



PROVINCE OF KWAZULU-NATAL

**Socio-Economic
Review and Outlook**

2015/2016

KwaZulu-Natal Provincial Government

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List of Acronyms

AIC	Aike Information Criterion
AIDS	Acquired Immune Deficiency Syndrome
ANA	Annual National Assessment
ARV	Antiretroviral
BCI	Business Confidence Index
BER	Bureau of Economic Research
Bn	Billion
BRICS	Brazil, Russia, India, China and South Africa
CCI	Consumer Confidence Index
CEO	Chief Executive Officer
DBE	Department of Basic Education
DBSA	Development Bank of Southern Africa
DoE	Department of Education
DoT	Department of Transport
DoH	Department of Health
EEA	Employment Equity Act
EAP	Economically Active Population
EC	Eastern Cape
ECB	European Central Bank
EFW	Economic Freedom of the World
FDI	Foreign Direct Investment
FE	Fixed Effect
FET	Further Education and Training

FPE	Final Prediction Error
FPL	Food Poverty Line
FS	Free State
GDP	Gross domestic product
GDP-R	Real Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GP	Gauteng Province
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HQ	Hannan-Quinn
IAs	Implementing Agents
IDC	Industrial Development Corporation
IDMS	Infrastructure Delivery Management System
IDZ	Industrial Development Zones
IEF	Index of Economic Freedom
IMF	International Monetary Fund
IPAP	Industrial Policy Action Plan
IRM	Infrastructure Reporting Model
KZN	KwaZulu-Natal
LAR	Labour Absorption Rate
LBPL	Lower Bound Poverty Line
LER	Learner-Educator Ratio
LFPR	Labour Force Participation Rate
LP	Limpopo
LSR	Learner-School Ratio
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MP	Mpumalanga
MPC	Monetary Policy Committee
MTEF	Medium Term Expenditure Framework
MTSF	Medium Term Strategic Framework
NC	Northern Cape
NCS	National Curriculum Statement
NDP	National Development Plan
NGP	New Growth Path
NSC	National Senior Certificate
NW	North West
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Square
PGDP	Provincial Growth and Development Plan
PMI	Purchasing Managers' Index
PSC	Public Service Commission
PT	Provincial Treasury
QE	Quantitative Easing
QESS	Quarterly Employment Statistics Survey
QLFS	Quarterly Labor Force Survey
R&I	Rating and Investment Information
RDP	Reconstruction and Development Programme
RE	Random Effect
RMB/BER	Rand Merchant Bank/ Bureau for Economic Research
SA	South Africa
SADC	Southern African Development Community
SARB	South African Reserve Bank
SASSA	South African Social Security Agency
SAT	South African Tourism

SC	Schwarz Criterion
SEZ	Special Economic Zones
SMMEs	Small, Medium and Micro Enterprises
SONA	State of the Nation Address
SPB	Strategic Partnerships for Business
Stats SA	Statistics South Africa
TB	Tuberculosis
UK	United Kingdom
UN	United Nations
UBPL	Upper Bound Poverty Line
UNDP	United Nations Development Plan
UNICEF	United Nations International Children's Emergency Fund
US	United States of America
VAR	Vector Autoregression
VFR	Visiting Friends and Relatives
WC	Western Cape
WEF	World Economic Forum
WEO	World Economic Outlook
WHO	World Health Organisation
WSJ	Wall Street Journal
WTTC	World Travel and Tourism Council

Executive Summary

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 2015/16 to all its relevant stakeholders. The publication provides a detailed analysis of the social and economic factors that influence the operation of the provincial economy. The analysis provided herein is envisioned to assist the provincial administration in the formulation of effective policies, and efficient fiscal resource allocation 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 the publication which could influence their business and personal decision-making. Although municipalities are not direct benefactors of the PTs' budget, they could, 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 an overview of the global social and economic landscape, cascading it down to the national and provincial economies.

Chapter two touches on population dynamics and their broad effect on populaces. The demographic analysis also begins with a global overview, followed by a discussion around theoretical frameworks. Africa, as the second most populous continent after Asia, is a focal point in the analysis.

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.

South Africa (SA) is known for being a rainbow nation. Therefore, this publication touches on population by race. It cannot be disregarded that South Africa remains plagued by the crippling effects of the Human Immunodeficiency Virus (HIV) and 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. This becomes more relevant because population size affects the distribution of the provincial funds according to the provincial Equitable Share; and KZN has been negatively affected by this. According to the 2011 census, KZN lost its population as a result, which means the equitable share distribution has been cut.

Chapter three focuses on the social development indicators in KZN. It looks at the gains made in achieving the former targets set by the United Nations – the Millennium Development Goals (MDGs) which were targeted to be achieved by the end of 2015. The organisation has now formally adopted the Sustainable Development Goals (SDGs), which have a focus on environmental management as a means to attaining sustainable development. It also acknowledges that some of the MDGs were not fulfilled while some were met by certain countries. The current priorities that this publication focuses on are: education, health, poverty, income inequality, human development, government grants and crime levels.

Aspects of education that were looked at included literacy rates, learner-educator ratio and the matric results. KZN had a pass rate of 60.7 per cent and was rated second to last out of the nine provinces in 2015. Matric results are the yardstick that measures learners' performance at their respective schools. However, these results highlight that KZN's schools are steadily deteriorating. Such disturbing performance instigated a decision by the national minister of education to visit most of these schools.

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.

The province's health is well managed, although HIV and AIDS are still a stigma, but fewer deaths have been recorded compared to five years ago. Provincial crime levels are decreasing, with the exception of sexual offences which escalated by 27.9 per cent from the year 2014 to 2015. In contrast, cash-in-transit robberies decreased by 51 per cent during the same period. Overall, there is improvement in the delivery of basic services such as electricity, water and sanitation.

Chapter four discusses the global, national and provincial economies. This chapter highlights the world economic estimates and projections in different countries with a focus on countries that do business with SA. Emphasis is placed on Brazil, Russia, India, China and South Africa (BRICS) and Sub Saharan countries as these countries have a unique relationship with SA. Macro-economic performance and projections of the country are analysed in real terms. Current sensitive economic issues such as currency depreciation, drought and the resultant increase in food prices are discussed at length. Importantly, the province's gross domestic product (GDP) and sector analysis growth rates are discussed and illustrated through graphs and tables.

Tourism, as a growing world industry, is also deliberated in this publication. 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 how the number of tourists that visited SA as well as KZN, during the years of 2014 and 2015 has influenced the GDP. Analyses of these indicators are of importance because they assist in the allocation of tourism funds.

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 inflation rate. It is disturbing that the rate of inflation has breached the inflation target band of 3 to 6 per cent.

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 the national labour market, focusing mainly on employment and unemployment rates. It proceeds by providing an analysis of both labour force participation and labour absorption rates. The chapter concludes by discussing the relationship between labour remuneration and productivity.

Chapter six looks at infrastructure expenditure in KZN. The delivery of economic and social services can only be successfully attained when the country has the appropriate infrastructure in place. This is why this publication has included an analysis of KZN infrastructure. Baseline allocations for 2014/15 and 2015/16 financial years are provided and analysed according to departments where the Department of Transport is the highest beneficiary. This department has valid reasons to be the highest beneficiary because transport is the key to promote economic growth. Moreover, research has demonstrated that countries that invest more in infrastructure are more developed. The second largest

beneficiary is The Department of Education which gets almost 20 per cent of the infrastructure allocation.

Chapter seven 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, rand/dollar exchange rate, gold price, credit extension and electricity supply. The results suggest that the economic risk to the province during 2015 was consistent but fairly low. However, in comparison to previous years, the figure improved during the latter part of 2015.

Chapter eight examines the results of a survey on the environment of Small Businesses in KZN province. Similarly to previous surveys, this survey attempted to understand the underlying dynamics in the small business environment, and thereby facilitate the development and growth of small businesses.

Chapter nine is a scientifically researched chapter, which is based on factors that have an impact on South Africa's economic freedom and economic growth. A regression technique has been conducted on time series data from 1995 to 2014 for economic freedom rating, and time-series data dating from 1995 to 2014 for both economic freedom and economic growth. Further analysis is made using Vector Autoregression (VAR) and the results of the study were found to be significant, suggesting that there is a positive relationship between economic freedom and economic growth.

Each chapter ends with its own conclusion taking into account the lessons learnt from the chapter itself. All policy recommendations and outcomes are considered where applicable.

Chapter 1: Introduction

The purpose of the Socio-Economic Review and Outlook (SERO) for the 2015/16 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 who are both within and outside the province. This facilitates decision-making in their respective organisations. The information contained herein can also benefit members of the general public who have an interest in understanding the dynamics at play within the provincial economy. The SERO offers a detailed analysis of the socio-economic indicators affecting the quality of life of the KZN populace; it highlights potential for and constraints to economic growth and development and further offers policy recommendations.

This publication will look 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 the commodity prices like gold, iron ore, coal and platinum is unfavourable as it reduces revenue for the country.

Counted amongst the factors that contribute to weaker economic growth is the weaker exchange rate. The constant depreciation of the rand poses a significant risk to the inflation outlook. It has put upward pressure on the prices of imported goods as they become expensive and consequently leading to inflation which has recently breached the inflation target band. This has a negative effect on the population because the response to inflation is the interest rate hike which reduces disposable income. The inflation outlook is exacerbated by the recent drought that has engulfed the country and KZN is no exception. In addition, the difficulties facing both commercial and small scale farmers are a threat to food security.

The recent move by the United States to lift-off its Federal (Fed) rate has put pressure on emerging markets (EMs) which has had a negative effect on South Africa (SA). The South African Reserve Bank (SARB) increased its repo rate as well, like any other EMs. The high interest rate weakens the currency and a weaker currency chases away investors which decreases foreign direct investment (FDI).

Regarding the social issues, the country faces pressure with regards to education. This has a negative impact on the government fiscus, given the current state of the economy as it is expected that the economy will generate less revenue. The implementation of the austerity measures such as cost cutting measures is not by choice. These include the cut in the

compensation of employee's budget by restricting staff employment in the public sector. This also exacerbates the level of unemployment causing more people to live below the bread-line. People with lack of education and skills and mostly youth are highly affected. This in turn exerts pressure on government to provide improved social services. Lack of social support continues to be a problem allowing the cycle of dependency on the government to continue.

Chapter 2: Demographic Profile

2.1 Introduction

The population dynamics of a country is of paramount importance in addressing developmental needs in society. The population growth, ageing population, migration and urbanisation present both important developmental challenges and opportunities that have direct and indirect implications for social, economic and environmental development. These dynamics in the population structure affect macro-economic factors such as consumption, production, employment, income distribution and poverty. The changes in the population structure influence universal access to social services such as health, education, sanitation, water, food and energy. Proper planning for population dynamics will therefore ensure that the wellbeing of both the current and the future generation is promoted with the motive of advancing sustainable development.

In analysing the population dynamics it is essential to look at factors such as urbanisation, migration, fertility, mortality, life expectancy as well as the age structure of the population. These factors will give an indication with regard to the estimated number of people who are dependent on government for transfers as well as the number of people who are economically active. These factors also play an essential role in the efficient allocation of resources at all spheres of government.

2.2 Global population growth

The world population increased to 7.3 billion people in 2015 from 7.2 billion recorded in 2013, with the majority of the population residing in the less developed countries. Approximately 60 per cent of the world population reside in Asia with both China and India comprising of 36.6 per cent. Africa comprises about 16 per cent of the total world population, trailed by America and Europe at 13.5 per cent and 10.1 per cent, respectively. It is evident from the information stated in Table 2.1 that developed countries will experience only a small growth in population (1.25 billion in 2015 to 1.3 billion by 2050). The Population Reference Bureau (2015) asserts that much of that growth will be immigrants from less developed countries. This is even indicated by the number of births and deaths per 1 000 which almost tally at 10 in developed countries, which is far below that of the world population at 20 and 8, respectively. It is not surprising that the population in Africa is expected to increase by approximately 1.3 billion people in 2050 which is more than doubled the current population

of 1.2 billion, given that the number of births per 1 000 people and the number of deaths per 1 000 people are at 36 and 10, respectively. All the other continents have lower birth and death rates per 1 000 population.

Table 2.1: World population and selected countries in 2015 and 2050

	2015				Population in 2050 (million)
	Population (million)	% Share of world population	Births per 1000 population	Deaths per 1000 population	
World	7 336	100	20	8	9 804
More Developed	1 254	17.1	11	10	1 310
Less Developed	6 082	82.9	22	7	8 495
Less Developed (Excl. China)	4 702	64.1	24	7	7 120
Africa	1 171	16.0	36	10	2 473
Sub-Saharan Africa	949	12.9	38	11	2 081
Nigeria	182	2.5	39	14	397
South Africa	55	0.7	22	10	65
Northern Africa	222	3.0	29	6	392
America	987	13.5	16	7	1 221
Northern America	357	4.9	12	8	445
Latin America and the Caribbean	630	8.6	18	6	776
Asia	4 397	59.9	18	7	5 324
China	1 372	18.7	12	7	1 366
India	1 314	17.9	21	7	1 660
Europe	742	10.1	11	11	728
European union	510	7.0	10	10	518
Russia	144	2.0	13	13	134
Oceania	40	0.5	18	7	59
Australia	24	0.3	13	7	34

Source: Population Reference Bureau, 2015

In addition to the growing population, there is also a challenge of the ageing population. According to the United Nations (2013), the ageing population currently seen in Europe and Japan raises questions about how the working population will support large numbers of elderly people. The Population Reference Bureau (2010) indicates that over the past two decades, China's population had also been ageing rapidly. This was a result from China's "one child" policy and low mortality; hence the proportion of elderly citizens has been continuing to grow rapidly, increasing stress on an already troubled health care system and causing China's economic growth rate to decline. In responding to this phenomenon, China's policy was then relaxed in 2014 and the country's government policy allowed couples to have two children if they so wished.

2.3 South African population

South Africa (SA) is a diverse nation, comprising of a wide variety of cultures, languages and religious beliefs. According to Statistics South Africa (Stats SA) (2015), the national population increased from 47.4 million in 2006 to 55 million in 2015. The Population Reference Bureau (2015) expects the population of SA to increase by almost 18.2 per cent from 2015 to 2050 which is far below the percentage increase in the continent of Africa. This

is not surprising as the number of births per 1 000 people and deaths per 1 000 people is almost equal to the world average and far below that of Africa as a continent and that of Nigeria, as another African country (table 2.1).

Table 2.2: South African population by province in 2006, 2011 and 2015

	2006		2011		2015	
	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	54 956 920	100
Eastern Cape	6 894 300	14.5	6 829 958	13.5	6 916 185	12.6
Free State	2 958 800	6.2	2 759 644	5.5	2 817 941	5.1
Gauteng	9 526 200	20.1	11 328 203	22.4	13 200 349	24.0
KwaZulu Natal	9 924 000	20.9	10 819 130	21.4	10 919 077	19.9
Limpopo	5 365 400	11.3	5 554 657	11.0	5 726 792	10.4
Mpumalanga	3 508 000	7.4	3 657 181	7.2	4 283 888	7.8
North West	3 374 200	7.1	3 253 390	6.4	3 706 962	6.7
Northern Cape	1 094 500	2.3	1 096 731	2.2	1 185 628	2.2
Western Cape	4 745 500	10.0	5 287 863	10.5	6 200 098	11.3

Source: Stats SA, 2006, 2011 and 2015

There are nine provinces spread across the country, 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). As indicated in this section, the national population has been increasing at a steady pace from 47.4 million in 2006 to 50.6 million in 2011, to 55 million in 2015. This shows an increase of 3.2 million people over the 5 year period between 2006 and 2011 compared to 4.4 million people for the period 2011 to 2015. Gauteng and the Western Cape realised a moderate increase in the proportion of the national population for the years under review. This is a result of the economic activities taking place in these provinces. However, in absolute values, other provinces realised an increase in the population. Factors that have caused KZN's reduced population emanate from migration, mortality rate (coupled with low fertility rate) and the impact of HIV and AIDS related diseases.

2.4 Population growth rate

Table 2.3 shows that the South African population growth rate increased between the years 2009 and 2015. The estimated overall growth rate was 1.5 per cent between 2009 and 2011 and increased steadily to 1.6 per cent between 2011 and 2014, which marginally increased to 1.7 per cent in 2015. It is worth noting that the growth rate for females is lower than that of their male counterparts.

Table 2.3: National annual population growth rate (%), 2009 to 2015

Period	Male	Female	Total
2009-2010	1.6	1.4	1.5
2010-2011	1.7	1.4	1.5
2011-2012	1.7	1.4	1.6
2012-2013	1.7	1.5	1.6
2013-2014	1.8	1.5	1.6
2014-2015	1.8	1.5	1.7

Source: Stats SA, 2015

2.5 KwaZulu-Natal provincial population size

The province of KZN is home to an estimated 10.9 million people which accounts for an estimated 19.9 per cent of the South African population. The province is the second most populated after Gauteng which has an estimated 13.2 million people, constituting 24 per cent of the total national population. This is in contrast to the figures in 2006, which showed that KZN was home to 9.9 million people followed by Gauteng at 9.5 million people. Migration is cited as one of the main factors contributing to the decline in the share of the national population and consequently affecting its equitable share grant allocation.

2.6 Population distribution by age, race and gender

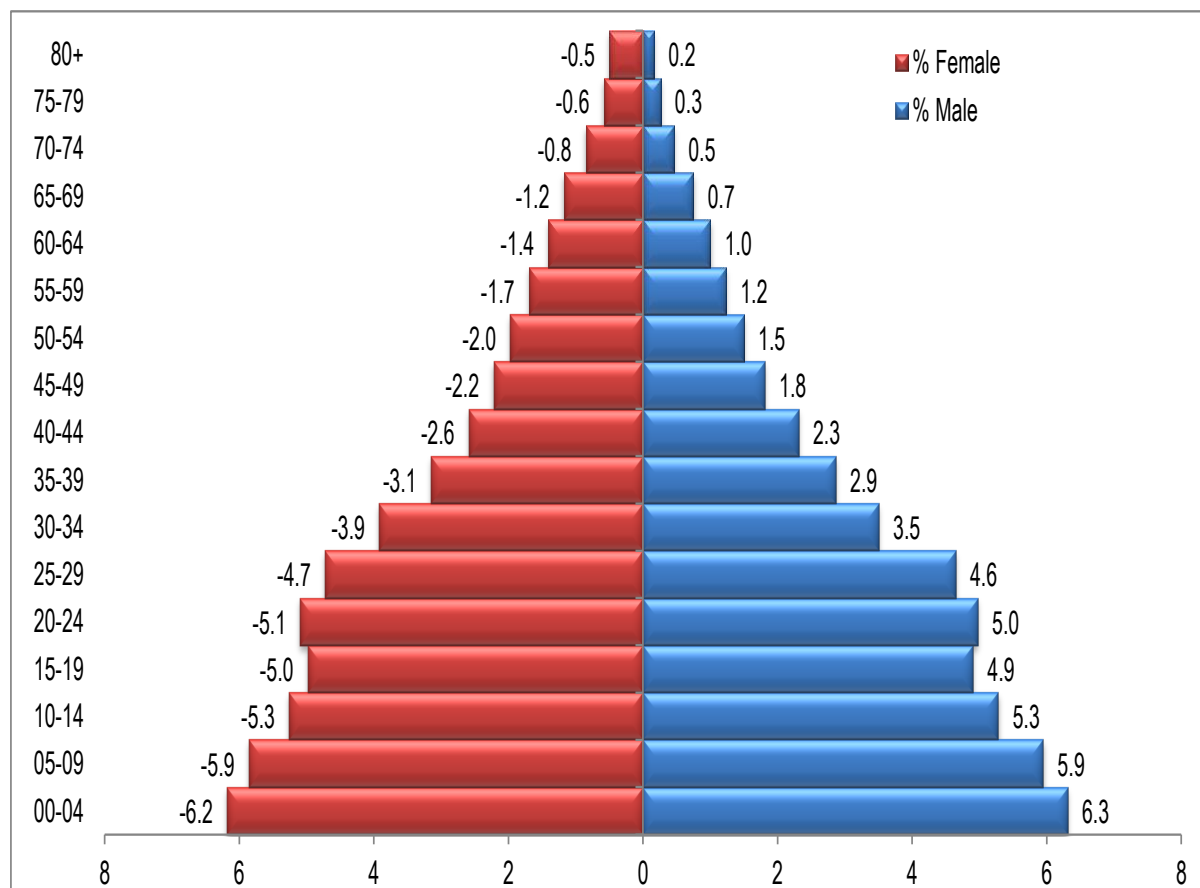
2.6.1 Population by age, gender and dependency ratio

Figure 2.1 shows the population distribution of KZN by age and gender in the year 2015. The pyramid is narrowly distributed and indicates that the largest population range is between 00-04 and 25-29 which is approximately 64.1 per cent of the total population. The percentage between the female and the male population is almost the same in this range. However, it is worth noting that from the age of 30 and above, the percentage of the female population is greater than that of their male counterparts. This could be the result of factors such as migration patterns and lifestyle choices by both genders. An estimated 35 per cent of the population are children between 00 and 14 years and about 37 per cent are economically active (aged 15-34). Collectively, children and young people account for an estimated 72 per cent of the total provincial population.

The total provincial dependent population is estimated at 4 318 415, while the economically active population is estimated at 6 600 660. The implication of these estimates is a high

dependency ratio of 65.4 per cent¹. It has to be noted that the dependency ratio is not totally reflective of the situation in the economy, since some of the people in the economically active population are not actively involved in the labour market.

Figure 2.1: Population distribution by age and gender in 2015



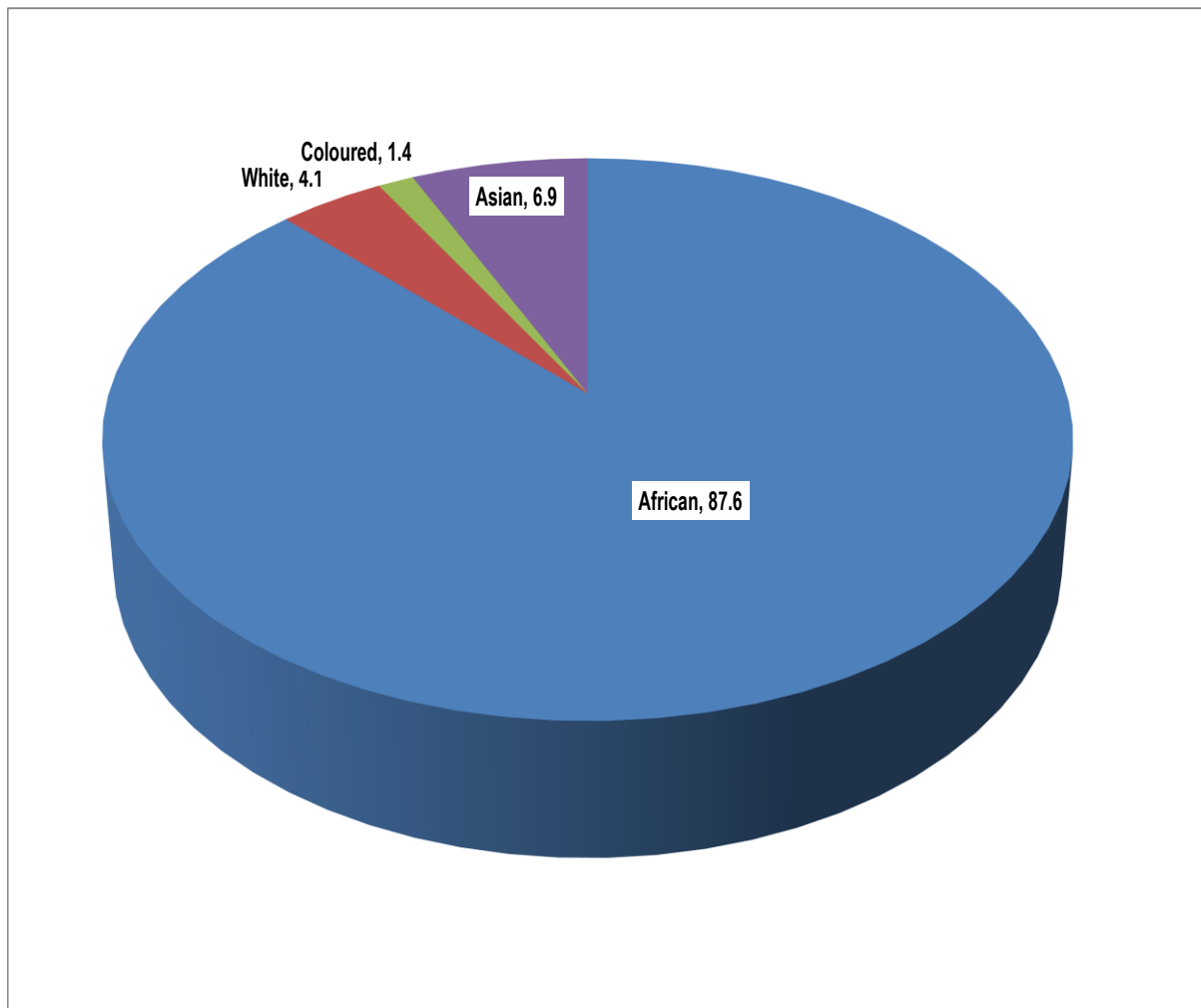
Source: Stats SA, 2015

2.7 Population by race

Figure 2.2 shows KZN’s population by race in 2014. The diagram illustrates that the province is divided into four racial groups which are African, Indian or Asian, White and Coloured. The province is largely dominated by Africans, constituting 87.6 per cent of the total KZN population in 2014, followed by Indians at 6.9 per cent, Whites at 4.1 per cent. Coloureds constitute the smallest percentage of the total provincial population (1.4 per cent).

¹Dependency Ratio = [(Number of people under 15 years) + (Number of people aged 65 and over)/ (Number of people between 15 and 64)] * 100 = (4 318 416/6 600 665)*100= 65.4 percent. The dependency ratio is an age population ratio of those not in the labour force.

Figure 2.2: KZN's population by race in 2014



Source: Global Insight, 2015

2.8 Fertility, mortality, life expectancy and migration

2.8.1 Fertility²

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.

²The 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 (www.worldbank.org).

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).

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.

Table 2.4: Fertility, mortality and life expectancy in KZN, 2006 - 2016

	SA	EC	FS	GP	KZN	LP	MP	NC	NW	WC
Total fertility rate										
2006-2011	2.7	3.2	2.4	2.0	3.2	2.9	2.7	2.5	2.8	2.3
2011-2016	2.5	3.0	2.3	2.1	2.9	2.9	2.5	2.4	2.6	2.2
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										
2011-2016 Female	59.2	57.8	54.7	64.3	58.4	60.5	57.2	57.8	56.1	66.0
2011-2016 Male	57.2	55.3	53.0	61.7	57.0	57.3	55.8	57.9	53.5	63.7

Source: Health Systems Trust and Stats SA, 2015

According to Stats SA (2015), the fertility rate in KZN between 2011 and 2016 is projected to stand at 2.9 children; a marginal increase from the 2014 projections. This estimate sits above the national average of 2.5, and is among the highest rates in the country. However, it is on par with LP, and just below that of the EC province (3.0). These aforementioned provinces are mainly characterised by their rural landscape, and low levels of human development. Despite them having fertility rates higher than the national average, these provinces have seen a decline in fertility rate from their 2006 to 2011 estimates (table 2.4).

2.8.2 Mortality³

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 Awareness⁴, it has been shown that providing reproductive health care, lowering the infant mortality rate⁵ and the maternal mortality rate⁶ 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

³The mortality rate represents the average number of deaths in a particular area over a specified period of time.

⁴ <http://www.overpopulation.org/>

⁵ Probability of dying between birth and exactly one year of age (expressed per 1 000 live births). www.UNICEF.org

⁶ 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).

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 4th lowest maternal mortality rates (124.9 deaths per 1 000 live births) after WC, GP and MP.

2.8.3 Life expectancy

The United Nations Development Plan (UNDP) defines life expectancy at birth as the number of years a newborn 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 life⁷. 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 (57.0 for males and 58.4 for females) than the national average (57.2 for males and 59.2 for females).

2.8.4 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).

⁷ <http://hdr.undp.org/en/69206>

Table 2.5 shows that during 2011 and 2016, Gauteng absorbed and is continuing to absorb the highest number of migrants (543110) out of all other South African provinces. In contrast, KZN is projected to have a net outflow of people which would reduce the population figures. A similar estimation is 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.

Table 2.5: Migration trends in KZN, 2006 - 2016

	2006 - 2011			2011 - 2016		
	Out-migrants	In-migrants	Net migration	Out-migrants	In-migrants	Net migration
Eastern Cape	241 339	173 464	-67 875	243 118	189 975	-53 143
Free State	130 236	118 297	-11 939	135 643	129 461	-6 182
Gauteng	575 626	1 072 834	497 208	626 727	1 169 837	543 110
KwaZulu-Natal	230 039	214 593	-15 446	241 601	234 570	-7 031
Limpopo	296 199	229 192	-67 007	303 151	255 794	-47 357
Mpumalanga	182 725	225 339	42 614	192 972	246 664	53 692
North West	180 800	259 206	78 406	194 181	283 498	89 317
Northern Cape	70 760	68 111	-2 649	77 578	73 573	-4 005
Western Cape	178 605	321 641	143 036	193 605	350 569	156 964

Source: Stats SA, 2015

2.8.5 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.

Chapter 3: Development Indicators

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 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.

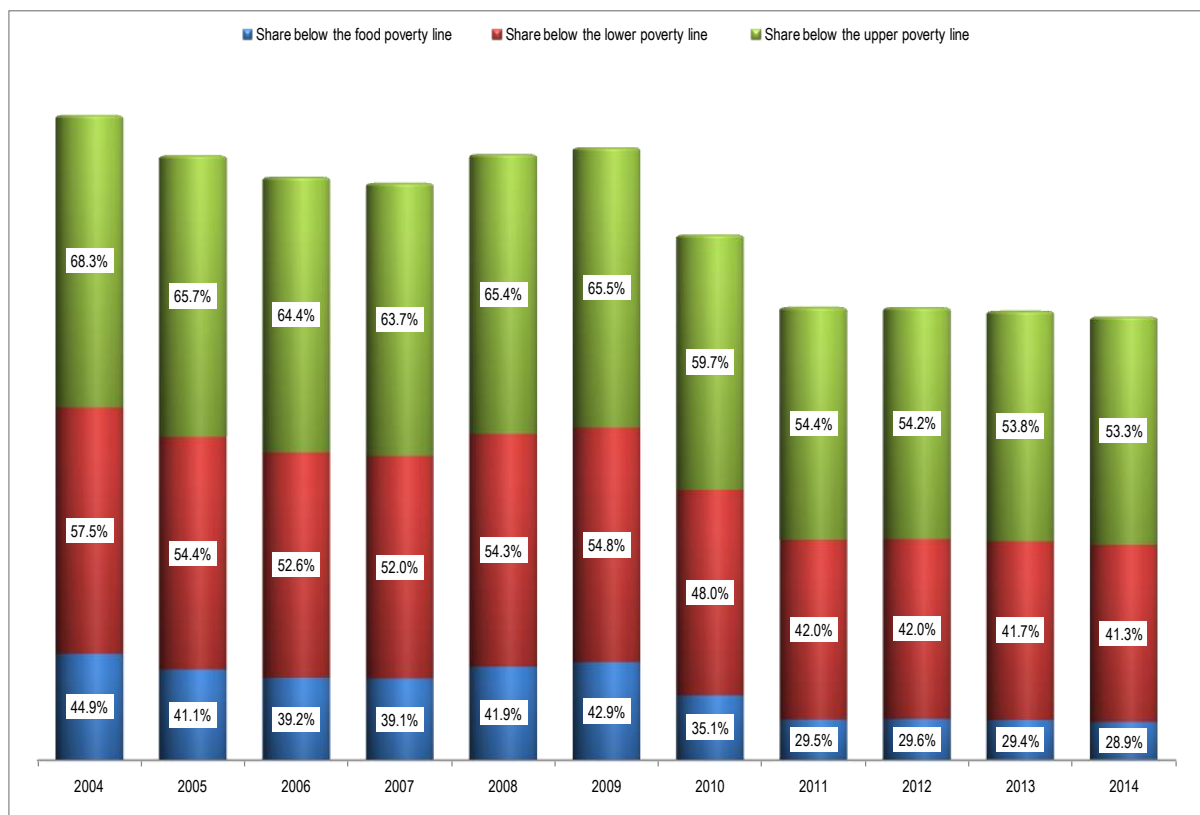
Sustainable development is underpinned by five main principles, namely: natural, human, social, manufactured and financial capital. These are the five types of sustainable capital

from which human beings derive the goods and services that they need to improve their quality of life.

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).

Figure 3.1: Upper line, lower line and food poverty rates in KwaZulu-Natal (KZN), 2014



Source: Global Insight, 2015

Similar to development, poverty is multi-dimensional; dependent on access to adequate health care, education facilities, and decent living standards (Alkire and Foster, 2007). It is this multi-faceted nature of poverty that prompted the decision by Stats SA, after extensive stakeholder engagements, to pilot the poverty lines approach (which is a cost-of-basic-needs approach) to poverty and deprivation measurement. A poverty line basically establishes a minimum socially acceptable standard for a predetermined welfare indicator to separate the poor from the non-poor (Stats SA, 2015). Currently, three poverty lines are being used: the

food poverty line (FPL)⁸, upper bound poverty line (UBPL)⁹ and lower bound poverty line (LBPL)¹⁰.

Poverty levels in KZN have been on a gradual decline over the years. Since 2011, however, the declining trend appears to have hit a plateau, declining only marginally in the advent of subdued economic growth following the economic crisis of 2009. The share of people living below the FPL stood at 28.9 per cent in 2014, while the number of people living below the LBPL was 41.3 per cent and about 53.3 per cent were living below the UBPL (Figure 3.1).

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).

Table 3.1: Income distribution by proportion of households in KZN, 2014

Income category	Income level (R'000)	African	Asian	Coloured	White
Affluent	1 200+	0.3%	3.8%	1.3%	9.4%
Upper middle class	600 - 1 200	1.2%	11.4%	4.6%	22.5%
Realised middle class	360 - 600	2.9%	17.1%	10.5%	24.1%
Emerging middle class	96 - 360	21.0%	53.6%	43.7%	39.1%
Low emerging middle income	54 - 96	22.3%	9.3%	15.8%	3.7%
Lower income	0 - 54	52.2%	4.7%	24.1%	1.2%

Source: Global Insight, 2015

⁸The FPL is the Rand value below which individuals are unable to purchase or consume enough food to supply them with minimum per-capita-per-day energy requirement for good health (which is about 2 100 kilocalories).

⁹ Individuals at the LBPL do not have command over enough resources to consume or purchase both adequate food and non-food items and are therefore forced to sacrifice food to obtain essential non-food items.

¹⁰ Individuals at the UBPL purchase both adequate food and non-food items.

In the year 2014, 44.8 per cent of all KZN households were categorized as being *lower income* households, where the annual income was between R0 and R54 000. About 20 per cent were categorized as being *low emerging middle income* households earning between R54 000 and R96 000 per annum, and roughly 25.1 per cent were *emerging middle class* (R96 000 – R360 000 per annum). Only a privileged proportion of the province's households earned between R360 000 and R600 000 (5.5 per cent) as the *realised middle class*, and about 3.4 per cent were *upper middle class* households earning between R600 000 and R1.2 million per annum. About 1.2 per cent of the total KZN population was considered to be *affluent*, earning in excess of R1.2 million per annum.

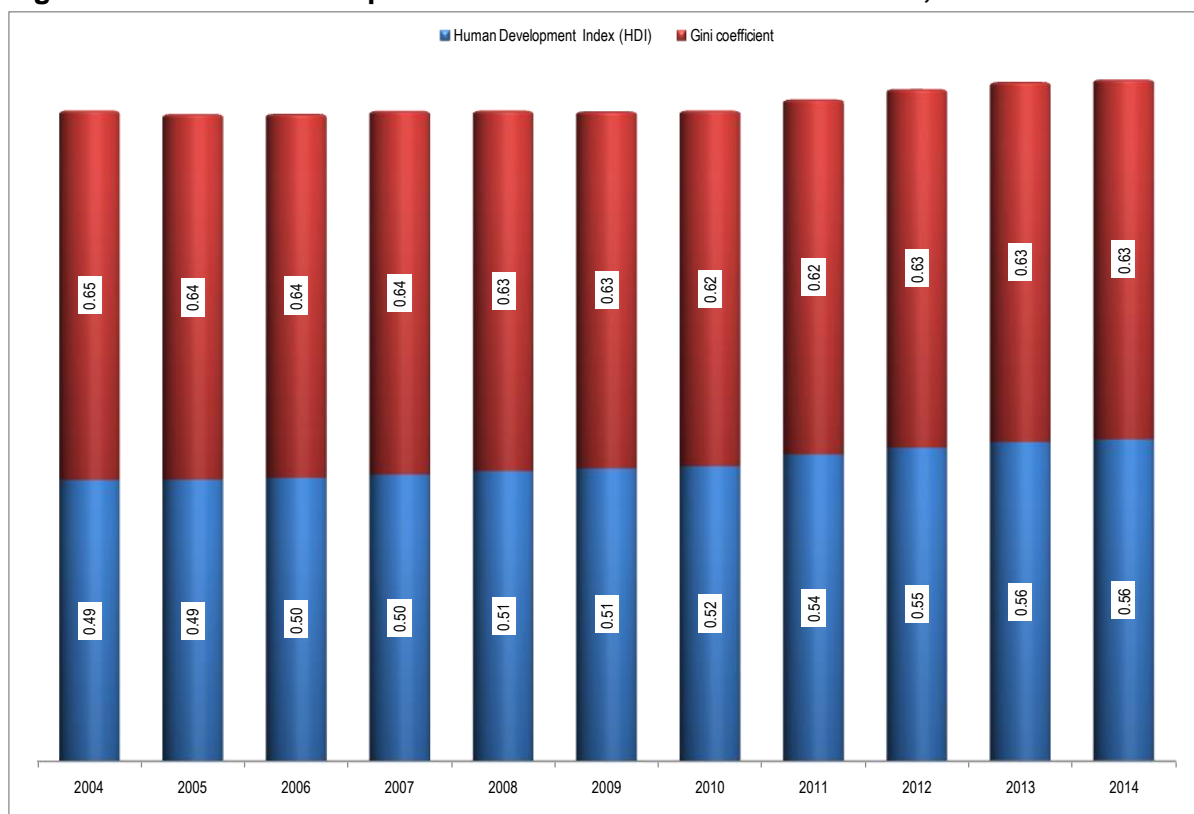
The majority of African households (52.2 per cent) were categorized in the *lower income* category in 2014, followed by Coloured (24.1 per cent), Asian (4.7 per cent), and lastly White households (1.2 per cent). In contrast, the majority of Asian (53.6 per cent), Coloured (43.7 per cent) and White households were found to be in the *emerging middle class* income category. The White segment of the population enjoyed the highest income in the *realised middle class* (24.1 per cent), *upper middle class* (22.5 per cent) and *affluent* (9.4 per cent) income categories (Table 3.1).

Much still needs to be done in addressing the stark reality that an estimated 44.8 per cent of the households residing in KZN were still categorized as low income earners in 2014. This observation is further supported by KZN's Gini coefficient of 0.63 which is the second highest across all provinces after Gauteng (0.65) (Figure 3.2).

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.

Figure 3.2: Human Development Index and Gini coefficient in KZN, 2004-2014



Source: Global Insight, 2015

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 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 employed to try and alleviate nutritional problems, it is not enough. As it has become the norm in social grant trend analysis, KZN, when compared nationally, had the highest number of social grant beneficiaries as at 31 December 2015, with a total number of 3 919 193 beneficiaries. This amount equated to 23.2 per cent of the total number of grant beneficiaries on a national scale.

