecutive year had the same majority response.

#### 8.4.4 Expectations to expand the workforce during the year

The possible options regarding possible expansion of the workforce during the year ranged between: "Yes Definitely, Yes, Maybe, No and Downsizing". There seems to be a fairly general consensus of "no" responses over the five urban economies (76 per cent). The majority of respondents in Durban, Pietermaritzburg and Port Shepstone consistently indicated "no", with the only exception of 2015, where the majority of respondents indicated "downsizing". This contrast with mixed responses in Richards Bay where no consecutive year having the same majority responses and ranging from "yes definitely" in 2014 to "downsizing" in 2015. Lastly, the majority of Newcastle respondents indicated "no" and "downsizing" during 2015.

#### 8.4.5 Economic activity in the local economy

Respondents were asked whether they expected any increase in economic activity in the country during the past year. The majority of respondents irrespective of location and year consistently indicated "no" (88 per cent). The majority of responses in Durban and Pietermaritzburg were "maybe", whereas in Richards Bay responses included a "yes", which were the only exceptions during the study period in 2014.

#### 8.5 Spatial comparison

The average responses on questions relating to experience and expectations for each of the five urban centres over the research period are displayed in table 8.1. There are very few differences in the responses by the participants over the period. However, some differences between the urban centres do exist (albeit not very much, depending on the questions), with the largest differences occurring in expectations with regard to sales performance over the next year and expansion of the workforce. There is virtually no difference in the average response to the experience of increasing economic activity in the local economy during the past year and expectations to expand business operations.

Average Majority Reponses over the period	Durban	Pietermaritzburg	<b>Richards Bay</b>	Port Shepstone	Newcastle
Present business/trading conditions are?	Poor	Fair	Fair	Fair	Fair
Your expected sales performance over the next year?	Better	Same	Better	Same	Same
I am expecting to expand my business operations during the year?	Yes	Yes	Yes	No	No
I am expecting to expand my workforce during the year?	No	No	No	No	No
I have experienced an increase in economic activity in the local economy during the past year?	No	No	No	No	No

Table 8.1: Response related to experience and expectations per urban centre

Source: Own calculations

#### 8.6 Conclusion

The survey results seem to suggest that spatial diversity and dispersal only matter marginally regarding business sentiment and confidence at an urban level. Overall, the unique spatial characteristics do not seem to influence business sentiment and confidence much, or the urban centres found themselves in similar positions to the rest of the country over the period. The results also suggest that factors affecting business sentiment and confidence, for example interest rates, business regulations and laws, are rather general or national wide, dependent on the state of the national economy and not unique to a particular urban centres.

# Appendix A: List of additional Figures and Tables

	Population size	% Share of KZN population	Area in square KMs	% Share of KZN area	Population density
KwaZulu-Natal	10 864 049	100	94 361	100	115.1
eThekwini Metro	3 765 088	34.7	2 556	2.7	1 473.1
Ugu	717 939	6.6	4 791	5.1	149.9
uMgungundlovu	1 076 146	9.9	9 602	10.2	112.1
uThukela	690 539	6.4	11 134	11.8	62.0
uMzinyathi	536 242	4.9	8 652	9.2	62.0
Amajuba	526 673	4.8	7 102	7.5	74.2
Zululand	829 484	7.6	14 799	15.7	56.1
uMkhanyakude	658 328	6.1	13 855	14.7	47.5
King Cetshwayo	940 461	8.7	8 213	8.7	114.5
iLembe	642 835	5.9	3 269	3.5	196.6
Harry Gwala	480 313	4.4	10 386	11.0	46.2

#### Table A2.1: KZN's population size, area in square kilometres and population density in 2016

Source: Global Insight, 2016

## Table A3.1: Crime in Dundee, 2013 to 2016

	April 2013 to	April 2014 to	April 2015 to March 2016	Comparison 2014/15 with 2015/16	
Crime category	March 2014	March 2015		Case Difference	% change
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)		
Murder	17	13	26	13	100.0%
Sex ual Offences	65	58	59	1	1.7%
Attempted murder	15	13	11	-2	-15.4%
Assault with the intent to inflict grievous bodily harm	154	155	164	9	5.8%
Common assault	253	205	164	-41	-20.0%
Common robbery	44	49	32	-17	-34.7%
Robbery with aggravating circumstances	85	76	91	15	19.7%
Contact Crimes ( Crimes Against The Person)	633	569	547	-22	-3.9%
CO	NTACT-RELATE	DCRIMES			
Arson	4	3	3	0	0.0%
Malicious damage to property	77	70	74	4	5.7%
Contact-Related Crimes	81	73	77	4	5.5%
PRC	PERTY-RELAT	ED CRIMES			-
Burglary at non-residential premises	58	68	80	12	17.6%
Burglary at residential premises	214	177	254	77	43.5%
Theft of motor vehicle and motorcy cle	32	30	22	-8	-26.7%
Theft out of or from motor vehicle	66	47	72	25	53.2%
Stock-theft	44	33	52	19	57.6%
Property-Related Crimes	414	355	480	125	35.2%
0	THER SERIOUS	CRIMES			
All theft not mentioned elsew here	241	241	204	-37	-15.4%
Commercial crime	121	164	157	-7	-4.3%
Shoplifting	113	111	144	33	29.7%
Other Serious Crimes	475	516	505	-11	-2.1%
17 Community-Reported Serious Crimes	1 603	1 513	1 609	96	6.3%
CRIME DETECT	ED AS A RESU	LT OF POLICE	ACTION		
Illegal possession of firearms and ammunition	50	31	23	-8	-25.8%
Drug-related crime	395	409	252	-157	-38.4%
Driving under the influence of alcohol or drugs	160	101	100	-1	-1.0%
Sexual offences as result of police action	0	0	1	1	-
Crime Detected As A Result Of Police Action	605	541	375	-166	-30.7%
SUBCATEGO	RIES OF AGGR	AVATED ROB	BERY		-
Carjacking	5	5	9	4	80%
Truck hijacking	1	0	0	0	-
Robbery of cash in transit	1	0	0	0	-
Bank robbery	0	0	0	0	-
Robbery at residential premises	12	6	9	3	50%
Robbery at non-residential premises	20	20	15	-5	-25%
Subcategories Of Aggravated Robbery	39	31	33	2	6%

