

PROVINCE OF KWAZULU-NATAL

Provincial-Economic Review and Outlook

2014/2015

KwaZulu-Natal Provincial Government

ISBN: ISBN No. 0-86967-366-1

To obtain further copies of this document, please contact:
Provincial Treasury
5th Floor
Treasury House
145 Chief Albert Luthuli Road
3201
P.O. Box 3613
Pietermaritzburg
3200
Tel: +27 (0) 33 – 897 4444
Fax: +27 (0) 33 – 897 4580

Contents

Executive Summary

Chapter 1: Introduction……...1

Chapter 2: Economic Review and Outlook……3
2.1 Introduction……...3
2.2 Global economic outlook……3
2.3 National economic outlook……8
2.4 Kwazulu-Natal Provincial Review and Outlook…….. 10
2.5 International trade..... 12
2.6 Inflation.....15
2.7 Travel and tourism..... 16
2.7.1 Tourism contribution to GDP and employment..... 16
2.7.2 Growth rate in travel and tourism in SA..... 17
2.7.3 KZN travel and tourism..... 18
2.7.3.1 Introduction..... 18
2.7.3.2 Contribution to GDP.....18
2.7.3.3 Top ten countries visiting KZN..... 19
2.7.3.4 Most visited destinations in KZN.....19
2.8 Conclusion……20

Chapter 3: Kwazulu-Natal Sector Analysis……..……..21
3.1 Introduction..... 21
3.2 Overview and outlook of the provincial sector analysis..... 21
3.3 Primary Sector..... 22
3.3.1 Overview of the Agricultural Sector.....22
3.3.1.1 Agriculture sub-industries.....23
3.3.1.2 Agriculture sub-sector performance in KZN.....24
3.3.2 Mining Industry.....26
3.3.2.1 Overview of the mining industry..... 26
3.3.2.2 Mining sub-sector performance in KZN.....28
3.4 Secondary sector..... 29
3.4.1 Overview of Manufacturing..... 29
3.4.2 Automotive..... 30
3.4.3 Metals.....32
3.4.4 Construction Industry……...33
3.4.5 Electricity……...34
3.5 Tertiary Sector.....35
3.5.1 Transport……..... 36
3.5.1.1 Transport as a contributor to GDP……..... 36
3.5.2 Trade……..... 37
3.5.2.1 Retail trade overview……37
3.5.2.2 Retail Trade Sales, Month on Month……38
3.5.3 Finance……...39
3.5.4 Community services……...42
3.6 Conclusion……44

Chapter 4: Labour Dynamics in KZN..... 45
4.1 Introduction……...45
4.2 Employment…….. 45
4.3 Employment by sector…… 47
4.4 Labour absorption rate……... 47
4.5 Labour Force Participation Rate in KZN..... 48
4.6 Unemployment……48
4.7 Labour productivity……49
4.8 Conclusion……51

Chapter 5: Relationship between Business Confidence Indicators and Real GDP? – A Regional Spatial Panel approach.....52
5.1 Introduction……...52
5.2 Estimating regional business confidence index…….. 53
5.3 Constructing and evaluating the panel…… 55
5.4 Econometric analysis of the panel……56
5.4.1 Pooled Model……56
5.4.2 Fixed Effect Model……...57
5.4.3 Within Q estimation……...58
5.4.4 Testing the joint validity of Fixed Cross and Time Effects……58
5.5 Random Effect Model……59
5.6 Fixed or Random: Hausman Test……59
5.7 Two-Way Error Component Regression Model – Fixed Effects……..59
5.8 Testing the Joint Validity of Fixed Effects (Individual and Time effects)……60
5.9 Two-Way Error Component Regression Model - Random Effects……. 60
5.10 Model Selection……61
5.11 Conclusion……..62