The province had the highest share of Old Age Grant beneficiaries (644 069 or 20.4 per cent), Disability Grant beneficiaries (270 310 or 24.6 per cent), Grant-in-Aid beneficiaries (45 342 or 34.2 per cent), Care Dependency Grant beneficiaries (37 301 or 28.4 per cent), Foster Child Grant beneficiaries (102 494 or 24 per cent), and Child Support Grant beneficiaries (2 819 646 or 23.6 per cent).

Table 3.2: Number and proportion of grant beneficiaries in KZN, as at 31 December 2015

	Old Age Grant		War Veteran's Grant		Disability Grant		Grant-in-aid		Care Dependency Grant		Foster Child Grant		Child Support Grant		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
South Africa	3 161 784	100.0	261	100.0	1 099 867	100.0	132 620	100.0	131 296	100.0	427 928	100.0	11 956 549	100.0	16 910 305
Eastern Cape	533 752	16.9	40	15.3	182 169	16.6	18 372	13.9	19 903	15.2	96 124	22.5	1 881 109	15.7	2 731 469
Free State	186 220	5.9	4	1.5	73 996	6.7	2 642	2.0	6 744	5.1	31 436	7.3	669 012	5.6	970 054
Gauteng	505 684	16.0	70	26.8	111 999	10.2	4 024	3.0	16 775	12.8	48 839	11.4	1 716 355	14.4	2 403 746
KwaZulu-Natal	644 069	20.4	31	11.9	270 310	24.6	45 342	34.2	37 301	28.4	102 494	24.0	2 819 646	23.6	3 919 193
Limpopo	436 986	13.8	17	6.5	94 997	8.6	26 494	20.0	13 820	10.5	45 715	10.7	1 742 594	14.6	2 360 623
Mpumalanga	231 675	7.3	13	5.0	77 747	7.1	6 741	5.1	9 925	7.6	30 328	7.1	1 050 756	8.8	1 407 185
Northern Cape	80 727	2.6	8	3.1	51 754	4.7	7 317	5.5	5 066	3.9	12 459	2.9	296 601	2.5	453 932
North West	238 295	7.5	8	3.1	82 693	7.5	7 962	6.0	9 172	7.0	32 050	7.5	815 977	6.8	1 186 157
Western Cape	304 376	9.6	70	26.8	154 202	14.0	13 726	10.3	12 590	9.6	28 483	6.7	964 499	8.1	1 477 946

Source: South African Social Security Agency (SASSA), 2015

In terms of growth in beneficiary numbers since 31 December 2014, only the War Veteran's Grant, Disability Grant and the Foster Child Grant experienced declines of 29.5 per cent, 7.3 per cent and 9.3 per cent, respectively, while other grant types experienced an increase in numbers. The most notable increase was in the number of Grant-in-Aid beneficiaries (23.9 per cent) followed by Old Age Grant beneficiaries (2.8 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 (DoE) strategic objectives is to extend a better quality of life to children of school-going age. According to Calman and Tarr-Whelan (2005)¹¹, 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. The study provides 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.

According to the National Treasury (2016), the proposed national allocation of basic education accounted for approximately 17.6 per cent of all the spending over the 2016 medium-term expenditure framework (MTEF). In addition, the province of KZN allocates the

¹¹Calman L.J. &Tarr-Whelan L. Early childhood education for all. A wise investment. Available online: <http://web.mit.edu/workplacecenter/docs/Full%20Report.pdf>.

highest of its budget to education at R45.5 billion for the 2016/17 MTEF. However, the quality of output does not match the extent of investment. This is due to the fact that a high percentage of budget allocation both nationally (73.1 per cent) and provincially (74.8 per cent) is dedicated to the compensation of educators with the remainder being used for improvements in the school facilities amongst other needs. This is also as a result of reprioritization of funds from infrastructure to the compensation of educators in the province. Studies have shown that an environment which is conducive to learning enhances teaching and learning.

The South African government spends more on education than any other expenditure category. The similar trend is also applicable to KZN budget allocation to education. However, more still needs to be done to ensure that performance of learners in the National Curriculum Statement (NCS) ranks improve which is one of the key indicators of quality with regard to the performance of the schooling system as a whole.

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 class 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 age of learners, academic needs of learners, experience, skills as well as effectiveness of educators in imparting knowledge.

Table 3.3 shows the number of learners, educators and schools across different provinces for the years 2010 and 2015. A comparison of the years under review indicates that there had been a marginal increase of 2.7 per cent in the KZN's number of learners from 2 806 988 in 2010 to 2 881 518 in 2015. However, this is in contrast to the drop in the number of educators and schools by 5.9 per cent and 0.2 per cent, respectively. This resulted in an increase in both the LER and the learner-to-school ratio (LSR) from 30.5 to 33.3 and 457 to 470 respectively. It is, therefore, not surprising that the KZN's LER was the highest out of all

provinces at 33.3, while LER in SA was 30.8. It appears that most of the provinces recorded increasing LSRs with the exception of the Eastern Cape (EC) (from 357 in 2010 to 341 in 2015) although it was the lowest of all the provinces.

Table 3.3: Leaner-educator ratio (LER) and leaner-school ratio (LSR) by districts in 2010 and 2015

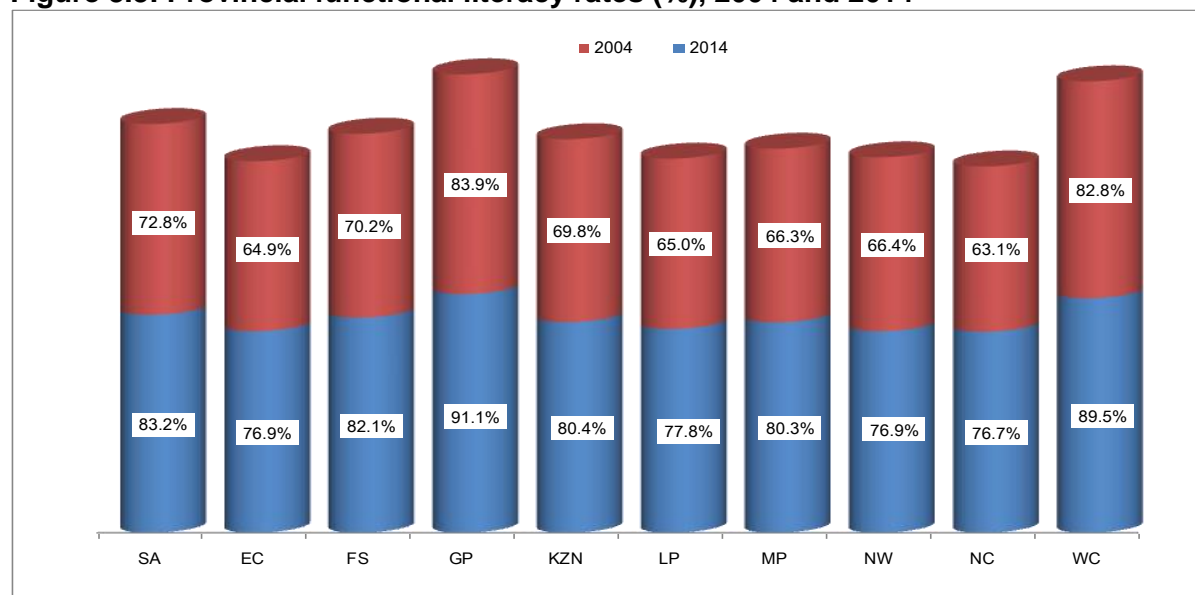
	2010					2015				
	Number of Learners	Number of Educators	Number of Schools	LER	LSR	Number of Learners	Number of Educators	Number of Schools	LER	LSR
South Africa	12 260 099	418 109	25 850	29.3	474	12 814 471	416 093	25 691	30.8	499
Eastern Cape	2 052 386	69 018	5 742	29.7	357	1 953 397	64 256	5 727	30.4	341
Free State	654 704	23 850	1 488	27.5	440	682 704	23 661	1 332	28.9	513
Gauteng	1 974 066	70 340	2 485	28.1	794	2 262 319	79 354	2 780	28.5	814
KwaZulu Natal	2 806 988	91 926	6 147	30.5	457	2 881 518	86 493	6 137	33.3	470
Limpopo	1 706 401	58 194	4 106	29.3	416	1 753 734	55 930	4 045	31.4	434
Mpumalanga	1 036 432	34 575	1 939	30.0	535	1 079 280	35 153	1 862	30.7	580
Northern Cape	269 392	8 846	617	30.5	437	290 139	9 162	581	31.7	499
North West	759 114	26 006	1 701	29.2	446	813 873	25 126	1 544	32.4	527
Western Cape	1 000 616	35 354	1 625	28.3	616	1 097 509	36 958	1 683	29.7	652

Source: Department of Basic Education, 2015

3.6.2 Literacy rate and matric results

According to the World Bank, literacy rate¹² means people who are aged 15 and above who can, with understanding, read and write a short simple statement on their everyday life.

Figure 3.3: Provincial functional literacy rates (%), 2004 and 2014



Global Insight, 2015

¹² 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: <http://data.worldbank.org/indicator/SE.ADT.LITR.ZS>

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 3.3 shows the functional literacy rate in SA by provinces in 2004 and 2014. In KZN, the literacy rate increased from 69.8 per cent in 2004 to 80.4 per cent in 2014. However, it was still 2.8 percentage points below the national level of 83.2 per cent in 2014. In 2014, functional literacy was the highest in the Gauteng Province (GP) (91.1 per cent) followed by the Western Cape (WC) (89.5 per cent). However, the provinces that fell below the literacy level of 80 per cent included the Eastern Cape (EC), Limpopo Province (LP), Northern Cape (NC) and the North West (NW).

Table 3.4: KZN levels of education, 2004 and 2014

	2004					2014				
	African	White	Coloured	Asian	Total	African	White	Coloured	Asian	Total
No schooling	18.9	0.9	3.2	4.6	15.9	9.9	0.3	1.6	2.4	8.6
Grade 0-6	20.2	1.0	7.0	8.1	17.3	14.7	1.2	4.2	7.5	13.1
Grade 7-11	37.6	21.5	49.1	38.4	36.7	40.9	18.1	39.2	32.9	38.9
Certificate/ diploma without matric	0.6	3.4	1.8	1.1	0.9	0.4	1.7	0.7	0.6	0.5
Matric only	18.4	41.0	29.8	36.4	22.1	27.3	43.7	38.2	43.1	29.8
Higher	4.3	32.2	9.1	11.5	7.2	6.8	34.9	16.0	13.5	9.2
Total	100	100	100	100	100	100	100	100	100	100

Source: Global Insight, 2015

Table 3.4 represents the level of education in KZN in 2004 and 2014. It is evident that the situation regarding the level of education in KZN improved over the 10-year period. In 2014, 8.6 per cent of the people who were 20 years and older had not received any schooling. This is an improvement from the 2004 analyses of 15.9 per cent.

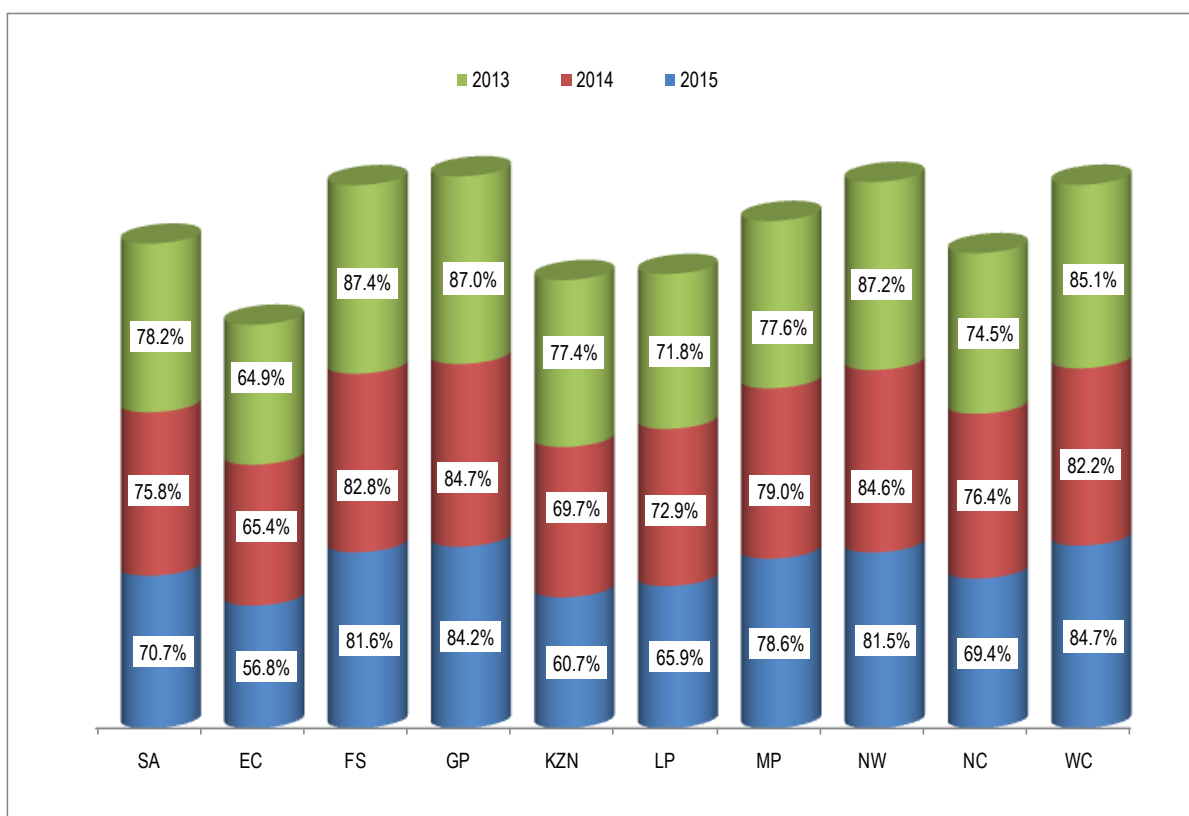
The percentage of the population 20 years and older that completed secondary education (matric only) in KZN increased from 22.1 per cent in 2004 to 29.8 per cent in 2014. This is admirable since it is reflective of more people in the economically active population (EAP) having received a basic education and as such can be more productive members of society. It is encouraging to see that there had been an increase in the proportion of people who

attained higher qualifications in 2014 (9.2 per cent) than in 2004 (7.2 per cent), although it was not a significant increase.

3.6.3 National senior certificate achievements

Figure 3.4 compares the national senior certificate (NSC) achievements in SA and among provinces from 2013 to 2015. Learner achievement rates in KZN had decreased from 77.4 per cent in 2013 to 60.7 per cent in 2015. This is, however, disappointing as KZN had the largest number of matriculants out of all the provinces (162 658 representing 25.2 per cent) of the matriculants who wrote the NSC exam in 2015.

Figure 3.4: Comparison of national and provincial NSC achievements in 2013, 2014 and 2015



Source: Department of Basic Education, NSC Examination, 2015

All the other provinces recorded a decrease in their matric performance except the WC which realised marginal increase from 82.2 per cent in 2014 to 84.7 per cent in 2015. Nationally, the average performance dropped by 5.1 per cent from 75.8 per cent in 2014 to 70.7 per cent.

According to the Department of Basic Education (DBE) (2015), the decrease in the overall performance may be attributed to the higher enrolment rate causing severe pressure on the education resources, a higher standard of question papers, and the introduction of a policy that tracks the progressed learners¹³. However, the DBE acknowledged that further investigation will be undertaken to establish the exact output status for the education system.

Table 3.5: Percentage of learners who achieved 40 per cent and above in selected subjects in 2014 and 2015

	2014				2015			
	Accounting	Economics	Mathematics	Physical Science	Accounting	Economics	Mathematics	Physical Science
South Africa	44.3	38.8	35.1	36.9	36.2	39.1	31.9	36.1
Eastern Cape	37.3	28.5	25.1	26.5	29.2	26.6	21.8	24.8
Free State	56.3	30.8	44.5	42.8	47.4	32.5	46.0	43.3
Gauteng	51.4	47.1	50.7	45.9	49.6	52.5	49.8	46.1
KwaZulu Natal	39.2	40.8	24.3	31.2	29.3	33.0	20.0	30.2
Limpopo	41.9	34.6	35.8	38.9	29.4	39.5	32.4	35.4
Mpumalanga	41.9	24.6	35.6	34.4	38.4	38.3	36.0	38.5
North West	50.9	55.3	40.3	36.8	33.2	48.2	37.3	35.9
Northern Cape	40.7	42.6	42.4	36.7	34.1	42.1	36.1	33.1
Western Cape	54.3	51.4	56.6	51.5	51.0	52.9	57.3	54.7

Source: Department of Basic Education, NSC examination, 2015

Table 3.5 compares the percentage of learners who achieved 40 per cent and above in selected subjects from 2014 to 2015. It is worrying that the learners' performances in the gateway subjects of Mathematics, Physical Science, Accounting and Economics showed a negative trend. These subjects showed a decrease in the province of KZN from 24.3 per cent to 20.0 per cent (Mathematics), from 31.2 per cent to 30.2 per cent (Physical Science), from 39.2 per cent to 29.3 per cent (Accounting) and from 40.8 per cent to 33.0 per cent for Economics between 2014 and 2015. Nationally, there was also a decrease in the performance of learners, except for Economics which showed marginal increase in the pass rate from 38.8 per cent in 2014 to 39.1 per cent in 2015. 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 skills¹⁴. The implication of this is that there is a low number of students who are able to get entrance to degree qualifications which require mathematics. These degrees, which include among

¹³ Progressed learners are the learners who failed Grade 11 twice and were promoted to Grade 12 without meeting the passing criteria.

¹⁴ <http://www.amesa.org.za/AMESA2014/Proceedings/papers/Plenary%20Papers/3.%20Anne%20Maclean.pdf>

others, are engineering, accounting, economics and the teaching profession in these subjects. In addition, most of the students who achieved a Bachelor pass¹⁵ 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 further education and training (FET) 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.

3.7 Access to 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. People in poor countries tend to have less access to health services than those in better-off countries, and within countries, the poor have less access to health services. 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.

¹⁵ 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.

Table 3.6: HIV and AIDS prevalence, 2013 - 2015

	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

Source: Health Systems Trust, 2015

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.

Table 3.7: HIV and AIDS prevalence, 2015

	SA	EC	FS	GP	KZN	LP	MP	NW	NC	WC
Total population	54 956 900	6 916 200	2 817 900	13 200 300	10 919 100	5 726 800	4 283 900	3 707 000	1 185 600	6 200 100
Estimated number of HIV+ people	6 595 232	800 854	390 152	1 601 435	1 807 354	518 006	596 331	488 949	86 336	305 815
HIV+ people (%)	12.0	11.6	13.8	12.1	16.6	9.0	13.9	13.2	7.3	4.9
Number of people on ARVs (April 2015)	3 103 902	320 062	168 877	730 576	951 462	232 506	284 984	191 612	43 054	180 769
Percentage of HIV+ people on ARVs	47.1	40.0	43.3	45.6	52.6	44.9	47.8	39.2	49.9	59.1

Source: Health Systems Trust, 2015

3.8 Crime

Table 3.8: Crime levels (per 100 000) and growth rates in KZN, 2012 to 2015

CRIME CATEGORY	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
				Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)					
Murder	3 623	3 616	3 810	194	5.4%
Total Sexual Offences	10 964	9 889	9 079	-810	-8.2%
Attempted murder	3 827	3 835	3 918	83	2.2%
Assault with the intent to inflict grievous bodily harm	28 832	28 982	29 201	219	0.8%
Common assault	30 087	26 307	24 011	-2 296	-8.7%
Common robbery	8 188	8 397	7 857	-540	-6.4%
Robbery with aggravating circumstances	19 923	20 957	20 881	-76	-0.4%
Total Contact Crimes (Crimes Against The Person)	105 444	101 983	98 757	-3 226	-3.2%
CONTACT-RELATED CRIMES					
Arson	946	896	854	-42	-4.7%
Malicious damage to property	15 670	14 954	14 605	-349	-2.3%
Total Contact-Related Crimes	16 616	15 850	15 459	-391	-2.5%
PROPERTY-RELATED CRIMES					
Burglary at non-residential premises	11 954	11 194	11 032	-162	-1.4%
Burglary at residential premises	45 404	43 969	43 274	-695	-1.6%
Theft of motor vehicle and motorcycle	9 738	8 674	8 404	-270	-3.1%
Theft out of or from motor vehicle	18 014	18 614	18 148	-466	-2.5%
Stock-theft	6 018	5 754	5 956	202	3.5%
Total Property-Related Crimes	91 128	88 205	86 814	-1 391	-1.6%
CRIME DETECTED AS A RESULT OF POLICE ACTION					
Illegal possession of firearms and ammunition	4 444	4 586	4 081	-505	-11.0%
Drug-related crime	42 167	45 950	47 377	1 427	3.1%
Driving under the influence of alcohol or drugs	15 109	12 595	11 702	-893	-7.1%
Sexual offences detected as result of police action	1 188	1 765	2 258	493	27.9%
Total Crime Detected As A Result Of Police Action	62 908	64 896	65 418	522	0.8%
OTHER SERIOUS CRIMES					
All theft not mentioned elsewhere	50 361	49 846	47 622	-2 224	-4.5%
Commercial crime	14 226	12 431	11 227	-1 204	-9.7%
Shoplifting	13 014	13 378	14 118	740	5.5%
Total Other Serious Crimes	77 601	75 655	72 967	-2 688	-3.6%
SUBCATEGORIES OF AGGRAVATED ROBBERY					
Carjacking	2 413	2 262	2 190	-72	-3.2%
Truck hijacking	82	46	63	17	37.0%
Robbery of cash in transit	20	37	18	-19	-51.4%
Bank robbery	2	0	0	0	0 Cases
Robbery at residential premises	4 119	4 099	3 958	-141	-3.4%
Robbery at non-residential premises	2 347	2 696	2 750	54	2.0%
Total Subcategories Of Aggravated Robbery	8 983	9 140	8 979	-161	-1.8%

Source: SAPS, 2015

Table 3.8 reflects crime categories prevalent in KZN between the years 2012 and 2015. *Theft, drug-related crime and burglary at residential premises* were the leading crime

categories in the province during the year under review. 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.

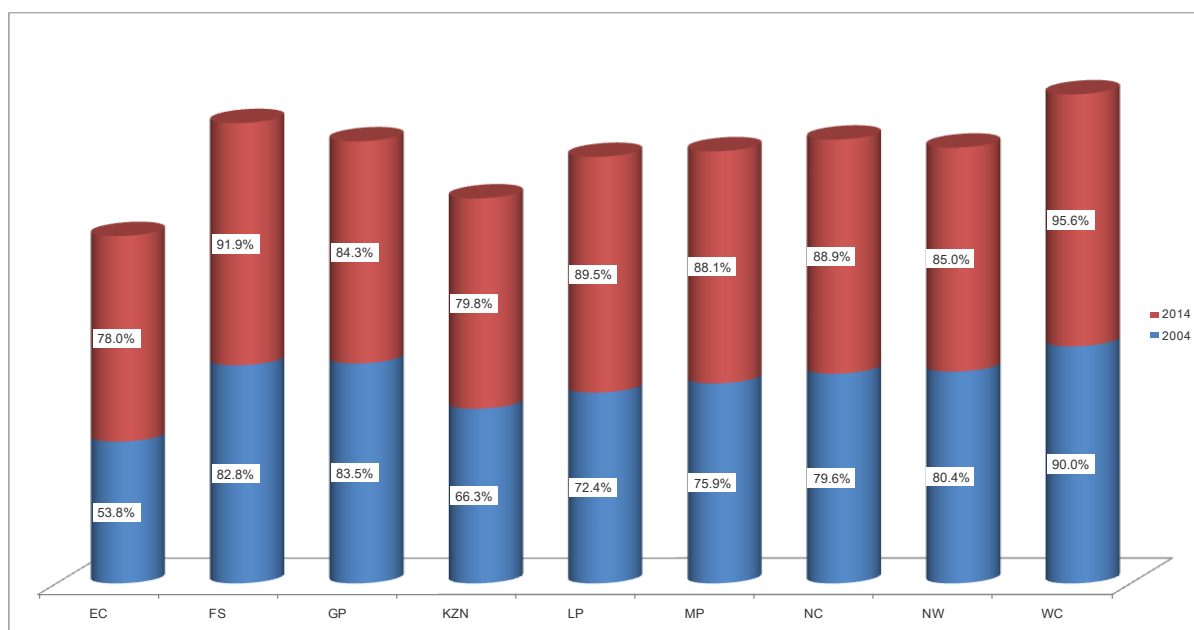
Data related to crime statistics for the main towns and cities in KZN is presented in the Appendix (Table A3.2 to A3.10).

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.

Figure 3.5: Share of households with electrical connections by province, 2004 and 2014



Source: Global Insight, 2015

Following a tumultuous couple of years for SA businesses that were without access to reliable electricity provision, Eskom made a drastic turnaround in 2015 after the appointment of a new CEO, which dramatically reduced the number of incidents of load shedding in the country. This about turn reinstated the confidence of business owners and ordinary citizens in the sustainability of the power utility.

KZN was trailing behind most other provinces in the country in respect of connecting households with electricity in 2014. Even so, 79.8 per cent of KZN households now have electricity.

3.9.2 Access to water and sanitation

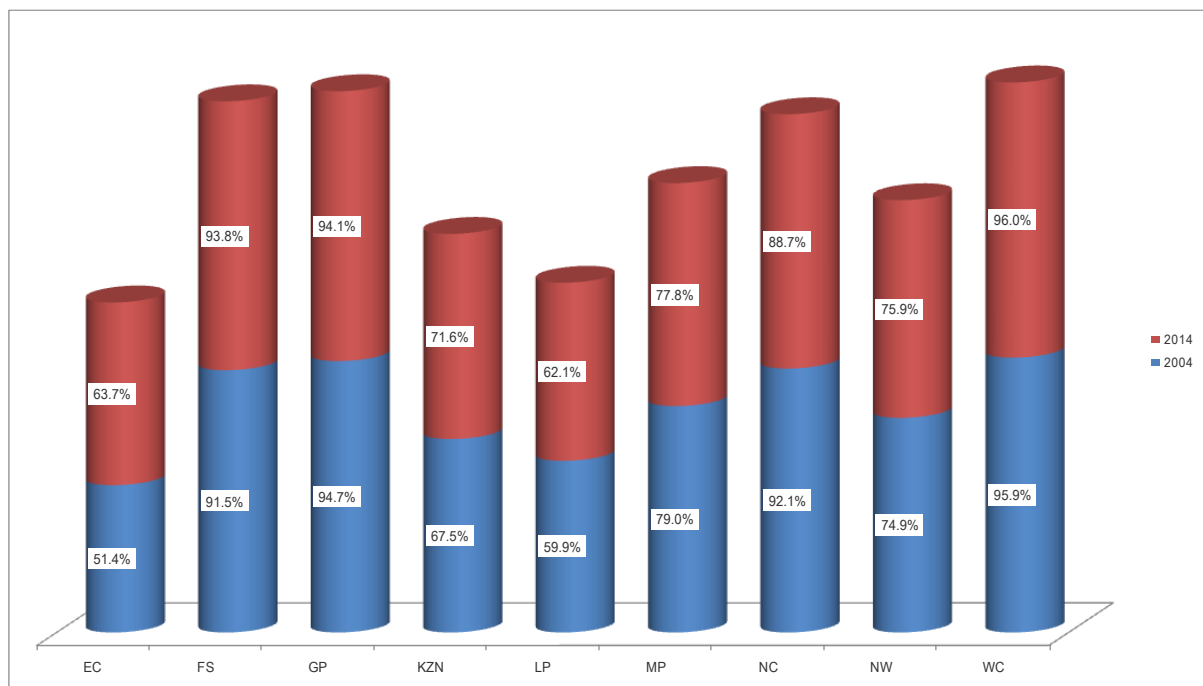
According to the United Nations (UN)¹⁶, water is at the core of sustainable development and is critical for socio-economic development, healthy ecosystems and for human survival. The resource is vital for reducing the global burden of disease and improving the health, welfare and productivity of the population.

Water is a critical input to the agricultural sector as the industry is crippled without it. It is an essential input for the survival of both livestock and crop, and by implication for food security

¹⁶ http://www.un.org/waterforlifedecade/water_and_sustainable_development.shtml

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 3.6: Share of households with piped water at or above RDP level by province, 2004 and 2014



Source: Global Insight, 2015

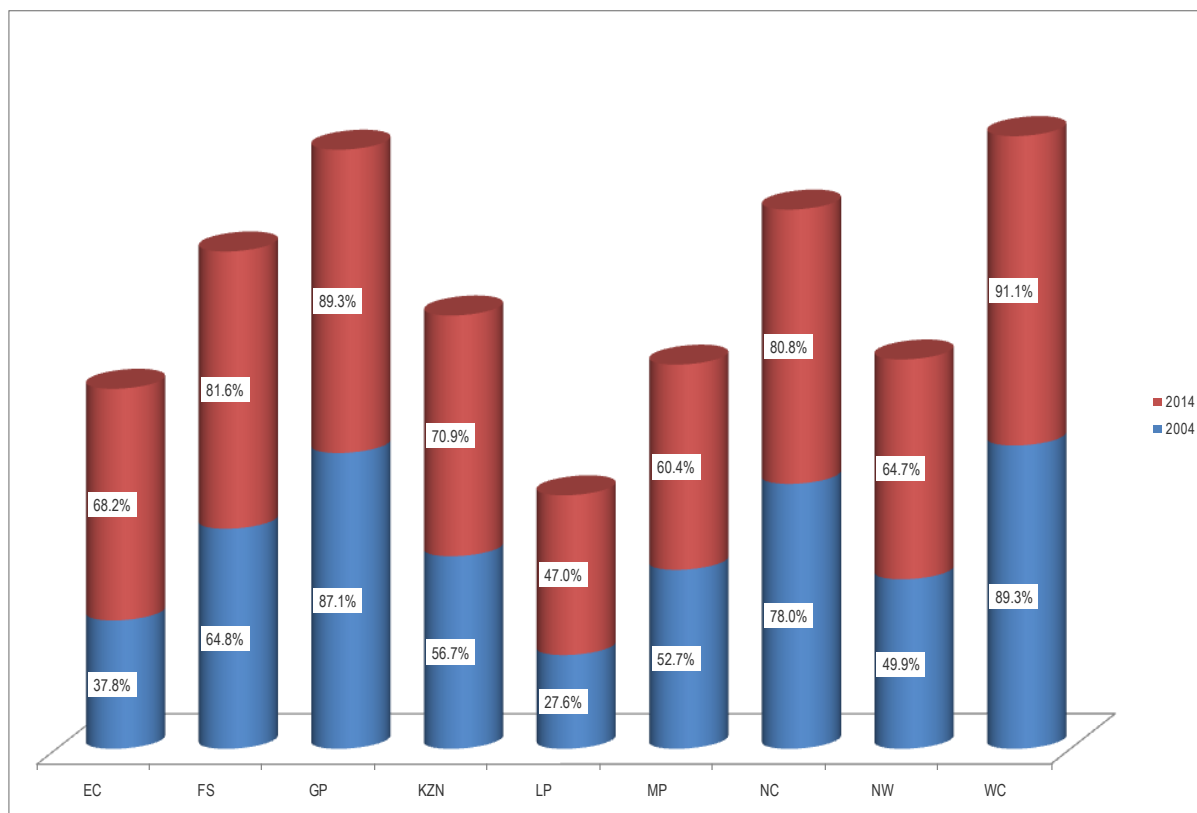
The high rate of urbanisation further exacerbates the problem for municipalities, who require water for sanitation and to prevent or eradicate slums. Environmental sustainability for communities therefore hinges mainly on the provision of housing, water and sanitation services. Sanitation¹⁷ is the safe 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

¹⁷<http://www.who.int/topics/sanitation/en/> [Accessed 30 January 2015]

attributable to diarrhoeal disease. Close to 90 per cent of the diarrhoeal disease burden is caused by 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 71.6 per cent and 70.9 per cent respectively.

Figure 3.7: Share of households with hygienic toilets by province, 2004 and 2014



Source: Global Insight, 2015

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 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 71.6 per cent and 70.9 per cent respectively.

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.

Chapter 4: Economic Review and Outlook

4.1 Introduction

Despite the cheaper oil price, the global economy is projected to continue to perform below expectations in 2016. However, economies in developed countries are improving, particularly in the United States (US). Emerging markets (Ems) growth prospects, especially for commodity-producing countries, remain constrained amid persistent capital outflows.

The South African economic growth outlook remains weak and expected to grow below one per cent in 2016. The sectors that are showing negative growth in South Africa (SA) include agriculture, mining, electricity and water, and to a lesser extent manufacturing. The future of mining is of great concern, because if this sector is negatively affected by a recession it would lead to a loss of thousands of jobs.

Financial markets have become volatile and currencies of EMs have become weak and they fluctuate widely. However, the rand's depreciation has been in excess of most of its EM peers. The prices of commodities that SA exports to the rest of the world have dropped significantly and continue to be low. Rising food prices, resulting from severe drought that is being experienced in the country, higher than expected inflation and rising interest rates are some of the major challenges facing SA. Furthermore, as indicated by the President in his 2016 State of the Nation Address (SONA), the country's economy is also affected by domestic factors such as the electricity constraints and industrial relations which are sometimes unstable.

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). This 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 and tourism in KZN. The chapter concludes by providing an analysis of international trade and inflation rate at both provincial and national levels.

4.2 Global economic outlook

According to the World Bank (2016), global economic growth continued to perform lower than projections in 2015, thereby slowing down to an estimated 3.1 per cent compared to the 3.4 per cent posted in 2014. Though the International Monetary Fund (IMF) (2016) expects this rate to improve slightly to 3.4 per cent in 2016, it is still below the 3.6 per cent projected in October 2015 (Table 4.1). The Goldman Sachs¹⁸ report, however, projects a slightly higher growth rate of 3.5 per cent in 2016. The slight upward trend in the global economy is mainly due to the moderate recovery in advanced economies, activity stabilisation among major commodity exporters, weaker capital flows and subdued global trade (World Bank, 2016).

Growth rate projections for developed nations are expected to improve slightly to 2.1 per cent in 2016, up from the 1.9 per cent estimated in 2015. The higher than anticipated recovery in the advanced economies in 2015 was to a large extent driven by stronger domestic demand as well as the improvement in credit conditions. This rate is projected to remain the same in 2017, partly in light of the effect on the US dollar appreciation and the impact on Japan of slowing trade in Asia (World Bank, 2016).

Table 4.1: World economic estimates and projections, 2013 to 2017

	Estimates			Projections			
	2013	2014	2015	IMF		World Bank	
				2016	2017	2016	2017
World	3.2	3.4	3.1	3.4	3.6	2.9	3.1
Advanced Economies	1.1	1.8	1.9	2.1	2.1	2.1	2.1
United States of America	1.5	2.4	2.5	2.6	2.6	2.7	2.4
Euro Area	-0.3	0.9	1.5	1.7	1.7	1.7	1.7
Japan	1.6	0	0.6	1.0	0.3	1.3	0.9
Emerging Market and Developing Economies	5.0	4.6	4.0	4.3	4.7	4.8	5.3
Russia	1.3	0.6	-3.7	-1	1.0	-0.7	1.3
China	7.7	7.3	6.9	6.3	6.0	6.7	6.5
India	6.9	7.3	7.3	7.5	7.5	7.8	7.9
Brazil	2.9	0.1	-3.8	-3.5	0.0	-2.5	1.4
Sub-Saharan Africa	5.4	5.0	3.5	4.0	4.7	4.2	4.7
South Africa	2.2	1.5	1.3	0.7	1.8	1.4	1.6

Source: IMF and World Bank, 2016

Stimulated by the robust household demand, economic performances between 2014 and 2016 in the US remain on a solid growth trajectory (OECD, 2015a). The report cites firm employment gains as continuing to curtail unemployment rate. Domestic demand is further expected to continue to be sustained by supportive financial conditions and the boost to

¹⁸ See 2016 Global Outlook by Goldman Sachs, available from <http://www.goldmansachs.com>, accessed on 12/01/2016.

household purchasing power from low energy prices and the stronger dollar (also see IMF, 2016).

Subsequent to this solid consumption spending by households, the US economy is estimated to have grown moderately at 2.5 per cent in 2015. This is the highest annual growth rate the US economy has recorded since the 2009 global economic meltdown. Real disposable income for households in the US has been improved by employment gains, declining oil prices and moderate wage growth (World Bank, 2016).

Economic growth in the eurozone continues on a positive trajectory, reflecting an estimated growth rate of 1.5 per cent in 2015. This may be, largely due to the improved performance in Germany and Spain. Gross domestic product (GDP) is expected to record a stable improvement of 1.7 per cent in 2016 and 2017 respectively. The strengthening growth rate in the euro area is partly induced by the on-going regional recovery. The continued quantitative easing (QE)¹⁹ by the European Central Bank (ECB) and the Bank of Japan are expected to boost global liquidity (World Bank, 2016).

Japan's economy is expected to recover marginally to 1 per cent in 2016, which is slightly up from 0.6 per cent in 2015. The OECD (2015b) cites rising real wages supporting consumer spending as the key driver of this slight improvement. The IMF (2016) further cites fiscal support, lower oil prices and accommodative financial conditions as also key drivers in the Japanese economic drivers. However, according the World Bank (2015), skill shortages are increasing, leading to a rise in prospects of a steady acceleration in wage growth.

Economic performance in EMs is expected to pick up modestly to 4 per cent and 4.3 per cent in 2015 and 2016, respectively, the lowest since the 2009 financial crisis. India continues to make a robust contribution, which is expected to remain the same at 7.5 per cent in 2016 and 2017. This is a slight increase from 7.3 per cent in 2015.

According to the OECD (2015d), public investment in India has picked up with faster clearance of key projects; better infrastructure and greater ease of doing business. This is further enhanced by the expanded fiscal policy, which is assumed to remain supportive of the economic performance. The report further cites public investment in the energy,

¹⁹Quantitative easing is a process of creating money by buying securities, such as government bonds, from banks, with electronic cash that did not exist before. This also includes the monetary policy tool of lowering interest rates by a central bank. QE is expected to stimulate the economy by encouraging banks to make more loans. See the Economist, "What is QE?", accessed on 15/01/2016, available from <http://www.economist.com/blogs/economist-explains/2015/03/economist-explains-5>.

transport, sanitation, housing and social protection sectors as critical in raising living standards for all.

The Russian economy contracted by an estimated -3.7 per cent in 2015 and is anticipated to continue on a negative trajectory at an estimated -1 per cent in 2016. The economy of Russia is, however, projected to stabilise and record 1 per cent economic growth rate in 2017. Falling oil prices, international sanctions and capital flight have reduced investment, domestic consumption and imports (OECD, 2016c & World Bank, 2016).

Economic growth in China continues to slow down. The World Bank (2016) maintains that economic expansion in this country was derailed by an acute slow-down in demand from other Asian countries, including China as well as through sluggish private consumption. Growth rate in China was estimated to be 6.9 per cent in 2015. This is projected to plunge to 6.3 per cent in 2016 before sliding further to 6 per cent in 2017.