Source: SAPS, 2016

## Table A.3.2: Crime in Durban, 2013 to 2016

Crime category	-	April 2014 to	April 2015 to March 2016	Comparison 2014/15 with 2015/16	
onne category	March 2014	March 2015		Case Difference	% change
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)		
Murder	41	29	55	26	89.7%
Sex ual Offences	104	91	96	5	5.5%
Attempted murder	28	22	18	-4	-18.2%
Assault with the intent to inflict grievous bodily harm	333	295	282	-13	-4.4%
Common assault	634	577	544	-33	-5.7%
Common robbery	445	429	533	104	24.2%
Robbery with aggravating circumstances	951	982	1 024	42	4.3%
Contact Crimes ( Crimes Against The Person)	2 536	2 425	2 552	127	5.2%
CO	NTACT-RELATI	ED CRIMES			
Arson	1	0	0	0	-
Malicious damage to property	386	332	309	-23	-6.9%
Contact-Related Crimes	387	332	309	-23	-6.9%
PRO	PERTY-RELAT	ED CRIMES			
Burglary at non-residential premises	579	521	650	129	24.8%
Burglary at residential premises	194	192	161	-31	-16.1%
Theft of motor vehicle and motorcy cle	620	570	618	48	8.4%
Theft out of or from motor vehicle	1 245	1 171	1 223	52	4.4%
Stock-theft	0	0	0	0	-
Property-Related Crimes	2 638	2 454	2 652	198	8.1%
0.	THER SERIOUS	6 CRIMES			
All theft not mentioned elsew here	3 390	2 872	2 865	-7	-0.2%
Commercial crime	1 127	969	1 050	81	8.4%
Shoplifting	1 694	1 589	1 426	-163	-10.3%
Other Serious Crimes	6 211	5 430	5 341	-89	-1.6%
17 Community-Reported Serious Crimes	11 772	10 641	10 854	213	2.0%
CRIME DETECTE	D AS A RESU	LT OF POLICE	ACTION		
Illegal possession of firearms and ammunition	49	57	28	-29	-50.9%
Drug-related crime	2 528	2 477	1 724	-753	-30.4%
Driving under the influence of alcohol or drugs	1 166	1 201	994	-207	-17.2%
Sexual offences as result of police action	567	566	410	-156	-27.6%
Crime Detected As A Result Of Police Action	3 743	3 735	2 746	-989	-26.5%
SUBCATEGO	RIES OF AGG	RAVATED ROE	BERY		
Carjacking	39	35	29	-6	-17%
Truck hijacking	0	0	0	0	-
Robbery of cash in transit	1	0	2	2	-
Bank robbery	0	0	0	0	-
Robbery at residential premises	13	8	9	1	13%
Robbery at non-residential premises	67	95	97	2	2%
Subcategories Of Aggravated Robbery	120	138	137	-1	-1%

Source: SAPS, 2016

## Table A3.3: Crime in Jozini, 2013 to 2016

Crime category	April 2013 to April 2014 t		April 2015 to	Comparison 2014/15 with 2015/16	
	March 2014	March 2015	March 2016	Case Difference	% change
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)		-
Murder	14	16	11	-5	-31.3%
Sex ual Offences	92	46	62	16	34.8%
Attempted murder	11	19	18	-1	-5.3%
Assault with the intent to inflict grievous bodily harm	170	161	172	11	6.8%
Common assault	71	54	44	-10	-18.5%
Common robbery	27	24	20	-4	-16.7%
Robbery with aggravating circumstances	56	63	64	1	1.6%
Contact Crimes ( Crimes Against The Person)	441	383	391	8	2.1%
CO	NTACT-RELATI	ED CRIMES		•	
Arson	16	11	14	3	27.3%
Malicious damage to property	30	47	48	1	2.1%
Contact-Related Crimes	46	58	62	4	6.9%
PRC	PERTY-RELAT	ED CRIMES		-	-
Burglary at non-residential premises	58	55	64	9	16.4%
Burglary at residential premises	102	87	123	36	41.4%
Theft of motor vehicle and motorcy cle	5	3	7	4	133.3%
Theft out of or from motor vehicle	19	30	20	-10	-33.3%
Stock-theft	50	28	22	-6	-21.4%
Property-Related Crimes	234	203	236	33	16.3%
0	THER SERIOUS	S CRIMES			
All theft not mentioned elsew here	131	100	97	-3	-3.0%
Commercial crime	59	59	58	-1	-1.7%
Shoplifting	12	16	14	-2	-12.5%
Other Serious Crimes	202	175	169	-6	-3.4%
17 Community-Reported Serious Crimes	923	819	858	39	4.8%
CRIME DETECTI	ED AS A RESU	LT OF POLICE	ACTION	-	-
Illegal possession of firearms and ammunition	27	8	23	15	187.5%
Drug-related crime	34	23	9	-14	-60.9%
Driving under the influence of alcohol or drugs	79	53	131	78	147.2%
Sexual offences as result of police action	0	0	0	0	-
Crime Detected As A Result Of Police Action	140	84	163	79	94.0%
SUBCATEGO	RIES OF AGGI	RAVATED ROE	BERY		
Carjacking	1	5	6	1	20%
Truck hijacking	0	0	0	0	-
Robbery of cash in transit	0	0	0	0	-
Bank robbery	0	0	0	0	-
Robbery at residential premises	12	14	16	2	14%
Robbery at non-residential premises	21	26	27	1	4%
Subcategories Of Aggravated Robbery	34	45	49	4	9%

Source: SAPS, 2016

# Table A3.4: Crime in Kokstad, 2013 to 2016

Crime category	April 2013 to	April 2014 to	April 2015 to	Comparison 2014/15 with 2015/16		
Chine category	March 2014	March 2015	March 2016	Case Difference	% change	
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)	-	-	
Murder	25	18	22	4	22.2%	
Sex ual Offences	61	62	46	-16	-25.8%	
Attempted murder	10	12	8	-4	-33.3%	
Assault with the intent to inflict grievous bodily harm	217	219	199	-20	-9.1%	
Common assault	105	88	75	-13	-14.8%	
Common robbery	53	58	32	-26	-44.8%	
Robbery with aggravating circumstances	64	89	87	-2	-2.2%	
Contact Crimes ( Crimes Against The Person)	535	546	469	-77	-14.1%	
со	NTACT-RELATI	ED CRIMES				
Arson	4	5	7	2	40.0%	
Malicious damage to property	124	103	87	-16	-15.5%	
Contact-Related Crimes	128	108	94	-14	-13.0%	
PRC	PERTY-RELAT	ED CRIMES				
Burglary at non-residential premises	24	26	56	30	115.4%	
Burglary at residential premises	296	258	319	61	23.6%	
Theft of motor vehicle and motorcycle	23	17	20	3	17.6%	
Theft out of or from motor vehicle	297	372	310	-62	-16.7%	
Stock-theft	36	50	39	-11	-22.0%	
Property-Related Crimes	676	723	744	21	2.9%	
0	THER SERIOUS	6 CRIMES				
All theft not mentioned elsew here	212	257	230	-27	-10.5%	
Commercial crime	142	158	115	-43	-27.2%	
Shoplifting	74	86	98	12	14.0%	
Other Serious Crimes	428	501	443	-58	-11.6%	
17 Community-Reported Serious Crimes	1 767	1 878	1 750	-128	-6.8%	
CRIME DETECT	ED AS A RESU	LT OF POLICE	ACTION			
Illegal possession of firearms and ammunition	18	16	19	3	18.8%	
Drug-related crime	262	274	283	9	3.3%	
Driving under the influence of alcohol or drugs	108	144	243	99	68.8%	
Sex ual offences as result of police action	1	0	1	1	-	
Crime Detected As A Result Of Police Action	388	434	545	111	25.6%	
SUBCATEGO	RIES OF AGGI	RAVATED ROE	BERY			
Carjacking	3	3	4	1	33%	
Truck hijacking	0	0	0	0	-	
Robbery of cash in transit	0	0	0	0	-	
Bank robbery	0	0	0	0	-	
Robbery at residential premises	19	10	20	10	100%	
Robbery at non-residential premises	8	15	12	-3	-20%	
Subcategories Of Aggravated Robbery	30	28	36	8	29%	