Appendix..... 63

References..... 66

List of Tables

Table 2.1: World economic estimates and projections, 2011 to 2015……..4
Table 2.2: Balance of payments on current account (R billion, seasonally adjusted and annualised) in 2014…….....12
Table 2.3: KZN's value of exports in 2003 and 2013……13
Table 2.4: Percentage share value of KZN's imports in 2003 and 2013…….14
Table 2.5: South African main indices of consumer price index (CPI) in all urban areas, September 2014……...16
Table 3.1: Sector contribution to the provincial real GDP (percentages), 1996 to 2016……..21
Table 3.2: Primary sector growth rates analysis, 2006 to 2017……26
Table 3.3: Provincial contribution to the national mining industry in 1996, 2001, 2006 and 2013……27
Table 3.4: GVA contribution by KZN's mining sub-sector (constant 2005 prices) to KZN's mining industry GVA, 2006 and 2013…… 28
Table 3.5: Tertiary sector contribution to GDP (%), 2003 to 2013…….. 35
Table 3.6: Tertiary sector growth rate analysis (%), 2004 to 2013……..35
Table 3.7: Retail Trade Sales, SA by Type of Retail Cluster, December 2013 to June 2014 in Millions…….. 38
Table 3.8: Provincial contribution to national trade sector……38
Employment in Transport Sub-Sectors from Quarter Labour Force Survey (TETA, 2011)……35
Table 3.9: Growth in KZN Gross Value Added by sector, 2003 to 2013…… 41
Table 3.10: Growth in KZN Gross Value Added by sector, 2003 to 2013…….44
Table 4.1: Characteristics of labour force in SA, 2013 to 2014……46
Table 4.2: Characteristics of labour force in KZN, 2013 to 2014…….46
Table 5.1: Fuel consumption structure as a percentage of national, 2008 to 2011……..53
Table 5.2: Change in regional GDP, 2005 TO 2013……..54
Table 5.3: Regional business index, 2005 to 2013……55
Table 5.4: Cross Section and Period Effects…….. 60
Table 5.5: Cross Section and Period Effects…….. 61
Table 5.6: Sum of squared residuals, 2011 to 2013…….. 61
Table 5.7: Business confidence in the five regions of KZN, 2011 TO 2013….. 62

List of Figures

Figure 2.1: GDP Growth Rate: South Africa, 2011:Q1 to 2014:Q2.....10
Figure 2.2: KZN provincial GDP by district municipality, 2013.....11
Figure 2.3: Economic growth rate in KZN, 2011:Q1 to 2016.....11
Figure 2.4: Inflation rate (percentages) in SA by province, June 2014.....15
Figure 2.5: Total Tourism spending as a percentage of GDP in KZN, 2006 to 2013.....18
Figure 2.6: KZN top ten foreign tourists by country of origin in numbers and percentages, 2012.....19
Figure 2.7: Percentage most visited destinations in KZN 2011.....20
Figure 3.1: Provincial contribution to the national agriculture industry in 2002, 2007 and 2013..... 24
Figure 3.2: GVA contribution by KZN's agricultural sub-sector (constant 2005 prices) to KZN's agriculture industry GVA in 2006 and 2013..... 25

Figure 3.3: KZN industries share of manufacturing contribution (%), 2013…….29
Figure 3.4: Gross value added by automotive industry to the KZN economy, 2002 to 2013.....31
Figure 3.5: Annual growth rate in the KZN automotive industry, 2002 to 2013……31
Figure 3.6: Average annual growth rate in the KZN metals industry, 2002 to 2013.....32
Figure 3.7: Value added by the construction industry to KZN economy, 2002 to 2013……...33
Figure 3.8: Electricity sector trend, 2004 to 2013…… 34
Figure 3.9: Finance sector contribution to Tertiary sector in KZN, 2013……..40
Figure 3.10: Community services contribution to Tertiary sector in KZN, 2013…43

Figure 4.1: Employment by sector (%) in KZN; 2003, 2008 AND 2013……47
Figure 4.2: Unemployment rate by province, June 2014……49
Figure 4.3: Labour productivity and remuneration in KZN, 2001 to 2013.....50
Figure 5.1: Panel for the five regions, 2011 to 2013……56

List of Acronyms

BPO	Business Process Outsourcing
BRT	Bus Rapid Transit
CPI	Consumer Price Index
DAFF	Department of Agriculture, Forestry and Fisheries
DED	Department of Economic Development
DEDT	Department of Economic Development and Tourism
EAP	Economically Active Population
FIFA	Federation International Football Association
GDP	Gross domestic product
GVA	Gross Value Added
HSRC	Human Sciences Research Council
IDS	Industrial Development Strategy
IMF	International Monetary Fund
IPAP	Industrial Policy Action Plan
KZN	KwaZulu-Natal
MDGs	Millennium Development Goals
MPC	Monetary Policy Committee
NAAMSA	National Association of Automobile Manufacturers of South Africa
NDP	National Development Plan
NDT	National Department of Tourism
NGP	New Growth Path
OECD	Organisation for Economic Co-operation and Development
PGMs	Platinum Group Metals
PHC	Primary Hospital Clinic
PMI	Purchasing Managers' Index
RBM	Richards Bay Minerals
RBCT	Richards Bay Coal Terminal
SA	South Africa
SADC	Southern African Development Community
SARB	South African Reserve Bank
SARS	South African Revenue Service