In Brazil, the estimated contraction in the economy of -3.8 per cent which the country suffered in 2015 is expected to persist at an estimated -3.5 per cent in 2016 before realising zero economic growth rate in 2017. This is due to a needed fiscal adjustment, tighter monetary policy to contain inflation and a lack of investor confidence related to political uncertainty. Subsequent to confidence emanating from an improvement in macroeconomic policies, a positive growth trajectory is thus expected to unfold in 2017²⁰

The Sub Saharan Africa region is projected to accelerate to 4 per cent in 2016. This will be an improvement from the 3.5 per cent estimated in 2015. The World Bank (2016) cites a combination of external and domestic factors as responsible for the slowdown. External factors, according to the World Bank include: lower commodity prices, a slowdown in major trading partners, and tightening borrowing conditions. Domestic factors, on the other hand, include political instability and conflict, and electricity shortages.

4.3 National economic outlook

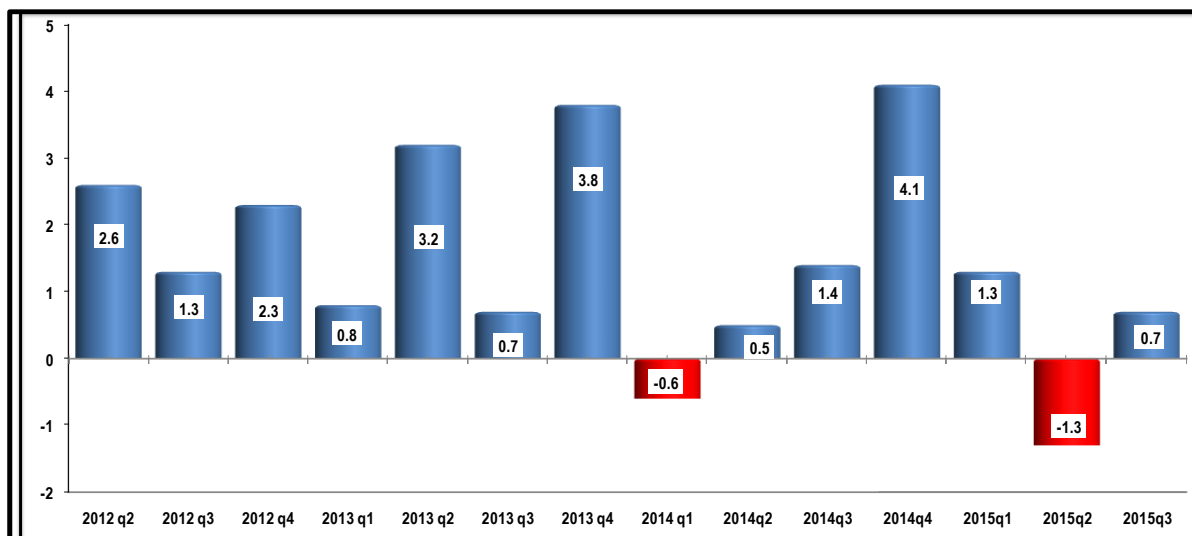
The South African economy grew by 1.3 per cent in the first quarter of 2015, easing from an upwardly revised 4.1 per cent expansion in the final quarter of 2014. Then, the country's

²⁰ See Brazil - Economic forecast summary (November 2015), accessed on the 10 January 2016, available at <http://www.oecd.org/eco/outlook/brazil-economic-forecast-summary>.

economy abruptly plummeted, thereby contracting by 1.3 per cent in the second quarter of 2015. The negative growth rate, however, improved marginally to 0.7 per cent in quarter three of 2015 (Figure 4.1).

Table 4.1 shows that economic growth continued to slow down in SA, recording an estimated downward revised 1.3 per cent in 2015. This was the weakest performance since the global financial crisis in 2009. The sluggish national economic performance in 2015 was due to among others, a slowdown in the primary sector whereby both the mining and agricultural industries contracted by 9.8 per cent and 12.6 per cent, respectively (Stats SA, 2015).

Figure 4.1: South African gross domestic product (GDP) growth rate, 2012:Q2 to 2015:Q3



Source: Stats SA, 2015

According to the World Bank (2016), the South African economic outlook for 2016 and 2017 is uncertain. The economic activity is therefore likely to remain subdued. Power supply, compounded by a severe drought is one of the challenges hindering economic growth in the country. The bank further cites under-investment in new capacity as one of the key drivers hindering the national economic performance. The argument by the World Bank is further reiterated by the Rating and Investment Information, Inc. (R&I) (2016)²¹, which stated that economic growth in SA is dragged down by uncertain business environments such as a spate of strikes and disruptions in power supply. Other concerns raised by the R&I include

²¹ Rating and Investment Information, Inc. (R&I) (2016): R&I Affirms BBB+/A-/a-2, Changes Outlook to Negative: Republic of South Africa, news release, accessed on 16/01/2016, available from https://www.r-i.co.jp/eng/body/cfp/news_release_A/2016/01/news_release_2016-A-0014_01.pdf

inflationary pressure from weaker demand, resulting from the lacklustre economy, electricity rate hikes, an increase in food prices caused by severe drought and effects from the weaker rand.

R&I has since affirmed the national sovereign credit rating at BBB+²², however, the rating agency revised the outlook from stable to negative. The latest rating by R&I follows similar trends by other agencies, namely Moody's, Fitch and Standard & Poor (S&P), who in the last quarter of 2015, rated SA at Baa2 and BBB-, respectively. With the exception of Fitch, the remaining three agencies have reflected a negative outlook for the country, implying that GDP growth might be lower than expected. The weak economic growth rate and the possibility that the country might not deliver on its commitment to fiscal prudence were cited as the main concerns resulting to the downgrade.

Following both the global and domestic economic trends, the South African Reserve Bank (SARB, 2015) has also revised its national economic growth forecast for 2015 and 2016 to 1.4 per cent and 1.5 per cent, respectively. This was one of the several cuts since the beginning of 2015. It must be noted that inherently, lower economic growth implies among others, 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. The projected subdued growth rate in the national economic performance is further confirmed by seasonally adjusted Barclays Purchasing Managers' Index (PMI)²³, which stood at 45.5 index points in December 2015. The average of 45.6 index points for the fourth quarter was 4.5 index points below the level recorded in the third quarter. This suggests that production growth is likely to come under renewed pressure in the future.

The SARB composite business cycle indicator²⁴ as well as both low business and consumer confidence also followed a downward trend in 2015, confirming the subdued economic

²²According to <http://multiple-markets.com>, BBB+ is the lower medium investment grade, weighting 6.5 of the possible 10 points rating related to AAA or prime and maximum safety ranking. The risk of owning a security increases for a country if it is ranked more towards the tail end of the rating scale, along on the downward trend of the rating scale (accessed on 20/01/2016).

²³ Barclays PMI is 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 the 20/1/2016).

²⁴ The composite business cycle leading indicator shows the direction of economic activity in the next 6 to 9 months (<http://www.resbank.co.za>) (accessed on 20/01/2016).

outlook. This sluggish economic performance is clearly not boding well with the unemployment rate which is estimated at 25.4 per cent as at the end of the third quarter of 2015 (Stats SA, 2015b).

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. However, Consumer Confidence Index (CCI), as compiled by the Bureau for Economic Research (BER)²⁵ dropped significantly in the last quarter of 2015. A CCI this low, signals a major slowdown in retail sales.

According to the SARB (2015), consumption expenditure by households continues to be hindered inter-alia by declining growth in disposable income and employment growth opportunities. The expenditure on consumption by households increased to 2.9 per cent in 2013. It, however, plummeted to 1.4 per cent in 2014 and 2015 and expected to drop further to 0.7 per cent in 2016, before moderating to 1.7 per cent in 2017, respectively. Also constrained by limited resources, growth rate in government spending is estimated to have dropped from 1.9 per cent in 2014 to 0.4 per cent in 2015. However, it is projected to rise moderately to 1.2 per cent in 2016 before contracting by -0.2 per cent in 2017.

Table 4.2: Macro-economic performance and projections, 2012 to 2018

	Actual			Estimate	Forecasts		
	2012	2013	2014	2015	2016	2017	2018
Final consumption expenditure by households: Total (PCE)	3.4	2.9	1.4	1.4	0.7	1.6	2.2
Final consumption expenditure by government	3.4	3.3	1.9	0.4	1.2	-0.2	0.2
Gross fixed capital formation (Investment)	3.6	7.6	-0.4	1.1	0.3	1.4	2.7
Gross domestic expenditure (GDE)	3.9	1.4	0.6	0.1	1.1	1.7	2.2
Exports of goods and services	0.1	4.6	2.6	9.5	3	4.6	5.2
Imports of goods and services	6.0	1.8	-0.5	5.3	3.7	4.5	4.9
Real GDP growth	2.2	2.2	1.5	1.3	0.9	1.7	2.4
GDP Inflation	5.5	6.0	5.8	4.0	6.7	6.3	6.0
Gross domestic product at current prices (R billion)	3 263.5	3 534.3	3 796.5	3 998.9	4 305.9	4 657.5	5 052.8
Headline CPI inflation (Dec 2012 = 100)	5.7	5.8	6.1	4.6	6.8	6.3	5.9
Current account balance (% of GDP)	-5.0	-5.8	-5.4	-4.1	-4.0	-3.9	-3.9

Source: National Treasury, 2015

²⁵ See FNB/BER Consumer Confidence Index, Issued by First National Bank, accessed on 20 January 2015 and available from www.ber.ac.za.

Growth in real gross fixed capital formation (investment) by both government and the private sector contracted to -0.4 per cent in 2014. It is, however, estimated to have accelerated moderately to 1.1 per cent in 2015, and projected to gain momentum over the 2016/17 Medium Term Expenditure Framework (MTEF) and reach 3.2 per cent in 2017.

Currency depreciation

According to Bloomberg²⁶, the rand has depreciated by 25 per cent against the US dollar in 2015. The loss was further extended to a record low in January 2016 when global markets tumbled out of fear from China's growth outlook and the devaluation of its currency (yaun)²⁷. Data from the SARB²⁸ shows that the rand has depreciated by close to 45 per cent against the US dollar between January 2015 and January 2016.

Since the beginning of the year, the rand was among the most severely affected currencies among EMs. As clearly pointed out by Bloomberg, currency analysts across the world have already developed pessimistic views about the rand. This is due to structural weaknesses of the national economy and the decline in commodity prices. The pessimistic view is also exacerbated by the risk that the country might lose its investment-grade rating and thus weakening the rand further down to the lowest level. Speculation is rife that the rand could fall to around R20 per dollar should SA's credit rating be cut to junk status²⁹.

The ailing rand is one of the contributing factors that prompted the SARB to raise the interest rate twice in 2015 by 25 basis points at a time, a trend that is expected to persist in 2016. Though this may look good in supporting the sharply weaker rand, it could further damage the economy, particularly the prices of imported goods. This situation is further compounded by the worst drought ever experienced in the country over the past two decades, which is driving food prices higher and is likely to push the agricultural sector into recession.

Collectively, the rand depreciation, the effect of the drought on food prices and electricity tariff increases are excessively outweighing the benefits of the current lower oil prices.

²⁶ See <http://www.bloomberg.com/news/articles/2016-01-20> (accessed on 20/01/2016).

²⁷ It must be noted that China is one of SA's largest trading partners.

²⁸ See the SARB, available from: <https://www.resbank.co.za/Research/Rates/Pages/Selected-Historical-Exchange-And-Interest-Rates> (accessed on 21/01/2016).

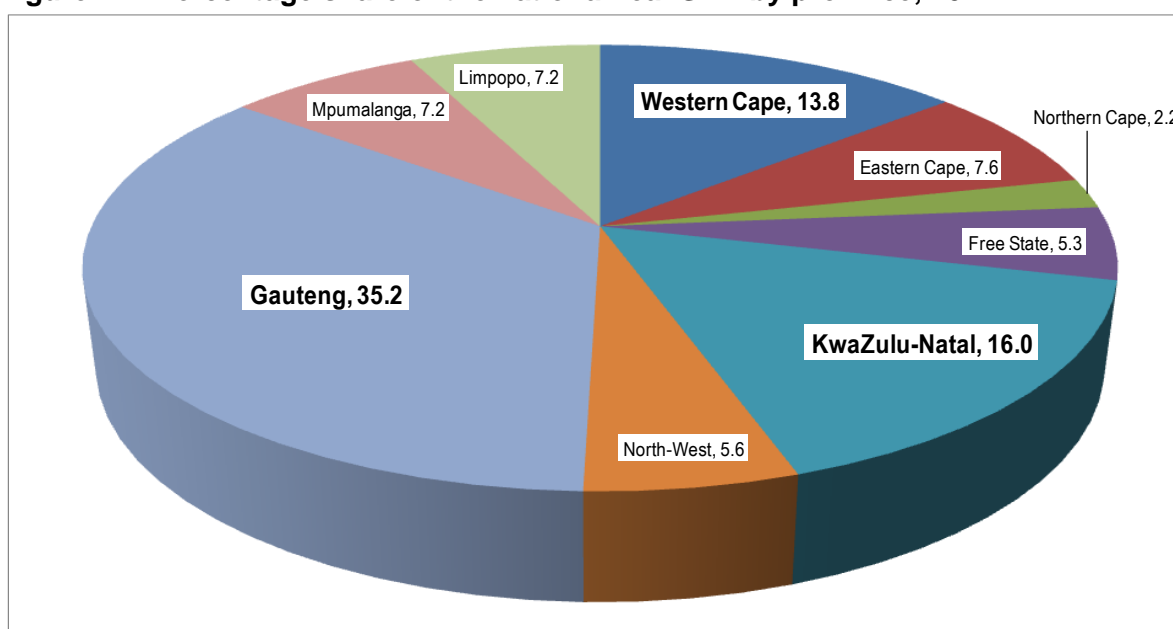
²⁹ Junk status refers to bonds with Standard & Poor's ratings below BBB or Moody's ratings below Baa. These bonds are called "junk" because of their higher default risk (<http://mockingbird.creighton.edu/english/fajardo/teaching/SRP435/junkbond>) (accessed on 21/01/2016).

Ideally, weaker currency is expected to benefit a country in terms of export earning, unfortunately, this is not the case in SA, particularly given the persisting economic structural constraints.

4.4 KZN economic review and outlook

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 R478.27 billion in 2014, making KZN the second largest contributor to the economy of the country at 16 per cent, after GP with 35.2 per cent. This was, however, slightly above 13.8 per cent recorded in the WC province (Figure 4.2).

Figure 4.2: Percentage share of the national real GDP by province, 2014

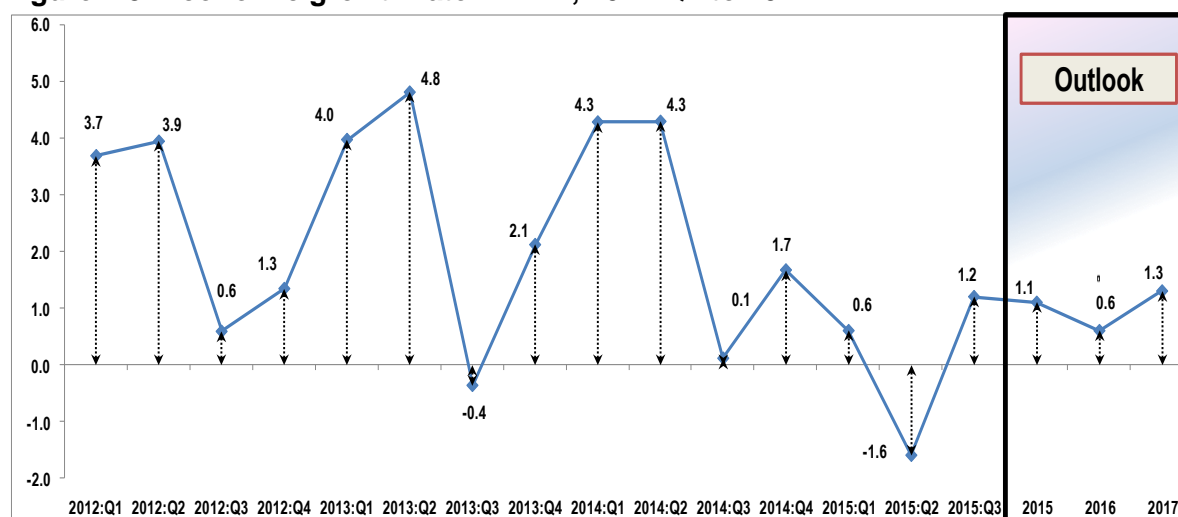


Source: Global insight, 2015

Given the economic activities that take place within eThekweni³⁰, 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).

³⁰KZN province has one metro (eThekweni) ten district municipalities which are: Ugu, uMgungundlovu, Uthukela, Umzinyathi, Amajuba, Zululand, Umkhanyakude, uThungulu and iLembe

Figure 4.3: Economic growth rate in KZN, 2012:Q1 to 2017



Source: KZN Treasury Economic Model, 2015 and Global Insight, 2015

Following the global and national trends, the provincial economy recorded a seasonally adjusted and annualized quarterly increase of 1.2 per cent in the third quarter of 2015, compared to -1.6 per cent contraction suffered in quarter two of 2015. Similar to the national projections, the provincial economic outlook is in a subdued trajectory but expected to grow at 0.6 per cent and 1.1 per cent in 2016 and 2017, 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.

4.4.1 Sector analysis

Table 4.3: Sector analysis growth rates and projections, 2008 to 2018

	Actual						Estimates	Projections			
	2008	2009	2011	2012	2013	2014		2015	2016	2017	2018
Primary Sector	15.0	-6.1	8.2	3.3	6.0	6.7	-1.0	5.2	4.0	0.0	1.0
Agriculture	21.6	-3.4	9.2	1.2	1.8	5.7	-2.9	1.4	0.0	-2.0	-0.7
Mining	-6.6	-2.7	-1.0	2.1	4.2	1.1	1.9	3.8	4.0	2.0	1.7
Secondary Sector	7.9	-5.2	4.3	4.4	4.0	1.9	0.7	2.8	3.4	7.1	7.1
Manufacturing	2.2	-10.4	2.8	1.9	0.9	0.3	0.0	1.2	1.7	3.0	2.9
Electricity	-4.5	-4.3	1.0	0.2	-0.1	0.3	-0.5	0.5	0.6	2.8	2.9
Construction	10.1	9.5	0.5	2.3	3.1	1.3	1.2	1.1	1.0	1.2	1.4
Tertiary Sector	15.9	2.6	15.1	11.4	9.7	8.2	6.0	4.0	5.1	7.1	10.2
Trade	1.5	0.2	4.7	3.4	1.5	0.8	0.3	0.9	0.9	0.0	2.3
Transport	3.7	0.1	2.8	2.5	2.3	2.7	1.7	1.9	2.1	3.3	3.9
Finance	5.8	0.0	4.1	2.0	3.2	2.0	2.7	1.5	1.9	2.8	2.9
Community services	4.9	2.3	3.4	3.5	2.8	2.7	1.3	-0.3	0.2	1.0	1.1

Source: Global Insight, 2016

As observed in table A4.1 in the appendices, the average annual growth rate improved moderately to an estimated 3.6 per cent between 2004 and 2014. However, the sector's contribution to the provincial real GDP declined slightly from 6.9 per cent in 2004 to 6.8 per cent in 2014 (Table A4.2, in appendices). Although agriculture reported moderate annual average growth rate of 3.6 per cent over the ten year period under review, it lost momentum and contracted by 2.9 per cent in 2015. This is after the industry posted a robust growth rate of 5.7 per cent in 2014 (Table A4.1 in appendices & Table 4.3). The moderate performance by agriculture in 2014 was due to the vigorous growth rate in *Fishing & operations of farms* (9.5 per cent), *Forestry & lodging* at 5.9 per cent and *Agriculture & hunting* at 5.5 per cent (Table A4.4 in appendices).

Though rain started to fall towards the end of 2015 and January 2016, the effects of the disturbing drought that has crippled the national economy will be felt for years, particularly by the agricultural sector. It is within this backdrop that comprehensive and sustainable programme by government and other stakeholders is urgently required to assist in re-establishing food production.

Mining (-0.4 per cent) contributed towards poor performance by the primary sector between 2004 and 2014 (Table A4.1 in appendices). The decline in the mining sector was to a large extent due to a sharp contraction in the *mining of metal ores* (-2.9 per cent), coupled by another negative growth rate of 0.9 per cent in the *mining of gold & uranium ore* (Table A4.4 in appendices); this trend persisted in 2013.

With the exception of agriculture and mining industries, a substantial proportion of manufacturing production (56.8 per cent) comes from eThekweni (Table A4.6 in appendices). Manufacturing grew moderately at 2.1 per cent in the province between 2004 and 2014 (Table A4.1, in appendices). Manufacturing exhibited the fastest growth in iLembe and uMgungundlovu District Municipalities, each growing at an estimated annual average rate of 3 per cent over the same period. The phenomenal growth of the sub-sector in iLembe was mainly due to high growth in *textile, clothing & leather goods* (5.5 per cent) as well as *fuel, petroleum, chemical & rubber products* (3.9 per cent) (Table A4.3, in appendices).

The electricity sector grew by a meagre annual average of 0.7 per cent in the province between 2004 and 2014 (Table A4.1). This growth rate is estimated to have contracted by 0.5 per cent in 2015 but projected to gain momentum and increase slightly to 0.5 per cent and 0.6 per cent in 2016 and 2017, respectively (Table 4.3).

Construction was the fastest growing sector (6.4 per cent) over the period 2004 to 2014 (Table A4.3, in appendices), but recorded a mere 1.3 per cent growth rate in 2014 and 1.2 per cent in 2015. This is further projected to drop slightly to 1.1 per cent in 2016, before dropping marginally to 1 per cent in 2017 (Table 4.3). A moderate growth rate in construction in 2014 was recorded across the districts in the province; however, eThekweni (1.1 per cent) and Ugu (0.7 per cent) posted performances below the average provincial growth rate (Table A4.4, in appendices).

Trade showed a positive average growth of 3.5 per cent over the ten year period under review. This solid trend was, however, abruptly interrupted and plummeted to 0.8 per cent and 0.3 per cent in 2014 and 2015, respectively. The robust performance in trade over the ten year period was enhanced by the *sales & repairs of motor vehicles* at 5 per cent (table A4.3, in appendices).

Finance (5.1 per cent) was the second fastest growing sector in the province between 2004 and 2014, but slowed down to 2 per cent in 2014 and 2.7 per cent in 2015 (Table 4.3). Umkhanyakude and iLembe posted the highest growth rates of 7.7 per cent and 6.9 per cent respectively in this industry when compared with other districts. The robust performance in finance was by far supported by growth in the *finance and insurance* subsector at 6 per cent (Table A4.4, in appendices).

Transport (3.5 per cent) is one of the fastest growing industries in the province over the 2004 to 2014 period (Table A4.3, in appendices). However, it slowed down moderately to 1.7 per cent in 2015 but is projected to rise to 1.9 per cent in 2016 and 2.1 per cent in 2017 (Table A4.3, in appendices). *Air transport & transporting* activities (7.2 per cent) led the growth trajectory, followed by *post & telecommunication* at 6.3 per cent (Table A4.3, in appendices).

Government exhibited moderate growth of 3.5 per cent over the period under review, but this slowed to 2.7 per cent in 2014 and 1.3 per cent in 2015 (Table A4.1, in appendices & Table 4.3). In terms of sector contribution towards provincial real GDP, government makes up an estimated 22.1 per cent. 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 2004 and 2014, while the primary and secondary sectors' contributions to GDP and employment had been declining³¹. This indicates that the economy is

³¹ See Section 8.2.1 (Chapter 8) of this publication for details in employment by sector.

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

4.5.1 Introduction

Travel and tourism has become the most important sector in most countries in the world. This is confirmed by the statistics displayed by the World Travel and Tourism Council (WTTC) (2015) indicating that in 2014, travel and tourism contributed quite a sizable percentage towards the world's GDP. This contribution constitutes direct and indirect activities towards tourism. The indirect contribution includes investment spending such as construction of new hotels and purchases of aircrafts and other assets that are promoting tourism; government spending that assist in promoting travel and tourism is also considered as an indirect contributor towards tourism³². Direct contribution includes marketing and promotions, security services, administration and other services that supplement tourism. This sub-section deals with an overview of world, national and KZN tourism.

4.5.2 World travel and tourism

According to the WTTC (2015), the direct contribution by the industry towards the global GDP was estimated at 3.1 per cent in 2014 and this is projected to rise to 3.7 per cent in 2015. The publication also projects that in ten years from now the industry is expected to grow its contribution towards the global GDP to 3.9 per cent per annum.

The sectors that are seen as main contributors to the growth of travel and tourism in the world are hotel occupancy and international air passenger demand which grew by around 5.4 per cent in 2013. Business and leisure spending also grew by 3.4 per cent in 2014. The leading global countries that benefited the most from travel and tourism in the world are South Asia, led by India and the Middle East when it comes to total contribution to GDP. Europe follows South Asia where it out-performed North America in 2014. Africa tourism picked up in 2014 compared to 2013 even though the continent was stigmatised by the outbreak of the Ebola virus, with the exception of Kenya where terrorism discouraged travel to the country.

³² 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.

The predictions or outlook of 2015 is also considered to be higher than that of 2014 as far as global growth is concerned. It is projected that global GDP growth of 2015 will be higher than that of 2014 at 3.7 per cent. Domestic travel and tourism spending growth is expected to rise from 3.1 per cent in 2014 to 3.7 per cent in 2015. Similarly, global travel and tourism investment is expected to rise from 3.9 per cent in 2014 to 4.8 in 2015. The world visitor export growth is expected to slow down in 2015. This is in line with the slowdown of world trade growth which is influenced by weaker travel fares that emanate from cheaper oil prices. This will affect most of the oil exporting countries that are faced with the problem of weaker currencies compared to a stronger dollar. On the other hand, lower oil prices benefit the oil importing countries that have already reaped these benefits through lower inflation which is boosting the real disposable income which in turn increases purchasing power. The ten year outlook for travel and tourism investment is projected to be lower than that of 4.1 per cent in 2014 and predicted to be even lower (3.8 per cent) in 2015.

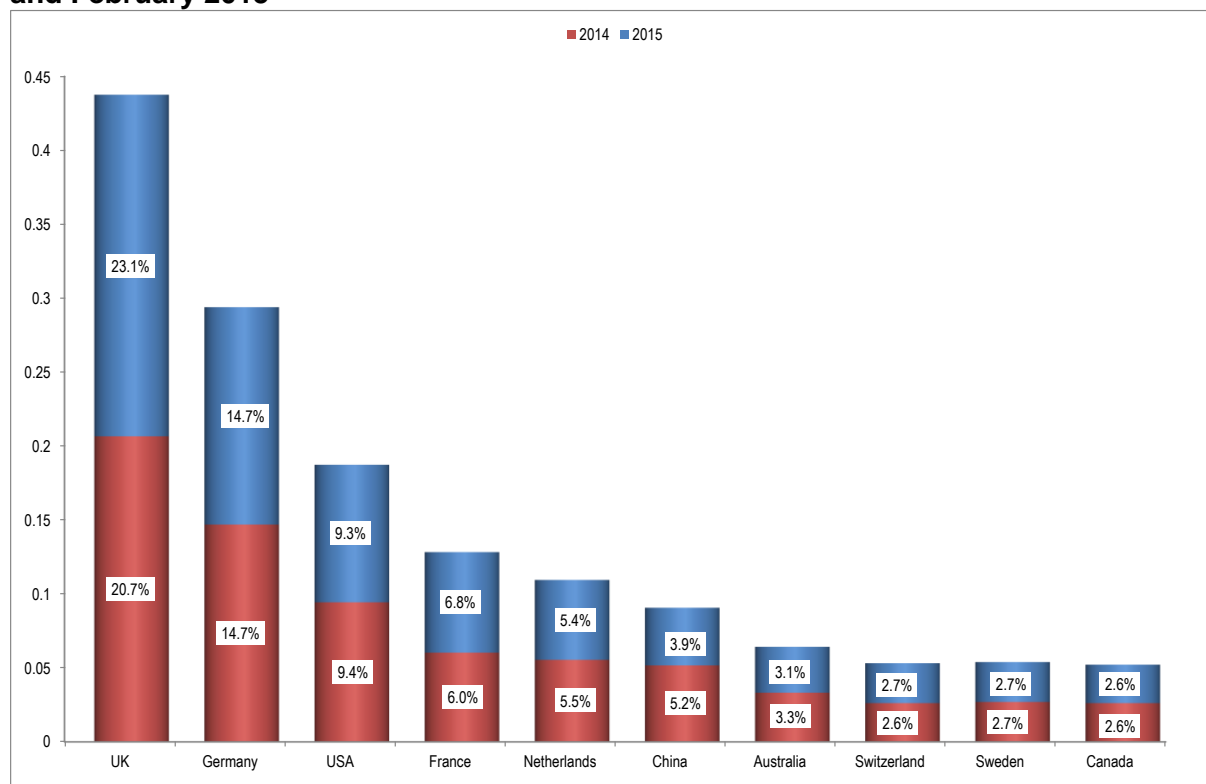
The travel industry has also a significant role to play when it comes to global employment. In 2014 it generated an estimated 105 408 000 direct jobs (3.6 per cent) of total employment and it is projected to grow by 2 per cent in 2015 to an estimated 107 519 000. The forecast goes further and looks at 2025 (ten year period) and estimates that the number of direct jobs that would be generated will be 130 694 000. This is an increase of 2 per cent per annum. When looking at the total employment where direct and indirect jobs were created in the industry, the picture changes tremendously. A total number of 276 845 000 jobs were generated in 2014 (9.4 per cent of total employment). The ten year forecast (2025) of jobs that will be supported by this industry is estimated at 356 911 000 jobs which is a growth of 2.3 per cent per annum (WTTC 2014).

The money spent by foreign visitors is the key component of the direct contribution of \$1 383.8 billion (bn) in 2014. In 2025, the industry is projected to have generated expenditure of \$1 796.2 bn. Capital investment attracted by this industry in 2014 is \$14.4 bn. The information in this section gives a clear indication that tourism industry is one of the dominating sectors in the economy of the world.

4.5.3 Travel and tourism in SA

SA is rated among the 184 countries in the world that consider tourism as an important contributor towards GDP. Scowsill, President and Chief Executive Officer (CEO) of WTTC has also realised the importance of tourism in South Africa when, in his celebration of SA's tourism speech, he acknowledged that travel and tourism contributes almost 10 per cent of GDP and creates over 1.4 million jobs to the South African economy. It is an undeniable fact that the changing of visa laws in 2014 has negatively impinged on the tourism industry in 2015. But, this is expected to change as the president Honourable Jacob Zuma mentioned in his SONA that an advantage of the exchange rate as well as the recent changes of visa regulations must be considered to boost inbound tourism. He alluded to investing one hundred million rand a year to promote domestic tourism, and by doing this, encouraging South Africans to tour their country. The decline in the number of tourists visiting SA between 2014 and 2015 is shown in Figure 4.4.

Figure 4.4: Number of tourists from ten leading overseas countries in February 2014 and February 2015



Source: Stats SA, 2015

Figure 4.4 shows that United Kingdom (UK) has been leading with the number of tourists in both years under review. The reason for British tourists to be number one to visit SA compared to other countries might be because of their stronger pound compared to SA rand

and not all tourists required a visa to visit SA. The South African weather also might be a good contributor towards this situation. People from Germany and USA are second and third most interested to visit SA.

Table 4.4: Number of visitors by continent, 2014 and 2015

	Europe	North America	South America	Australia	Middle East	Asia	Africa
2014	151 113	26 727	6 420	8 553	3 032	26 100	511 460
2015	142 805	23 817	3 828	7 247	2 737	18 595	481 302

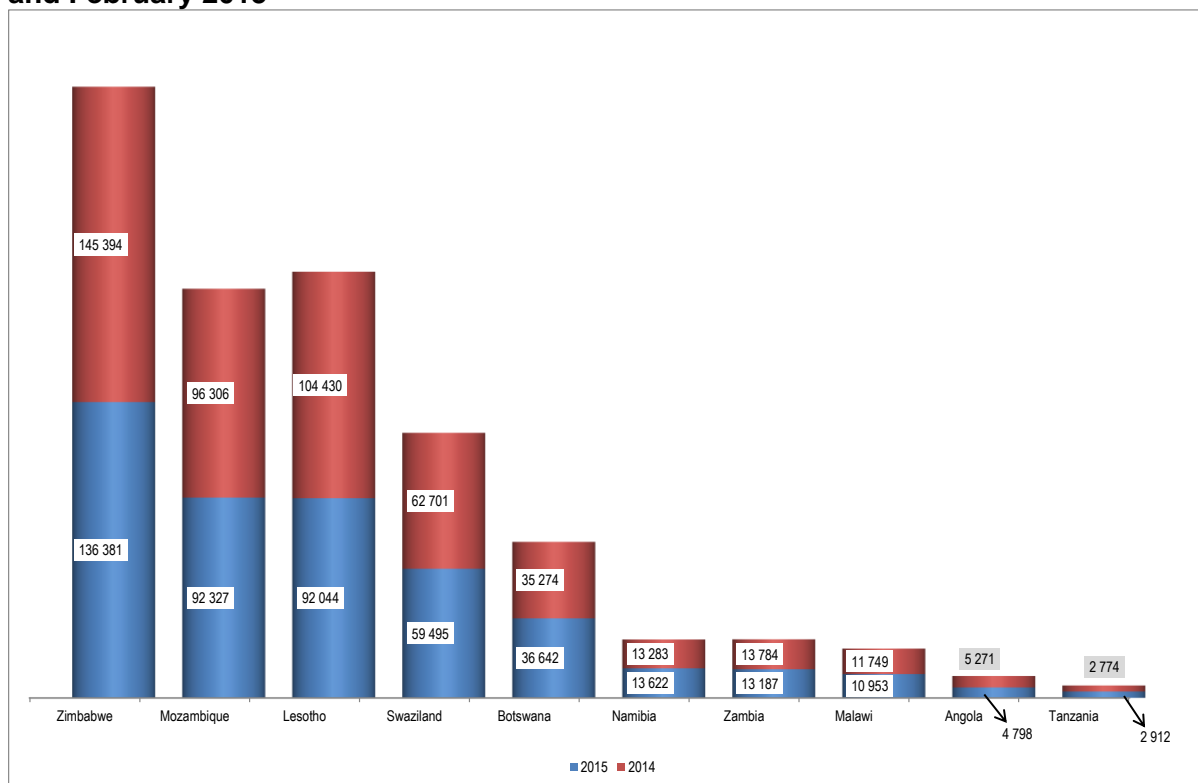
Source: Stats SA, 2015

Although SA receives more visitors from UK, its leading partner in tourism is its own continent of Africa. Table 4.4 shows the difference between tourists from overseas and Africa. Tourists from Africa are more than double compared to tourist from the rest of the world for both 2014 and 2015. The least number of tourists coming to SA are from the Middle East, Australia, South America and Asia. Most of these continents' visitors are dominated by the Southern African Development Community (SADC) which is followed by East Africa. In all seven continents, the number of tourists have declined during the said period between February 2014 and February 2015. It is assumed that this situation has been the result of change in visa laws that were implemented in 2014.

According to Stats SA (2015), among the African countries, the most visitors to SA were from the Southern African Development Community (SADC) countries³³ as indicated above - 97.1 per cent. Among the SADC countries, Tanzania, Botswana and Namibia received more tourists during 2015 than in 2014; otherwise all other SADC countries showed a decrease in tourists coming to SA during the same period. Figure 3.5 shows the number of tourists from ten leading Southern African Developing Community (SADC) between February 2014 and February 2015.

³³ The countries that form part of the SADC community are: Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe.

Figure 4.5: Number of tourists from the ten leading SADC countries in February 2014 and February 2015



Source: Stats SA, 2015

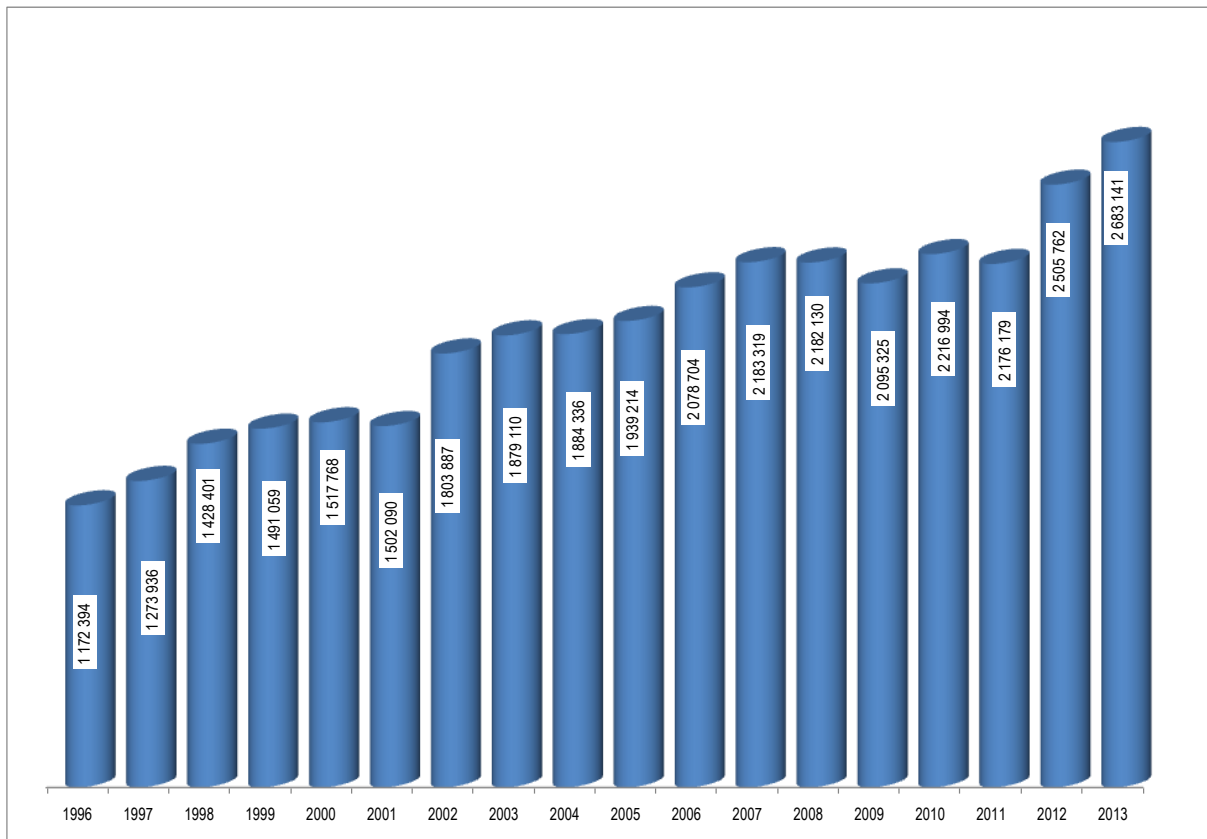
This diagram shows the same trend as overseas tourists where the number of tourists has declined in 2015. It is speculated that this decrease is due to new restrictions on visa laws imposed by SA. Tourism has contributed towards GDP, employment, exports and investment. According to WTTC SA, the total contribution towards GDP by the industry in 2014 is estimated at R357 bn (9.4 per cent of the GDP). This contribution is projected to grow in 2015 by 3.4 per cent. The publication also forecasted a 10 year period of contribution at a rise of 4.3 per cent per annum which counts to R561.1bn (10.4 per cent of the GDP in 2015).

The industry also contributes quite significantly towards job creation in the country. In 2014, the industry contributed 9.9 per cent of total employment (1 497 500 jobs). This is expected to rise by 3.6 per cent to 1 551 500 jobs (10.0 per cent) in 2015. By 2025, the estimation is a 2.7 per cent rise per annum which constitutes a total of 2 028 000 jobs (11.5 per cent) of total employment.