# Table A3.5: Crime in KwaDukuza, 2013 to 2016

Crime category	-	-	April 2015 to	Comparison 2014/15 wit 2015/16		
	March 2014	March 2015	March 2016	Case Difference	% change	
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)			
Murder	55	69	52	-17	-24.6%	
Sex ual Offences	218	197	171	-26	-13.2%	
Attempted murder	66	92	92	0	0.0%	
Assault with the intent to inflict grievous bodily harm	457	471	472	1	0.2%	
Common assault	665	491	593	102	20.8%	
Common robbery	133	143	110	-33	-23.1%	
Robbery with aggravating circumstances	635	538	518	-20	-3.7%	
Contact Crimes ( Crimes Against The Person)	2 229	2 001	2 008	7	0.3%	
CO	NTACT-RELAT	ED CRIMES				
Arson	11	9	10	1	11.1%	
Malicious damage to property	325	396	369	-27	-6.8%	
Contact-Related Crimes	336	405	379	-26	-6.4%	
PRC	PERTY-RELAT	ED CRIMES				
Burglary at non-residential premises	129	143	195	52	36.4%	
Burglary at residential premises	1 152	1 044	992	-52	-5.0%	
Theft of motor vehicle and motorcycle	98	148	81	-67	-45.3%	
Theft out of or from motor vehicle	284	384	268	-116	-30.2%	
Stock-theft	15	14	8	-6	-42.9%	
Property-Related Crimes	1 678	1 733	1 544	-189	-10.9%	
0	THER SERIOUS	S CRIMES			-	
All theft not mentioned elsew here	1 099	1 025	877	-148	-14.4%	
Commercial crime	292	254	214	-40	-15.7%	
Shoplifting	342	446	441	-5	-1.1%	
Other Serious Crimes	1 733	1 725	1 532	-193	-11.2%	
17 Community-Reported Serious Crimes	5 976	5 864	5 463	-401	-6.8%	
CRIME DETECTI	ED AS A RESU	LT OF POLICE	ACTION			
Illegal possession of firearms and ammunition	54	58	80	22	37.9%	
Drug-related crime	1 027	1 168	1 342	174	14.9%	
Driving under the influence of alcohol or drugs	268	189	253	64	33.9%	
Sexual offences as result of police action	15	6	0	-6	-100.0%	
Crime Detected As A Result Of Police Action	1 349	1 415	1 675	260	18.4%	
SUBCATEGO	RIES OF AGGI	RAVATED ROE	BERY			
Carjacking	40	23	25	2	9%	
Truck hijacking	0	1	0	-1	-100%	
Robbery of cash in transit	1	0	1	1	-	
Bank robbery	0	0	0	0	-	
Robbery at residential premises	86	99	97	-2	-2%	
Robbery at non-residential premises	87	56	65	9	16%	
Subcategories Of Aggravated Robbery	214	179	188	9	5%	

# Table A3.6: Crime in Ladysmith, 2013 to 2016

Crime category		April 2014 to	o April 2015 to	Comparison 2014/15 with 2015/16		
	March 2014	March 2015	March 2016	Case Difference	% change	
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)			
Murder	6	7	10	3	42.9%	
Sex ual Offences	20	26	20	-6	-23.1%	
Attempted murder	0	3	2	-1	-33.3%	
Assault with the intent to inflict grievous bodily harm	94	107	77	-30	-28.0%	
Common assault	176	143	160	17	11.9%	
Common robbery	7	3	7	4	133.3%	
Robbery with aggravating circumstances	2	5	2	-3	-60.0%	
Contact Crimes ( Crimes Against The Person)	305	294	278	-16	-5.4%	
CO	NTACT-RELAT	ED CRIMES				
Arson	2	3	5	2	66.7%	
Malicious damage to property	54	64	50	-14	-21.9%	
Contact-Related Crimes	56	67	55	-12	-17.9%	
PRO	PERTY-RELAT	ED CRIMES				
Burglary at non-residential premises	46	36	30	-6	-16.7%	
Burglary at residential premises	104	91	81	-10	-11.0%	
Theft of motor vehicle and motorcy cle	1	1	1	0	0.0%	
Theft out of or from motor vehicle	24	20	20	0	0.0%	
Stock-theft	9	4	12	8	200.0%	
Property-Related Crimes	184	152	144	-8	-5.3%	
0	THER SERIOUS	6 CRIMES				
All theft not mentioned elsew here	131	127	91	-36	-28.3%	
Commercial crime	3	2	6	4	200.0%	
Shoplifting	12	8	4	-4	-50.0%	
Other Serious Crimes	146	137	101	-36	-26.3%	
17 Community-Reported Serious Crimes	691	650	578	-72	-11.1%	
CRIME DETECTE	ED AS A RESU	LT OF POLICE	ACTION			
Illegal possession of firearms and ammunition	1	2	2	0	0.0%	
Drug-related crime	295	357	417	60	16.8%	
Driving under the influence of alcohol or drugs	26	29	24	-5	-17.2%	
Sexual offences as result of police action	0	0	0	0	-	
Crime Detected As A Result Of Police Action	322	388	443	55	14.2%	
SUBCATEGO	RIES OF AGG	RAVATED ROE	BERY		-	
Carjacking	0	0	0	0	-	
Truck hijacking	0	0	0	0	-	
Robbery of cash in transit	0	0	0	0	-	
Bank robbery	0	0	0	0	-	
Robbery at residential premises	1	0	0	0	-	
Robbery at non-residential premises	0	0	1	1	-	
Subcategories Of Aggravated Robbery	1	0	1	1	-	

# Table A3.7: Crime in Newcastle, 2013 to 2016

	April 2013 to	April 2014 to	April 2015 to	Comparison 201	2014/15 witl 5/16
Crime category	March 2014	March 2015	March 2016	Case	
				Difference	% change
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)		-
Murder	19	18	18	0	0.0%
Sex ual Offences	61	70	61	-9	-12.9%
Attempted murder	15	33	38	5	15.2%
Assault with the intent to inflict grievous bodily harm	283	317	354	37	11.7%
Common assault	385	399	410	11	2.8%
Common robbery	105	137	121	-16	-11.7%
Robbery with aggravating circumstances	142	152	212	60	39.5%
Contact Crimes ( Crimes Against The Person)	1 010	1 126	1 214	88	7.8%
CO	NTACT-RELAT	ED CRIMES			
Arson	5	3	6	3	100.0%
Malicious damage to property	160	185	178	-7	-3.8%
Contact-Related Crimes	165	188	184	-4	-2.1%
PRC	PERTY-RELAT	ED CRIMES			-
Burglary at non-residential premises	219	243	239	-4	-1.6%
Burglary at residential premises	446	418	500	82	19.6%
Theft of motor vehicle and motorcycle	36	96	100	4	4.2%
Theft out of or from motor vehicle	260	388	404	16	4.1%
Stock-theft	50	56	49	-7	-12.5%
Property-Related Crimes	1 011	1 201	1 292	91	7.6%
0`	THER SERIOUS	S CRIMES			-
All theft not mentioned elsew here	831	788	802	14	1.8%
Commercial crime	454	422	384	-38	-9.0%
Shoplifting	316	333	316	-17	-5.1%
Other Serious Crimes	1 601	1 543	1 502	-41	-2.7%
17 Community-Reported Serious Crimes	3 787	4 058	4 192	134	3.3%
CRIME DETECT	ED AS A RESU	LT OF POLICE	ACTION		
llegal possession of firearms and ammunition	12	10	16	6	60.0%
Drug-related crime	371	316	357	41	13.0%
Driving under the influence of alcohol or drugs	184	180	189	9	5.0%
Sex ual offences as result of police action	1	0	1	1	-
Crime Detected As A Result Of Police Action	567	506	562	56	11.1%
SUBCATEGO	RIES OF AGG	RAVATED ROE	BERY	<b>-</b>	ſ
Carjacking	4	2	4	2	100%
Truck hijacking	2	0	1	1	-
Robbery of cash in transit	0	0	0	0	-
Bank robbery	0	0	0	0	-
Robbery at residential premises	11	11	29	18	164%
Robbery at non-residential premises	15	21	24	3	14%
Subcategories Of Aggravated Robbery	32	34	58	24	71%