Stats SA	Statistics of South Africa
TETA	Transport Education Training Authority
TIKZN	Trade and Investment KwaZulu-Natal
WEO	World Economic Outlook
WTTC	World Travel and Tourism Council

Executive Summary

The KwaZulu-Natal (KZN) Provincial Treasury presents the 2014 edition of the Provincial Economic Review and Outlook (PERO) the first publication of its kind. The publication seeks to provide useful economic information on the global, national and provincial level, with particular reference to KZN. The document comprises of five chapters; with chapter one representing introduction, while chapters two and three focus on global, South African and KZN economic reviews and outlook, while chapter three provides a review of the sector analysis in KZN. Chapter four focuses on an overview of the provincial labour market and the final chapter provides the application of economic models to investigate possible relationship between regional business confidence and regional economic growth in the major economic hubs of KZN.

The summary of the global economic outlook is discussed lengthy, reason being its influence on the country's and provincial economy. World economic outlook depicts that the South African (SA) growth rate of 1.9 per cent in 2013 is weaker compared to the overall rate of 5.1 per cent estimated in the sub-Saharan region. The chapter further provides highlights on the economic review and outlook of the developed countries. These economies show a slow recovery after a long recession of three successive years from 2011 to 2013. This recovery is due to a number of policies implemented by these economies which assisted them to recover from the perpetual recession.

A brief outline of the SA economic outlook and review is also discussed quarterly from the year 2011 to 2014, while KZN economic growth is summarised according to districts for the year 2013. Attention is also given to the international trade of the country whereby imports and exports are analysed quarterly for the years 2013 and 2014. This analysis shows that the balance of payment for SA has been fluctuating and mostly negatively. When it comes to the exports and imports for the years 2003 and 2013, the provincial exports are dominated by eThekwini district.

The chapter also looks at the inflation at both national and across provinces, whereby provinces' inflation rate ranges from 5.7 per cent to 6.6 per cent. Travel and tourism is also included in this chapter. This is due to the reality that the industry is seen as one of the most contributors in the economy of the province as well as that of the country. There are a number of factors that

contribute in the growth of the tourism industry that are highlighted in the province as well as in the country. Some of these factors are associated with the strategic geographic position of the country and the province itself. This industry contributes in various ways in the economy ranging from being an employer to being one of the most contributors to the gross domestic product (GDP) of the province as well as the country. The publication highlights the regions in the province of KZN that are visited the most as well as top ten countries that visited the province in recent years.

Chapter three provides an analysis of the economic sectors in KZN. The analysis consists of primary, secondary and tertiary sectors. The analysis however, focuses to a larger extent to those industries contributing significantly to the GDP of the province. Primary sector includes agriculture and mining, while secondary sector discuses manufacturing, electricity and construction. The tertiary sector focuses on trade, transport, finance and community services.

The chapter summarises the contribution of these sectors to province's GDP for the period 1996 to 2013 and also shows projections from 2014 to 2016. It discusses agriculture as one of the growth drivers in the province and the province is the highest contributor to the GDP of the country when it comes to agriculture at 26.3 per cent in 2013. The province is not considered as the best contributor in the mining industry compared to provinces like North-West, Limpopo and Mpumalanga, in fact it is the third from the bottom out of nine provinces.

The province of KZN leads in the manufacturing industry whereby it contributes 24.4 per cent and it plummeted to 21.8 per cent in 2013 but still does better than other industries. The highest contributor in this industry is food, beverages and tobacco products, while metals and construction follow respectively. In 2013 the automotive industry contributed more than R6.6 billion in the economy of KZN. Metals industry is highly susceptible to the export markets. During recession in 2009, the industry suffered a severe negative growth rate of 11.3 per cent which was the lowest during the period 2002 to 2013. Contribution by the construction industry had been on the positive trajectory over the years, thereby increasing from about R4.4 billion in 2002 to R8.9 billion in 2013.

Transport as one of tertiary sector's industry that is considered as of strategic importance to the economy of the province as well as the country. Its crucial contribution to the economy is the power of the industry to create jobs. According to economic expectations, once employment is

increased, the tax base also increases which lead to the increase in government revenue and thus poverty is reduced. In 2013 the transport industry in the province of KZN contributed 22.9 per cent as a share of the country's employment. The province is the second highest after Gauteng which shows that the transport industry is one of the important employers in the province.

The analysis of trade in this publication; focuses on retail, wholesale, restaurants, hotels and sales and repairs of motor vehicles. The focus is on how the retail industry contributes positively to the economy of the province. The analysis of this industry shows how much sales have been achieved in different types of retail stores and how much contribution does the province contribute towards national trade sector. The final section of chapter three is dedicated to the finance sector analysis. Finance is disaggregated into three subsectors namely: *Finance and Insurance*, *Real estate activities* and *other business activities.* The sector contribution of the community services is analysed according to the districts of the province as well as the provinces of the country. The rate at which this sector is contributing towards the department is also shown.