4.5.3.1 Visitor exports and investment

Visitor export is money spent by foreign visitors to a country. This is the key contributor in the direct contribution by tourism. In 2014, the contribution by the industry in this sector is estimated at R102.9bn and it is expected to grow by 4.5 per cent in 2015. Tourism has also attracted capital investment directly and indirectly to SA. In 2014, capital investment attracted by tourism reached R60.5bn. This is expected to rise by 0.3 per cent in 2015 and by 2.3 per cent per annum in 2025 to R76bn.

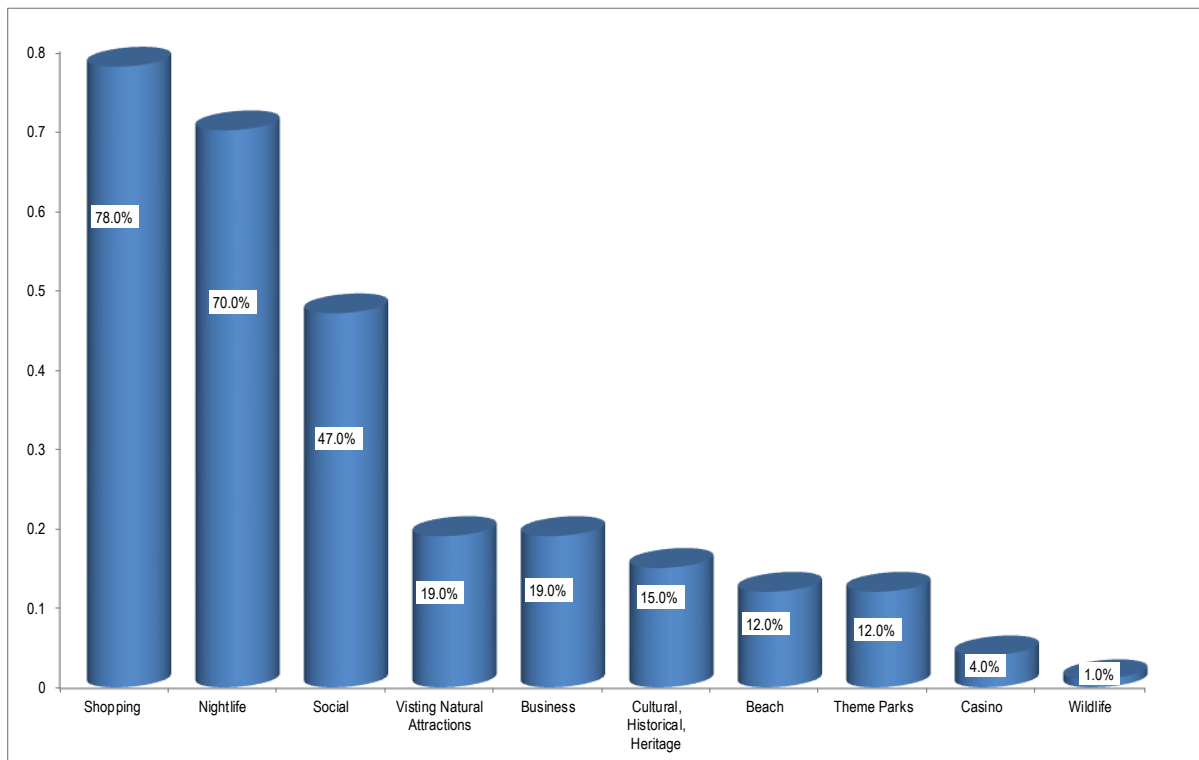
Figure 4.6: SA's overseas (long haul) visitors from 1996 to 2013



Source: Zulu Kingdom.org, 2014

Since 1995 to 2013, visitors to SA have more than doubled. This shows how SA has attracted visitors from outside since the death of apartheid. Prior to 1994, there were fewer than a million visitors. According to the South African Tourism (SAT) (2014), there were 404 391 visitors to SA in 1980. Fourteen years later, in 1994, this number nearly doubled to 704 630 visitors. This number continued to increase to 1 071 839 in 1995 which further increased to 2 683 141 in 2013. Visitors to the country have different reasons for visiting. Figure 4.7 shows the major purposes of visiting the country in 2014.

Figure 4.7: Purpose of visit in SA by percentages, 2014



Source: Zulu Kingdom.org, 2014

This diagram illustrates that shopping dominated the reasons people chose to visit to the country. This gives an opportunity for SA to produce more goods and services to cater for people who come to the country to shop.

4.5.4 Travel and tourism in KZN

KZN is SA's top holiday destination. This may be because KZN is situated on the east coast and as such is gifted with the warm Indian Ocean, golden beaches and warm weather – even during the winter months, the weather remains moderate; range of mountains (which provide visitors with excellent sightseeing, mountain hiking and in winter ice climbing), cycling, abseiling and white water rafting as well as wonderful game reserves (where visitors can view wild animals including the Big 5 and many species of birds). According to KZN Travel and Tourism Guide, the Isimangaliso wetlands in St Lucia is the second World Heritage Site. It is also home to world class sport, for example: golf, two famous marathons (Duzi and Comrades) and the Mandela marathon.

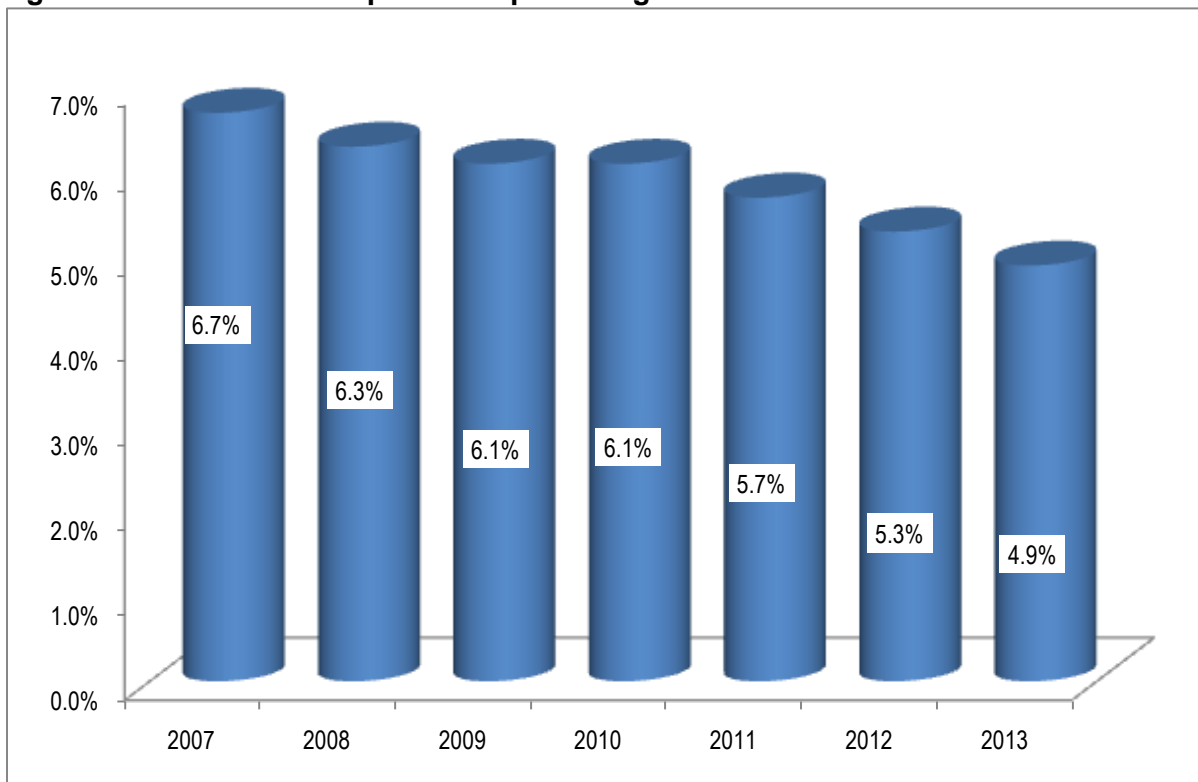
Recently, in September 2015, it was announced that the KZN province will be host to the Common Wealth Olympic Games. This is a popular and wonderful event as people will come

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 invite many more world events in 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.

4.5.4.1 Contribution to GDP by the tourism industry

Figure 4.8 shows the total tourism expenditure as a percentage of GDP in KZN. The spending of tourism in the province has been marginally deteriorating since 2007 to 2013. Even though tourism as a percentage of GDP is declining, in absolute values it increased for the period under review. The reason for this trend is that GDP is increasing at a much faster pace than the corresponding increase in tourism.

Figure 4.8: Total tourism spend as a percentage of GDP in KZN from 2007 to 2013



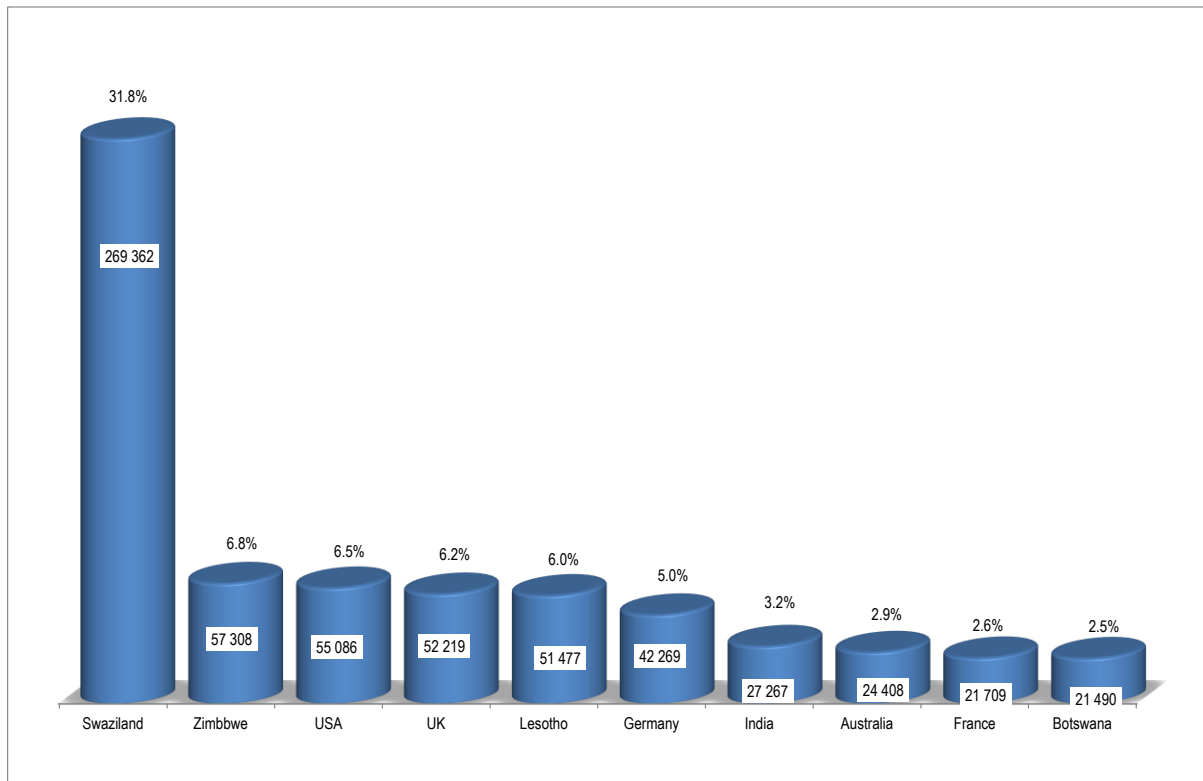
Source: Global Insight, 2014

4.5.4.2 Tourists visiting KZN by country of origin

Figure 4.9 shows the tourists who visited KZN in 2013. Seven of these are from outside Africa, while three of them are from within the continent, more specifically the SADC. The

highest proportion of visiting tourists from overseas come from the US (6.5 per cent), followed by the UK (6.2 per cent), while Germany, India, Australia and France contributed a rate of 5 per cent and below. Within the SADC, Swaziland had the highest number of people visiting KZN (31.8 per cent), followed by Zimbabwe and Lesotho at 6.8 per cent and 6 per cent, respectively.

Figure 4.9: Tourists visiting KZN by country of origin in numbers and percentages, 2013



Source: SAT, 2013

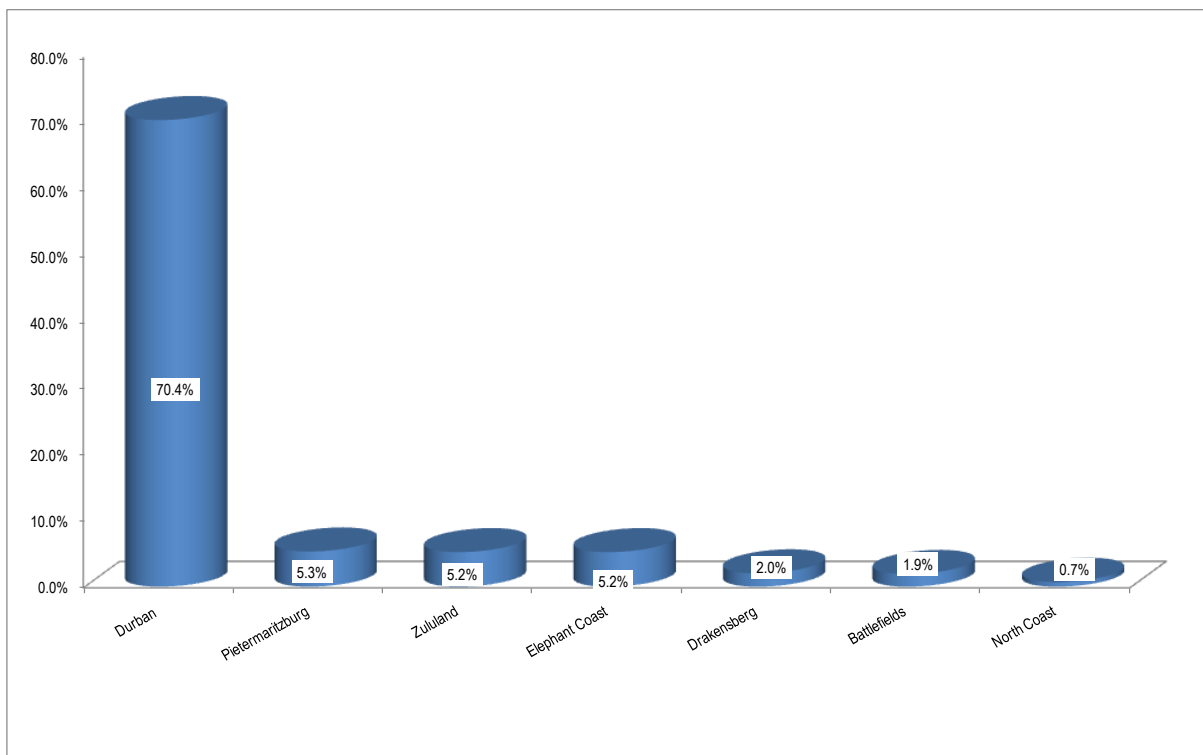
4.5.4.3 Most visited destinations in KZN

Figure 4.10 shows the destinations tourists visited the most in the KZN province during 2013. During 2013, Durban was one of the most visited destinations in the province of KZN. Nearly three-quarters of all tourists (70.4) visited Durban as opposed to other tourist areas such as the Drakesberg (2 per cent) and the Battlefields (1.9 per cent). People are attracted to visit Durban due to the following factors: Infrastructure and the warm Indian ocean are among a series of factors attracting tourists to Durban. The Durban July Handicap attracts many tourists during the month of July. This event brings together all the top horses and their riders to win the most prestigious race of the year. It also gives an opportunity for designers to showcase their designs. The city is also the custodian owner of Moses

Mabhida, a beautiful stadium in South Africa which is host to a number of local and international football games during the year.

There are also other sporting interests which boost the city's tourism. The city is known for its rugby team, "the Sharks", and its soccer team the "Golden Arrows" and "AmaZulu" Football Clubs. The swimming event, the Midmar mile, Amashova, the Cycle race and the running race, the Comrades as well as the canoe race, the Duzi marathons are prominent sporting events which attract global as well as national communities of all ages, races and gender. The second most visited destination in KZN is the Elephant coast, which hosted approximately 22.3 per cent of the total tourists who visited the province in 2011. The tourists visiting the Elephant Coast are those that are passionate about nature, and thus interested in seeing wild animals in their natural environment, while the Drakensberg (15.8 per cent) attracts tourists who are interested in outdoor activities, for example: hiking up mountains, and / or swimming in fresh water rivers.

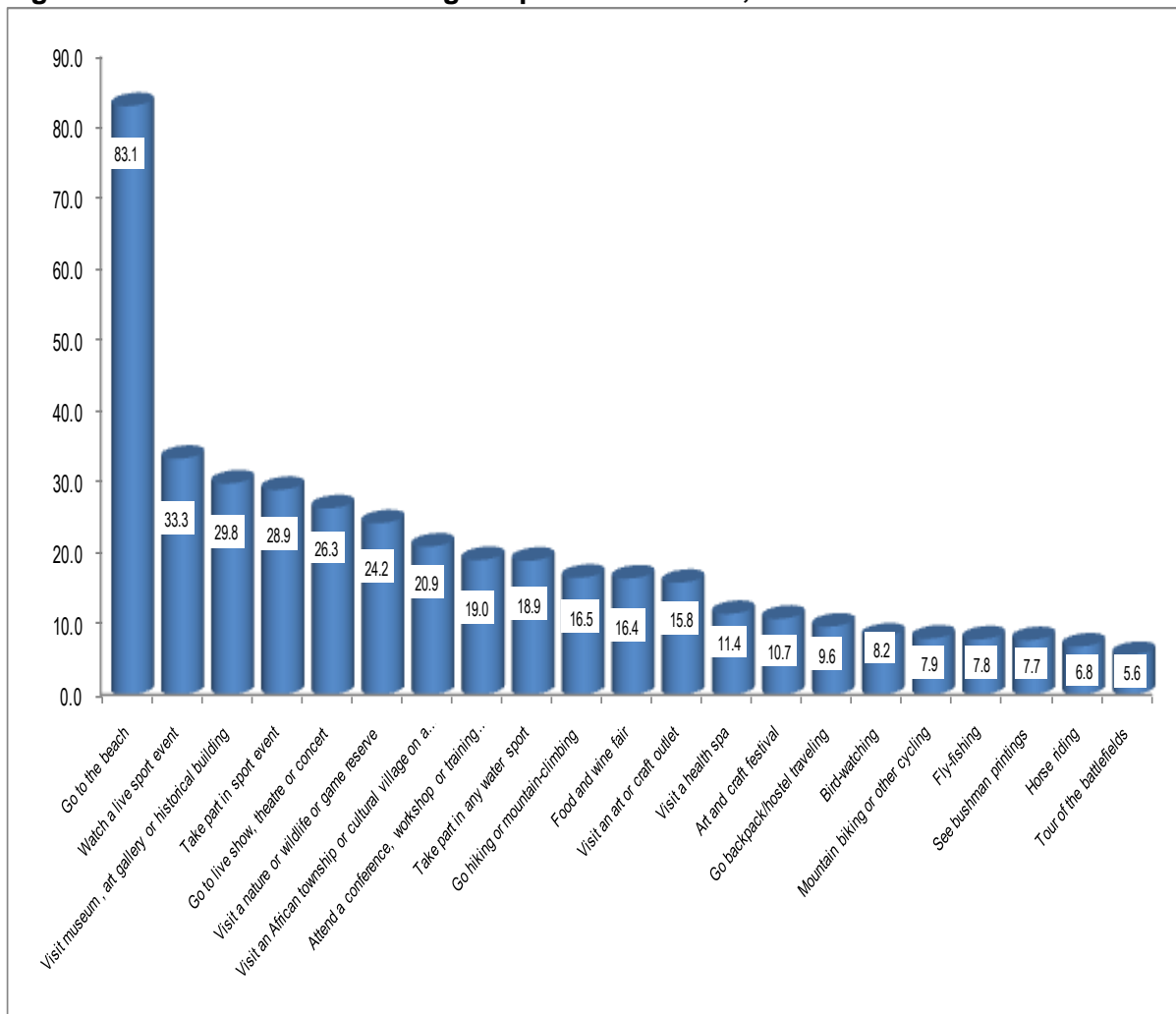
Figure 4.10: Percentage most visited destinations in KZN 2013



Source: SAT, 2012

This city enjoys the advantage of having beaches that are developed to the world standards. Among tourist attractions that take place in the city of Durban are uShaka Marine World, and the world class 'Moses Mabida' stadium where a number of both local and international sporting activities take place.

Figure: 4.11: Reasons for visiting the province of KZN, 2014

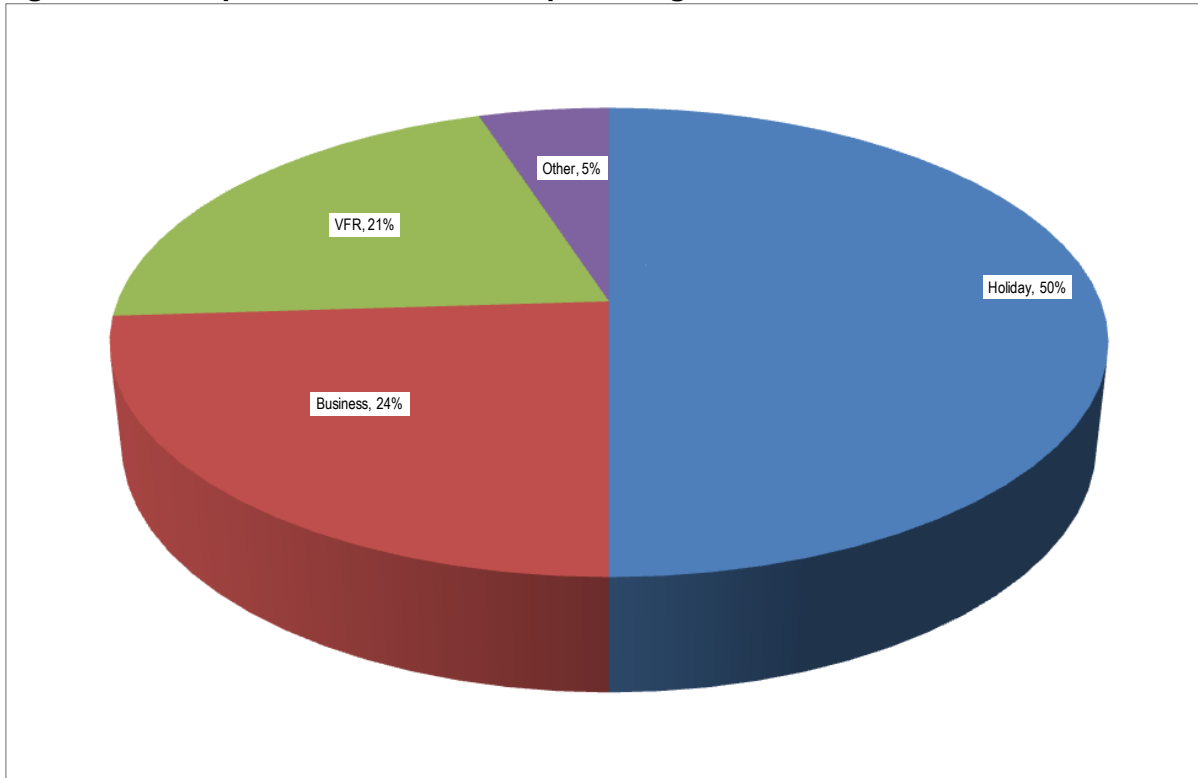


Source: SAT, 2014

Figure 4.11 shows that 83.1 per cent of all visitors to the KZN province visited KZN beaches. This is the sign that KZN beaches are the source of income to many KZN residents and creates most of the indirect jobs in the tourism industry. The second activity that tourists most enjoyed doing in Durban was watching live sport events (33.3 per cent), such as rugby or football.

Tourists have different purposes of visiting the province. As depicted in Figure 4.12, most tourists come to the province for holidays where in 2014 about 50 per cent of the tourists were holiday makers. Others come for business ventures (24 per cent) or visiting friends and relatives (VFR) (21 per cent).

Figure 4.12: Purpose of visit to KZN as percentages in 2014



Source: Zulu Kingdom.org, 2014

4.6 International trade

International trade allows a country to expand its market penetration while influencing growth and development in an economy. This is influenced by comparative advantage over its foreign competitors in the production of tradable goods. SA's Trade and Industrial Policy has evolved over the years, as it has moved away from the highly protected, inward looking economy, towards a more open economy. A key challenge for SA and KZN is reducing the current account deficit by increasing the country's production for both domestic and international markets. Encouragingly, KZN is the second largest contributor to the South African economy, as it is home to the busiest and largest ports of Durban and Richards Bay. This section therefore provides an 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.

Table 4.5 shows the balance of payments on the current account from the second to the last quarter of 2014 and the first three quarters of 2015. It is clear from this table that the South African current account recently improved from a deficit realised in 2014 which averaged at R69 billion to a surplus of R14 billion in the second quarter of 2015 and deteriorated again to a deficit of R14 billion in the third quarter of 2015.

As correctly pointed out by the SARB (2015), the improvement in the current account in the second quarter of 2015 emanates from the depreciation of the South African rand, the increase in global demand for domestically produced goods and the decline in imports. This also resulted in an improvement of the current account as a percentage of GDP of -3.1 per cent in the second quarter of 2015 from -4.7 per cent realised in the first quarter of the same year.

Table 4.5: Balance on current account (R billion, seasonally adjusted and annualised) in 2014 and 2015

	2014			Qtr 1 - Qtr 4 (2014)	2015		
	2nd Quarter	3rd Quarter	4th Quarter		1st Quarter	2nd Quarter	3rd Quarter
Merchandise exports	909	931	959	941	937	1001	1009
Net Gold exports	64	63	62	63	62	71	64
Merchandise imports	-1064	-1071	-1056	-1072	-1067	-1059	-1087
Trade Balance	-90	-77	-35	-69	-68	14	-14
Net service, income and current transfer payments	-142	-145	-163	-138	-117	-138	-151
Balance on current account	-232	-223	-198	-207	-185	-124	-165
<i>As percentage of GDP</i>	-6.2	-5.8	-5.1	-5.4	-4.7	-3.1	-4.1

Source: SARB Quarterly Bulletin, December 2015

Surprisingly, in the third quarter of 2015 the current account realised a deficit of R14 billion which was mainly attributed to increased domestic demand for foreign produced intermediate and consumption goods. In addition, growth in export volumes moderated, following steady growth in the physical quantity of exports from the middle of 2014. The shortfall on the services, income and current transfer account with the rest of the world also widened from the second to the third quarter of 2015 from R138 billion to R151 billion. This shortfall was as a result of higher net income payments to international investors.

4.6.1 KwaZulu-Natal exports

Table 4.6 depicts the values of exports in SA by provinces for the years 2004 and 2014. Although exports in the province of KZN had been falling behind that of the GP, it has increased massively from R48.2 billion in 2004 to an estimated R118 billion recorded in 2014. This is a contribution of 19.4 per cent as a proportion of GDP as compared to 49.8 per cent recorded by the GP in 2014. This constitutes 11.8 per cent of the South African exports which is second after Gauteng (64.7 per cent). It has to be noted that given the comparative

advantage of the province of KZN with regard to having the largest and busiest ports, the province has a potential of increasing its export capacity even further.

Table 4.6: South African exports by provinces in 2004 and 2014 (R'000)

	2004			2014		
	Exports	% Share of SA exports	Exports as % of GDP	Exports	% Share of SA exports	Exports as % of GDP
South Africa	310 524 999	100	21	1 003 825 998	100	26.4
Eastern Cape	25 456 936	8.2	22.4	42 470 623	4.2	14.2
Free State	3 013 464	1.0	3.8	9 662 395	1.0	5.1
Gauteng	173 312 220	55.8	33.6	649 360 192	64.7	49.8
KwaZulu-Natal	48 241 100	15.5	19.8	118 006 121	11.8	19.4
Limpopo	2 153 419	0.7	2.2	20 909 440	2.1	7.6
Mpumalanga	5 039 671	1.6	5.1	18 423 245	1.8	6.3
Northern Cape	5 617 562	1.8	17.8	13 649 207	1.4	18.1
North-West	14 664 164	4.7	17.8	18 300 516	1.8	8.1
Western Cape	33 026 465	10.6	15.2	113 044 260	11.3	21.5

Source: Global Insight, 2015

4.6.2 KwaZulu-Natal imports

Table 4.7 shows the value of imports and percentage share of South African imports by provinces in 2004 and 2014. KZN imported an estimated value of R118 billion worth of goods in 2014 which grew by 176.3 per cent from imports realised in 2004 (R42.7 billion). As expected, the GP was the largest importer with an estimated value of R646.1 billion in 2014 which was 60.2 per cent of South African imports.

Table 4.7: Percentage share of South African imports by provinces in 2004 and 2014

	2004		2014	
	Imports	% Share of SA imports	Imports	% Share of SA imports
South Africa	311 758 996	100	1 072 463 997	100
Eastern Cape	23 830 381	7.6	50 134 236	4.7
Free State	1 586 391	0.5	4 236 986	0.4
Gauteng	179 553 576	57.6	646 107 196	60.2
KwaZulu-Natal	42 657 343	13.7	118 006 695	11.0
Limpopo	871 343	0.3	970 299	0.1
Mpumalanga	1 824 607	0.6	5 527 626	0.5
Northern Cape	3 258 472	1.0	3 403 822	0.3
North-West	1 541 412	0.5	5 553 622	0.5
Western Cape	56 635 473	18.2	238 523 515	22.2

Source: Global Insight, 2015

In contrast, the province of KZN (11 per cent of South African imports) had the third largest imports after Gauteng and the WC (22.2 per cent of South African imports). The least

contributor of all the provinces was the LP with a mere 0.1 per cent of the South African imports.

4.7 Inflation rate

Inflation is one of the key macro-economic indicators that affect the economic performance of a country. Higher levels of inflation reduce households' disposable income and thus impinging negatively on consumption. As a result, this 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)³⁴ of the SARB carefully monitors inflation trends both globally and nationally and then applies appropriate monetary policy instruments as and when required.

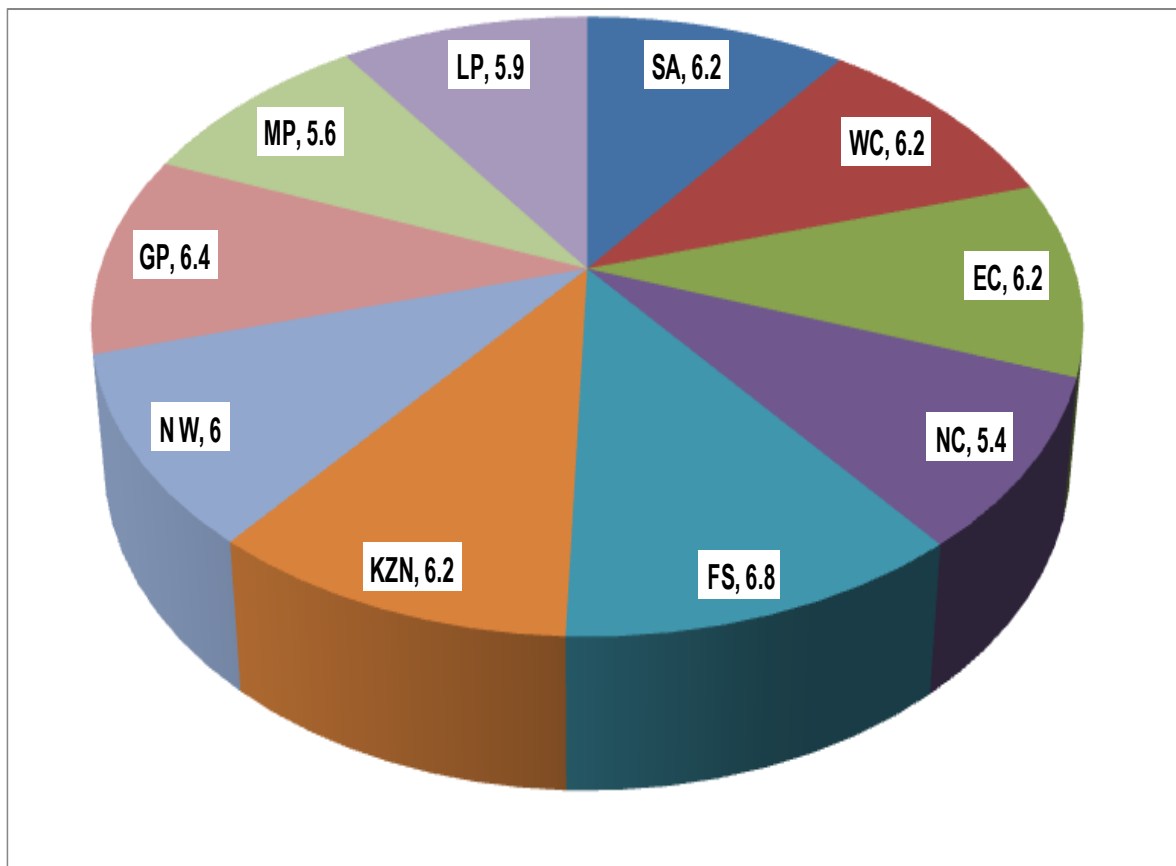
As correctly pointed out by the SARB (2016), inflation outlook has deteriorated significantly, mainly due to the exchange rate, drought and higher food prices. According Stats SA (2016), the year-on-year inflation rate, as measured by the consumer price index (CPI) for all urban areas, accelerated sharply to 6.2 per cent³⁵ in January 2016 from 5.2 per cent in December 2015. This was the highest increase in 17 months which was within the SARB expectations. Inflation that rises above the 3 per cent to the 6 per cent target band suggests interest rate hikes in the near future.

The key drivers of higher inflation rate are food and non-alcoholic beverages which accelerated to 6.9 per cent. The CPI for goods increased by 6.5 per cent, while services increased by 6 per cent, mainly due to higher petrol and food prices (Stats SA, 2016). Inflation is projected to peak at 7.8 per cent in the fourth quarter of 2016 and the first quarter of 2017. It is, however, expected to moderate to 6.2 per cent in the final quarter of 2017. Drought-induced food prices increased, higher electricity tariffs and a weak rand are anticipated to be the main drivers of inflation in 2016.

³⁴ 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 (<https://www.resbank.co.za/MonetaryPolicy/Pages/MonetaryPolicy-Home.aspx>)

³⁵ The most important categories in the consumer price index in the country are: housing and utilities at 24.5 per cent of total weight, transport (16.4 per cent) and food and non-alcoholic beverages at 15.4 per cent (Stats SA, 2016).

Figure 4.13: Inflation rate (percentages) in SA by province, January 2016



Source: Stats SA, 2016

The rising inflation and the deterioration in the inflation outlook due to the weak rand are cited as the main reasons that have compelled the SARB to raise interest rate by another 50 basis points in January 2016. The SARB raised rates twice in 2015 by 50 basis points. This is not boding well with households who, according to the SARB (2015), are highly indebted.

KZN is similar to two other provinces in which their inflation rate is at the same level as the national average headline inflation rate of 6.2 per cent. These other provinces are: the FS at 6.8 per cent and Gauteng at 6.4 per cent. The NC and the NW were the only provinces recording inflation slightly below the national average rate at 5.4 per cent and 6 per cent, respectively (Figure 4.13).

4.8 Conclusion

In conclusion, the global economic growth performs lower than expected but the emerging markets' (EM) economic performance is expected to pick up quicker than developed markets (DM). Unfortunately, SA as EM is not expected to grow its economy as fast as its

counterparts (EM). Factors like drought, weak currency, strikes, mine disasters, rising interest rate and student protests are among others which are the root cause of slow economic growth. This calls for SA to tighten up its budget by avoiding fruitless spending. Booming industries like tourism should be nurtured by boosting them through higher budgets.

Sectors such as agriculture have lost momentum due to issues such as drought as mentioned above; it is thus recommended that government gives some form of assistance in this regard through government subsidies. The mining sector has performed poorly due to a sharp contraction in the mining of metal ores caused by ongoing strikes in the mining industry. However, trade and finance sectors showed a positive growth.

International trade is largely influenced by the comparative advantage the country has over its foreign rivals. With South Africa moving away from being a protected economy to an open economy, the current account has improved in 2015 nevertheless; it has again deteriorated in the same year. This enhancement emanates from the weaker rand. The government can exercise its powers by revaluing the rand.

Chapter 5: Labour Markets

5.1 Introduction

The South African labour market has transformed since 1994. Since then, more emphasis has been put on strategies that are aimed at eliminating labour inequalities of the past, and improving working conditions for the people in the country. Although there has been a transformation in the labour market, the country is, however, still faced with major challenges, such as: job creation, excess of unskilled workers and as such unemployable labour, high poverty rate, and high levels of inequality.

The purpose of this chapter is therefore 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 and labour absorption rates. The chapter concludes by discussing the relationship between labour remuneration and productivity.

5.2 Employment

The Quarterly Labor Force Survey (QLFS) by Stats SA (2015) indicates that the working-age population in SA is 36.1 million, however, only 15.8 million people are employed. The total number of people employed increased by 171 000 in the third quarter of 2015 compared to 198 000 estimated in the second quarter of the same year. Compared to the same period in 2014, employment increased by a staggering 712 000.

An analysis of employment by level of education reveals the largest proportion of the employed population (Indians and Whites) have tertiary qualifications. It is estimated that 48.6 per cent of employed White persons and 33.8 per cent of employed Indian persons had a tertiary qualification in the third quarter of 2015. Disturbingly, more than half of the Black African and Coloured population had an educational level of less than a matric (Stats SA, 2015).

The report further states that, similar to quarter three of 2014, employment levels increased in seven of the nine provinces between quarters two and three of 2015. The largest quarterly employment gains were observed in the Western Cape (WC), with 60 000 people having

found work. This was followed by the cities of Limpopo and Gauteng in which 59 000 and 41 000 people found work. Job losses of 19 000 and 4 000 were recorded in the North West and Free State (FS) provinces, respectively.

As at the end of September 2015, the total number of the working age population in KZN was estimated at 6.715 million, however, only 2.573 million were employed (Stats SA, 2015). Most of the people (1.23 million or 44 per cent) employed in KZN are in the eThekweni Metro³⁶. This is nonetheless a non-startling revelation as eThekweni is the economic hub of the province. The remaining 1.450 million jobs are shared unevenly among the ten district municipalities in the province.

Table 5.1: Formal and informal employment by district, 2003 and 2014

	2003			2014		
	Formal Employment	Informal Employment	Total Employment	Formal Employment	Informal Employment	Total Employment
National	10 174 633	1 843 824	12 018 457	12 109 847	2 343 516	14 453 363
KwaZulu-Natal	1 778 334	340 585	2 118 919	1 989 315	452 045	2 441 360
eThekweni	939 202	116 858	1 056 060	1 033 782	211 772	1 245 553
Ugu	91 658	23 755	115 412	109 502	25 533	135 034
uMgungundlovu	205 000	45 567	250 567	227 753	54 992	282 745
Uthukela	81 257	25 327	106 584	83 510	23 471	106 981
Umzinyathi	30 886	10 031	40 917	37 783	11 356	49 139
Amajuba	72 056	22 459	94 515	74 543	21 358	95 902
Zululand	64 066	18 656	82 721	73 400	18 831	92 231
Umkhanyakude	42 120	11 531	53 651	53 697	14 146	67 843
Uthungulu	132 474	28 419	160 893	144 937	31 323	176 260
iLembe	76 346	22 563	98 909	95 450	24 432	119 883
Sisonke	43 270	15 419	58 689	54 958	14 830	69 789

Source: Global Insight, 2015

5.2.1 Employment by sector

An observation from the Quarterly Employment Statistics Survey (QESS) by Stats SA (2015), clearly indicates that the prospects for formal sector employment growth remains bleak for the people in the country. This observation is consistent with the sluggish growth performance of the economy. With the exception of the transport industry, which shed 34 000 jobs, annual employment gains were recorded in all the industries between the third quarters of 2014 and 2015. Over the same period, the largest employment gains were observed in agriculture (211 000), construction (180 000), and finance (135 000) industries (Stats SA, 2015).