Crime category	April 2013 to	April 2014 to	April 2015 to	Comparison 201	2014/15 with 5/16
	March 2014	March 2015	March 2016	Case Difference	% change
CONTACT CRIM	ES ( CRIMES A	GAINST THE	PERSON)		_
Murder	26	35	34	-1	-2.9%
Sex ual Offences	56	73	65	-8	-11.0%
Attempted murder	17	40	17	-23	-57.5%
Assault with the intent to inflict grievous bodily harm	186	253	193	-60	-23.7%
Common assault	424	562	458	-104	-18.5%
Common robbery	501	479	348	-131	-27.3%
Robbery with aggravating circumstances	564	596	461	-135	-22.7%
Contact Crimes ( Crimes Against The Person)	1 774	2 038	1 576	-462	-22.7%
CO	NTACT-RELATI	ED CRIMES			
Arson	0	1	1	0	0.0%
Malicious damage to property	182	188	205	17	9.0%
Contact-Related Crimes	182	189	206	17	9.0%
PRC	PERTY-RELAT	ED CRIMES			
Burglary at non-residential premises	378	343	391	48	14.0%
Burglary at residential premises	144	229	260	31	13.5%
Theft of motor vehicle and motorcy cle	127	123	138	15	12.2%
Theft out of or from motor vehicle	750	741	766	25	3.4%
Stock-theft	0	0	0	0	-
Property-Related Crimes	1 399	1 436	1 555	119	8.3%
0	THER SERIOUS	6 CRIMES			
All theft not mentioned elsew here	1 394	1 459	1 202	-257	-17.6%
Commercial crime	561	393	353	-40	-10.2%
Shoplifting	678	714	718	4	0.6%
Other Serious Crimes	2 633	2 566	2 273	-293	-11.4%
17 Community-Reported Serious Crimes	5 988	6 229	5 610	-619	-9.9%
CRIME DETECT	ED AS A RESU	LT OF POLICE	ACTION		
llegal possession of firearms and ammunition	34	39	31	-8	-20.5%
Drug-related crime	922	1 131	1 259	128	11.3%
Driving under the influence of alcohol or drugs	85	120	165	45	37.5%
Sexual offences as result of police action	97	196	461	265	-
Crime Detected As A Result Of Police Action	1 041	1 290	1 455	165	12.8%
SUBCATEGO	RIES OF AGGI	RAVATED ROE	BERY		
Carjacking	7	6	13	7	117%
Truck hijacking	1	0	1	1	-
Robbery of cash in transit	0	0	0	0	-
Bank robbery	0	0	0	0	-
Robbery at residential premises	14	10	12	2	20%
Robbery at non-residential premises	37	40	48	8	20%
Subcategories Of Aggravated Robbery	59	56	74	18	32%

Crime category	April 2013 to	April 2014 to	April 2015 to	201	5/16
onnie category	March 2014	March 2015	March 2016	Case	% change
				Difference	
CONTACT CRIM	45	58	51	-7	-12.1%
Sexual Offences	110	85	86	1	1.2%
	84	54	43	-11	-20.4%
Attempted murder	298	249	278	29	11.6%
Assault with the intent to inflict grievous bodily harm	410	322	356	34	10.6%
Common assault Common robbery	126	87	104	17	19.5%
,	217	224	204	-20	-8.9%
Robbery with aggravating circumstances	1 290	1 079	1 122	43	4.0%
Contact Crimes ( Crimes Against The Person)	NTACT-RELATE		1 122	40	4.070
Arson	6	7	3	-4	-57.1%
Malicious damage to property	113	116	86	-30	-25.9%
Contact-Related Crimes	119	123	89	-34	-27.6%
	I PERTY-RELAT	ED CRIMES			
Burglary at non-residential premises	6	7	3	-4	-57.1%
Burglary at residential premises	113	116	86	-30	-25.9%
Theft of motor vehicle and motorcy cle	119	123	89	-34	-27.6%
Theft out of or from motor vehicle	6	7	3	-4	-57.1%
Stock-theft	113	116	86	-30	-25.9%
Property-Related Crimes	119	123	89	-34	-27.6%
0.	THER SERIOUS	CRIMES			•
All theft not mentioned elsewhere	616	654	563	-91	-13.9%
Commercial crime	309	254	281	27	10.6%
Shoplifting	480	334	322	-12	-3.6%
Other Serious Crimes	1 405	1 242	1 166	-76	-6.1%
17 Community-Reported Serious Crimes	4 177	3 637	3 540	-97	-2.7%
CRIME DETECTE	ED AS A RESU	LT OF POLICE	ACTION		
Illegal possession of firearms and ammunition	28	41	42	1	2.4%
Drug-related crime	493	578	393	-185	-32.0%
Driving under the influence of alcohol or drugs	145	188	195	7	3.7%
Sexual offences as result of police action	346	443	547	104	23.5%
Crime Detected As A Result Of Police Action	666	807	630	-177	-21.9%
SUBCATEGO	RIES OF AGG	RAVATED ROB	BERY		
Carjacking	0	4	9	5	125%
Truck hijacking	0	0	1	1	-

0

0

0

0

28

33

71

0

0

-2

4

8

### Table A3.9: Crime in Port Shepstone, 2013 to 2016

0 0 Bank robbery 30 30 Robbery at residential premises 29 33 Robbery at non-residential premises 63 63 Subcategories Of Aggravated Robbery