In chapter four, labour dynamics of the province are discussed in details. The definitions and the characteristics of labour force of the country and the province of KZN for the years 2013 and 2014 are analysed. Employment sector analysis for 2003, 2008 and 2013 is provided graphically in the strategic sectors whereby change is marginal in all sectors and below the National Development Plan (NDP) target of 65 per cent by 2030. Policies that are set to target unemployment are unpacked and the unemployment rate in 2014 is analysed according to provinces. Labour productivity and remuneration through the years 2001 to 2013 of the province is graphically displayed and the analysis points out that remunerations are higher than productivity.

KZN has five economic regions that contribute significantly towards the provincial GDP. These strategic regions are considered being the economic engines of the province. Chapter five models the relationship between business confidence indicators and the real GDP, using a Spatial Panel Approach in these regions. The panel models are explained and applied in depth. The results suggest that the relationship should be positive and significant irrespective of region between business confidence and economic output.

Chapter 1: Introduction

The Provincial Economic Review and Outlook (PERO) publication provides an outline of the economic performance of the province of KZN. The performance presented ranges from economic review and outlook in chapter two to business confidence indicators and its relationship with the province's real GDP in chapter 5.

The publication starts by providing the overview of the economic performance of the world, Sub Saharan Africa, SA and the province of KZN. Performance by BRICS[1] countries is also highlighted because of its strategic importance in the economy of SA since the country is a member. The focus is however, more on the economic performance by KZN and its contribution to the national GDP. The province's districts economic performance is also briefly analysed.

This review presented includes growth in the economy of the province as well as the outlook for the period ending in 2016. Exports and imports are also included to determine the state of the current account of the province. The publication further includes inflation rate at national level and across provinces as well as factors affecting the levels of inflation.

A review of tourism as one of the comparative and competitive advantage of the province also receives particular attention. This sector has a strategic important contribution to the economy of the world, country as well as the province of KZN. It contributes both directly and indirectly in job creation as it brings people of the world to the province and many other contributing factors to the wellbeing of the people of KZN.

An in-depth analysis of sector performance is also provided in this publication, focusing mainly to the primary, secondary and tertiary sectors of the economy. In the primary sector, agriculture is extensively analysed because of its potential in contributing to the economic output of KZN. This is partly due to the comparative advantage the province has in terms of good climate conditions.

A particular attention is provided to industries in the manufacturing sector of the province. These industries include automotive, metals, electricity and construction. The tertiary sector

[1] BRICS countries are Brazil, Russia, India, China and South Africa

considered transport, trade, finance and community services as essential industries that contribute immensely to the economy of the province.

The chapter on labour dynamics focuses at the levels of employment, labour force, labour absorption rate, labour participation rate and productivity of labour compared to remuneration of labour. Characteristics of the labour market of the province are compared to those of other provinces. Finally, the publication highlights the relationship between business confidence index and real GDP in the province selecting major regions that are economic engines of the province. This exercise is performed by modelling five regions using econometrics tools.

Chapter 2: Economic Review and Outlook

2.1 Introduction

Despite the tight economic policies adopted by many regions after the on-set of the financial and economic crisis suffered in 2009, the world economy is still weak. The Organisation for Economic Co-operation and Development (OECD, 2014g) maintains that most economies continue to underperform pre-crisis developments. Thus the International Monetary Fund (IMF, 2014) argues that the global economic recovery remained uneven and fragile since the beginning of 2014, amid sustained improvements in the United States of America (US) and United Kingdom (UK), and deteriorating prospects in the Eurozone and Japan.

Emerging market economies continue to account for the bulk of the global growth. As correctly pointed out by the IMF (2014), the Sub-Saharan African economy is expected to perform better in 2014. Following the global economic trajectory, the national economic growth outlook remains subdued and is projected to grow at a marginal rate in 2014 before gaining momentum in 2017.

Taking into account both the global and national economic performance, this chapter provides the *Economic Review and Outlook* of the province of KZN. The chapter begins with an outline of the global, national and KZN economic review and outlook. This is then followed by the brief analysis of the international trade, inflation and tourism, eventually the chapter concludes by providing some policy recommendations for the province.