³⁶See Section 4.4 in Chapter 4 of this report.

Similar to the national trend and across provinces, the largest proportion of all jobs in the province emanate from the government (22.9 per cent). This is followed closely by trade at 21.5 per cent, manufacturing with 13.6 per cent and finance (13.3 per cent). Mining contributes the least to the employment statistics (0.4 per cent). The tertiary sector (73.4 per cent) is the main driver of job creation in the province. The remaining job opportunities is spread between the secondary (22.4 per cent) and the primary (4.2 per cent) sectors.

Table 5.2: Employment by sector in KZN, 2014

	South Africa	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape
Primary Sector	7.5	5.0	11.8	2.8	4.2	16.0	15.4	22.6	24.2	6.3
1 Agriculture	4.1	4.8	7.4	0.9	3.8	6.9	6.7	4.2	12.2	6.2
2 Mining	3.4	0.1	4.4	1.9	0.4	9.0	8.6	18.5	12.0	0.1
Secondary Sector	19.2	20.4	15.0	19.6	22.4	16.1	17.3	13.5	10.2	21.2
3 Manufacturing	11.4	10.9	8.2	12.9	13.6	6.2	8.1	7.7	3.5	13.7
4 Electricity	0.6	0.3	0.5	0.6	0.4	0.7	1.6	0.4	0.6	0.5
5 Construction	7.2	9.1	6.3	6.1	8.4	9.2	7.6	5.5	6.0	7.0
Tertiary Sector	73.3	74.7	73.2	77.6	73.4	68.0	67.3	63.8	65.7	72.5
6 Trade	21.7	22.4	21.2	21.5	21.5	23.6	22.8	19.6	15.9	22.1
7 Transport	5.6	5.3	4.4	6.5	6.8	3.9	4.5	3.2	3.3	5.3
8 Finance	15.8	10.6	10.3	22.2	13.3	7.0	11.6	9.8	9.1	18.4
9 Community services	22.0	27.6	26.0	19.7	22.9	24.8	19.3	22.3	28.3	20.3
House hold	8.2	8.8	11.2	7.8	8.9	8.7	9.1	8.8	9.1	6.3

Source: Global Insight, 2015

5.3 Unemployment

Data from Stats SA (2015) shows that, between the second and third quarter of 2015, the official national unemployment rate increased minimally by a 0.5 percentage point, from 25 per cent in second quarter to 25.5 per cent in the third quarter. In contrast to other provinces, KZN recorded the second lowest unemployment rate during the second quarter (20.4 per cent) and third quarter of 2015 (20.5 per cent). Limpopo recorded the lowest at 18.9 per cent and 18.8 per cent, respectively for the same period. The highest official unemployment rate out of the nine provinces was in the Northern Cape (NC) in which 32.7 per cent and 34.8 per cent of people remained unemployed during the second and third quarter of 2015, The Free State (FS) unemployment statistics were not similar, as 31.4 per cent and 31.5 per cent of people remained unemployed during the second and third quarter of 2015.

Inherently, social ills, unemployment, poverty and inequality remain major challenges which hamper economic performances in an economy. In an effort to address these challenges, the national government has committed to continue implement the National Development Plan (NDP), the New Growth Path (NGP), Industrial Policy Action Plan (IPAP) and the creation of Special Economic or Industrial Development Zones (SEZs / IDZs).

As indicated in chapter three³⁷ of this publication, the global, national and economic outlook is subdued. The statistics show that KZN is not excluded from this analysis. Subsequently, unemployment rate continues to increase at both national and provincial levels. It is within this challenging experience that sectors of particular concern include agriculture and mining, as both major employers are currently involved with retrenchment programmes.

The external economic factors such as the ailing Chinese economy which has shown a declining trend in its economic growth has directly affected South Africa (SA), especially in respect of exports of non-beneficiated materials. Similarly, world demand for goods and services has contracted, thereby further exacerbating the already sluggish national economy. Internal factors, which include the relatively high labour costs, when measured against inflation and productivity are also cause for concern. This situation is further exacerbated by the fact that over the past eighteen months, SA has been experiencing unseasonably dry conditions, culminating in the summer of 2015/16 as being alluded to by experts as the worst drought in 30 years. At a farm level, and in terms of agro-processing industries, further retrenchments will be inevitable.

5.3.1 Unemployment by gender and age

According to Stats SA (2015), as at the end of the third quarter of 2015, the national unemployment rate among females was higher at 45.9 per cent (quarter-to-quarter change) compared to that of males at 54 per cent. Evidence indicates that the national unemployment gap between women and men narrowed between 2003 and 2013; this could be attributed to, among others, the effective implementation of the labour laws such as the Employment Equity Act (EEA).

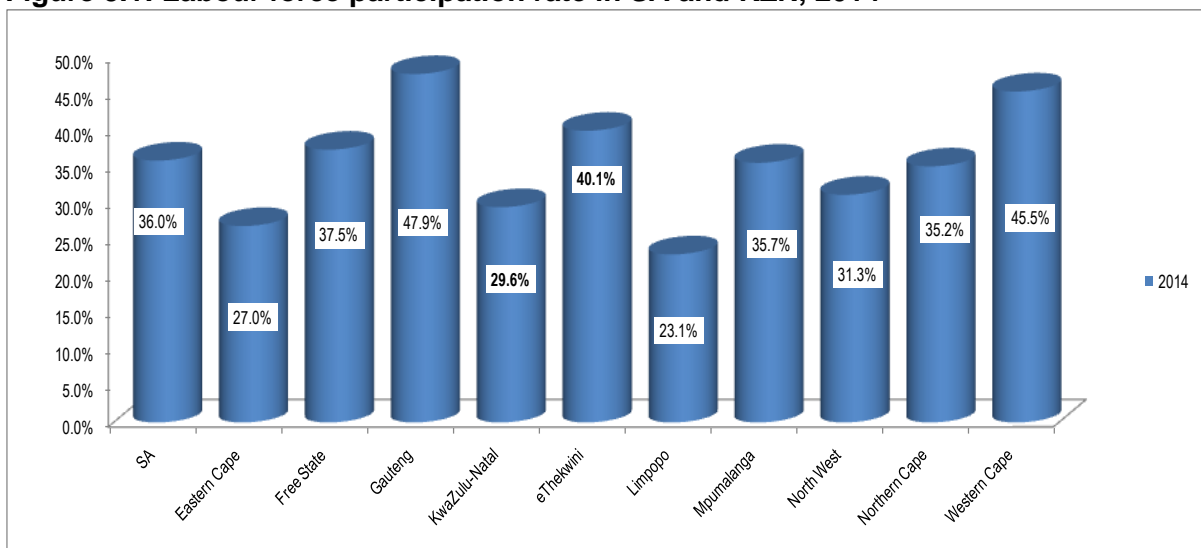
Stats SA further indicated that the unemployment rate among youth aged between 15 to 24 in the third quarter of 2015 was at 49.9 per cent and 30.3 per cent among people in the 25 to 34 age cohort. Subsequently, strategic objectives number 1.3 and 1.4 of the Provincial Growth and Development Plan (PGDP): *Expansion of Government-led job creation Programmes* and *Promoting Small, Medium and Micro Enterprise (SMME), Entrepreneurship and Youth Development*, respectively are essential in not only closing the gender gap, but reducing unemployment. These harsh realities are therefore an indication that a great deal has to be done to reduce the unemployment rate, particularly among the youth population.

³⁷See Sections 4.2 to 4.4 of this report.

5.4 Labour force participation rate

The labour force participation rate (LFPR)³⁸ shows the extent to which the working population is economically active. Figure 5.1 indicates that LFPR in KZN is estimated at 29.6 per cent which is far below the national average rate of 36 percent. This rate is further below that which was estimated in most provinces, with the exception of the Eastern Cape (EC) (27 per cent) and Limpopo (23.1 per cent).

Figure 5.1: Labour force participation rate in SA and KZN, 2014



Source: Global Insight, 2015

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. Technically, this leads to a decrease in the number of labour force, which implies that KZN, EC and Limpopo experience more discouraged work seekers compared to the average national rate and across other provinces.

5.5 Labour absorption rate

The labour absorption rate (LAR) is generally defined as the percentage of the working age of population employed. In SA, the average absorption rate as at the end of September 2015

³⁸The 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. Accessed on the 4th of February 2014 and available online http://economics.about.com/od/unemploymentrate/f/labor_force.htm,

was estimated at 43.8 per cent (Table 5.3). However, there had been a variation in the absorption rate of the labour force in KZN over the years under review. The provincial LAR had been increasing between 2004 and 2008. It, however, started to decline and fell slightly to 23.9 per cent in 2009, compared to 24.3 per cent recorded in 2008. Since then, it never returned to pre-global economic recession's upward trend. As expected, eThekweni³⁹ consists of the highest LAR, ranging between 33.2 per cent in 2004 and 35.1 per cent in 2014.

Table 5.3: Labour absorption rate (percentages), 2004 to 2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
KwaZulu-Natal	22.1	22.7	23.5	24.2	24.3	23.9	23.4	23.0	23.0	23.2	23.2
eThekweni	33.2	33.9	34.9	35.8	36.3	36.0	35.6	35.3	35.3	35.4	35.1
Ugu	16.9	17.6	18.5	19.2	19.3	19.0	18.5	18.2	18.1	18.2	18.4
uMgungundlovu	26.9	27.5	28.5	29.1	29.0	28.3	27.4	26.7	26.6	26.8	27.0
uThukela	16.2	16.8	17.5	18.0	17.8	17.1	16.4	15.8	15.7	15.5	15.8
Umzinyathi	8.8	9.2	9.7	10.1	10.1	9.8	9.4	9.1	9.1	9.3	9.4
Amajuba	19.9	20.1	20.5	20.7	20.4	19.5	18.5	17.8	18.1	18.5	18.7
Zululand	10.8	11.2	11.8	12.2	12.1	11.6	11.1	10.8	10.9	11.1	11.3
Umkhanyakude	9.8	10.4	11.3	11.8	11.7	11.2	10.6	10.1	10.1	10.4	10.6
uThungulu	18.3	18.9	19.8	20.3	20.2	19.6	18.9	18.4	18.4	18.9	19.2
iLembe	18.1	18.7	19.5	20.0	20.0	19.6	19.1	18.8	18.6	19.0	19.2
Harry Gwala	13.4	14.1	15.0	15.6	15.6	15.1	14.5	14.2	14.5	14.8	15.0

Source: Global Insight, 2015

5.6 Labour remuneration and productivity

Labour productivity is defined as the number of units of output obtained from a unit of input (Barker, 1998). It is a meaningful measure, since it helps reflect changes in the price of labour. When output increases without changes in input, productivity increases and when output decreases without a change in input, productivity decreases. The relationship between productivity and remuneration is arguable, such that labour cost and productivity can be said to have a positive or a negative relationship. For example, increased remuneration is normally rewarded to employees when production increases and similarly, poor production often means lack of increases in remuneration.

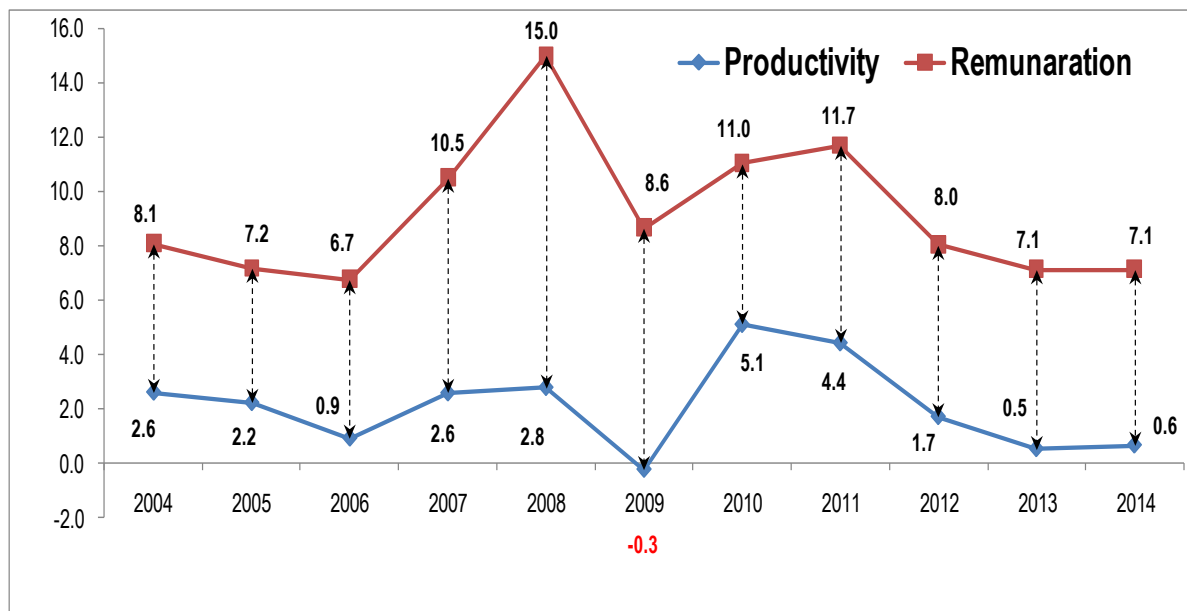
Productivity is one of the instrumental indicators in attracting investors. According to the Department of Labour (2014), investors generally withdraw their investments due to unproductive labour. This is not surprising as one of the country's key challenges relates to

³⁹As indicated in Section 3.4 of this publication, eThekweni is the economic hub of the province.

the shortage of skilled labour. An increase in wages with no link to efficiency, labour costs tend to increase and the economy becomes less competitive internationally and locally. It is, therefore, evident that the labour productivity in SA is also a challenge. This may be due to many factors, such as: lack of skills, poor literacy rate and lack of experience.

Figure 5.2 shows the trend between productivity and remuneration of labour in KZN for the period 2004 to 2014. 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 2009⁴⁰.

Figure 5.2: Labour remuneration and productivity, 2004 to 2014



Source: Global Insight, 2015

5.7 Conclusion

There is, without doubt a tremendous lack of skilled labour in SA and KZN is no exception. This calls for a major intervention by the current dispensation. There are policies and programmes that are pro job creation but the challenges of unemployment and poverty still exist. It is disturbing that the sector that provides most employment is community services for both KZN and SA, considering that government's responsibility should ideally be that of creating a conducive environment for businesses to thrive. It is therefore important to

⁴⁰ It must be remembered that this was during the time of the global economic recession.

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.

Chapter 6: Infrastructure Spending in KZN

6.1 Introduction

This section provides an overview of provincial infrastructure in terms of budget allocations for the 2014/2015 and 2015/2016 financial years. Also captured in this section is a focus on the departments that have been allocated the largest proportion of the infrastructure budget. An analysis of investment categories (New Infrastructure, Existing Infrastructure, Transfers and Leases) has been conducted. This analysis aims to provide an overview of how the infrastructure budget allocations are spent. According to Economic Commission for Africa (2013) Infrastructure is one of the pillars of economic transformation. Sustainable economic growth often occurs in an environment where there is a meaningful infrastructure, and there is evidence that it reduces inequality. Therefore it is essential to focus on closely monitoring infrastructure budget allocations, streamlining the infrastructure value chain through the IDMS and improving quality of existing infrastructure.

A discussion of the Infrastructure Delivery Management System (IDMS) has been included in this section, and changes and improvements to the system have also been highlighted. The monitoring and evaluation role of the Provincial Treasury (PT) has also been conducted in order to highlight the importance of monitoring and evaluation.

6.2 Infrastructure spending in KZN

6.2.1 Provincial infrastructure overview

Governments around the world rank infrastructure among their greatest concerns. The modernisation of infrastructure is seen as being critical to future economic competitiveness and crucial to accommodating expanding populations in urbanising environments (Development Bank of Southern Africa (DBSA), 2012).

Infrastructure contributes to economic growth and poverty reduction by increasing the competitiveness as well as the international and domestic connectivity of economies. In a highly globalized economy with vertically and horizontally integrated production networks, regional integration and agglomeration offer significant growth and employment opportunities for developing countries. Infrastructure also improves rural access to earnings opportunities,

raises rural productivity, and provides access to basic services, thereby achieving inclusive development (Fujita, 2012). It is therefore inevitable that investment in infrastructure contributes to economic growth and development in the country and hence has to be made one of the priorities. In line with these sentiments, infrastructure is a priority in the province and infrastructure budget baseline allocations are geared towards social infrastructure.

Table 6.1: Infrastructure baseline allocation 2014/15 to 2015/16

	2014/15		2015/16	
	R'000	%	R'000	%
1. Office of the Premier	R 24 560	0.2	R 19 629	0.2
2. Provincial Legislature	R 5 552	0.0	R 4 900	0.0
3. Agriculture and Rural Development	R 147 586	1.3	R 140 756	1.2
4. Economic Development, Tourism and Environmental Affairs	R 540 775	4.8	R 660 015	5.5
5. Education	R 1 862 926	16.4	R 2 504 035	20.8
6. Provincial Treasury	R 31 883	0.3	R 10 062	0.1
7. Health	R 1 656 641	14.6	R 1 504 206	12.5
8. Human Settlements	R 108 720	1.0	R 160 900	1.3
9. Cogta	R 80 152	0.7	R 78 231	0.6
10. Transport	R 6 533 844	57.5	R 6 550 069	54.3
11. Social Development	R 135 218	1.2	R 152 938	1.3
12. Public Works	R 105 508	0.9	R 77 373	0.6
13. Arts and Culture	R 70 257	0.6	R 118 479	1.0
14. Sports and Recreation	R 58 378	0.5	R 77 964	0.6
	R 11 362 000	100	R 12 059 557	100

Source: Estimates of provincial revenue and expenditure, 2015

The province continues to invest the largest proportion of the infrastructure budget for social infrastructure to the departments of Transport, Education and Health respectively, (Table 6.1). The department of Transport is the largest infrastructure department in terms of budget allocation with an estimated 57.5 per cent and 54.3 per cent of the total provincial infrastructure budget in the 2014/15 and 2015/16 financial years, respectively. According to the OECD (2016), infrastructure investment (indicator) in the transport sector is a key contributor to the country's competitiveness in global markets. This department's five modalities include road, rail, sea, pipeline and air transport which are the biggest and most efficient transport networks in Africa, servicing industries that span the continent, and the sector which is seen by the government as a crucial engine for economic growth and development.

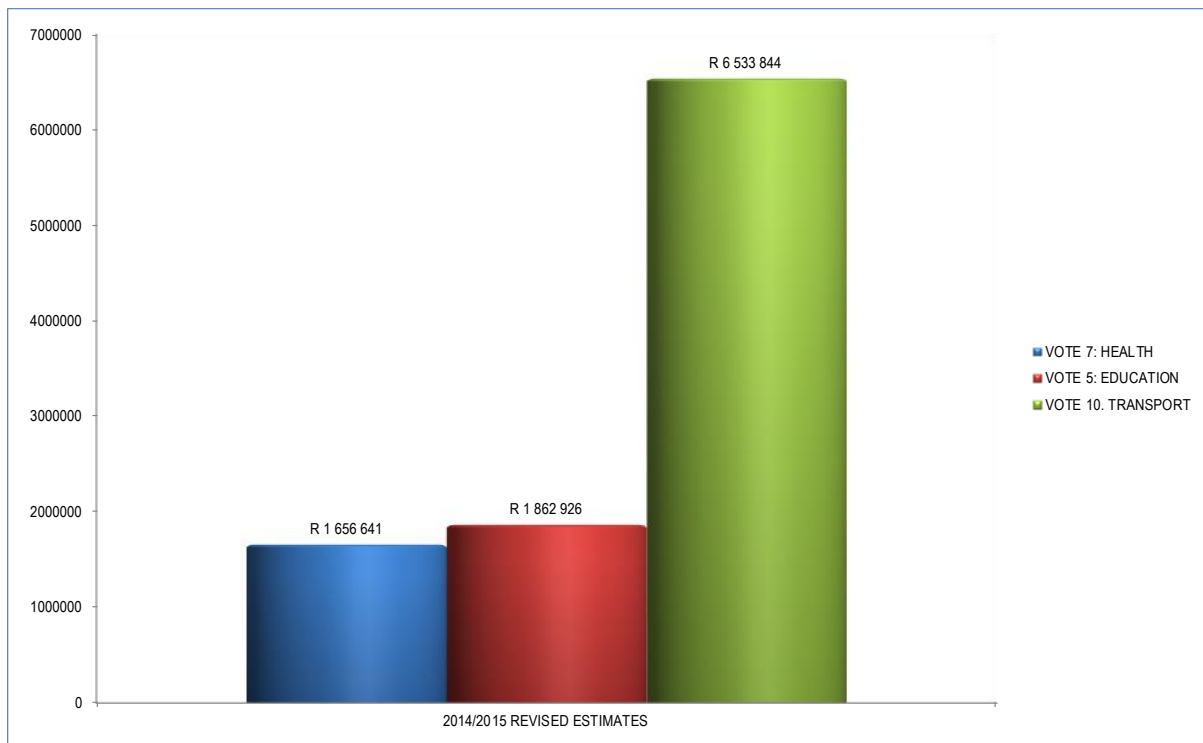
Transport infrastructure is a derived need created by the spatial separation of activities. In order to develop from subsistence economy to a commercially viable economy, it is imperative that there exists an integrated transport network. This will help to facilitate the

transportation of goods and people between areas of production and consumption and ensures that economic activity is improved.

The department of Education is the second largest infrastructure department in terms of budget allocation with 20.8 per cent of the total infrastructure budget in the 2015/16 financial year. The department of Education has 1631 active infrastructure projects recorded on the Infrastructure Reporting Model (IRM). These infrastructure projects include, sanitation projects which consist of the provision of chemical toilets to schools, fencing of schools and construction of new schools as well as maintenance of existing school infrastructure.

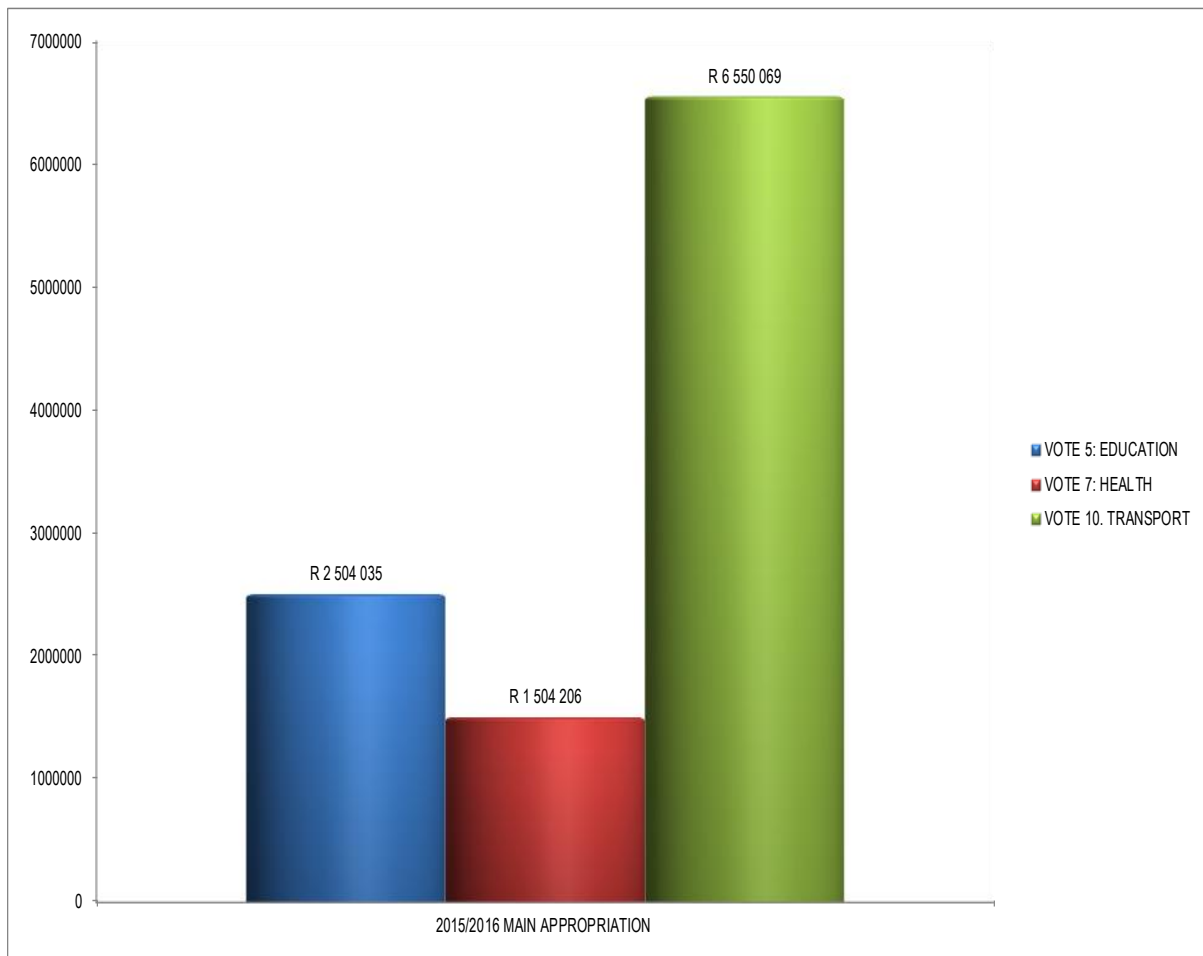
The third largest department is the department of Health with a budget allocation of 12.5 per cent in 2015/16 financial year and 345 active infrastructure projects recorded on the IRM. The main purpose of the this department is to develop and implement a sustainable, co-ordinated, integrated and comprehensive health system based on the primary health care approach, which encompasses promotive, curative, rehabilitative, supportive and palliative care. This is guided by the principles of accessibility, equity, quality and efficiency, sustainability, community participation, appropriate technology, and inter-governmental and inter-sectoral collaboration.

Figure 6.1(a): Major infrastructure departments



Source: Estimates of provincial revenue and expenditure, 2015

Figure 6.1(b): Major infrastructure departments



Source: Estimates of provincial revenue and expenditure, 2015

The province allocated a total revised budget estimate amount of R11.4 billion in 2014/15 financial year and a total amount of R12.1 billion in the 2015/16 financial year to sector departments for the implementation of infrastructure projects in the province. Therefore, the budget allocated for infrastructure in the 2014/2015 financial year increased by 6 per cent. However, the budget allocated to social infrastructure as well as economic infrastructure is insufficient given the rural nature of KZN, size of the province, approximately 45 per cent of the KZN population are children from age 00 to 19 and the catalyst for economic growth is investment in economic infrastructure.

Table 6.2 shows the split of infrastructure budget by categories which include existing infrastructure, new infrastructure and transfers. Approximately 76.4 per cent of infrastructure budget was invested on the existing infrastructure which includes maintenance, upgrades and additions as well as refurbishment and rehabilitation in 2015/16.

Table 6.2: Summary of infrastructure payments and estimates by category

R thousand	Revised Estimate	Medium-term Estimates		
	2015/16	2016/17	2017/18	2018/19
Existing infrastructure assets	9 352 289	9 603 629	9 692 172	10 245 453
Maintenance and repair: Current	3 014 147	4 361 572	4 368 136	4 778 594
Upgrades and additions: Capital	4 659 020	3 071 705	3 312 909	3 443 307
Refurbishment and rehabilitation: Capital	1 679 122	2 170 352	2 011 127	2 023 551
New infrastructure assets: Capital	2 018 719	1 776 975	1 863 510	1 913 843
Infrastructure transfers	842 857	576 483	610 596	637 597
Infrastructure transfers: Current	1 650	2 000	1 650	1 650
Infrastructure transfers: Capital	841 207	574 483	608 946	635 947
Infrastructure: Payments for financial assets	-	-	-	-
Infrastructure: Leases	21 390	21 285	22 301	23 542
Total	12 235 254	11 978 372	12 188 579	12 820 434
<i>Capital infrastructure</i>	<i>9 198 067</i>	<i>7 593 515</i>	<i>7 796 492</i>	<i>8 016 648</i>
<i>Current infrastructure</i>	<i>3 037 187</i>	<i>4 384 857</i>	<i>4 392 087</i>	<i>4 803 786</i>

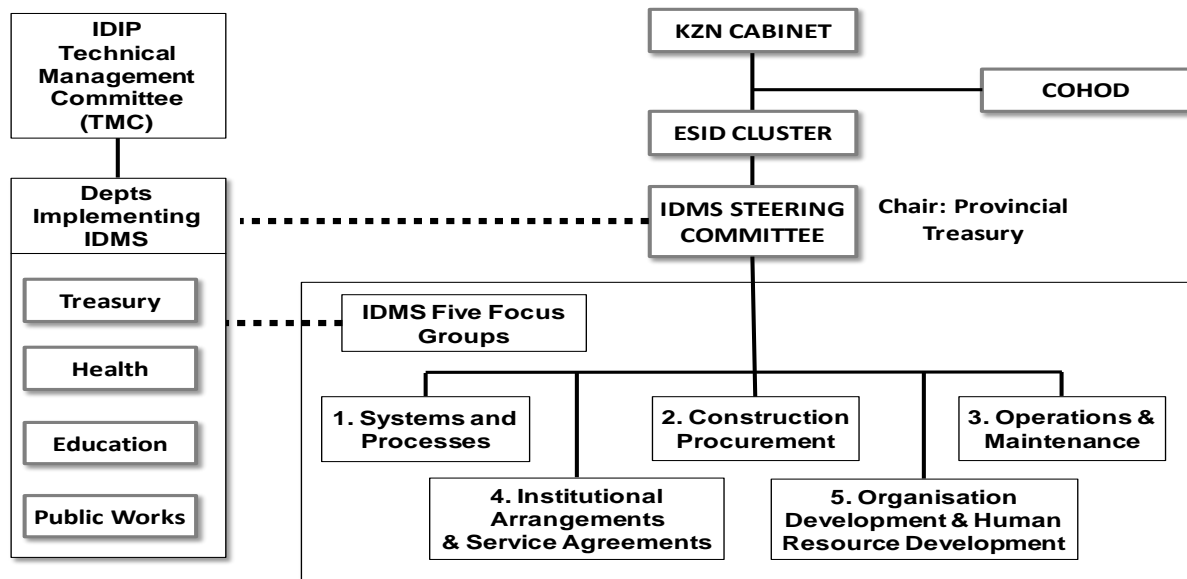
Source: EPRE, 2016/17

The level of capital investment delivered in the last decade made up substantial ground in bridging the infrastructure deficit, particularly in the rural areas which in the past were left underdeveloped. The rural areas and the majority of the population's access to essential services and other government services has increased substantively. It is therefore important for infrastructure maintenance to be a priority in the province. Given the prevailing challenging fiscal environment, it is more beneficial to invest on existing infrastructure and the upkeep of the existing assets than the building of new structures.

6.2.2 Infrastructure Delivery Management System (IDMS)

The ability to achieve the objectives has been strengthened by the appointment of Provincial Infrastructure Technical Assistants. Therefore, in the 2013/14 financial year, a review of the KwaZulu-Natal (KZN) IDMS framework was undertaken to determine how far the implementation process had gone and what challenges were experienced as well as to map the way forward. The targets and timeframes which were contained in the framework document were reviewed and the functionality of the IDMS focal areas.

Figure 6.2: KZN-IDMS enabling environment



Source: KZN Provincial IDMS Framework, 2012

A further review of the KZN-IDMS framework has been undertaken in 2015/2016. This review will look at the framework in its entirety from the roles and responsibilities of the role-players, timeframes and governing structures. The KZN-IDMS contains the governance and infrastructure principles that are applicable to the core infrastructure roles of sector departments. It also incorporates the capacitation plan of Public Works as government infrastructure implementing agent.

6.3 Monitoring and evaluation

6.3.1 Monitoring

According to the Public Service Commission (PSC) (2008), Monitoring means “A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds”.

The KZN PT performs the function of monitoring infrastructure budget expenditure trends and actual progress of the project. This is achieved through infrastructure project site visits. An infrastructure construction site is randomly selected and a site meeting is scheduled with the relevant departmental official and the site technical team. After concluding the site

meeting and viewing the site, a report is compiled and circulated to the relevant stakeholders.

6.3.2 Evaluation

“Evaluation is the systematic and objective assessment of an on-going or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors. Evaluation also refers to the process of determining the worth or significance of an activity, policy or programme” (Public Service Commission, 2008).

The KZN PT performs the function of evaluating infrastructure budget expenditure trends and actual project progress. This is achieved through monthly infrastructure project reports. The IRM is a tool that was developed by National Treasury to assist provinces to better monitor and evaluate the infrastructure performance of the sectors. Therefore, through combining site visits, the IDMS framework and the IRM, enables the National Treasury to create a clear picture of infrastructure performance and effectiveness in the province.

6.4 Conclusion

An overview of provincial infrastructure in terms of budget allocations for the 2014/2015 and 2015/2016 financial years revealed that the province allocates approximately R12 billion annually to 14 provincial departments. Also captured in this section are the departments of Transport, Education and Health respectively, who receive the highest proportion of the total provincial infrastructure budget. It also emerged that the department with the largest budget allocation is not necessarily the one with the largest number of projects. However, this is due to the way in which departments report on specific projects. The department of Transport clusters or groups the majority of the projects while the other departments capture the majority of their projects as individual projects. A discussion on the IDMS has also been included as well as the review of the KZN-IDMS framework document. The review of this document highlighted the roles and responsibility of all the sector departments as well as how it will be implemented in future.

Chapter 7: Provincial Economic Risk Index⁴¹

7.1 Economic risk or condition variables

The economic risk or condition variables that are included in the monitor are indicated in Table 7.1. The relative sector weights for the economic risk or condition variables are also displayed and add up to 100 per cent. The weights at this stage are purely assumed weights and not based on any econometric modelling or calculations 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 7.1: Economic risk or condition variables and their associated sector weights

Relative Economic Sector Impact	Rand/Dollar (Rand per USD)	Interest rate (R157 = %)	Inflation (pa %)	Oil Price (USD)	Sugar price (US cents per pound)	Gold Price (USD)	Credit extended to the domestic private sector (Rm)	Physical volume of electricity production (2005 = 100)
Agriculture, forestry and fishing	20.0%	10.0%	5.0%	17.0%	30.0%	0.0%	10.0%	8.0%
Mining and quarrying	30.0%	0.0%	0.0%	10.0%	0.0%	40.0%	0.0%	20.0%
Manufacturing	35.0%	20.0%	5.0%	10.0%	0.0%	0.0%	10.0%	20.0%
Electricity, gas and water	10.0%	5.0%	5.0%	20.0%	0.0%	0.0%	10.0%	50.0%
Construction	10.0%	30.0%	10.0%	15.0%	0.0%	0.0%	30.0%	5.0%
Wholesale & retail trade; hotels & restaurants	10.0%	35.0%	20.0%	10.0%	0.0%	0.0%	25.0%	0.0%
Transport, storage and communication	10.0%	20.0%	10.0%	30.0%	0.0%	0.0%	20.0%	10.0%
Finance, real estate and business services	10.0%	35.0%	10.0%	10.0%	0.0%	0.0%	30.0%	5.0%
Personal and General Government Services	10.0%	35.0%	20.0%	0.0%	0.0%	0.0%	30.0%	5.0%

Source: Own calculations using KZN Economic Model, 2015

⁴¹The views expressed in this chapter are those of the author and do not necessarily represent those of the KZN Provincial Treasury.

Table 7.2: Implications of a change in the economic risk or condition variables

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

Source: Own calculations using KZN Economic Model, 2015

The theoretical impact of a change in each of the economic risk or condition variables are illustrated in Table 7.2; for example, when the rand/dollar exchange rate depreciates the risk associated to the provincial economy is assumed to be decreasing because of the potential improvement in the economic conditions associated with a depreciating currency (increased exports for example).

7.2 Behaviour of the economic risk or conditions variables

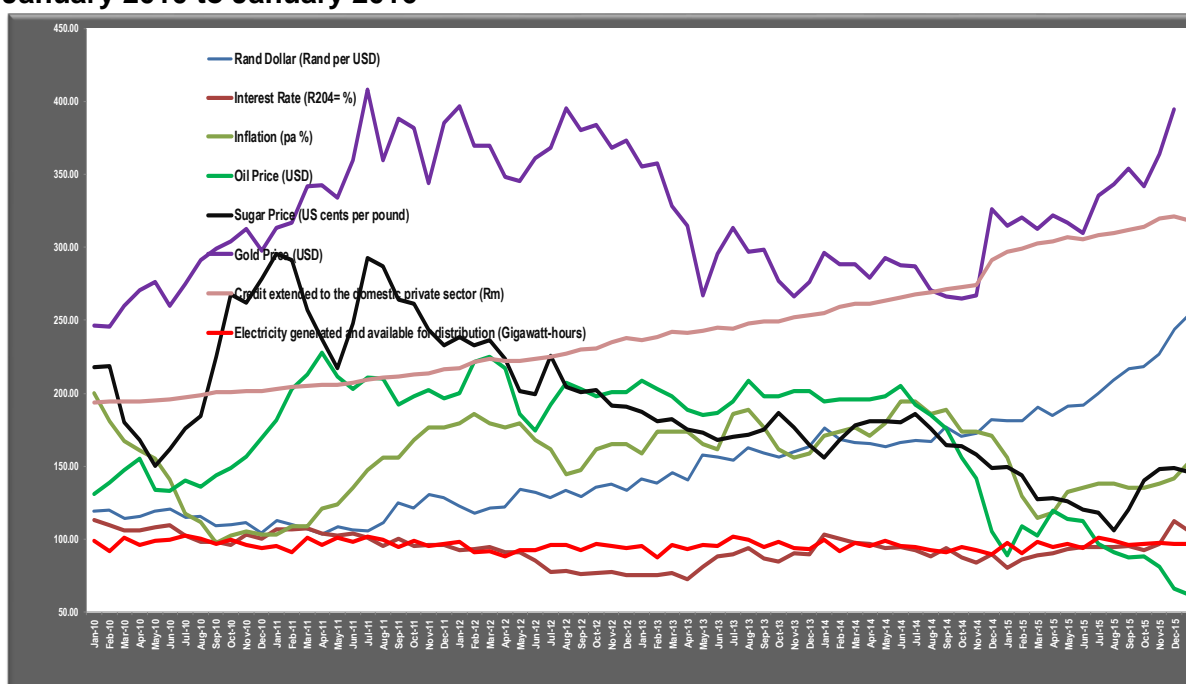
The behaviour or movement of the economic risk or conditions variables during 2015 is shown Table 7.3.