Source: SAPS, 2016

Robbery of cash in transit

Comparison 2014/15 with

-

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-7%

14%

13%

## Table A3.10: Crime in Vryheid, 2013 to 2016

Orima astanami	April 2013 to	April 2014 to	April 2015 to	Comparison 201	
Crime category	March 2014	March 2015	March 2016	Case	% change
				Difference	/o change
CONTACT CRIM	ES ( CRIMES /	AGAINST THE	PERSON)		
Murder	20	23	16	-7	-30.4%
Sex ual Offences	118	89	66	-23	-25.8%
Attempted murder	16	26	21	-5	-19.2%
Assault with the intent to inflict grievous bodily harm	198	242	291	49	20.2%
Common assault	201	248	280	32	12.9%
Common robbery	99	117	96	-21	-17.9%
Robbery with aggravating circumstances	77	107	89	-18	-16.8%
Contact Crimes ( Crimes Against The Person)	729	852	859	7	0.8%
CO	NTACT-RELAT	ED CRIMES			
Arson	1	2	1	-1	-50.0%
Malicious damage to property	238	230	163	-67	-29.1%
Contact-Related Crimes	239	232	164	-68	-29.3%
PRC	PERTY-RELA	TED CRIMES			
Burglary at non-residential premises	71	69	134	65	94.2%
Burglary at residential premises	180	283	363	80	28.3%
Theft of motor vehicle and motorcycle	87	70	50	-20	-28.6%
Theft out of or from motor vehicle	209	253	288	35	13.8%
Stock-theft	131	122	86	-36	-29.5%
Property-Related Crimes	678	797	921	124	15.6%
0	THER SERIOU	S CRIMES			
All theft not mentioned elsew here	850	803	634	-169	-21.0%
Commercial crime	203	193	220	27	14.0%
Shoplifting	169	205	194	-11	-5.4%
Other Serious Crimes	1 222	1 201	1 048	-153	-12.7%
17 Community-Reported Serious Crimes	2 868	3 082	2 992	-90	-2.9%
CRIME DETECT	ED AS A RESU	ILT OF POLICE	ACTION		
Illegal possession of firearms and ammunition	41	22	52	30	136.4%
Drug-related crime	124	93	186	93	100.0%
Driving under the influence of alcohol or drugs	107	151	141	-10	-6.6%
Sexual offences as result of police action	0	1	0	-1	-100.0%
Crime Detected As A Result Of Police Action	272	266	379	113	42.5%
	RIES OF AGG	RAVATED RO	BBERY		
Carjacking	4	1	2	1	100%
Truck hijacking	0	1	0	-1	-100%
Robbery of cash in transit	1	0	0	0	-
Bank robbery	0	0	0	0	-
Robbery at residential premises	8	18	11	-7	-39%
Robbery at non-residential premises	9	11	12	1	9%
Subcategories Of Aggravated Robbery	22	31	25	-6	-19%

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	King Cetshwayo	iLembe	Harry Gwala
Primary Sector	4.7	-0.2	2.3	6.4	4.2	6.7	4.8	3.7	2.9	5.8	4.9	6.9
Agriculture	3.9	1.8	3.9	4.8	3.2	4.6	4.1	2.8	3.4	4.4	3.9	5.6
Mining	0.8	-2.0	-1.6	1.6	0.9	2.0	0.7	0.9	-0.5	1.3	1.0	1.3
Secondary Sector	6.9	7.1	5.0	7.8	4.1	7.1	2.7	2.7	5.3	5.1	5.3	11.9
Manufacturing	1.5	1.0	1.7	2.8	2.0	2.0	1.6	0.8	1.9	2.0	2.1	4.0
Electricity	-0.2	-2.0	0.8	1.8	-0.2	2.1	-1.8	0.2	1.0	0.1	0.8	3.3
Construction	5.7	8.1	2.5	3.2	2.3	2.9	2.9	1.7	2.4	3.0	2.4	4.6
Tertiary Sector	13.4	14.5	10.6	13.2	9.0	12.0	12.1	6.0	15.5	12.0	12.3	18.0
Trade	3.1	3.3	2.3	3.0	2.0	2.7	2.8	1.4	2.1	2.8	2.2	4.5
Transport	3.4	3.3	3.6	4.2	2.7	3.5	3.6	1.6	3.4	3.6	3.2	5.3
Finance	3.7	3.8	2.7	3.3	2.6	3.3	3.3	2.1	7.9	3.1	5.3	4.1
Community services	3.2	4.0	2.0	2.7	1.7	2.4	2.5	1.0	2.0	2.5	1.7	4.1

Table A4.1: Sub-sector's average annual growth rates in KZN, 2005 to 2015

### Table A4.2: Sub-sector's growth rates, 2004 to 2015

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	King Cetshwayo	iLembe	Harry Gwala
Primary Sector	-5.8	-4.3	-3.6	-5.5	-6.1	-1.7	-5.9	-2.9	-5.9	-8.1	-8.3	-2.5
Agriculture	-4.8	-4.6	-5.2	-4.5	-5.6	-3.9	-5.5	-4.6	-5.3	-4.9	-5.2	-4.0
Mining	-1.0	0.3	1.6	-0.9	-0.6	2.1	-0.5	1.7	-0.5	-3.3	-3.1	1.5
Secondary Sector	0.4	1.4	-0.8	-1.7	-2.6	0.9	-5.6	-0.7	3.2	-1.2	-0.3	4.2
Manufacturing	-0.1	0.4	-0.5	-0.7	-0.9	-0.7	-3.2	-0.5	1.5	-1.3	0.3	1.4
Electricity	-0.7	-0.9	-0.7	-1.2	-1.3	0.5	-2.2	-0.6	1.1	-0.5	-0.9	1.3
Construction	1.3	1.9	0.3	0.2	-0.3	1.1	-0.1	0.4	0.7	0.6	0.3	1.6
Tertiary Sector	6.8	8.9	1.3	1.1	-2.0	6.3	3.0	2.7	8.1	4.8	2.6	8.3
Trade	1.0	1.4	0.3	-0.1	-0.3	0.9	-0.3	0.6	1.2	0.6	0.3	1.9
Transport	1.8	2.0	1.5	1.1	0.6	2.2	0.7	1.4	2.3	1.9	1.4	3.0
Finance	2.9	3.8	-0.7	0.0	-1.7	2.4	2.9	0.9	3.4	1.7	0.7	1.7
Community services	1.1	1.6	0.3	0.1	-0.5	0.9	-0.4	-0.2	1.3	0.7	0.2	1.8

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	King Cetshwayo	iLembe	Harry Gwala
Primary Sector	6.6	-5.1	9.8	15.1	5.7	14.3	10.6	-4.1	9.2	13.5	5.9	23.0
11 Agriculture and hunting	4.1	1.7	4.0	5.3	3.4	4.9	4.3	3.2	3.8	4.8	4.0	6.3
12 Forestry and logging	3.3	0.8	3.0	3.8	1.6	4.3	3.0	2.1	2.5	3.6	0.7	4.7
13 Fishing, operation of fish farms	5.3	3.6	6.2	7.0	5.9	6.1	6.9	5.3	5.9	6.9	6.3	8.6
21 Mining of coal and lignite	1.3	0.2	2.2	2.9	1.3	2.3	0.4	1.3	2.2	2.6	2.0	3.8
23 Mining of gold and uranium ore	-6.3	-6.7	-4.8	-4.0	-4.9	-4.2	-3.9	-14.0	-4.1	-4.1	-6.1	-2.8
24 Mining of metal ores	2.7	0.8	2.8	3.2	2.7	3.8	3.4	2.1	2.4	2.9	2.7	4.3
25-29 Other mining and quarrying (incl 22)	-3.8 23.5	-5.5 14.3	-3.5 29.6	-3.0 41.2	-4.3 28.8	-2.9	-3.4 36.6	-4.1 19.2	-3.5 31.3	-3.2	-3.7 32.6	-1.9 59.1
Secondary Sector												
30 Food, beverages and tobacco products	1.7	1.3	1.7	2.7	1.0	2.4	2.5	1.1	2.1	2.6	2.1	4.0
31 Textiles, clothing and leather goods	2.6	1.4	3.9	5.0	4.4	5.2	4.9	3.3	4.1	5.0	4.2	5.9
32 Wood and wood products	1.3	0.5	1.2	2.2	0.8	2.7	2.1	0.7	1.5	2.0	1.8	3.5
33 Fuel, petroleum, chemical and rubber products	1.8	1.3	2.2	3.6	3.0	3.2	3.3	1.6	2.4	3.1	2.7	4.6
34 Other non-metallic mineral products	-1.0	-2.2	0.2	0.7	-0.6	-0.2	0.4	-1.1	0.0	0.6	0.2	2.0
35 Metal products, machinery and household appliances	0.3	-0.3	-0.1	0.8	0.5	0.2	0.8	-0.8	0.2	0.7	0.5	2.2
36 Electrical machinery and apparatus	3.9	2.8	5.1	5.9	5.5	5.4	5.9	4.1	5.1	5.8	5.3	7.6
37 Electronic, sound/vision, medical & other appliances	4.1	3.2	5.7	6.3	6.0	5.5	6.5	4.4	5.9	6.3	5.8	7.8
38 Transport equipment	2.2	1.7	3.5	4.5	3.8	4.8	4.3	2.6	3.7	4.3	3.8	5.7
39 Furniture and other items NEC and recycling	0.3	-0.8	1.5	2.3	1.6	2.0	2.2	0.6	1.4	2.2	1.7	3.8
41 Electricity, gas, steam and hot water supply	-1.1	-2.7	0.1	0.7	-1.0	1.2	-2.2	-0.8	0.0	-0.6	0.6	3.0
42 Collection, purification and distribution of water	1.8	0.0	2.2	3.3	1.9	3.3	3.0	1.8	2.5	2.9	1.4	4.5
50 Construction	5.7	8.1	2.5	3.2	2.3	2.9	2.9	1.7	2.4	3.0	2.4	4.6
Tertiary Sector	49.9	51.3	42.4	50.5	39.6	50.4	51.3	31.4	53.5	50.3	47.7	68.6
61 Wholesale and commission trade	2.9	3.0	2.2	2.9	1.9	2.5	2.7	1.3	2.1	2.6	2.1	4.5
62 Retail trade and repairs of goods	3.1	3.4	2.0	2.7	1.8	2.5	2.5	1.2	2.0	2.5	1.8	4.2
63 Sale and repairs of motor vehicles, sale of fuel	4.4	4.9	3.2	3.9	3.1	3.7	3.7	2.2	3.2	3.8	3.2	5.7
64 Hotels and restaurants	1.4		2.5			3.2			2.2		2.5	4.8
		0.1		3.4	1.6		3.1	1.6		3.1		
71-72 Land and Water transport	2.3	2.4	1.7	2.5	1.9	2.3	2.2	0.8	1.8	2.3	1.7	3.9
73-74 Air transport and transport supporting activities	6.2	5.7	6.9	7.8	7.5	8.0	7.7	6.0	7.1	7.6	7.1	8.9
75 Post and telecommunication	6.0	5.3	7.2	7.9	7.2	7.6	7.8	6.2	7.0	7.7	7.2	9.5
81-83 Finance and Insurance	5.6	5.7	5.1	5.7	5.1	5.6	5.8	4.1	5.1	5.6	5.1	7.4
84 Real estate activites	1.7	1.5	0.6	-0.5	-0.6	1.6	1.8	1.5	12.0	1.3	6.6	-2.1
85-88 Other business activities	3.1	3.2	2.5	3.2	2.3	3.0	3.2	1.6	2.5	3.1	2.5	4.7
91 Public administration and defence activities	2.3	3.3	1.1	1.8	1.1	1.7	1.6	0.3	1.2	1.7	1.0	3.3
92 Education	2.9	3.8	1.6	2.3	1.3	2.1	2.1	0.8	1.6	2.1	1.3	3.7
93 Health and social work	4.1	4.5	3.0	3.6	2.9	3.5	3.7	2.1	3.0	3.5	2.7	5.2
94-99 Other service activities	3.9	4.4	2.7	3.5	2.4	3.0	3.3	1.7	2.7	3.3	2.7	5.0
Total Industries	3.0	3.2	2.4	3.2	2.4	2.9	2.2	1.3	2.9	2.5	2.7	4.5
Taxes less Subsidies on products	3.0 2.7	3.2 2.2	3.3	3.2	2.0	2.9	2.2	0.5	2.9	4.0	5.0	4.5
Total (Gross Domestic Product - GDP)	2.9	3.1	2.5	3.2	2.1	2.9	2.3	1.3	2.9	2.7	3.0	4.5