Table 7.3: Behaviour of the economic risk or conditions variables, January 2015 to December 2015

	Rand/Dollar (Rand per USD)	Interest rate (R157 = %)	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)
Jan-15	11.6	6.4	5.3	49	15.1	1 467	2 862 253	3 494
Feb-15	11.5	6.9	4.4	60	14.5	1 417	2 886 214	3 238
Mar-15	12.1	7.1	4.0	56	12.8	1 440	2 920 340	3 529
Apr-15	11.8	7.2	4.5	66	12.9	1 407	2 934 096	3 393
May-15	12.2	7.4	4.4	63	12.7	1 448	2 961 439	3 464
Jun-15	12.2	7.6	4.6	62	12.1	1 424	2 947 591	3 374
Jul-15	12.7	7.6	4.7	53	11.9	1 392	2 970 091	3 624
Aug-15	13.3	7.6	4.7	50	10.7	1 509	2 988 514	3 543
Sep-15	13.8	7.6	4.6	48	12.1	1 543	3 007 216	3 436
Oct-15	13.9	7.4	4.6	49	14.1	1 590	3 028 592	3 472
Nov-15	14.4	7.8	4.7	45	14.9	1 538	3 081 672	3 488
Dec-15	15.5	9.0	4.8	36	15.0	1 636	3 097 580	3 466

Source: Own calculations using KZN Economic Model, 2015

Figure 7.1: Behaviour of the economic risk or conditions variables in index format, January 2010 to January 2016



Source: Own calculations using KZN Economic Model, 2016

Figure 7.1 indicates the behaviour of the economic risk variables in index format (2005 = 100) from January 2010 to January 2016. Evidence from both Table 7.3 and Figure 7.1 shows that during 2015, the risk index was adversely or positively influenced by the following variables⁴²:

- ❖ The rand/dollar exchange rate has depreciated (√)
- ❖ Interest rates have increased (x)
- ❖ Inflation has decreased (√)
- ❖ Oil prices have decreased (√)
- ❖ Sugar prices have increased (√)
- ❖ Gold price has increased (√)
- ❖ Credit extended has increased (√)
- ❖ Electricity supply has increased (√)

Both Table 7.3 and Figure 7.1 suggest that the behaviour or change of one of these variables has increased the economic risk and the remaining seven have decreased the

⁴²A cross on a variable indicates a negative effect while a tick implies a positive influence on a risk index.

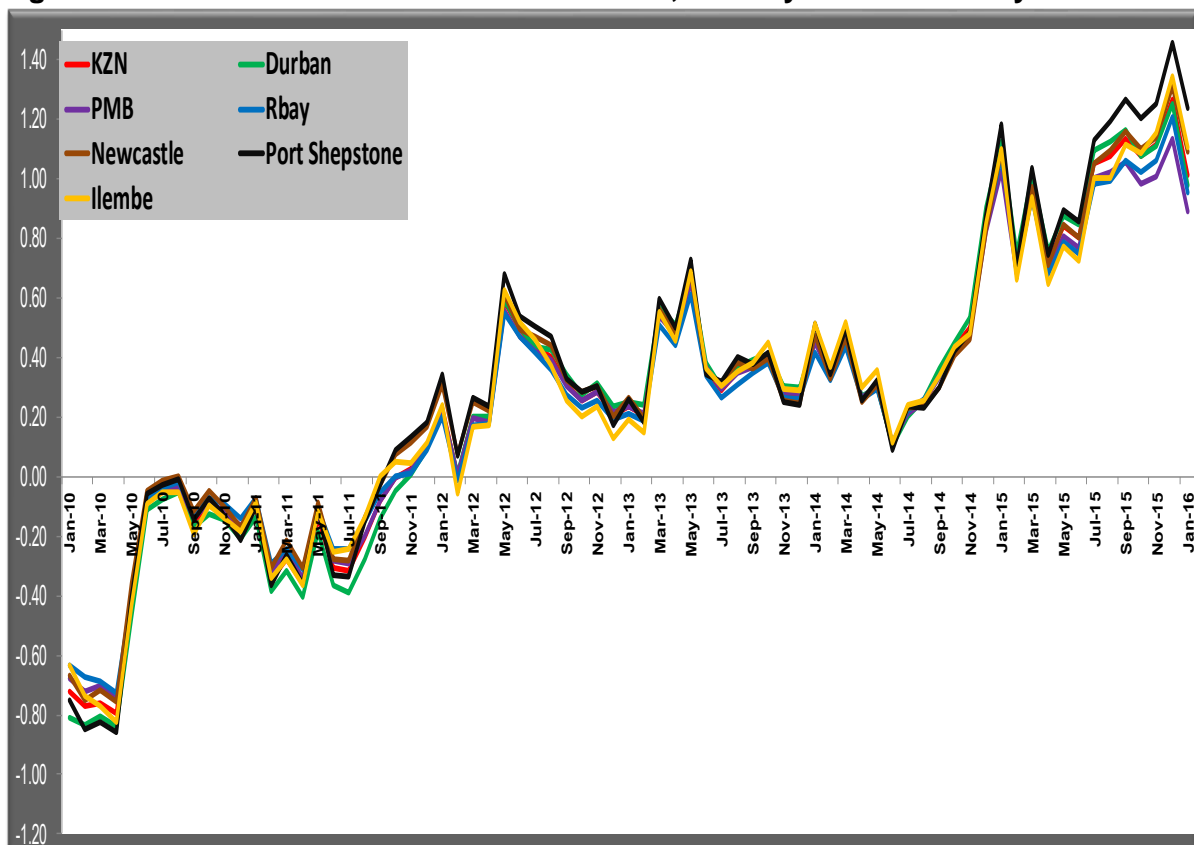
economic risk in the provincial economy. The calculation of economic risk or conditions monitor for KZN and each of the provincial six regions is presented in appendix B.

7.3 Economic risk or conditions monitor for KZN

The results for the province and each of the six regions are displayed in Figure 7.2 and Table 7.4. The results have been smoothed using a twelve month moving average method because of the inclusion of monthly data in the calculations. The monitor should be interpreted as follows:

- ❖ Positive numbers: Low or decreasing risk
- ❖ Zero: Neutral risk
- ❖ Negative numbers: High or increasing risk

Figure 7.2: Economic risk or conditions monitor, January 2010 to January 2016



Source: Own calculations using KZN Economic Model, 2016

Table 7.4: Economic risk or conditions monitor, January 2014 to December 2015

	KZN	Durban	PMB	Richards Bay	Newcastle	Port Shepstone	Ilembe
Jan-14	2.0	1.9	1.9	1.7	2.3	2.7	2.3
Feb-14	-0.9	-0.9	-0.9	-0.7	-1.1	-1.3	-1.1
Mar-14	0.8	0.7	0.8	0.8	0.8	0.8	1.0
Apr-14	-0.3	-0.2	-0.3	-0.2	-0.3	-0.4	-0.3
May-14	0.2	0.2	0.2	0.2	0.2	0.1	0.2
Jun-14	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.4
Jul-14	1.0	1.0	0.9	1.0	0.9	0.9	1.1
Aug-14	0.3	0.4	0.3	0.3	0.2	0.2	0.1
Sep-14	1.3	1.4	1.2	1.2	1.2	1.4	1.4
Oct-14	1.4	1.4	1.3	1.4	1.3	1.3	1.3
Nov-14	1.0	1.1	1.0	1.0	0.9	1.0	0.9
Dec-14	4.7	4.8	4.3	4.5	4.4	4.7	4.6
Jan-15	3.3	3.1	2.9	3.1	3.7	4.1	3.3
Feb-15	-3.1	-3.0	-2.7	-2.9	-3.0	-3.5	-3.4
Mar-15	2.5	2.5	2.4	2.2	2.7	3.0	2.5
Apr-15	-2.7	-2.7	-2.4	-2.5	-2.7	-3.1	-2.9
May-15	1.4	1.4	1.3	1.3	1.5	1.7	1.5
Jun-15	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5
Jul-15	3.0	3.0	2.7	2.8	3.0	3.3	3.2
Aug-15	1.3	1.3	1.2	1.1	1.5	1.7	1.1
Sep-15	1.1	0.9	0.8	1.2	1.0	1.2	1.6
Oct-15	-8.9	-8.2	-8.8	-7.8	-10.7	-11.8	-10.2
Nov-15	1.9	1.8	1.6	1.9	1.8	1.9	2.2
Dec-15	3.1	3.0	2.6	2.9	3.1	3.7	3.4

Source: Own calculations using KZN Economic Model, 2015

The average risk index for the province and each of the regions for the period 2010 to 2015 is displayed in Table 7.5.

Table 7.5: Average economic risk or conditions monitor for the period 2010 to 2015

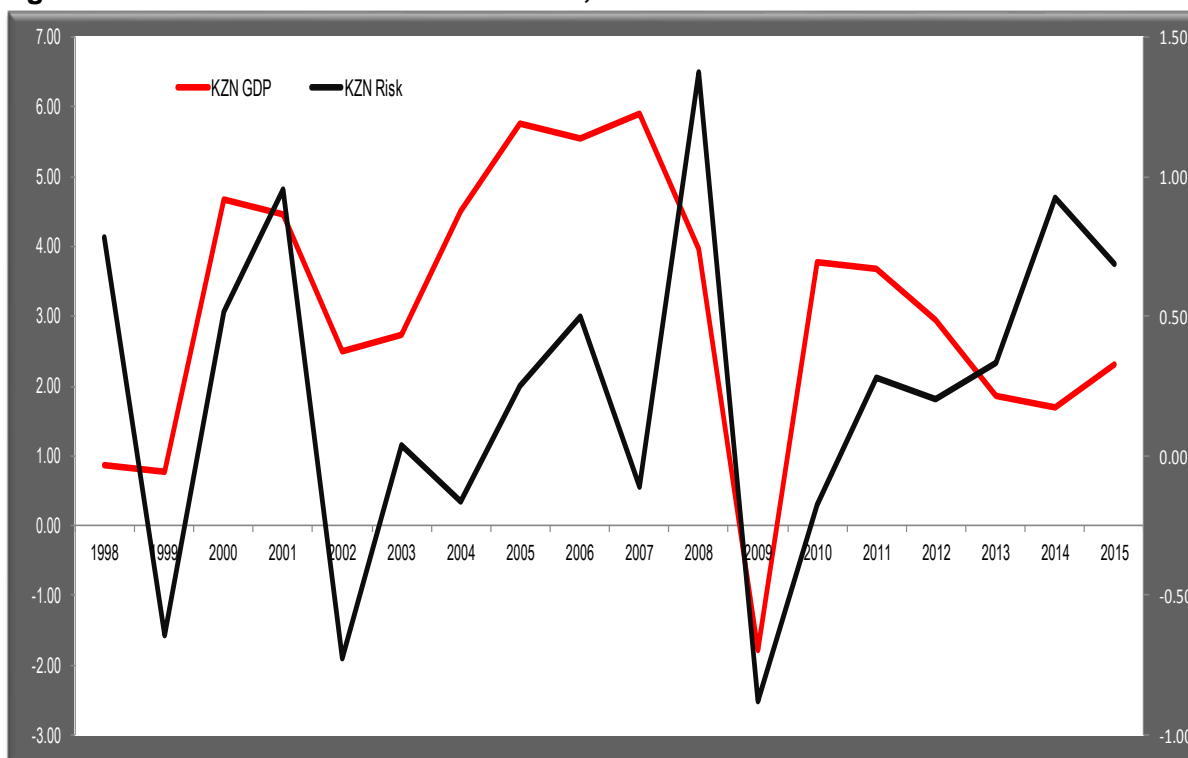
	KZN	Durban	PMB	Rbay	Newcastle	Port Shepstone	Ilembe
2010	-0.4	-0.4	-0.3	-0.3	-0.3	-0.4	-0.4
2011	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
2012	0.3	0.3	0.3	0.3	0.3	0.4	0.3
2013	0.4	0.4	0.4	0.3	0.4	0.4	0.4
2014	0.4	0.4	0.4	0.4	0.4	0.4	0.4
2015	1.0	1.0	0.9	0.9	1.0	1.1	1.0

Source: Own calculations using KZN Economic Model, 2015

7.4: KZN risk index and KZN GDP

Figure 7.3 shows the behaviour of the KZN risk index and KZN GDP growth from 1998 to 2015. Prior to 2013, there had only been two years where the provincial risk index was higher than the provincial GDP that was in 1998 and 2008. Both years were characterised by very low economic output followed by strong economic recovery. Time will tell whether history will dictate if the current period of low economic output will also be followed by strong economic recovery.

Figure 7.3: KZN risk index and KZN GDP⁴³, 1998 to 2015



Source: Own calculations using KZN Economic Model, 2015

7.5 Interpretation of the monitor

The results suggest that the economic risk in the province during 2015 was consistently fairly low and improved further during the latter part of 2015, especially when compared to the previous years. Furthermore, the risk index suggests that economic conditions in the KZN province was positive based on seven variables. Fortunately, the outlook also seems to be even further improving during the early months of 2016, especially given the behaviour of the international oil price. The major risk factors for 2015 are the availability of electricity and water, increasing inflation and interest rates and the continuous fiscal pressure.

The immediate past, current and risk or economic outlook conditions “should” support the economic outlook of the province during 2016, but unfortunately, given the “bad” business and consumer confidence numbers and the monetary and fiscal constraints, only a marginal result has occurred.

The results also suggest that economic risk during 2015 was the highest in the Pietermaritzburg and Richards Bay economies, whilst it was the lowest in the Port Shepstone and Durban economies.

⁴³KZN GDP is on the left axis (% growth) and KZN risk index is on the right axis (value)

Chapter 8: The Environment of Small Business in KZN

8.1 Introduction

This chapter examines the survey on the environment of small businesses in the province of KwaZulu-Natal (KZN). This survey is similar to others that have been conducted before where attempts have been made to understand and facilitate the development and growth of small businesses. Small Businesses are defined as a distinct business entities, including cooperative enterprises and non-governmental organizations, managed by one owner or more which, including its subsidiaries, if any, is mostly carried on in any sector or sub-sector of the economy (Agupusi, 2007).

8.2 Background and methodology

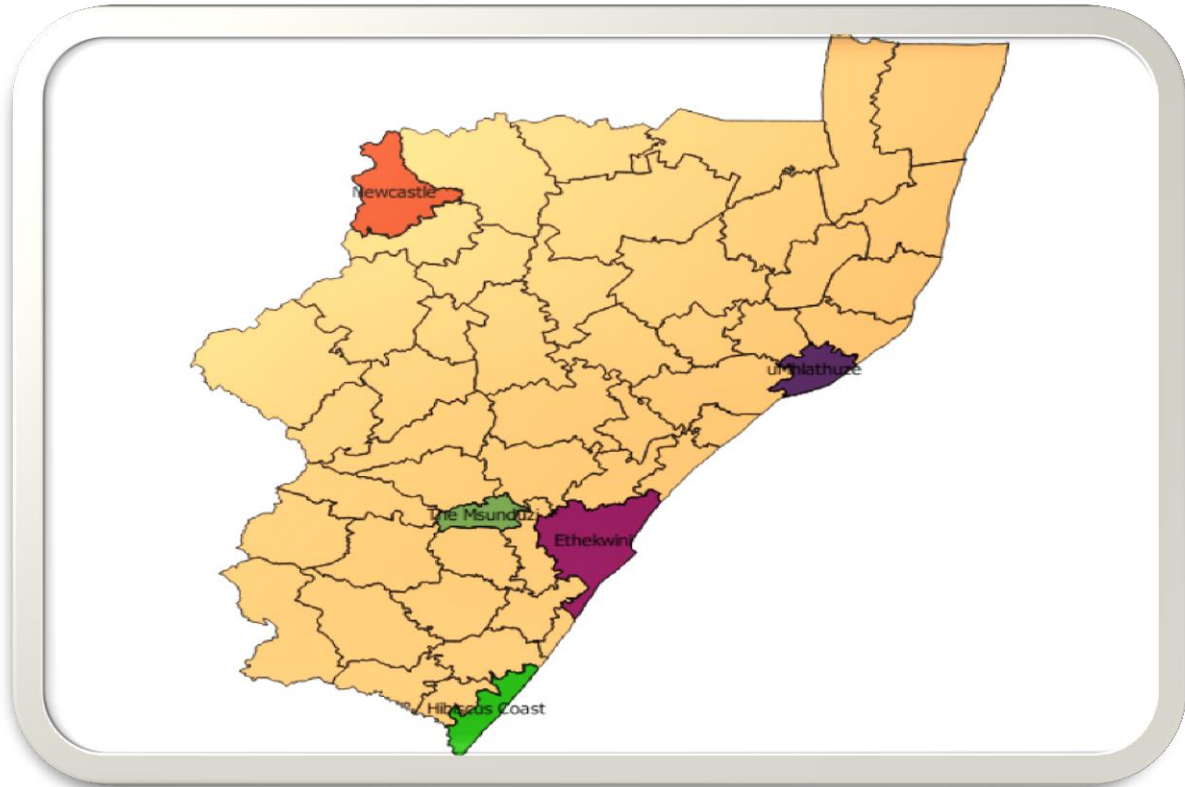
This study was conducted to address the significant matter of “red tape”, which has a massive effect on the small business. “Red tape” is an ambiguous term because it is widely documented that for many businesses, it embraces the entire experience of engagement with the government. It has been recognized that “red tape” is a focal issue in a number of previous surveys and studies conducted internationally, nationally and regionally and very similar results and conclusions have been drawn.

In addition, the compliance processes involved in understanding the purpose and processes of the legislation, obtaining relevant and correct information, waiting periods, courtesy of staff, and the general sense of fair and equitable treatment missing end of sentence. This survey was conducted using a structured questionnaire that was formulated so as to profile the performance of small businesses across a range of sectors. There were 2 500 questionnaires that was distributed among five selected districts, however, only 1 934 responses were received. This contributes to 77.4 per cent of the total responses. The number of non-response reduced the sample size, but it did not compromise the validity of the major findings of the survey.

The survey was intended to solicit the views of a representative sample of small businesses in five KZN districts. Collectively, these districts were known to represent 80 per cent of the provincial economy and were therefore considered to be an adequate representation of the

prevailing circumstances of small businesses in the province. The selected districts or metropolitan authority areas which were targeted were UMSunduzi, eThekwini, Newcastle, Umhlathuze and Hibiscus Coast.

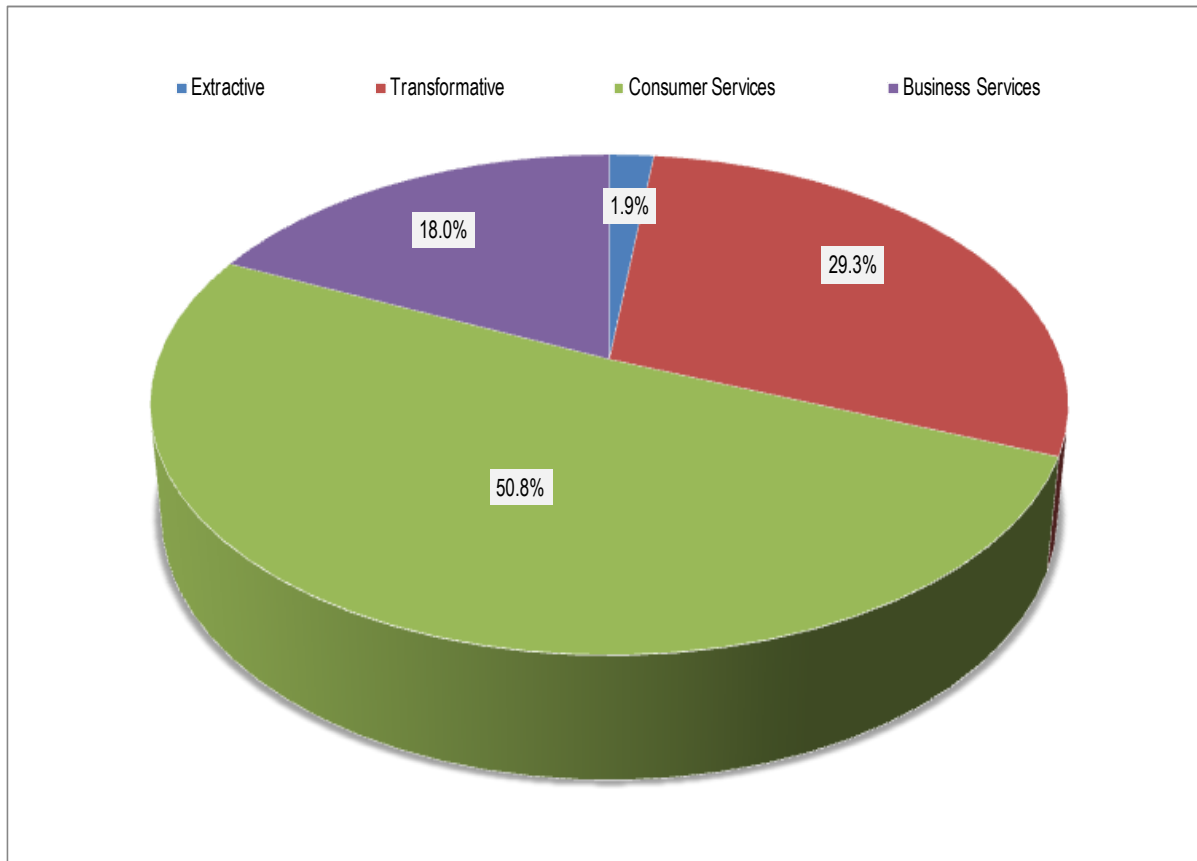
Figure 8.1: Sample locations



Source: Own calculations

The named areas in (Figure 8.1) indicate the targeted districts in KZN. The percentage contributed by each district is as follows: UMSunduzi (26.2 per cent); eThekwini (35.1 per cent); Newcastle (12.4 per cent); UMhlathuze (14.1 per cent) and Hibiscus Coast (12.2 per cent). The survey mainly focuses on four sectors: Extractive, Transformative, Consumer Services and Business Services. These four sectors also have other sub-sectors within them - (Extractive: Agriculture, Forestry and Fishing, Mining); (Transformative: Construction, Manufacturing, Transport, Communications, Utilities and Wholesale); (Consumer Services: Motor and Vehicle, Hospitality, Personal, Education, Recreation); (Business Services: Finance, Insurance, Real Estate).

Figure 8.2: Response received from sectors by percentages in 2015



Source: Own calculations, 2015

Figure 8.2 shows the dominance of the consumer services compared to other sectors, since it contributed 50.8 per cent, followed by the transformative sector with a contribution of 29.3 per cent. However, the extractive sector contributed the lowest responses of 1.9 per cent.

8.3 Global overview of the small business

The global small and medium sized enterprises hold greater potential for employment creation than do large enterprises. A 13-year study conducted in the US during 1990-2003, demonstrated that small businesses create a significant more employment opportunities than large businesses (Edmiston, 2007:78). The Global Entrepreneurship Monitor (GEM) records that 73 per cent of employment occurs in firms that have fewer than 50 employees, yet 45 per cent of employment occurs in firms with fewer than 10 employees (GEM, 2010).

The challenge to create a business climate that is conducive to facilitating new business formation and support is a formidable one. South African research completed in 2006 (GTZ, 2006) makes the case for improvements built upon a foundation of a better public or private

dialogue that addresses key dimensions of the business climate that includes processes of governance, policy and regulation, government capacity development and access to business services and infrastructure. The recent studies in the United Kingdom (UK) (BIS Small Business Survey 2011) and South Africa (SA) (SPB, 2011) indicate the value of longitudinal studies in assessing small business development and in creating a favourable business climate for small business. Studies, such as this one that provide a “snapshot” at a point in time are useful but do not portray trends that reveal the manner and direction in which changes are occurring, other than in the very short-term.

8.4 National overview of small businesses

Since the structural change in 1994, small, medium and micro enterprises (SMMEs) grew at a moderate growth rate. Currently, there are 107 724 enterprises in the manufacturing sector, and 42 per cent of these enterprises are attributed to be in the growing phase of SMMEs (Department-of-Trade-and-Industry, 2005 - 2007). SMMEs in SA have a positive impact on GDP because they generate income.

The most referenced national survey on how cost impacts on compliance was completed by Strategic Partnerships for Business Growth in Africa (SPB) in 2004. The estimated total costs of compliance in SA was 6,5 per cent of the GDP; this was in contrast to compliance costs in other countries. The cost burden of regulation, as a proportion of operating expenses, falls more heavily on small businesses rather than large businesses, mostly because of the legislation that is applicable to most business types and sizes.

The SPB in SA (2011) reinforces the challenges that confront SA in attempting to stimulate the development and growth of small businesses. As result, the government’s target to create five million jobs over the next ten years has been translated into 13 600 new manufacturing businesses and a total of 100 000 new businesses overall (SPB, 2011). It could be noted that less than 4 per cent of start-up businesses take on new employees.

The requirement to create employment through the medium and small businesses will require a paradigm shift in thinking and practices relative to small business development. A focus on the “red tape” and bureaucracy alone will not achieve this change; thoughts also need to focus on how to help small businesses survive.

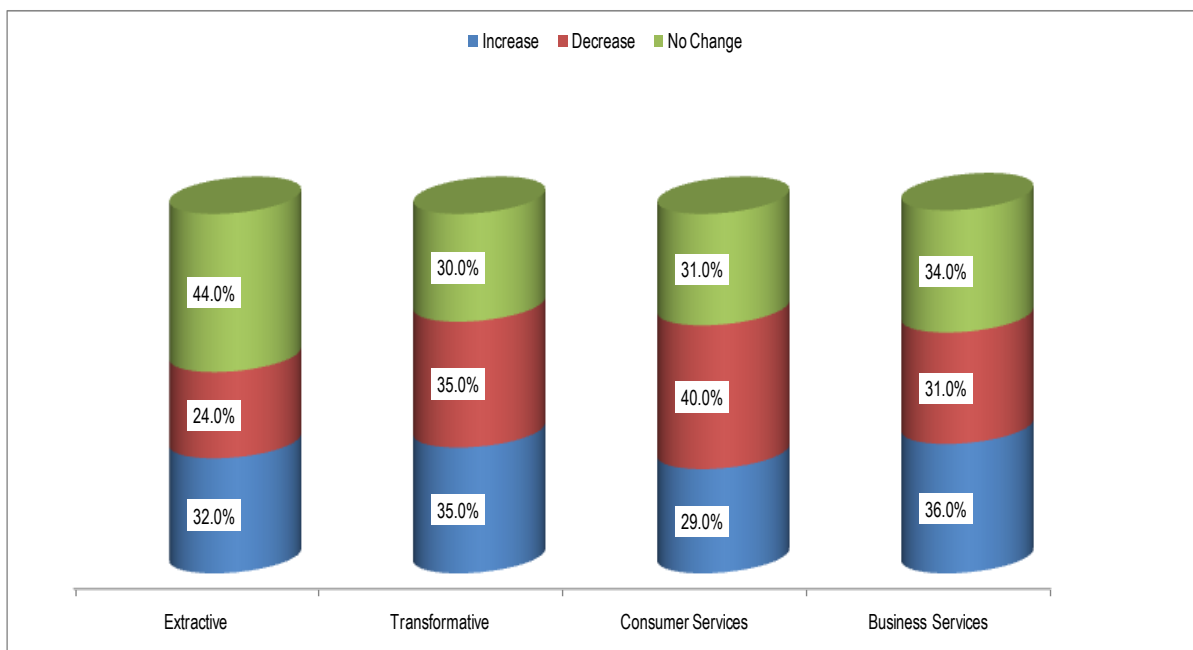
8.5 Small business performance in KZN

The aim of this study was to examine the profile of small businesses in various sectors in KZN with a view to determining the distribution of small businesses among sectors and also to profile them in terms of their turnover, employment, financial access, and their business constraints. This study was conducted to address the significant matter of “red tape”, which has a massive effect on the small business in KZN.

8.5.1 Small business turnover

There was a noticeable decrease in turnover throughout sectors. The consumer service sector decreased by 40 per cent, probably because the study was conducted at the time of general economic downturn. This also underscores the reality of a very uncertain trading environment for small businesses. The predominant influencing factor relative to a changing turnover performance is an economic recession. This was confirmed in this study as 60 per cent of respondents recorded this as being the most significant factor that also impinged on their requirements to grow their labour force. The second most significant factor (29 per cent) was related to local competition.

Figure 8.3: Turnover percentage by sectors



Source: Own calculations, 2015

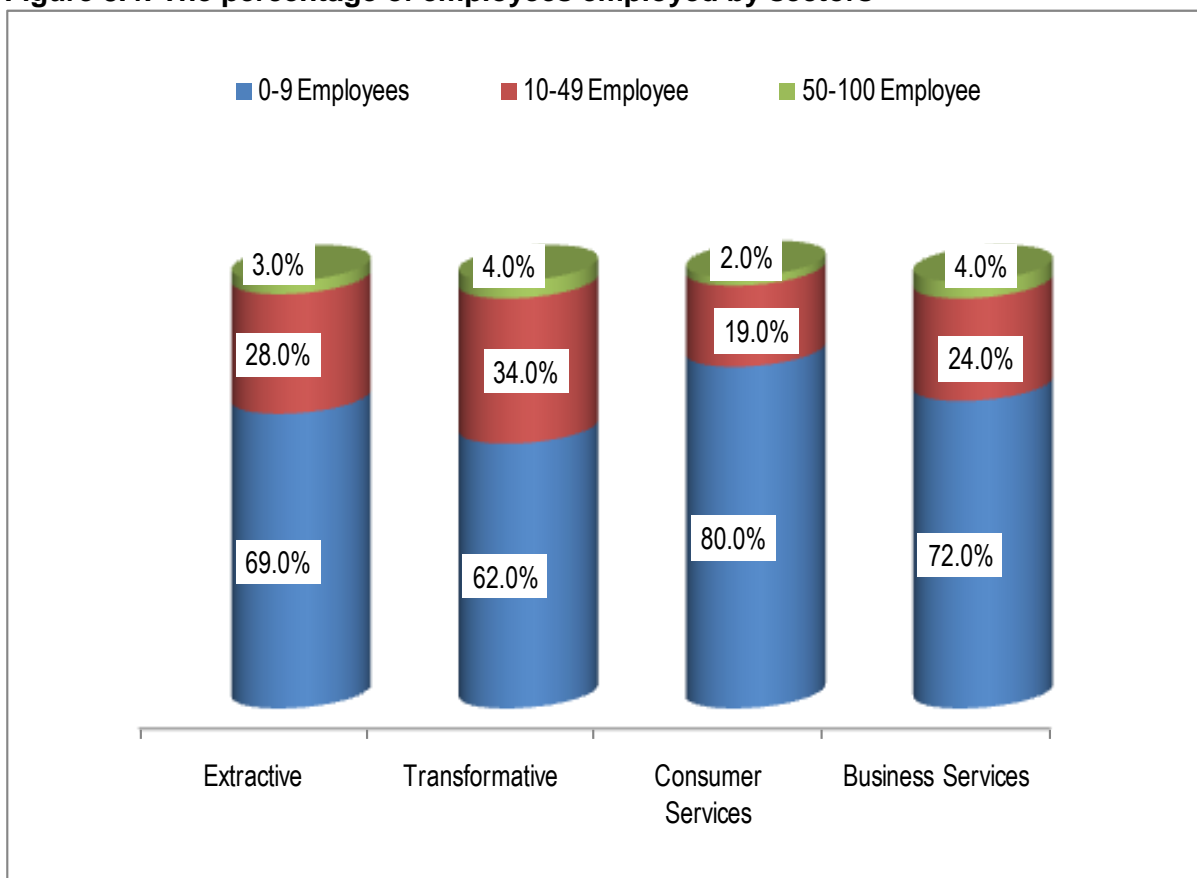
The information stated in Figure 8.3 suggests that the turnover performance over the previous 12 months had either decreased by 40 per cent (Consumer Services) or remained

the same (Extractive – 44.0 per cent). Business Services improved their turnover performance by 36 per cent. However, this was marginally followed closely by the Transformative Sector, who improved their performance by 35 per cent.

8.5.2 Employment created by small businesses

Small businesses are viewed as a crucial source for creating job opportunities and also generating income in more developing countries. However, an analysis of this survey depicts that employment had a very small impact. The gender and race profile shows that 52 per cent of small business employees are drawn from the African community (28 per cent male; 24 per cent female), with White and Asian ethnic groups approximating 20 per cent each and Coloured employees making up the balance of 8 per cent. The survey also showed that there was also very little reported tendency to employ seasonal workers, even within the hospitality sector where general economic stringency is curtailing retail activity, lengths of stay and holiday expenditure, even in traditional holiday destination areas for example: Port Shepstone.

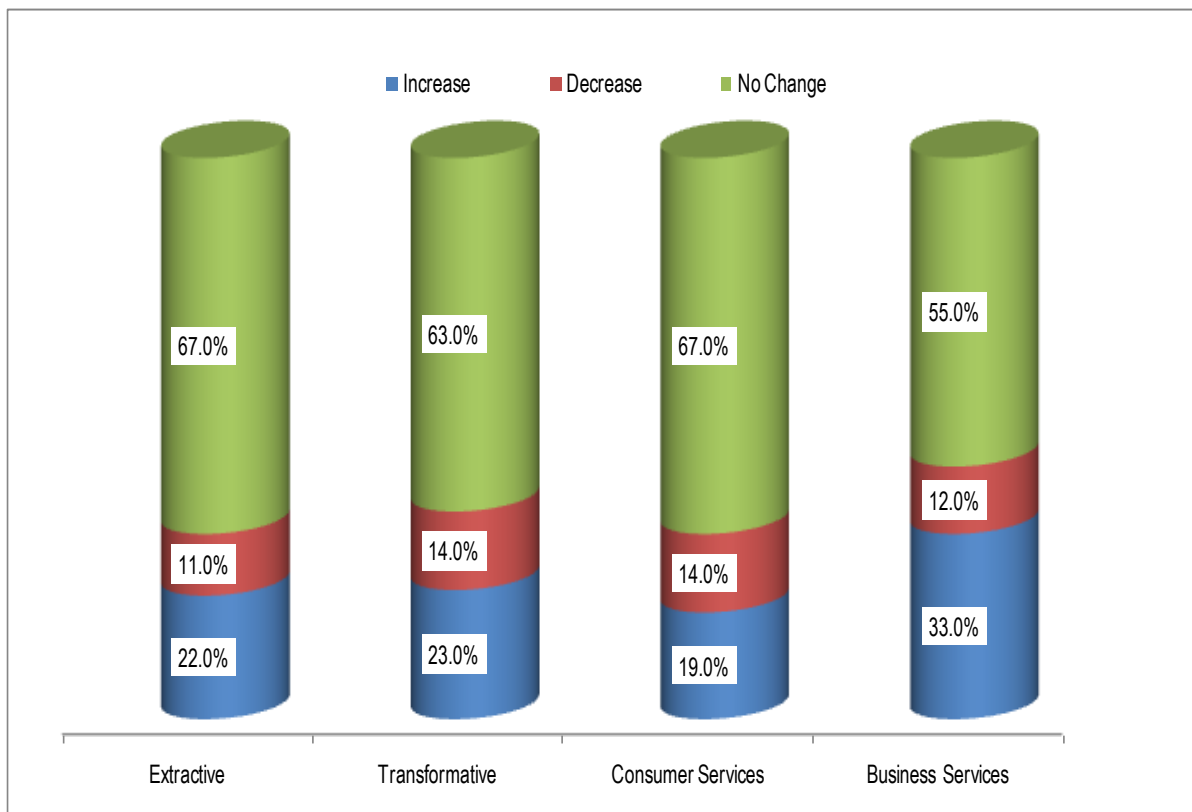
Figure 8.4: The percentage of employees employed by sectors



Source: Own calculations, 2015

Figure 8.4 indicates that all sectors have at least 9 employees. Out of all the sectors, Consumer Services employed the least number of staff - 80 per cent of their employees numbered between 0 and 9. There was a very small variation in the number of people employed in all the sectors. The main reason may be because small businesses try to cut their operating cost. However, there are other factors that affect small business employment which include labour legislation, labour productivity, skill availability, anticipated demand, management capacity and technological change.

Figure 8.5: Percentage of employment changes by sectors



Source: Own calculations, 2015

Figure 8.5 depicts that 33 per cent in the Business Services increased their employee numbers. Both Extractive and Transformative sectors indicate no significant changes within 12 months. Given that the four sectors mostly employed up to nine employees, the increase in employment is insignificant.

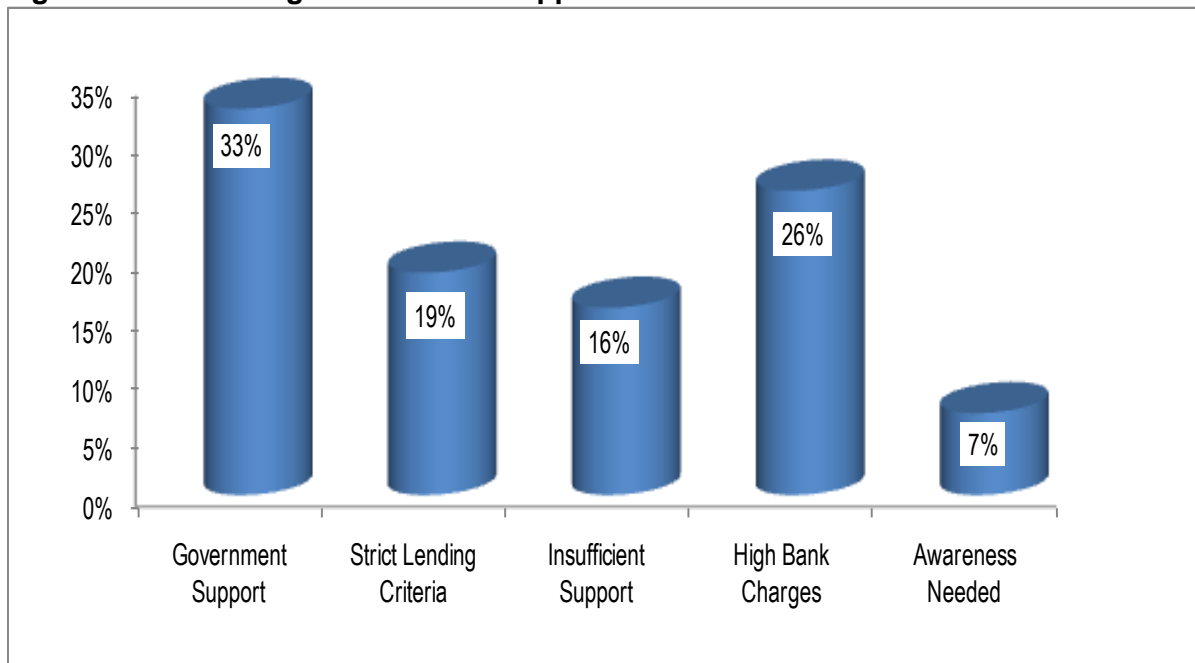
8.5.3 Small business' access to finance

The survey results indicate that approximately 93 per cent of small businesses are uncertain about where and how to access finance. This implies that financial access is not the

fundamental problem for businesses; however, the main problem is the knowledge and understanding of the support that may or may not be available. The survey results indicate that 67 per cent of respondents were happy with the range of banking services provided, 15 per cent had successfully applied for venture finance, but 64 per cent had not realised that such support is available.

This scenario correlates well with the recent findings of the SPB which recorded that 60 per cent of small businesses use their own resources (SPB, 2011). They also noted that only two per cent accessed funding from the Industrial Development Corporation (IDC), eight per cent used banks and six per cent obtained funds from private investors or shareholders.