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	King Cetshwayo	iLembe	Harry Gwala
Primary Sector	-11.8	-6.5	-12.8	-9.6	-16.7	-4.6	-14.0	-16.5	-11.6	-12.0	-16.0	-5.5
11 Agriculture and hunting	-5.0	-4.8	-5.3	-4.9	-5.6	-4.4	-5.7	-5.1	-5.0	-5.0	-5.2	-4.0
12 Forestry and logging	-4.4	-3.3	-5.2	-3.8	-5.7	-3.1	-4.1	-3.8	-6.0	-4.7	-6.8	-3.9
13 Fishing, operation of fish farms	-3.7	-3.9	-3.8	-4.1	-4.4	-3.3	-4.6	-3.8	-2.4	-3.8	-3.7	-2.8
21 Mining of coal and lignite	1.6	2.3	1.7	2.2	1.2	2.5	0.6	2.0	2.4	2.3	1.8	2.9
23 Mining of gold and uranium ore	1.9	2.3	1.6	2.3	1.0	2.5	1.4	-4.2	3.2	2.3	1.1	3.4
24 Mining of metal ores	-6.7	-4.1	-6.0	-5.4	-6.6	-4.0	-5.4	-6.0	-8.3	-7.5	-7.2	-6.3
25-29 Other mining and quarrying (incl 22)	4.4	5.0	4.2	4.1	3.3	5.1	3.7	4.5	4.5	4.4	4.0	5.3
Secondary Sector	-10.6	-7.8	-15.3	-5.0	-22.8	-4.6	-21.6	-12.8	-8.4	-11.4	-14.1	4.4
30 Food, beverages and tobacco products	2.9	3.1	2.8	2.4	2.0	3.3	1.9	2.8	3.8	3.1	2.7	4.6
31 Textiles, clothing and leather goods	-0.2	0.1	-0.3	1.0	-1.0	0.5	-0.8	-0.2	0.3	-0.2	-0.2	1.1
32 Wood and wood products	-0.6	-0.5	-0.8	-5.8	-1.6	-0.1	-1.6	-0.6	0.2	-0.6	-0.7	0.9
33 Fuel, petroleum, chemical and rubber products	-0.3	-0.1	-1.1	-1.0	-1.3	0.1	-1.1	-0.7	-0.9	-0.6	-0.8	0.5
34 Other non-metallic mineral products	-7.2	-6.9	-7.5	0.8	-8.5	-6.9	-7.8	-7.3	-8.0	-7.5	-7.5	-6.7
35 Metal products, machinery and household appliances	-3.7	-3.0	-4.1	1.3	-4.5	-3.4	-4.2	-3.7	-4.0	-3.7	-3.9	-2.9
36 Electrical machinery and apparatus	6.3	6.7	5.8	1.8	5.4	6.7	5.6	6.2	5.6	6.0	5.9	7.2
37 Electronic, sound/vision, medical & other appliances	-5.3	-5.2	-5.6	2.9	-6.2	-5.1	-6.0	-5.5	-5.1	-5.1	-5.5	-4.1
38 Transport equipment	4.3	4.4	3.7	-7.8	3.2	4.9	3.4	4.0	3.9	4.1	3.9	5.2
89 Furniture and other items NEC and	-7.2	-7.0	-7.5	1.0	-8.0	-6.7	-7.8	-7.2	-7.3	-7.3	-7.3	-6.2
ecycling 11 Electricity, gas, steam and hot water supply	-1.2	-1.3	-1.1	-2.7	-1.8	-0.2	-2.4	-1.2	0.5	-0.8	-1.1	1.0
42 Collection, purification and distribution of water	0.2	0.1	0.1	-0.7	-0.2	1.3	-0.7	0.2	1.9	0.5	0.0	2.0
50 Construction	1.3	1.9	0.3	1.9	-0.3	1.1	-0.1	0.4	0.7	0.6	0.3	1.6
Tertiary Sector	18.5	25.0	3.1	2.8	-10.1	20.4	6.3	10.2	22.7	14.3	9.0	20.3
61 Wholesale and commission trade	2.9	3.1	2.4	-6.2	1.9	3.2	2.0	2.6	2.8	2.8	2.5	3.9
62 Retail trade and repairs of goods	2.0	2.3	1.2	1.0	0.6	2.0	0.7	1.3	1.9	1.5	1.2	2.7
63 Sale and repairs of motor vehicles, sale of fuel	-4.9	-4.5	-5.4	2.0	-6.0	-4.8	-6.0	-5.3	-4.5	-4.9	-5.4	-4.1
64 Hotels and restaurants	-0.6	-0.5	-0.7	1.6	-1.2	0.0	-1.4	-0.7	0.0	-0.4	-0.7	0.1
71-72 Land and Water transport	1.6	1.8	1.2	3.9	0.4	2.0	0.4	1.2	2.4	1.7	1.3	2.9
73-74 Air transport and transport supporfing activities	2.0	2.2	1.6	2.7	0.9	2.5	1.0	1.7	2.2	2.2	1.7	3.0
75 Post and telecommunication	2.4	2.7	1.9	-4.1	1.4	2.7	1.6	2.2	1.9	2.1	1.9	3.1
31-83 Finance and Insurance	3.8	4.0	3.4	0.1	2.7	4.1	2.7	3.4	4.5	3.8	3.5	4.9
84 Real estate activities	2.3	5.2	-6.3	2.9	-11.4	0.9	4.1	-0.3	3.5	-0.1	-0.8	-7.4
35-88 Other business activities	1.8	2.1	1.2	3.0	0.6	2.0	0.8	1.3	2.0	1.5	1.3	2.7
01 Public administration and defence activities	-1.9	-1.5	-2.5	3.1	-3.1	-1.6	-2.9	-2.4	-2.1	-2.3	-2.6	-1.2
92 Education	0.2	0.6	-0.4	4.9	-1.0	0.5	-1.0	-0.3	0.6	-0.1	-0.4	1.3
93 Health and social work	2.9	3.3	2.3	-7.4	1.7	3.2	1.7	2.3	3.6	2.9	2.4	4.0
94-99 Other service activities	3.9	4.2	3.1	2.7	2.5	3.8	2.5	3.2	4.1	3.5	3.2	4.5
Total Industries	0.9	1.8	-0.6	-0.5	-1.0	0.3	-0.7	-0.1	0.3	-0.5	-0.5	0.6
Taxes less Subsidies on products	2.6	2.8	2.4	2.1	1.7	3.0	1.3	2.5	3.3	2.3	2.7	3.8
Total (Gross Domestic Product - GDP)	1.0	1.9	-0.3	-0.2	-0.8	0.5	-0.5	0.0	0.5	-0.2	-0.1	0.8

	Sectors contribution to GDP			national	je share of sectors by	Percentage share of KZN sectors by districts												
	South	Africa	KwaZulu-Natal		KZN		U	Ugu		Uthukela		Umzinyathi		uland	Umkhanyakude		Harry Gwala	
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
Primary Sector	12.9	9.9	6.2	6.2	28.5	33.9	11.7	11.3	9.1	8.8	9.4	10.3	23.4	22.9	12.5	11.6	8.1	9.5
Agriculture	2.4	2.3	4.0	4.4	25.1	30.0	9.9	9.9	6.3	5.9	5.1	5.5	7.3	6.5	9.9	9.3	7.8	9.2
Mining	10.4	7.6	2.3	1.8	3.4	3.9	1.8	1.4	2.8	2.9	4.3	4.9	16.1	16.4	2.6	2.3	0.4	0.4
Secondary Sector	19.4	18.2	25.0	22.8	56.4	55.8	15.6	14.4	17.9	16.9	5.4	5.7	11.5	10.6	9.0	8.9	5.6	6.8
Manufacturing	14.0	12.4	18.9	16.3	20.9	21.0	3.5	3.6	3.7	4.0	0.9	0.9	1.2	1.1	1.0	1.0	0.8	1.0
Electricity	2.8	2.2	2.9	2.1	16.3	15.6	5.2	5.8	9.7	9.7	2.7	3.5	6.7	7.0	5.2	5.9	2.8	3.9
Construction	2.6	3.6	3.3	4.3	19.2	19.2	6.9	5.1	4.5	3.2	1.8	1.4	3.6	2.5	2.8	2.0	2.0	1.8
Tertiary Sector	58.5	62.7	59.6	62.1	65.7	66.6	15.2	14.1	14.0	12.5	6.5	6.2	12.7	10.5	8.5	8.5	6.6	7.4
Trade	13.3	13.8	13.9	14.1	16.1	16.4	4.8	4.5	3.7	3.3	1.7	1.6	2.6	2.2	2.2	2.0	2.4	2.7
Transport	8.2	8.6	10.9	11.4	20.6	21.3	2.7	2.8	3.6	3.4	1.2	1.2	2.5	2.1	1.5	1.5	1.0	1.3
Finance	17.4	19.9	15.4	16.6	13.6	13.4	3.4	3.1	2.5	2.2	1.0	1.0	2.5	2.1	1.3	2.0	0.8	0.8
Community services	19.6	20.6	19.4	20.0	15.2	15.5	4.2	3.7	4.2	3.6	2.5	2.3	5.1	4.1	3.5	3.1	2.4	2.6