Figure 8.6: Percentage for financial support for small businesses



Source: Own calculations, 2015

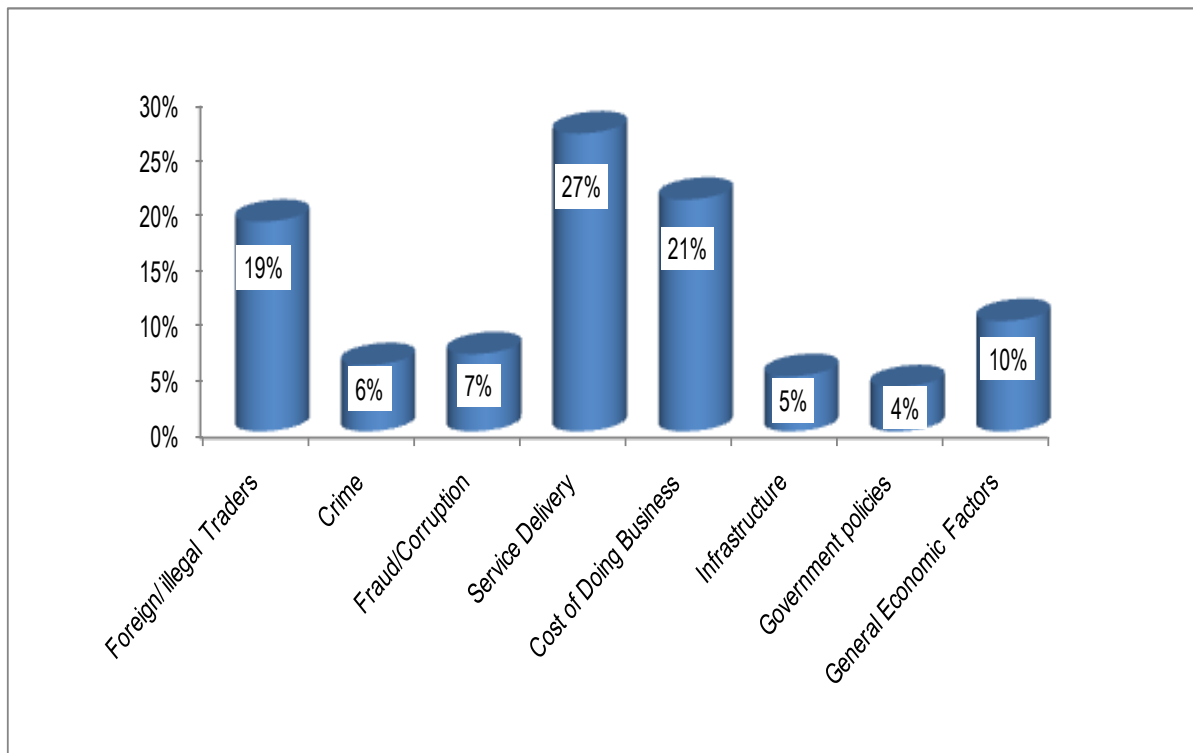
Figure 8.6 shows that 33 per cent of the small businesses appealed for further government support; this may be because the owners found bank charges to be excessively expensive (26 per cent). The results of the survey indicate that small businesses require a review of their policies and practices.

8.5.4 Limitations for small businesses

This survey identified various challenges that negatively impinge on small businesses ability to survive and grow. The policy implementation for illegal trading is understood to be

inadequately engaged, including foreign trader activities and informal business activities. It is important to note that although compliance costs form one of the biggest obstacles to small business growth and development in the KwaZulu-Natal province, the government has not selected a specific benchmark in terms of which compliance costs can be reduced. Regulators did not want to select a benchmark as they argued that compliance costs need to be continuously reduced, even if they are relatively low.

Figure 8.7: The percentage indicating limitations for small businesses



Source: Own calculations, 2015

Figure 8.7 illustrates the challenges that small businesses faced when they entered into the market. These challenges facing the small businesses include service delivery (27 per cent), cost of doing business (21 per cent) and illegal traders (19 per cent) because of the existence of cheap foreign goods that are unregulated.

8.6 Conclusion

The findings of this study require further validation. The study and the supporting interviews (although limited) that were conducted indicate a more complex set of circumstances than simply an evaluation of “red tape” as an impediment to small business development. SA shares the burdens that are common in many African countries, such as education and a

training system that lacks a developmental orientation, non-coherent government policies in terms of achieving important objectives, and misallocated or inaccessible finance. In addition, SA carries the burden of its political history followed by redress programmes that are perceived by many to be diluting the energy that might otherwise be mobilized.

The process of small businesses to create job opportunities and growth require further investigations, not only to validate this finding but also to establish the reasons for the apparent absence of incentives to start new businesses and to grow existing businesses. In addition, the whole mechanism of public funding provisions for the support and growth of small businesses need to be examined in order to develop frameworks so that the available resources within KZN can be used more effectively.

Chapter 9: Economic Freedom and Economic Growth⁴⁴

9.1 Introduction

The relationship between economic freedom and growth has been studied and debated by economists since Adam Smith⁴⁵. It has been generally argued that free economies will be more productive. Economic freedom is considered to be the ultimate incentive for the optimal use of scarce resources, by creating a favourable environment for healthy competitiveness and stimulating human creativity. In a free private market, individuals have the freedom to choose what to consume, to produce, and to give. The invisible hand leads free economic agents to pursue their own interests and voluntarily cooperate with others (Smith; cited in Gwartney and Lawson, 2002).

It is common knowledge that large differences exist in the economic growth and development of countries around the world. An extensive literature review finds numerous factors that taken together; explain why certain countries experience greater rates of income and employment growth than others. The most cited factors contributing to economic growth include the stock of human capital, investment in technology, trade specialization and foreign direct investment (FDI), and low levels of political corruption (Gwartney, 2009).

The author further presents a more recent literature, which has explored the role of economic and political institutions in the economic growth of countries. He also presents studies which have shown that countries with greater economic freedom, meaning the protection of private property and private markets operating with minimal government interference, have greater rates of economic growth than countries with lower levels of economic freedom.

According to Gwartney and Lawson (2002), the higher the level of economic freedom in a country, the higher the country's prosperity. Baumol (2002) stated that the system of market

⁴⁴The views expressed in this chapter are those of the author and do not necessarily represent those of the KZN Provincial Treasury.

⁴⁵ Adam Smith is one of the famous economists and moral philosopher who was the first economist to inquire about the nature and causes of the wealth of nations (1776).

economy is the engine of innovation that fuel growth. While Dutz and Hayri (2000) found a correlation between long-term growth with competitive policies.

9.2 Economic freedom conceptualised

The Heritage Foundation publishes on an annual basis an Index of Economic Freedom (IEF) report. The report is published in partnership with the Wall Street Journal (WSJ). Economic freedom, according to the Heritage Foundation is the fundamental right of every human to control his or her own labour and property. In an economically free society, individuals are free to work, produce, consume, and invest in any way they please. The government allows labour, capital, and goods to move freely.

The Fraser Institute also publishes an Economic Freedom of the World (EFW) annual report. Economic freedom is an individual's ability to make their own economic decisions without interference or limitations by the government or the government's protection of anti-market behaviour who may be in favour of such powerful groups who may abuse this power to limit market choices. The cornerstones of economic freedom, according to the Fraser Institute are: personal choice rather than collective choice, voluntary exchange coordinated by markets rather than allocation via the political process, freedom to enter and compete in markets and the protection of persons and their property from aggression by others.⁴⁶

According to Gwartney and Lawson (2002), economic freedom is complex and multi-dimensional and this makes it difficult to quantify. Its measurement should, therefore, be based on objective quantifiable data and transparent procedures. The researchers' subjective views should not influence the rating of any country. The goal should be to develop an index that others, regardless of their political orientation, could replicate. Beach and Kanestate (2008) argue that overall economic freedom, defined by multiple rights and liberties, can be quantified as an index of less abstract components.⁴⁷

The index conceived by Beach and Kane (2008) uses 10 specific freedoms, some as composites of even further detailed and quantifiable components, including: business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption and labor freedom. In the IEF, all 10 factors are equally weighted so not to bias the overall score toward any one

⁴⁶See Economic Freedom of the World, available online: https://en.wikipedia.org/wiki/Economic_Freedom_of_the_World, accessed on 6 February 2016.

⁴⁷Beach, WW and Kane, T (2008): Methodology: Measuring the 10 Economic Freedoms, available online: http://www.appstate.edu/~ehrhartg/Economic_freedom_codebook.pdf.

factor or policy direction. The IEF then offers a simple composite based on an average of the 10 freedoms (Beach & Kane, 2008).

The EFW index contains 21 individual components. A diverse set of objective variables are employed and they provide a good measure of cross-country differences in size of government, access to sound money, openness of international trade, and regulation of capital markets. However, important dimensions are omitted because of data limitations and measurement problems. In some cases, potential components are omitted because the required data is only available for a small number of countries. In other instances, omissions reflect the difficulties involved in the development of an objective measure (Gwartney & Lawson, 2002).

The authors further maintained that the EFW index measures the degree of economic freedom present in five major areas, namely: size of government expenditures, taxes and enterprises, legal structure and security of property rights, sound money, freedom to trade with foreigners and regulation of credit, labour, and business.

The Heritage Foundation measures economic freedom based on 10 quantitative and qualitative factors, grouped into four broad categories, or pillars, of economic freedom, namely: rule of law (property rights, freedom from corruption), limited government (fiscal freedom, government spending), regulatory efficiency (business freedom, labour freedom, monetary freedom), and open markets (trade freedom, investment freedom, financial freedom). Each of the ten economic freedoms within these categories is graded on a scale of 0 to 100. A country's overall score is derived by averaging these ten economic freedoms, with equal weight being given to each.

9.3 Does economic freedom matter?

The study conducted by Panahi, Assadzadeh and Refaei (2014) focused on the impact of economic freedom on economic growth. They investigated the relationship between economic freedom and economic growth using data from 13 selected Middle East and North Africa (MENA) countries over the period of 2000 to 2009.

The study makes use of two models. First, a variety of control variables that may affect a country's growth rate were employed, and an estimation of the model with the overall index

of economic freedom was made. In the next step, the economic freedom index was broken down into the categories in constructing the index.

The model is defined as:

$$LRGDP_{pc} = \beta_0 + \beta_1 LECFR + \beta_i \sum LZ_i + \varepsilon_i \quad (9.1)$$

Where $LRGDP_{pc}$ is real gross domestic product per capita in 2000 constant dollars, and $LECFR$ is economic freedom indicators, $\sum z$ is a control variable ε is a stochastic error term. The standard control vector includes government share of the gross domestic product (GDP0, investment share of the GDP, total area of a country and primary school enrolment. The data on economic freedom was reported in the various EFW Annual Reports. Thereafter, the panel characteristics of the dataset were taken into account and an estimation of random and fixed effects models were made.

Using data from 2004 to 2014, Wulandari (2015) applied a positivist approach to find the relationship between economic freedom and economic growth in Indonesia. The data used in the study was obtained from the official website of the Central Bureau of Statistics of Indonesia and the Heritage Foundation. The vector autoregression (VAR) model that was applied follows the study conducted by Lee (1992). The results suggest that economic freedom has a positive impact on economic growth which in turn has a positive influence on economic freedom. This supports previous studies which stated that economic freedom leads to growth. Market liberalization is a necessary institutional reform for a country concerned with economic growth and social welfare.

Justesen (2006) stated that one prominent line of research which had gained momentum in the last decade emphasised the role of economic freedom as an important determinant of economic growth. Theoretically, the literature of economic freedom emphasises that the extent to which countries possess free market institutions to protect property rights and implement policies, and which provide for trade and voluntary exchange, is instrumental to economic growth.

Similar to most studies, the main conclusion of the paper is that economic freedom does matter for economic growth. However, the relationship between the individual components of economic freedom and growth is rather complex, which for the purpose of empirical research, highlights the importance of decomposing the indices of economic freedom. Inherently, both the level of and changes in overall economic freedom appear to be a cause

of economic growth. The level of property rights appears to have a causal impact on growth, whereas changes in property rights apparently do not Granger cause economic growth.

As for the relationship between economic growth and the component on (changes in) trade, causality appears to run both ways. The only single component of economic freedom that exerts a unidirectional Granger causal impact on economic growth regardless of model specification is the component measuring regulation of business, labour and credit markets (Justesen, 2006).

Garrett and Rhine (2010) extend earlier models of economic growth and development by exploring the effect of economic freedom on United State (US) employment growth. Their results reveal that economic freedom is a significant factor in state employment growth in addition to the more traditional determinants of growth such as industrial diversity and human capital. They find that the effect of economic freedom on state employment growth varies depending on the time period studied and which economic freedom index is used.

Gorlach and Le Roux (2013) investigated the relationship between economic freedom, in aggregate and on an individual component basis, focusing on economic growth in the Southern African Development Community (SADC) countries. Their study seems to confirm the a-priori expectations of freer and more open economies experience higher growth rates. Similarly, public debt and GDP are inversely related, and are significant at the 1 per cent level of confidence. Therefore, the a-priori expectation is that public debt negatively affects growth. According to the authors, an interesting result to take note of is the strong positive and highly significant relationship of the freedom components amongst each other. Therefore, a country, by improving one aspect of economic freedom can automatically increase its freedom in another category and experience a multiplier effect on growth rates.

The empirical results from the study by Gorlach and Le Roux (2013) confirm that economic freedom is positively related to economic growth in the SADC countries. More importantly, economic freedom is found to Granger-cause⁴⁸ economic growth. Therefore, increasing the levels of economic freedom leads to higher GDP per capita growth rates.

⁴⁸ Granger causality is a term used for a specific notion of causality in time-series analysis. It states that a variable, for instance *X* causes another variable such as *Y*, if *Y* can be better predicted using the histories of both *X* and *Y* then it can be used to predict the history of *Y*.

9.4 Why economic freedom matters

The three most comprehensive studies that attempt to measure economic freedom and publish the results thereof are the Heritage Foundation's Index of Economic Freedom, the Fraser Institute's Economic Freedom of the World Index, and the Freedom House's Freedom in the World Index. The Heritage Foundation's Index of Economic Freedom results have shown that sustaining such economic dynamism is achievable only when governments adopt economic policies that empower individuals and firms with more choices, encouraging greater entrepreneurship.

Notably, are the fundamental benefits that stem from the strong positive relationship between economic freedom and levels of per capita income. For countries achieving scores in the index that reflect even moderate levels of economic freedom (60 or above), the relationship between economic freedom and per capita GDP is highly significant.⁴⁹

Greater economic freedom has had a positive impact not just on the number of people in poverty, but also on the intensity of the poverty still experienced by some. Poverty intensity as measured by the United Nations Development Programme's Multidimensional Poverty Index, which assesses the nature and intensity of deprivation at the individual level in education, health outcomes, and standard of living, is much lower on average in countries with higher levels of economic freedom.⁵⁰

The positive link between economic freedom and higher levels of innovation ensures greater economic dynamism in coping with various developmental challenges, and the most remarkable improvements in clean energy use and energy efficiency over the past decades have occurred, not as a result of government regulation, but rather because of advances in technology and trade.⁵¹

According to the Fraser Institute's annual report, EFW, based on 2013 statistics (the most recent year of available data)⁵², the top 10 most economically free jurisdictions are Hong Kong, Singapore, New Zealand, Switzerland, United Arab Emirates, Mauritius, Jordan, Ireland, Canada, with the United Kingdom and Chile tying for 10th place. The US, once

⁴⁹See Heritage (2016): Economic Freedom: The Proven Path to Prosperity, accessed on 08/02/2016 and available online: <http://www.heritage.org/index/book/chapter-1>

⁵⁰See footnote number 5.

⁵¹See footnote number 5 .

⁵²See the report which is available online: www.freedomhouse.org/report/freedom-world/freedom-world-2015, accessed on 2/12/2016.

considered a bastion of economic freedom, now ranks 16th in the world after being as high as second in 2000. The 10th lowest-ranked countries are Angola, Central African Republic, Zimbabwe, Algeria, Argentina, Syria, Chad, Libya, Republic of Congo, and Venezuela. Some despotic countries such as North Korea and Cuba can't be ranked due to lack of data.

In EFW annual report, Rode, Knoll, and Pitlik (2013) focus on the life satisfaction outcomes of economic freedom and democracy, showing that there is a welfare benefit derived from living in an economically free society that goes beyond pure income-enhancing effects. Crisp, Rode, Knoll, and Pitlik (2013) further states that in a parallel manner, it has been shown that economic freedom exerts an independent impact on life satisfaction over and above its impact on per-capita income levels and other indicators of material well-being. Following Buchanan's (2005) ground-breaking research, Rode, Knoll, and Pitlik (2013) examined the impact of economic institutions which were built on the principle of free choice upon individual perceptions of life control. They also considered the potential benefit that accrues to individuals in terms of their life satisfaction.

Their findings indicate that living in a country with high overall economic freedom is a relevant determinant of feeling in control of one's own life. As one might expect, a substantial share of the impact of economic freedom on life satisfaction is actually channelled through life control. Therefore, economic freedom also influences individual happiness by giving people the feeling of being more in control of their own lives and having the freedom to choose between different options in the market.

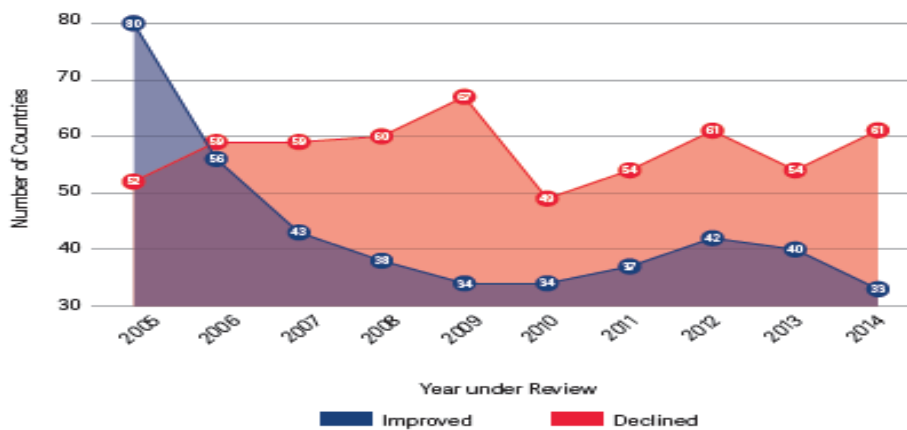
According to the Freedom House Freedom in the World 2015 Report, countries with declines in freedom have out-numbered those with gains for the past nine years (Figure 9.1).The report further states that the number of countries designated by Freedom in the World as Free in 2014 stood at 89, representing 46 per cent of the world's 195 countries and nearly 2.9 billion people or 40 per cent of the global population. The number of countries qualifying as *partly free* stood at 55, or 28 per cent of all countries assessed, and they were home to just over 1.7 billion people, or 24 per cent of the world's total population.

The number of *partly free* countries decreased by four from the previous year. A total of 51 countries were deemed *not free*, representing 26 per cent of the world's population. The number of people living under *not free* conditions stood at 2.6 billion people, or 36 per cent of the global population, though it is important to note that more than half of these people

live in just one country, namely China. The number of *not free* countries increased by three from 2013.

The report also concludes that in a new and disquieting development, a number of countries lost ground due to state surveillance, restrictions on internet communications, and curbs on personal autonomy. Its ratings for the Middle East and North Africa region were the worst in the world, followed by Eurasia. The Worst of the Worst countries are the Central African Republic, Equatorial Guinea, Eritrea, North Korea, Saudi Arabia, Somalia, Sudan, Syria, Turkmenistan and Uzbekistan.

Figure 9.1: Number of countries showing improvement or decline in economic freedom, 2005 to 2014

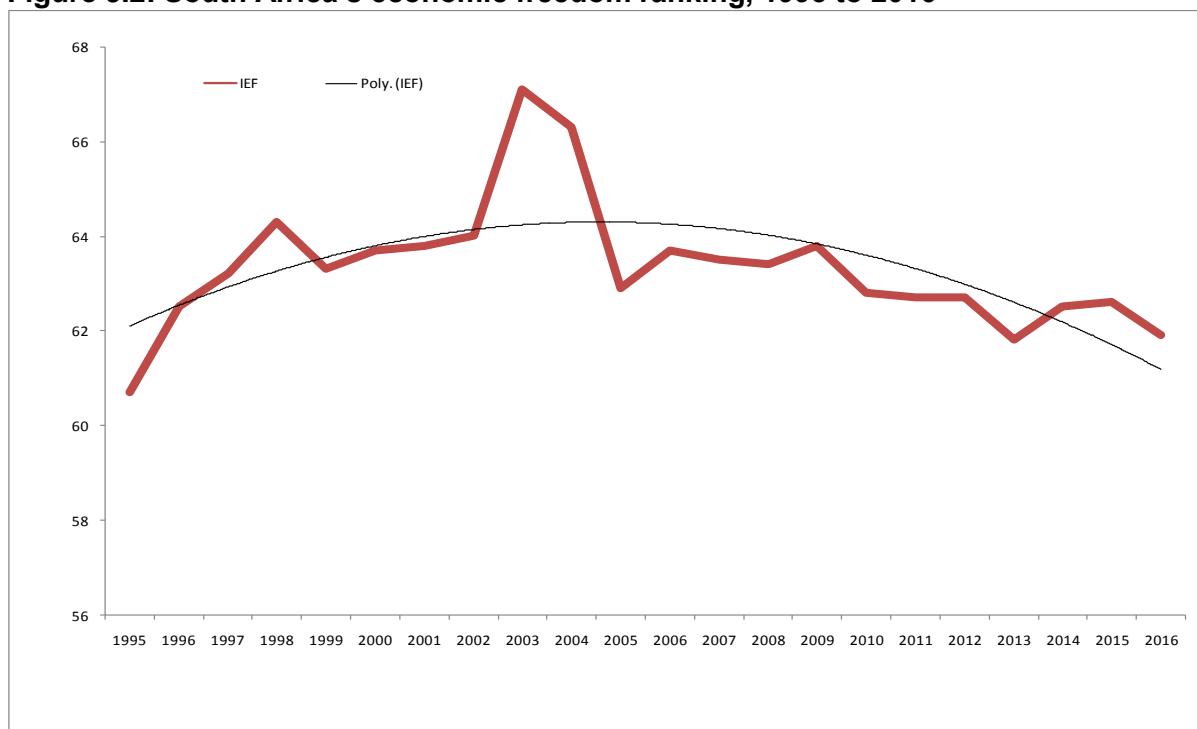


Freedom House, 2015

9.5 South Africa's (SA's) ranking in economic freedom

Figure 9.2 displays SA's freedom according to the Heritage Foundation's IEF. The economic freedom score of 100 represents the most free and 0 the least free. The country is currently ranked 80 out of 186 most free countries in the 2016 index. SA remains in the ranks of the *"moderately free"*. The country is ranked 6th in the 46 Sub-Saharan Africa countries. The trend line suggests a steady regression with regard to economic freedom, especially post 2005.

Figure 9.2: South Africa's economic freedom ranking, 1995 to 2016



Source: Heritage Foundation's IEF, 2015

Table 9.1 reflects on the long-term score change between 1995 and 2015. The biggest gains in economic freedom were recorded in trade and finance, whereas the biggest losses were recorded in investment and business. The country also scored well on "Trade Freedom" and "Monetary Freedom". There was, however, a concern on the "Rule of Law" and "Management of Public Finance". The overall change in score since 2012 is -0.8.

Table 9.1 Long-term score change, 1995 to 2015

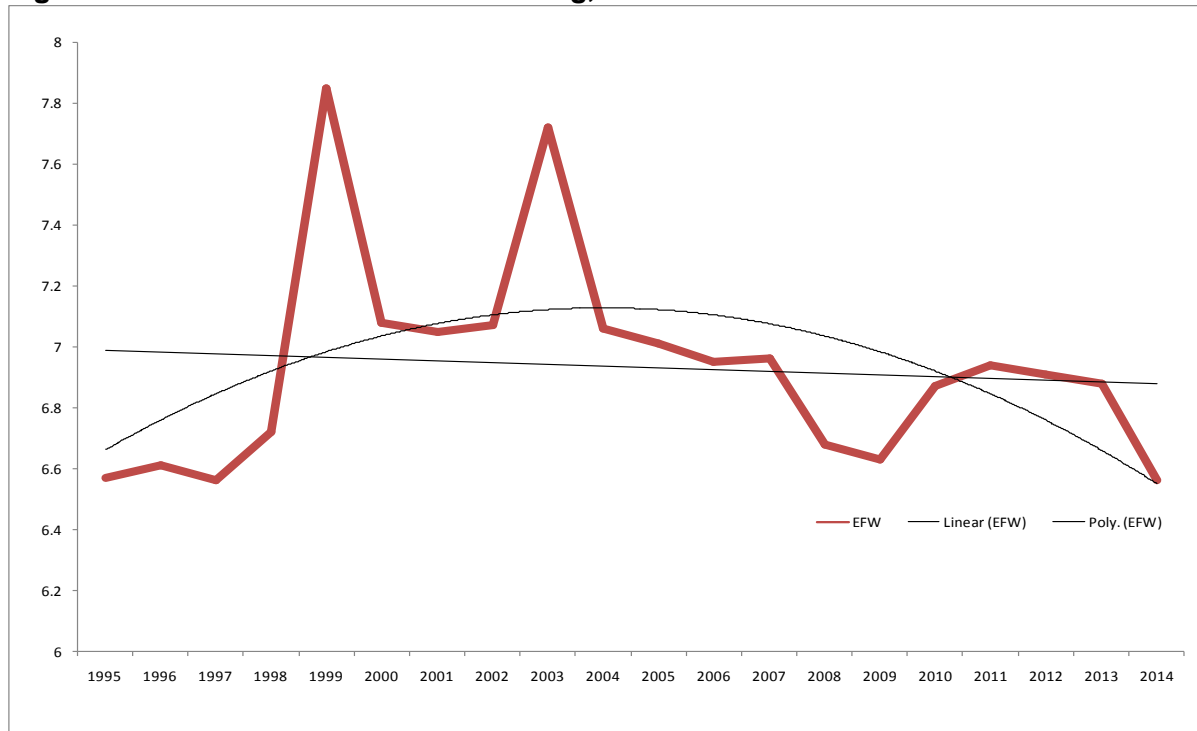
Long-Term Score Change (since 1995)

RULE OF LAW		GOVERNMENT SIZE		REGULATORY EFFICIENCY		OPEN MARKETS	
Property Rights	0	Fiscal Freedom	8.4	Business Freedom	-12.0	Trade Freedom	33.6
Freedom from Corruption	-8.0	Government Spending	4.9	Labour Freedom	2.9	Investment freedom	-20.0
				Monetary Freedom	1.1	financial Freedom	10.0

Source: Heritage Foundation's Index of Economic Freedom, 2015

According to the Fraser Institute's annual report, EFW, based on the 2013 statistics, SA received a rating of 96 out of 175 countries. Figure 9.3 displays SA's rating since 1995 suggesting a progressive regression post 2005. A score of 10 represents the most free and zero the least free.

Figure 9.3: SA's economic freedom rating, 1995 to 2014



Source: Fraser Institute's, Economic Freedom of the World, 2014

9.6 Economic freedom and the economy of SA

The descriptive statistics for the four variables under consideration are presented in table A9.1 (see appendix A). These variables are: GDP or annual percentage change (economic growth rate), Heritage Foundation's IEF, Fraser Institute's EFW and Freedom House Freedom in the World (FW). Table A9.1 shows that GDP, IEF and FW are normally distributed whilst EFW is not.

Figure 9.3 suggests that economic freedom started decreasing post 2005. The 2005 year was also evident when applying the polynomial (2nd order) function and the three-period moving average function. The unit root test (test for stationarity of the variables using the Augmented Dickey-Fuller test) indicates that the GDP variable and the three economic freedom variables are indeed non-stationary in the level format and stationary in the 1st difference format. This suggests the presence of a structural break in each of the three

economic freedom variables, that is, an unexpected shift estimated to have happened circa year 2005.

Table 9.2 displays the average annual economic growth rate for the two periods, between 1995 and 2004 as well as 2005 to 2014. The results suggest that the economy performed better during the period of relative economic freedom, that is, 1995 to 2004 vis-à-vis the period of decreasing economic freedom, 2005 to 2014.

Table 9.2: Economic freedom and economic growth, 1995 to 2014

	GDP	IEF	EFW	FW
Average 1995 to 2004	3.1	63.9	7.0	1.6
Average 2005 to 2014	2.7	62.9	6.8	1.9

Source: own calculations using Stats SA GDP publications

The first statistical analysis uses the cross-correlation function. Cross-correlation is a measure of similarity of two series as a function of the lag of one relative to the other. The results (see Table A9.2) suggest a lagged correlation or delayed response between economic freedom and economic growth, that is, between 2 and 4 years. Interestingly, it does not seem to be a lagged correlation between economic growth and economic freedom.

The second statistical analysis includes the Granger causality function. In essence, it tests whether a *variable X* causes another *variable Y* in order to see how much of the current values of *Y* can be explained by past values of *Y* and then to check whether adding lagged values of *X* can improve the explanation. *Y* is said to be Granger-caused by *X* if *X* helps in the prediction of *Y*, or equivalently, if the coefficients on the lagged *X*'s are statistically significant. The results of the Granger causality tests (Table A9.3) suggest that economic freedom does Granger cause economic growth and not the other way around.

Thirdly, the study analyses the effect of economic freedom on GDP growth using the three measures of overall economic freedom:

$$g_i = \alpha + \beta_1 \gamma_i + \beta_2 INV_i + \delta EF_i + \varepsilon_i \quad (9.2)$$

Where g_i is annual economic growth rate (percentage), γ_i is the annual percentage change in gross national income per capita, and INV_i is the annual percentage change in gross fixed capital formation. According to Carlson and Lundström (2001), these variables are often significant in growth and are almost standard for this type of model. EF_i is the value of the

economic freedom index during 1995 to 2014, while ε is a stochastic error term. Since the variables are non-stationary in level format, the 1st difference values will be used, that is, $d(g_i)$. The results of the regression estimation suggest that income per capita and investment are highly significant (Table 9.3). Economic freedom is only significant when using the Fraser Institute's EFW index.

Table 9.3: Regression results estimations using the three measures of economic freedom: GDP growth

d(variable)	IEF		EFW		FW	
	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
Y	0.70*	0.00	0.76*	0.00	0.84*	0.00
INV	0.07*	0.04	0.08*	0.02	0.05	0.14
EF	-0.33	0.07	1.27*	0.03	1.49	0.14
Constant	0.01	0.99	-0.02	0.91	0.00	1.00
R-squared	0.78		0.8		0.78	
F-statistic	22.63*	0.00	25.46*	0.00	20.64	0.00
Sum Squared Residuals	12.95		11.78		13.96	

Note: *: significant

Source: Own calculations using data from Heritage Foundation's Index of Economic Freedom Report (2015), Fraser Institute's, Economic Freedom of the World (2014), Freedom House, Freedom in the World (2015) and Stats SA (2015).

Sometimes the process of estimation and inference becomes more complicated because of the presence of endogenous variables on both sides of the equation (endogeneity in the dependent and independent variables). Given the results of the above regression analysis, it is plausible that economic freedom may be endogenous to economic growth making Ordinary Least Square (OLS) an inappropriate estimator. The results of the Granger causality tests (Table 8.3) suggests that economic freedom consistently predetermines economic growth (economic freedom is endogenous) making the statistical findings on economic growth and economic freedom spurious.

The VAR was first proposed by Sims (1980) since there is no need to worry about the determination of endogenous and exogenous variables, all variables are considered as endogenous variables.

The estimated results that are applied to the VAR model is based on a simple bivariate function as shown in equations 9.3 and 9.4. We can let the time path of the $\{g_t\}$ be affected by current and past realizations of the $\{ef_t\}$ sequence and let the time path of the $\{ef_t\}$ sequence be affected by current and past realizations of the $\{g_t\}$ sequence. The VAR in $d(1)$ format system is as follows:

$$g_t = a_{10} + a_{11} g_{t-i} + a_{12} ef_{t-i} + e_{1t} \quad (9.3)$$

$$ef_t = a_{20} + a_{21} g_{t-i} + a_{22} ef_{t-i} + e_{2t} \quad (9.4)$$

Where:

g_t is the annual economic growth rate, 1995 to 2014 (%)

ef_t refers to the value of the economic freedom index, 1995 to 2014

$i = 1 \dots n$

and where it is assumed (i) that g_t and ef_t are stationary; (ii) e_{1t} and e_{2t} are white-noise disturbances with standard deviations of σ_g and σ_{ef} respectively; and (iii) - the error terms are uncorrelated. The amount of lag in the VAR model is determined on the information criteria recommended by the Final Prediction Error (FPE) or Aike Information Criterion (AIC) or Schwarz Criterion (SC) or Hannan-Quinn (HQ). The structure of the system incorporates feedback since g_t and ef_t are allowed to affect each other. The results of the VAR estimation are presented in Table 9.4.

Table 9.4: VAR results estimations using the three measures of economic freedom: GDP growth

d(GDP)	IEF		EFW		FW	
	Coefficient	T-stat	Coefficient	T-stat	Coefficient	T-stat
Economic growth(-1)	(-)0.53*	-2.92	-0.39	-0.99	-0.72	-1.64
Economic growth (-2)	-0.35	-1.93	-0.44	-1.19	-0.55	-1.85
Economic growth (-3)	-0.21	-1.15	-0.25	-0.65	-0.29	-1.26
Economic growth (-4)	0.02	0.12	-0.27	-0.77	-0.17	-0.99
Economic growth (-1)	0.05	0.16	1.94	1.03	-4.59	-0.1
Economic growth (-2)	0.65*	2.37	0.56	0.02	(-)13.58*	-4.21
Economic growth (-3)	0.34	1.2	1.54	0.75	-1.38	-0.22
Economic growth (-4)	1.27*	5.02	1.04	0.53	-1.06	-1.1
R-squared	0.66		-0.40		-0.75	
F-statistic	4.46		0.49		6.5	
sum Squared Residuals	8.53		35.63		6.12	

Note: *: significant

Source: Own calculations using data from Heritage Foundation's Index of Economic Freedom Report (2015), Fraser Institute's, Economic Freedom of the World (2014), Freedom House, Freedom in the World (2015) and Stats SA (2015).

Table 9.4 indicates that economic growth is affected by the economic growth (one lag period) and the lagged period 2 and period 4 of economic freedom using the Heritage Foundation's Index of Economic Freedom. The table also indicates that economic growth is

affected by the lagged period 1 and period 2 of economic freedom using the Freedom House Freedom in the World.

9.7 Conclusion

South Africa's ranking in the three global economic freedom publications has steadily been worsening post 2005. South Africa can be categorised as "*partly free*". Over the same period, SA's economy has deteriorated with an economic growth estimate of below 1 per cent for 2016. Growth theory and fairly extensive research seems to support the economic growth economic freedom nexus. The focus of economic freedom rests on two pillars, that is, competition and individual responsibility. It is argued that under a competitive and personal responsibility environment, the incentives for the optimal allocation and use of scarce resources will be maximized.

The results of this study seem to support the finding of the previous studies, that is, economic freedom is to have a positive and significant effect on economic growth. Economic freedom, therefore, needs to be recognized as being potentially important for economic growth.

Appendix A: List of additional Figures and Tables

Table A3.1: Crime in Dundee, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	13	16	21	17	13	-4	-23.5%
Total Sexual Offences	81	56	42	65	58	-7	-10.8%
Attempted murder	10	8	8	15	13	-2	-13.3%
Assault with the intent to inflict grievous bodily harm	187	181	154	154	155	1	0.6%
Common assault	263	310	288	253	205	-48	-19.0%
Common robbery	55	58	56	44	49	5	11.4%
Robbery with aggravating circumstances	41	73	87	85	76	-9	-10.6%
Total Contact Crimes (Crimes Against The Person)	650	702	656	633	569	-64	-10.1%
CONTACT-RELATED CRIMES							
Arson	6	3	2	4	3	-1	-25.0%
Malicious damage to property	103	96	80	77	70	-7	-9.1%
Total Contact-Related Crimes	109	99	82	81	73	-8	-9.9%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	75	57	76	58	68	10	17.2%
Burglary at residential premises	215	164	163	214	177	-37	-17.3%
Theft of motor vehicle and motorcycle	50	42	19	32	30	-2	-6.3%
Theft out of or from motor vehicle	58	58	51	66	47	-19	-28.8%
Stock-theft	51	40	40	44	33	-11	-25.0%
Total Property-Related Crimes	449	361	349	414	355	-59	-14.3%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	31	40	33	50	31	-19	-38.0%
Drug-related crime	227	243	369	395	409	14	3.5%
Driving under the influence of alcohol or drugs	106	116	175	160	101	-59	-36.9%
Sexual offences detected as result of police action	-	0	7	0	0	0	0 Cases
Total Crime Detected As A Result Of Police Action	364	399	584	605	541	-64	-10.6%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	278	311	342	241	241	0	0.0%
Commercial crime	79	65	83	121	164	43	35.5%
Shoplifting	73	104	126	113	111	-2	-1.8%
Total Other Serious Crimes	430	480	551	475	516	41	8.6%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	9	4	3	5	5	0	0.0%
Truck hijacking	1	0	1	1	0	-1	-100.0%
Robbery at residential premises	6	5	10	12	6	-6	-50.0%
Robbery at non-residential premises	3	15	14	20	20	0	0.0%

Source: SAPS, 2015

Table A.3.2: Crime in Durban, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	38	42	39	41	29	-12	-29.3%
Total Sexual Offences	762	134	124	104	91	-13	-12.5%
Attempted murder	31	25	36	28	22	-6	-21.4%
Assault with the intent to inflict grievous bodily harm	364	325	310	333	295	-38	-11.4%
Common assault	812	878	787	634	577	-57	-9.0%
Common robbery	487	514	467	445	429	-16	-3.6%
Robbery with aggravating circumstances	899	924	885	951	982	31	3.3%
Total Contact Crimes (Crimes Against The Person)	3 393	2 842	2 648	2 536	2 425	-111	-4.4%
CONTACT-RELATED CRIMES							
Arson	2	2	0	1	0	-1	-100.0%
Malicious damage to property	390	329	378	386	332	-54	-14.0%
Total Contact-Related Crimes	392	331	378	387	332	-55	-14.2%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	572	537	599	579	521	-58	-10.0%
Burglary at residential premises	153	184	199	194	192	-2	-1.0%
Theft of motor vehicle and motorcycle	670	584	668	620	570	-50	-8.1%
Theft out of or from motor vehicle	1 144	1 074	1 251	1 245	1 171	-74	-5.9%
Stock-theft	0	0	0	0	0	0	0 Cases
Total Property-Related Crimes	2 539	2 379	2 717	2 638	2 454	-184	-7.0%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	73	87	91	49	57	8	16.3%
Drug-related crime	1 872	2 304	2 336	2 528	2 477	-51	-2.0%
Driving under the influence of alcohol or drugs	616	978	1 111	1 166	1 201	35	3.0%
Sexual offences detected as result of police action	-	391	451	567	566	-1	-0.2%
Total Crime Detected As A Result Of Police Action	2 561	3 760	3 989	4 310	4 301	-9	-0.2%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	2 933	3 219	3 418	3 390	2 872	-518	-15.3%
Commercial crime	1 228	1 158	1 141	1 127	969	-158	-14.0%
Shoplifting	1 843	1 958	1 840	1 694	1 589	-105	-6.2%
Total Other Serious Crimes	6 004	6 335	6 399	6 211	5 430	-781	-12.6%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	36	37	38	39	35	-4	-10.3%
Truck hijacking	0	0	1	0	0	0	0 Cases
Robbery at residential premises	7	11	9	13	8	-5	-38.5%
Robbery at non-residential premises	56	65	66	67	95	28	41.8%

Source: SAPS, 2015

Table A3.3: Crime in Jozini, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	17	22	22	14	16	2	14.3%
Total Sexual Offences	88	94	86	92	46	-46	-50.0%
Attempted murder	18	18	18	11	19	8	72.7%
Assault with the intent to inflict grievous bodily harm	189	228	191	170	161	-9	-5.3%
Common assault	94	80	73	71	54	-17	-23.9%
Common robbery	15	26	37	27	24	-3	-11.1%
Robbery with aggravating circumstances	73	70	91	56	63	7	12.5%
Total Contact Crimes (Crimes Against The Person)	494	538	518	441	383	-58	-13.2%
CONTACT-RELATED CRIMES							
Arson	7	13	18	16	11	-5	-31.3%
Malicious damage to property	37	44	35	30	47	17	56.7%
Total Contact-Related Crimes	44	57	53	46	58	12	26.1%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	58	58	66	58	55	-3	-5.2%
Burglary at residential premises	124	98	139	102	87	-15	-14.7%
Theft of motor vehicle and motorcycle	4	6	9	5	3	-2	-40.0%
Theft out of or from motor vehicle	18	19	14	19	30	11	57.9%
Stock-theft	44	45	25	50	28	-22	-44.0%
Total Property-Related Crimes	248	226	253	234	203	-31	-13.2%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	40	15	29	27	8	-19	-70.4%
Drug-related crime	31	40	37	34	23	-11	-32.4%
Driving under the influence of alcohol or drugs	82	93	106	79	53	-26	-32.9%
Sexual offences detected as result of police action	-	0	0	0	0	0	0 Cases
Total Crime Detected As A Result Of Police Action	153	148	172	140	84	-56	-40.0%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	101	112	121	131	100	-31	-23.7%
Commercial crime	28	45	39	59	59	0	0.0%
Shoplifting	3	4	6	12	16	4	33.3%
Total Other Serious Crimes	132	161	166	202	175	-27	-13.4%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	0	3	8	1	5	4	400.0%
Truck hijacking	0	1	0	0	0	0	0 Cases
Robbery at residential premises	28	32	26	12	14	2	16.7%
Robbery at non-residential premises	24	17	24	21	26	5	23.8%

Source: SAPS, 2015

Table A3.4: Crime in Kokstad, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	16	25	14	25	18	-7	-28.0%
Total Sexual Offences	84	62	93	61	62	1	1.6%
Attempted murder	12	18	10	10	12	2	20.0%
Assault with the intent to inflict grievous bodily harm	292	233	259	217	219	2	0.9%
Common assault	157	132	127	105	88	-17	-16.2%
Common robbery	50	48	48	53	58	5	9.4%
Robbery with aggravating circumstances	49	77	62	64	89	25	39.1%
Total Contact Crimes (Crimes Against The Person)	660	595	613	535	546	11	2.1%
CONTACT-RELATED CRIMES							
Arson	3	8	7	4	5	1	25.0%
Malicious damage to property	96	76	101	124	103	-21	-16.9%
Total Contact-Related Crimes	99	84	108	128	108	-20	-15.6%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	50	40	39	24	26	2	8.3%
Burglary at residential premises	256	267	300	296	258	-38	-12.8%
Theft of motor vehicle and motorcycle	14	19	10	23	17	-6	-26.1%
Theft out of or from motor vehicle	143	167	251	297	372	75	25.3%
Stock-theft	48	52	65	36	50	14	38.9%
Total Property-Related Crimes	511	545	665	676	723	47	7.0%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	13	15	8	18	16	-2	-11.1%
Drug-related crime	396	258	290	262	274	12	4.6%
Driving under the influence of alcohol or drugs	123	139	196	108	144	36	33.3%
Sexual offences detected as result of police action	-	0	0	1	0	-1	-100.0%
Total Crime Detected As A Result Of Police Action	532	412	494	389	434	45	11.6%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	247	208	241	212	257	45	21.2%
Commercial crime	105	127	107	142	158	16	11.3%
Shoplifting	119	133	107	74	86	12	16.2%
Total Other Serious Crimes	471	468	455	428	501	73	17.1%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	0	1	2	3	3	0	0.0%
Truck hijacking	0	0	0	0	0	0	0 Cases
Robbery at residential premises	7	13	11	19	10	-9	-47.4%
Robbery at non-residential premises	5	4	8	8	15	7	87.5%

Source: SAPS, 2015

Table A3.5: Crime in KwaDukuza, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	68	57	47	55	69	14	25.5%
Total Sexual Offences	209	195	219	218	197	-21	-9.6%
Attempted murder	73	81	71	66	92	26	39.4%
Assault with the intent to inflict grievous bodily harm	499	462	493	457	471	14	3.1%
Common assault	636	766	682	665	491	-174	-26.2%
Common robbery	94	117	118	133	143	10	7.5%
Robbery with aggravating circumstances	499	459	486	635	538	-97	-15.3%
Total Contact Crimes (Crimes Against The Person)	2 078	2 137	2 116	2 229	2 001	-228	-10.2%
CONTACT-RELATED CRIMES							
Arson	23	14	10	11	9	-2	-18.2%
Malicious damage to property	320	343	303	325	396	71	21.8%
Total Contact-Related Crimes	343	357	313	336	405	69	20.5%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	150	185	176	129	143	14	10.9%
Burglary at residential premises	754	732	967	1 152	1 044	-108	-9.4%
Theft of motor vehicle and motorcycle	131	133	85	98	148	50	51.0%
Theft out of or from motor vehicle	266	245	250	284	384	100	35.2%
Stock-theft	13	4	10	15	14	-1	-6.7%
Total Property-Related Crimes	1 314	1 299	1 488	1 678	1 733	55	3.3%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	100	77	70	54	58	4	7.4%
Drug-related crime	698	957	953	1 027	1 168	141	13.7%
Driving under the influence of alcohol or drugs	131	234	207	268	189	-79	-29.5%
Sexual offences detected as result of police action	-	0	5	15	6	-9	-60.0%
Total Crime Detected As A Result Of Police Action	929	1 268	1 235	1 364	1 421	57	4.2%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	885	1 067	1 034	1 099	1 025	-74	-6.7%
Commercial crime	486	538	323	292	254	-38	-13.0%
Shoplifting	215	242	251	342	446	104	30.4%
Total Other Serious Crimes	1 586	1 847	1 608	1 733	1 725	-8	-0.5%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	48	33	35	40	23	-17	-42.5%
Truck hijacking	1	0	0	0	1	1	1 Case Higher
Robbery at residential premises	79	77	88	86	99	13	15.1%
Robbery at non-residential premises	26	36	46	87	56	-31	-35.6%

Source: SAPS, 2015

Table A3.6: Crime in Ladysmith, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	44	39	46	39	34	-5	-12.8%
Total Sexual Offences	168	137	155	136	126	-10	-7.4%
Attempted murder	52	64	56	51	54	3	5.9%
Assault with the intent to inflict grievous bodily harm	517	537	485	433	427	-6	-1.4%
Common assault	701	703	708	563	537	-26	-4.6%
Common robbery	123	117	130	104	109	5	4.8%
Robbery with aggravating circumstances	326	300	266	369	267	-102	-27.6%
Total Contact Crimes (Crimes Against The Person)	1 931	1 897	1 846	1 695	1 554	-141	-8.3%
CONTACT-RELATED CRIMES							
Arson	15	16	9	9	9	0	0.0%
Malicious damage to property	293	268	261	238	224	-14	-5.9%
Total Contact-Related Crimes	308	284	270	247	233	-14	-5.7%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	165	201	236	206	209	3	1.5%
Burglary at residential premises	511	479	614	676	638	-38	-5.6%
Theft of motor vehicle and motorcycle	80	82	104	74	64	-10	-13.5%
Theft out of or from motor vehicle	295	253	256	344	256	-88	-25.6%
Stock-theft	190	174	211	161	143	-18	-11.2%
Total Property-Related Crimes	1 241	1 189	1 421	1 461	1 310	-151	-10.3%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	32	61	35	64	30	-34	-53.1%
Drug-related crime	119	158	73	100	57	-43	-43.0%
Driving under the influence of alcohol or drugs	539	651	718	727	241	-486	-66.9%
Sexual offences detected as result of police action	-	1	1	1	4	3	300.0%
Total Crime Detected As A Result Of Police Action	690	871	827	892	332	-560	-62.8%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	917	1 060	1 003	1 082	1 016	-66	-6.1%
Commercial crime	263	125	138	161	119	-42	-26.1%
Shoplifting	542	476	488	465	378	-87	-18.7%
Total Other Serious Crimes	1 722	1 661	1 629	1 708	1 513	-195	-11.4%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	11	11	16	11	7	-4	-36.4%
Truck hijacking	2	6	6	6	3	-3	-50.0%
Robbery at residential premises	33	27	32	57	41	-16	-28.1%
Robbery at non-residential premises	33	18	24	32	23	-9	-28.1%

Source: SAPS, 2015

Table A3.7: Crime in Newcastle, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	18	10	13	19	18	-1	-5.3%
Total Sexual Offences	74	88	74	61	70	9	14.8%
Attempted murder	14	18	13	15	33	18	120.0%
Assault with the intent to inflict grievous bodily harm	265	301	272	283	317	34	12.0%
Common assault	397	381	361	385	399	14	3.6%
Common robbery	68	120	88	105	137	32	30.5%
Robbery with aggravating circumstances	100	103	133	142	152	10	7.0%
Total Contact Crimes (Crimes Against The Person)	936	1 021	954	1 010	1 126	116	11.5%
CONTACT-RELATED CRIMES							
Arson	14	13	7	5	3	-2	-40.0%
Malicious damage to property	195	201	187	160	185	25	15.6%
Total Contact-Related Crimes	209	214	194	165	188	23	13.9%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	214	213	240	219	243	24	11.0%
Burglary at residential premises	385	420	373	446	418	-28	-6.3%
Theft of motor vehicle and motorcycle	77	42	52	36	96	60	166.7%
Theft out of or from motor vehicle	379	251	254	260	388	128	49.2%
Stock-theft	49	44	43	50	56	6	12.0%
Total Property-Related Crimes	1 104	970	962	1 011	1 201	190	18.8%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	6	11	11	12	10	-2	-16.7%
Drug-related crime	231	234	319	371	316	-55	-14.8%
Driving under the influence of alcohol or drugs	256	286	237	184	180	-4	-2.2%
Sexual offences detected as result of police action	-	2	2	1	0	-1	-100.0%
Total Crime Detected As A Result Of Police Action	493	533	569	568	506	-62	-10.9%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	827	882	809	831	788	-43	-5.2%
Commercial crime	310	384	468	454	422	-32	-7.0%
Shoplifting	365	368	320	316	333	17	5.4%
Total Other Serious Crimes	1 502	1 634	1 597	1 601	1 543	-58	-3.6%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	7	3	7	4	2	-2	-50.0%
Truck hijacking	3	1	2	2	0	-2	-100.0%
Robbery at residential premises	15	7	20	11	11	0	0.0%
Robbery at non-residential premises	27	20	16	15	21	6	40.0%

Source: SAPS, 2015

Table A3.8: Crime in Pietermaritzburg, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	30	30	43	26	35	9	34.6%
Total Sexual Offences	67	63	79	56	73	17	30.4%
Attempted murder	13	16	26	17	40	23	135.3%
Assault with the intent to inflict grievous bodily harm	233	237	233	186	253	67	36.0%
Common assault	447	415	465	424	562	138	32.5%
Common robbery	117	180	367	501	479	-22	-4.4%
Robbery with aggravating circumstances	314	346	433	564	596	32	5.7%
Total Contact Crimes (Crimes Against The Person)	1 221	1 287	1 646	1 774	2 038	264	14.9%
CONTACT-RELATED CRIMES							
Arson	1	4	1	0	1	1	1 Case Higher
Malicious damage to property	202	230	226	182	188	6	3.3%
Total Contact-Related Crimes	203	234	227	182	189	7	3.8%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	262	338	320	378	343	-35	-9.3%
Burglary at residential premises	103	123	125	144	229	85	59.0%
Theft of motor vehicle and motorcycle	203	175	163	127	123	-4	-3.1%
Theft out of or from motor vehicle	410	368	401	750	741	-9	-1.2%
Stock-theft	0	0	0	0	0	0	0 Cases
Total Property-Related Crimes	978	1 004	1 009	1 399	1 436	37	2.6%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	36	40	45	34	39	5	14.7%
Drug-related crime	804	835	880	922	1 131	209	22.7%
Driving under the influence of alcohol or drugs	96	95	92	85	120	35	41.2%
Sexual offences detected as result of police action	-	0	133	97	196	99	102.1%
Total Crime Detected As A Result Of Police Action	936	970	1 150	1 138	1 486	348	30.6%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	1 074	1 195	1 211	1 394	1 459	65	4.7%
Commercial crime	941	606	498	561	393	-168	-29.9%
Shoplifting	757	741	798	678	714	36	5.3%
Total Other Serious Crimes	2 772	2 542	2 507	2 633	2 566	-67	-2.5%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	7	7	8	7	6	-1	-14.3%
Truck hijacking	0	0	2	1	0	-1	-100.0%
Robbery at residential premises	10	12	15	14	10	-4	-28.6%
Robbery at non-residential premises	37	33	39	37	40	3	8.1%

Source: SAPS, 2015

Table A3.9: Crime in Port Shepstone, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	50	49	48	45	58	13	28.9%
Total Sexual Offences	137	143	129	110	85	-25	-22.7%
Attempted murder	51	62	84	84	54	-30	-35.7%
Assault with the intent to inflict grievous bodily harm	414	380	332	298	249	-49	-16.4%
Common assault	511	468	381	410	322	-88	-21.5%
Common robbery	96	103	94	126	87	-39	-31.0%
Robbery with aggravating circumstances	184	208	238	217	224	7	3.2%
Total Contact Crimes (Crimes Against The Person)	1443	1413	1306	1290	1079	-211	-16.4%
CONTACT-RELATED CRIMES							
Arson	9	9	3	6	7	1	16.7%
Malicious damage to property	168	178	163	113	116	3	2.7%
Total Contact-Related Crimes	177	187	166	119	123	4	3.4%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	189	210	203	218	182	-36	-16.5%
Burglary at residential premises	635	692	690	713	717	4	0.6%
Theft of motor vehicle and motorcycle	57	50	64	107	74	-33	-30.8%
Theft out of or from motor vehicle	291	299	250	322	212	-110	-34.2%
Stock-theft	5	5	2	3	8	5	166.7%
Total Property-Related Crimes	1177	1256	1209	1363	1193	-170	-12.5%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	39	43	28	28	41	13	46.4%
Drug-related crime	329	417	906	493	578	85	17.2%
Driving under the influence of alcohol or drugs	340	379	164	145	188	43	29.7%
Sexual offences detected as result of police action	-	42	89	346	443	97	28.0%
Total Crime Detected As A Result Of Police Action	708	881	1187	1012	1250	238	23.5%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	654	660	648	616	654	38	6.2%
Commercial crime	357	303	316	309	254	-55	-17.8%
Shoplifting	292	287	396	480	334	-146	-30.4%
Total Other Serious Crimes	1303	1250	1360	1405	1242	-163	-11.6%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	4	2	3	0	4	4	. Cases Highe
Truck hijacking	0	0	1	0	0	0	0 Cases
Robbery at residential premises	23	37	43	30	30	0	0.0%
Robbery at non-residential premises	17	20	30	33	29	-4	-12.1%

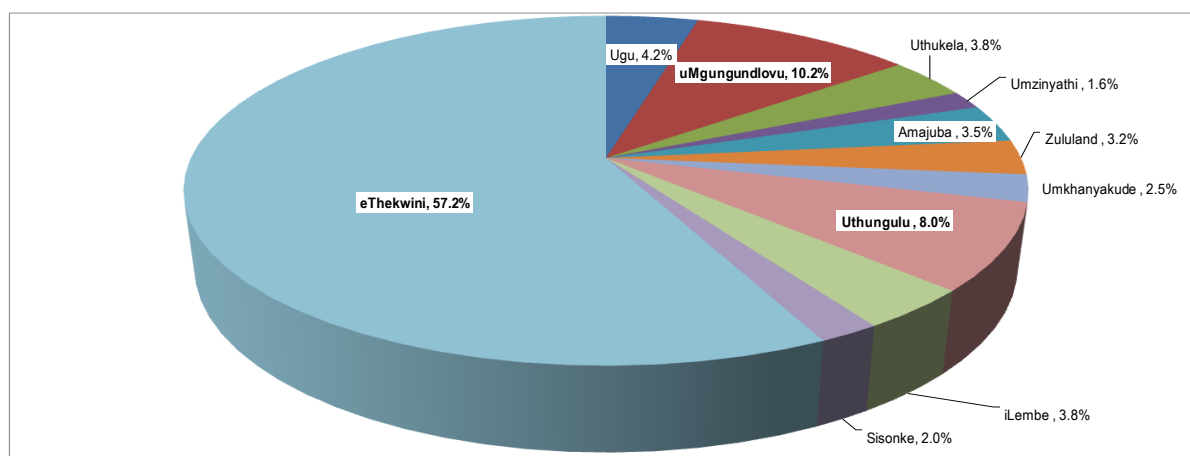
Source: SAPS, 2015

Table A3.10: Crime in Vryheid, 2010 to 2015

CRIME CATEGORY	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	Comparison 2013-2014 with 2014-2015	
						Case Difference	% Change
CONTACT CRIMES (CRIMES AGAINST THE PERSON)							
Murder	19	23	24	20	23	3	15.0%
Total Sexual Offences	82	113	94	118	89	-29	-24.6%
Attempted murder	13	12	21	16	26	10	62.5%
Assault with the intent to inflict grievous bodily harm	255	222	254	198	242	44	22.2%
Common assault	318	267	214	201	248	47	23.4%
Common robbery	71	47	55	99	117	18	18.2%
Robbery with aggravating circumstances	36	43	65	77	107	30	39.0%
Total Contact Crimes (Crimes Against The Person)	794	727	727	729	852	123	16.9%
CONTACT-RELATED CRIMES							
Arson	0	1	4	1	2	1	100.0%
Malicious damage to property	172	180	187	238	230	-8	-3.4%
Total Contact-Related Crimes	172	181	191	239	232	-7	-2.9%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	89	64	87	71	69	-2	-2.8%
Burglary at residential premises	236	145	149	180	283	103	57.2%
Theft of motor vehicle and motorcycle	67	68	76	87	70	-17	-19.5%
Theft out of or from motor vehicle	122	97	110	209	253	44	21.1%
Stock-theft	131	120	127	131	122	-9	-6.9%
Total Property-Related Crimes	645	494	549	678	797	119	17.6%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	19	28	24	41	22	-19	-46.3%
Drug-related crime	93	127	85	124	93	-31	-25.0%
Driving under the influence of alcohol or drugs	180	213	384	107	151	44	41.1%
Sexual offences detected as result of police action	-	1	0	0	1	1	1 Case Higher
Total Crime Detected As A Result Of Police Action	292	369	493	272	267	-5	-1.8%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	730	691	646	850	803	-47	-5.5%
Commercial crime	238	224	202	203	193	-10	-4.9%
Shoplifting	272	232	196	169	205	36	21.3%
Total Other Serious Crimes	1 240	1 147	1 044	1 222	1 201	-21	-1.7%
SUBCATEGORIES OF AGGRAVATED ROBBERY							
Carjacking	3	0	5	4	1	-3	-75.0%
Truck hijacking	0	0	1	0	1	1	1 Case Higher
Robbery at residential premises	11	7	7	8	18	10	125.0%
Robbery at non-residential premises	7	11	6	9	11	2	22.2%

Source: SAPS, 2015

Figure A4.1: KZN provincial GDP by district municipality, 2014



Source: Global insight, 2015

Table A4.1: Sectors' average annual growth rate in KZN, 2004 to 2014

	eThekweni	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	uThungulu	iLembe	Harry Gwala
Agriculture	9.4	9.7	20.0	6.0	4.8	2.8	6.4	9.8	12.0	11.3	7.7
Mining	8.5	1.8	3.3	3.0	4.2	21.8	14.8	2.4	38.6	1.4	0.3
Manufacturing	56.8	3.9	8.7	4.0	0.9	3.8	1.2	1.0	12.5	6.2	1.0
Electricity	33.1	6.4	16.3	9.0	3.0	4.8	7.8	7.4	6.0	2.8	3.3
Construction	61.5	5.2	9.3	3.3	1.2	2.7	2.7	2.1	6.7	3.4	1.8
Trade	65.0	4.5	8.9	3.3	1.5	2.5	2.3	1.9	4.8	2.6	2.6
Transport	66.9	2.8	8.8	3.5	1.1	2.4	2.3	1.4	7.3	2.2	1.2
Finance	68.7	3.6	8.9	2.5	1.0	2.7	2.4	2.0	4.6	2.7	0.9
Community services	53.7	4.1	12.2	4.0	2.4	3.8	4.9	3.4	6.3	2.5	2.7

Source: Global insight, 2015

Table A4.2: Sectors contribution to the real GDP, 2014

	1996	2004	2013	2014
Primary Sector	8.9	6.9	6.6	6.8
Agriculture	5.4	4.4	4.7	4.8
Mining	3.5	2.5	2.0	1.9
Secondary Sector	28.4	24.7	25.6	25.2
Manufacturing	21.0	18.8	18.5	18.3
Electricity	3.5	2.9	2.5	2.5
Construction	3.8	3.1	4.5	4.5
Tertiary Sector	62.7	59.1	67.8	68.0
Trade	13.5	13.8	15.7	15.5
Transport	9.7	10.9	12.2	12.3
Finance	14.2	14.7	18.1	18.2
Community services	25.3	19.7	21.9	22.1

Source: Global insight, 2015

Table A4.3: Sub-sector's average annual growth rate (percentages) in KZN, 2004 to 2014

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	uThungulu	iLembe	Harry Gwala
Primary Sector	3.6	-14.6	5.0	6.9	4.5	7.7	5.2	1.9	8.4	10.4	5.0	20.0
11 Agriculture and hunting	3.1	0.1	2.9	3.9	2.6	3.5	3.0	2.9	3.4	4.4	3.3	5.4
12 Forestry and logging	4.3	1.0	4.4	4.3	3.0	4.9	3.5	3.3	4.0	4.8	2.2	5.9
13 Fishing, operation of fish farms	4.4	2.6	5.6	6.2	5.9	5.8	6.2	5.7	5.7	7.2	6.2	8.2
21 Mining of coal and lignite	-1.3	-3.4	-0.9	-0.6	-0.6	-0.6	-1.6	-1.4	-0.4	-0.3	-0.3	1.5
23 Mining of gold and uranium ore	-8.2	-11.1	-8.5	-8.4	-8.2	-8.2	-8.1	-9.9	-7.0	-7.9	-9.4	-6.2
24 Mining of metal ores	3.0	0.3	2.9	2.9	3.6	3.5	3.4	2.8	3.4	3.3	3.8	4.9
25-29 Other mining and quarrying (incl 22)	-1.7	-4.0	-1.4	-1.4	-1.8	-1.2	-1.3	-1.6	-0.7	-1.0	-0.8	0.4
Secondary Sector	33.8	21.7	41.6	46.1	45.0	47.0	48.9	37.7	51.1	54.6	48.6	71.7
30 Food, beverages and tobacco products	2.2	1.7	2.3	2.7	1.6	2.8	2.9	2.4	3.0	3.5	2.9	5.0
31 Textiles, clothing and leather goods	2.9	2.2	3.5	4.2	4.5	4.2	4.4	3.6	4.1	5.5	4.3	6.1
32 Wood and wood products	1.8	0.8	1.9	2.3	1.5	2.6	2.5	1.8	2.6	2.9	2.8	3.9
33 Fuel, petroleum, chemical and rubber products	2.2	1.8	2.8	3.6	4.0	3.4	3.6	2.7	3.4	3.9	3.6	5.4
34 Other non-metallic mineral products	0.7	-0.9	2.0	2.2	2.0	1.9	2.4	1.2	2.4	2.8	2.5	4.3
35 Metal products, machinery and household appliances	0.8	-0.5	0.7	1.1	1.8	1.0	1.5	0.5	1.3	1.6	1.8	3.3
36 Electrical machinery and apparatus	4.7	3.3	6.2	6.6	7.1	6.4	6.9	5.7	6.7	7.3	6.9	9.0
37 Electronic, sound/vision, medical & other appliances	5.5	4.4	7.5	7.7	8.3	7.4	8.1	6.4	8.0	8.3	7.9	9.8
38 Transport equipment	3.0	2.6	3.9	4.4	4.6	4.6	4.5	3.4	4.4	4.8	4.5	6.5
39 Furniture and other items NEC and recycling	1.5	0.1	2.9	3.3	3.5	3.3	3.6	2.6	3.3	4.2	3.6	5.5
41 Electricity, gas, steam and hot water supply	0.0	-2.3	1.7	1.0	0.0	1.7	1.4	1.0	4.0	2.1	2.1	2.9
42 Collection, purification and distribution of water	2.1	-0.1	2.9	3.3	2.6	3.9	3.3	3.2	4.0	3.6	2.1	4.4
50 Construction	6.4	8.5	3.3	3.6	3.5	3.8	3.6	3.2	3.9	4.2	3.6	5.6
Tertiary Sector	57.7	57.6	52.4	55.2	53.8	52.6	56.7	46.2	66.0	62.6	61.5	80.1
61 Wholesale and commission trade	3.4	3.8	2.2	2.4	2.3	2.5	2.6	1.9	2.6	2.9	2.4	4.3
62 Retail trade and repairs of goods	3.4	3.9	2.0	2.3	2.3	2.5	2.5	2.1	2.6	3.0	2.3	4.3
63 Sale and repairs of motor vehicles, sale of fuel	5.0	5.2	4.2	4.4	4.5	4.5	4.6	3.7	4.7	5.1	4.5	6.8
64 Hotels and restaurants	2.1	0.5	3.5	4.0	2.8	3.9	4.0	3.2	3.8	4.4	3.8	5.8
71-72 Land and Water transport	2.5	2.5	2.0	2.3	2.7	2.5	2.4	1.6	2.6	2.8	2.4	4.3
73-74 Air transport and transport supporting activities	7.2	7.1	7.0	7.6	8.3	7.9	7.8	6.5	7.3	7.9	7.6	9.6
75 Post and telecommunication	6.3	5.5	7.3	7.7	8.0	7.6	7.9	6.8	7.6	8.2	7.7	9.9
81-83 Finance and Insurance	7.2	7.3	6.4	6.6	6.8	6.7	6.9	6.0	7.1	7.2	6.8	8.9
84 Real estate activities	1.4	0.9	3.0	1.7	-0.1	-2.7	0.8	0.5	8.9	1.5	7.9	0.2
85-88 Other business activities	4.5	4.7	3.7	3.9	3.9	4.0	4.2	3.5	4.5	4.6	4.0	6.2
91 Public administration and defence activities	3.6	4.3	2.5	2.8	3.1	3.2	2.8	2.3	3.3	3.6	2.9	4.7
92 Education	2.6	2.7	2.0	2.4	2.2	2.7	2.4	2.1	2.7	3.0	2.2	4.1
93 Health and social work	4.4	4.7	3.4	3.6	3.7	4.0	4.0	3.4	4.2	4.3	3.6	5.4
94-99 Other service activities	4.2	4.6	3.1	3.5	3.3	3.4	3.6	2.7	3.9	4.0	3.5	5.5

Source: Global insight, 2015

Table A4.4: Sub-sector's growth rate (percentages) in KZN, 2014

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	uThungulu	iLembe
Primary Sector	21.5	13.7	14.2	19.6	20.0	25.5	23.8	22.9	21.1	25.0	19.2
11 Agriculture and hunting	5.5	4.3	4.6	5.4	5.5	6.3	5.7	6.1	5.7	6.2	6.0
12 Forestry and logging	5.9	5.5	4.6	5.8	4.7	7.4	6.0	6.5	4.7	6.5	4.2
13 Fishing, operation of fish farms	9.5	8.7	9.3	10.0	10.2	10.6	10.9	10.6	10.1	10.6	10.6
21 Mining of coal and lignite	4.1	2.9	2.9	3.7	4.1	4.4	3.9	4.1	3.7	4.7	3.8
23 Mining of gold and uranium ore	-0.9	-3.3	-2.9	-2.4	-1.9	-1.3	-1.4	-2.3	0.1	-1.0	-2.1
24 Mining of metal ores	-2.9	-3.2	-3.6	-2.6	-2.5	-2.2	-1.5	-2.5	-4.2	-3.1	-3.6
25-29 Other mining and quarrying (incl 22)	0.4	-1.3	-0.6	-0.5	-0.1	0.4	0.2	0.4	1.1	1.2	0.4
Secondary Sector	11.9	3.7	3.7	14.6	18.1	25.3	26.9	21.7	18.8	26.8	21.5
30 Food, beverages and tobacco products	2.1	1.6	1.5	2.3	1.7	3.1	3.3	3.1	2.9	3.4	3.1
31 Textiles, clothing and leather goods	0.5	0.1	-0.4	1.0	1.2	1.6	2.0	1.4	0.5	1.5	1.1
32 Wood and wood products	0.9	0.2	0.1	0.9	0.6	1.9	1.9	1.6	1.7	2.1	1.7
33 Fuel, petroleum, chemical and rubber products	-0.3	-0.6	-1.3	0.3	0.8	0.8	1.2	0.5	-0.4	0.8	0.4
34 Other non-metallic mineral products	-0.5	-1.1	-0.8	-0.2	-0.3	0.1	0.7	0.1	-0.5	0.6	0.3
35 Metal products, machinery and household appliances	-3.2	-4.1	-4.7	-3.4	-2.8	-3.0	-2.4	-3.0	-3.9	-2.7	-3.2
36 Electrical machinery and apparatus	-2.3	-2.6	-3.3	-1.8	-1.5	-1.6	-0.9	-1.7	-3.6	-1.7	-2.0
37 Electronic, sound/vision, medical & other appliances	10.1	9.6	10.1	10.6	11.4	11.1	11.7	11.0	11.2	12.0	11.4
38 Transport equipment	-0.6	-0.9	-1.2	0.0	0.3	0.8	0.8	0.3	-0.5	0.7	0.4
39 Furniture and other items NEC and recycling	3.2	2.7	2.7	3.6	3.9	4.3	4.7	4.1	3.2	4.3	4.1
41 Electricity, gas, steam and hot water supply	0.2	-1.3	0.3	-0.2	0.5	1.6	0.7	1.0	3.7	1.8	1.3
42 Collection, purification and distribution of water	0.4	-0.9	0.0	0.2	0.8	2.3	1.0	1.3	3.0	1.7	0.9
50 Construction	1.3	1.1	0.7	1.3	1.5	2.2	2.2	1.9	1.7	2.2	1.8
Tertiary Sector	19.4	14.1	13.2	23.9	29.8	36.8	36.6	30.7	26.9	35.6	30.5
61 Wholesale and commission trade	1.0	0.8	0.8	1.3	1.6	2.1	2.4	1.9	1.5	2.3	1.9
62 Retail trade and repairs of goods	1.1	0.9	0.6	1.4	1.6	2.1	2.4	1.9	1.3	2.0	1.6
63 Sale and repairs of motor vehicles, sale of fuel	-1.9	-2.3	-2.1	-1.8	-1.3	-1.0	-0.9	-1.2	-0.7	-0.5	-1.0
64 Hotels and restaurants	4.4	3.8	4.2	4.8	4.4	5.6	5.8	5.3	4.9	5.7	5.4
71-72 Land and Water transport	5.1	4.6	4.8	5.2	5.9	6.4	6.2	5.9	6.4	6.7	6.1
73-74 Air transport and transport supporting activities	-6.2	-6.4	-7.3	-5.8	-5.3	-5.0	-4.9	-5.6	-6.9	-5.2	-5.4
75 Post and telecommunication	0.1	-0.2	-0.4	0.5	0.8	1.1	1.4	0.8	-0.5	1.0	0.7
81-83 Finance and Insurance	6.0	5.7	6.1	6.4	7.0	7.3	7.5	7.0	7.7	7.7	7.3
84 Real estate activities	-2.3	-2.9	-3.0	-1.0	0.6	0.7	-0.8	-1.0	-3.7	-1.6	-1.4
85-88 Other business activities	-0.1	-0.4	-0.4	0.3	0.5	1.0	1.3	0.8	0.9	1.2	0.8
91 Public administration and defence activities	5.3	4.8	4.6	5.3	5.8	6.4	6.0	5.7	6.0	6.2	5.8
92 Education	1.6	1.0	0.9	1.6	1.9	2.8	2.5	2.3	2.5	2.5	2.0
93 Health and social work	2.7	2.3	2.2	2.8	3.2	3.9	3.9	3.4	3.9	3.8	3.3
94-99 Other service activities	2.7	2.4	2.3	2.9	3.1	3.6	3.9	3.3	3.5	3.8	3.4

Source: Global insight, 2015

Table A4.5: Sectors contribution to District real GDP, 2014

	KZN	Ethekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	uThungulu	iLembe	Harry Gwala
Primary Sector	6.7	3.6	4.1	5.6	7.6	10.3	8.6	9.8	5.6	6.0	5.2	7.7
Agriculture	5.7	4.8	4.7	5.6	5.4	6.8	5.8	6.3	5.4	6.4	5.9	6.4
Mining	1.1	-1.2	-0.6	0.0	2.1	3.5	2.8	3.5	0.2	-0.4	-0.7	1.3
Secondary Sector	1.9	-0.1	1.1	2.0	3.0	5.3	2.1	4.5	6.7	4.6	4.9	6.8
Manufacturing	0.3	0.0	0.3	0.7	0.8	1.2	-0.8	1.5	1.6	0.6	1.9	2.4
Electricity	0.3	-1.2	0.2	0.0	0.6	2.0	0.7	1.1	3.4	1.8	1.2	2.2
Construction	1.3	1.1	0.7	1.3	1.5	2.2	2.2	1.9	1.7	2.2	1.8	2.2
Tertiary Sector	8.2	6.9	5.7	9.3	12.6	13.6	12.8	11.4	7.5	11.8	9.5	14.7
Trade	0.8	0.5	0.5	1.0	1.4	1.7	2.0	1.6	1.5	1.9	1.5	1.9
Transport	2.7	2.1	2.2	2.8	4.9	4.8	4.6	4.8	3.0	4.2	3.8	4.9
Finance	2.0	2.0	0.9	2.6	3.3	3.2	2.5	1.4	-0.7	2.1	1.1	4.3
Community services	2.7	2.3	2.1	2.9	3.1	3.9	3.8	3.6	3.6	3.6	3.1	3.7

Source: Global insight, 2015

Table A4.6: Sectors contribution to KZN real GDP by district municipality, 2014

	eThekwini	Ugu	uMgungundlovu	Uthukela	Umzinyathi	Amajuba	Zululand	Umkhanyakude	uThungulu	iLembe	Harry Gwala
Agriculture	9.4	9.7	20.0	6.0	4.8	2.8	6.4	9.8	12.0	11.3	7.7
Mining	8.5	1.8	3.3	3.0	4.2	21.8	14.8	2.4	38.6	1.4	0.3
Manufacturing	56.8	3.9	8.7	4.0	0.9	3.8	1.2	1.0	12.5	6.2	1.0
Electricity	33.1	6.4	16.3	9.0	3.0	4.8	7.8	7.4	6.0	2.8	3.3
Construction	61.5	5.2	9.3	3.3	1.2	2.7	2.7	2.1	6.7	3.4	1.8
Trade	65.0	4.5	8.9	3.3	1.5	2.5	2.3	1.9	4.8	2.6	2.6
Transport	66.9	2.8	8.8	3.5	1.1	2.4	2.3	1.4	7.3	2.2	1.2
Finance	68.7	3.6	8.9	2.5	1.0	2.7	2.4	2.0	4.6	2.7	0.9
Community services	53.7	4.1	12.2	4.0	2.4	3.8	4.9	3.4	6.3	2.5	2.7

Source: Global insight, 2015

Table A9.1: Descriptive statistics for the variables included in the estimations

	GDP	IEF	EFW	FW
Mean	3.055000	63.43500	6.934000	1.750000
Median	3.050000	63.35000	6.925000	1.500000
Maximum	5.600000	67.10000	7.850000	2.500000
Minimum	-1.500000	60.70000	6.560000	1.500000
Std. Dev.	1.696273	1.392943	0.344909	0.303488
Skewness	-0.758221	0.919562	1.345303	0.724418
Kurtosis	3.933685	4.620335	4.578245	2.551020
Jarque-Bera	2.642803	5.006552	8.108512	1.917257
Probability	0.266761	0.081817	0.017348	0.383418
Sum	61.10000	1268.700	138.6800	35.00000
Sum Sq. Dev.	54.66950	36.86550	2.260280	1.750000
Observations	20	20	20	20

Source: Own calculations using data from Heritage Foundation's Index of Economic Freedom report (2015), Fraser Institute's, Economic Freedom of the World (2014), Freedom House, Freedom in the World 2015) and Stats SA (2015).

GDP: gross domestic product annual percentage change (economic growth rate)

IEF: Heritage Foundation's Index of Economic Freedom

EFW: Fraser Institute's Economic Freedom of the World
 FW: Freedom House Freedom in the World

Table A9.2: Cross-correlation results

Lag	IEF(-1)	IEF(+1)	EFW(-1)	EFW(+1)	FW(-1)	FW(+1)
1	0.1388	0.1388	0.203	0.203	-0.2633	-0.2633
2	0.3129	0.2204	0.4351	-0.1811	-0.2593	-0.098
3	0.5455	0.2097	0.2842	-0.1981	-0.4087	0.0386
4	0.6001	0.136	0.3908	0.0167	-0.4022	0.1394
5	0.3976	0.1349	0.2381	-0.1376	-0.2704	0.1278

Source: Own calculations using data from Heritage Foundation's Index of Economic Freedom report (2015), Fraser Institute's, Economic Freedom of the World (2014), Freedom House, Freedom in the World 2015) and Stats SA (2015).

Table A9.3: Cross-correlation results

Pairwise Granger Causality Tests	F-Statistic	Prob.
IEF does not Granger Cause GDP	6.42	0.01
GDP does not Granger Cause IEF	0.43	0.78
EFW does not Granger Cause GDP	0.95	0.54
GDP does not Granger Cause EFW	0.91	0.55
FW does not Granger Cause GDP	17.16	0.01
GDP does not Granger Cause FW	1.11	0.47

Source: Own calculations using data from Heritage Foundation's Index of Economic Freedom report (2015), Fraser Institute's, Economic Freedom of the World (2014), Freedom House, Freedom in the World 2015) and Stats SA (2015).

Appendix B: Calculating the Index

The economic risk index for the province and each of the 6 regions are calculated as follows:

Step1: Calculate or compute the monthly percentage change in each of the 8 economic risk variables ($t = 1$ to 8 and $i = 1$ to 184)

$$\% \Delta er_{ti} = \left\{ \frac{(er_{ti} - er_{ti-1})}{er_{ti-1}} \right\} \times 100 \quad 7.1$$

Where:

er_t is the different economic risk variables

i is the time in months

Step 2: Calculate or compute the monthly economic sector weights for each of the 9 economic sectors ($s = 1$ to 9 and $i = 1$ to 184)

$$W_{si} = \frac{GDP_{si}}{GDP_{KZNi}} \times 100 \quad 7.2$$

Where:

w_{si} is relative weight of each economic sector

GDP_{si} is the gross domestic product per economic sector in period i

GDP_{KZNi} is the gross domestic product for the province in period i

Step 3: Calculate or compute the economic sector risk for each of the 9 sectors

$$ERC_{sti} = \sum (W_{si} \times \% \Delta er_{ti} \times erw_{ti}) \quad 7.3$$

Where:

ERC_{st} is economic risk of the particular sector

ERW is a weight of each of the economic risk variables per economic sector

Step 4: Calculate or compute the provincial or regional economic risk index

$$ERC_{loc} = \sum ERC_{sti} \quad 7.4$$

Where:

ERC_{loc} is the economic risk index for the province or region

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