## Table A4.5a: Sector contribution to provincial GDP by rural district municipalities in KZN, 2005 to 2015

Source: Global Insight, 2016

# Table A5.1: Total employment in KZN and district municipalities, 2005 and 2015

		2005			2015	
	Formal Employment	Informal Employment	Total Employment	Formal Employment	Informal Employment	Total Employment
South Africa	10 523 977	2 018 843	12 542 820	12 843 756	2 549 724	15 393 480
KwaZulu-Natal	1 862 441	342 810	2 205 251	2 106 492	499 258	2 605 749
eThekwini	979 020	126 290	1 105 309	1 081 163	215 422	1 296 585
Ugu	93 263	23 484	116 746	109 483	32 735	142 218
uMgungundlovu	209 782	41 001	250 782	251 318	58 580	309 899
uThukela	86 233	23 934	110 167	90 787	25 386	116 173
uMzinyathi	34 585	9 923	44 509	42 096	13 557	55 653
Amajuba	73 545	20 501	94 046	81 029	22 298	103 326
Zululand	67 472	18 918	86 389	76 735	24 456	101 191
uMkhanyakude	46 757	13 547	60 304	56 893	18 725	75 618
King Cetshwayo	140 223	28 256	168 479	154 096	38 251	192 347
iLembe	81 588	21 266	102 854	101 305	30 504	131 809
Harry Gwala	49 974	15 691	65 666	61 587	19 344	80 931

Source: Global Insight, 2016

### Table A5.2: Unemployment trends in KZN and district municipalities, 2005 to 2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
eThekwini Metro	26.6	24.9	22.2	18.6	16.7	15.9	15.2	15.0	14.5	14.7	15.9
Ugu	34.7	33.5	31.0	26.9	24.8	24.2	24.0	25.5	27.3	28.2	27.4
uMgungundlovu	29.8	28.6	26.3	22.8	21.1	20.8	20.7	21.5	22.6	22.7	22.2
Uthukela	39.2	37.3	34.3	30.3	28.4	28.0	27.9	29.7	32.4	33.0	32.3
Umzinyathi	42.4	40.0	36.2	31.2	28.3	26.8	25.8	26.8	28.2	28.4	27.4
Amajuba	38.1	37.2	34.7	30.5	28.4	27.9	27.7	28.4	29.8	29.8	29.6
Zululand	42.5	40.9	37.7	33.2	30.8	30.0	29.5	30.7	32.3	32.3	31.4
Umkhanyakude	40.6	38.3	35.0	31.5	29.9	30.0	30.5	31.6	32.7	33.0	31.5
King Cetshwayo	33.6	32.5	30.1	26.3	24.5	24.0	24.0	25.4	27.0	27.3	26.5
iLembe	30.4	29.1	26.7	23.2	21.4	20.9	20.7	22.4	23.7	24.1	23.2
Harry Gwala	37.1	35.2	32.2	28.2	26.1	25.5	25.2	25.6	26.7	26.9	25.4
KwaZulu-Natal	31.5	29.9	27.2	23.4	24.1	21.3	20.6	20.2	22.6	20.7	21.4

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
KwaZulu-Natal	32.5	32.8	33.0	32.6	31.1	29.3	28.8	28.9	29.6	30.4	30.6
eThekwini	44.1	44.5	44.7	44.3	42.5	40.3	39.7	39.6	39.9	39.9	39.2
Ugu	26.6	27.1	27.5	27.4	26.1	24.7	24.4	24.7	25.5	26.6	27.2
uMgungundlovu	38.5	38.6	38.8	38.5	36.9	34.9	34.2	34.4	35.3	36.7	37.4
uThukela	26.1	26.1	25.9	25.3	23.6	21.8	21.2	21.4	22.1	23.2	23.8
uMzinyathi	18.8	18.9	19.0	18.4	17.1	15.7	15.1	15.4	16.0	17.0	17.5
Amajuba	32.0	31.8	31.4	30.4	28.3	26.1	25.1	25.4	26.3	27.7	28.2
Zululand	20.7	20.8	20.7	20.1	18.7	17.2	16.6	16.9	17.6	18.7	19.3
uMkhanyakude	18.2	18.7	19.1	18.6	17.3	15.9	15.4	15.7	16.4	17.4	18.0
King Cetshwayo	27.9	28.3	28.4	28.0	26.5	24.9	24.4	24.7	25.6	26.8	27.5
iLembe	29.1	29.4	29.7	29.6	28.5	27.1	26.7	26.9	27.8	29.0	29.7
Harry Gwala	22.9	23.4	23.6	23.2	21.9	20.5	20.1	20.5	21.4	22.6	23.4

### Table A5.4: Labour absorption rate in KZN and district municipalities, 2005 to 2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
KwaZulu-Natal	22.4	23.1	24.2	25.2	24.6	23.4	23.1	23.1	23.4	23.9	24.0
eThekwini	33.6	34.7	36.2	37.5	36.9	35.3	35.0	35.0	35.4	35.4	34.4
Ugu	17.3	18.0	19.0	20.0	19.6	18.7	18.5	18.5	18.6	19.2	19.8
uMgungundlovu	26.7	27.3	28.4	29.6	28.9	27.5	27.0	26.9	27.2	28.2	28.8
uThukela	16.3	16.9	17.6	18.3	17.6	16.4	15.9	15.7	15.7	16.3	16.8
uMzinyathi	16.3	16.9	17.6	18.3	17.6	16.4	15.9	15.7	15.7	16.3	16.8
Amajuba	19.5	19.6	20.1	20.8	20.0	18.6	17.9	18.0	18.3	19.2	19.6
Zululand	11.0	10.3	11.9	12.4	12.0	11.1	10.8	10.8	11.0	11.7	12.2
uMkhanyakude	10.2	10.9	11.6	12.0	11.4	10.5	10.1	10.1	10.4	11.0	11.5
King Cetshwayo	18.6	19.1	20.0	20.8	20.2	19.0	18.6	18.6	18.9	19.7	20.5
iLembe	18.4	18.9	19.8	20.6	20.2	19.4	19.2	18.9	19.2	19.9	20.5
Harry Gwala	14.1	14.8	15.6	16.3	15.8	14.9	14.7	14.9	15.3	16.0	16.8

# **Appendix B: Calculating the monitor**

The economic risk or conditions monitor for the province and each of the regions (6 regions) are calculated as follows:

Step 1. Calculate the monthly percentage change in each of the 8 economic risk or conditions variables (t = 1 to 8 and i = 1 to 184)

 $\% \Delta er_{ti} = (er_{ti} - er_{ti-1}) / er_{ti-1} \times 100$ 

Where  $er_t$  is the different economic risk or conditions variables and *i* represent time in months.

Step 2. Compute the monthly economic sector weights for each of the 9 economic sectors (s = 1 to 9 and i = 1 to 184)

 $W_{si} = GDP_{si} / GDP_{kzni} \times 100$ 

Where  $W_{si}$  is a relative weight of each economic sector,  $GDP_{si}$  is gross domestic product per economic sector in period *i* and  $GDP_{kzni}$  is the gross domestic product for the province in period *i*.

✤ Step 3. Calculate the economic sector risk or conditions for each of the 9 sectors  $ERC_{sti} = \sum (w_{si} \times \% \Delta er_{ti} \times erw_{ti})$ 

Where  $ERC_{st}$  is the economic risk or condition of the particular sector, and erw is the weight of each of the economic risk or conditions per economic sector.

Step 4. Calculate or compute the provincial or regional economic risk/condition monitor  $ERC_{loc} = \sum ERC_{sti}$ 

Where *ERC*<sub>loc</sub> is the economic risk or conditions monitor for the province or regiosns.

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