2.2 Global economic outlook

According to the IMF (2014a), the pace of the global recovery has been below expectations in 2014. The IMF is of the view that the weaker-than-expected global growth recorded in the first half of 2014 together with increased downside risks[2] are a concern in the near future performance of the global economy. These downside risks are however argued to be prevalent

[2] Down side risk is generally regarded as the financial risk associated with financial losses that is, the risk of difference between the actual return and the expected return. It occurs mainly when the actual return is less than the expected. It also emanates as a result of the uncertainty pertaining to the investment return (http://en.wikipedia.org/wiki/Downside_risk), accessed on the 15 July 2014.

globally in the form of risks to activity from lower than expected inflation rates and low growth in advanced economies, particularly the euro area and Japan. Inadequate reforms and increasing geopolitical tensions are further cited as exacerbating downside risks which continue to dominate the global economic outlook (IMF, 2014b). The IMF (2014a) is of the view that in advanced economies, the downward risk will require continued support from monetary policy and fiscal adjustment related with the pace of both the recovery and long-term growth.

The IMF further argues that in a number of economies, an increase in public infrastructure investment can support demand in the short term and help boost potential output in the medium term. It further assets that in emerging markets, the scope for macroeconomic policies to support growth, if needed, varies across countries and regions, but space is limited in countries with external vulnerabilities.

Table 2.1 shows that the global economic growth was estimated at 3.3 per cent in 2013, this rate was 0.1 percentage points lower than the 3.4 per cent registered in 2012. The global economic growth is expected to surge to 3.3 per cent in 2014. This projection is however, revised down by 0.1 percentage points from the July 2014 World Economic Outlook (WEO) (IMF, 2014a).

Table 2.1: World economic estimates and projections, 2011 to 2015

	Estimates			Projections	
	2011	2012	2013	2014	2015
World	**3.9**	**3.4**	**3.3**	**3.3**	**3.8**
Developed countries	1.7	1.2	1.4	1.8	2.3
Euro Area	1.5	-0.7	-0.4	0.8	1.3
United States of America	1.8	2.3	2.2	2.2	3.1
Emerging countries	6.2	5	4.7	4.9	5.3
Sub-Saharan Africa	**5.5**	**4.4**	**5.1**	**5.1**	**5.8**
Japan	-0.6	1.5	1.5	0.9	0.8
South Africa	**3.5**	**2.5**	**1.9**	**1.4**	**2.3**
Brazil	2.7	1.0	2.5	0.3	1.4
Russia	4.3	3.4	1.3	0.2	0.5
India	6.3	4.7	5	5.6	6.4
China	9.3	7.7	7.7	7.4	7.1

Source: IMF, 2014a

The table also indicates that growth in advanced economies has been restrained at 1.2 and 1.4 per cent in 2012 and 2013 respectively. This is however, expected to gain momentum and rise moderately to 1.8 per cent in 2014, supported by a popular reduction in fiscal tightening and

largely accommodative monetary policy conditions (IMF, 2014b). The overall growth in 2015 is expected to be at 2.3 per cent.

Emerging market and developing economies face two contradicting forces on their growth prospects. Contributing to the upside is growth in exports stimulated by increased activity in advanced economies as well the current weak currencies. The weakness in investment and tightness of external funding and domestic financial conditions are some of the offsetting factors which are expected to remain for the most part of 2014. In overall, emerging market and developing economies grew by 4.7 per cent in 2013. This economic block contributes more than two-thirds of global growth and is forecasted to grow by 4.9 per cent and 5.3 per cent in 2014 and 2015 respectively (IMF, 2014b).

As correctly pointed out by the IMF (2014c), the Sub-Saharan Africa region currently enjoys protracted robust growth which is anticipated to be on an upward trajectory in 2014. Table 2.1 evinces that economic growth rate in the region was strong and relatively stable in 2012 and 2013 at 4.4 and 5.1 per cent respectively. The bank cites mining activity, agricultural production and investment in natural resources and infrastructure as contributing to a large extent to this robust growth rate. Domestic demand was also high due to strong credit growth in the private sector. The Sub-Saharan African economy is projected to grow at the same rate of 5.1 per cent in 2014 and at 5.8 per cent in 2015 (table 2.1). The commodity related projects currently running in the region are expected to be the main drivers of this higher growth.

The US economy grew above expectations in the second half of 2013. IMF (2014) attributes this growth to an increase in the level of exports as well as temporarily greater inventory demand. In overall, the US economy grew by 2.2 per cent in 2013. This is expected to remain the same in 2014 and the projections indicate that it will moderately surge to 3.1 per cent in 2015 (table 2.1). In 2014 there have been signs of a slow-down stemming from lesser inventory demand and bad weather conditions. However, a boost in the economy in 2014 is expected to be fuelled by accommodative monetary policy conditions, favourable house and stock prices, higher household wealth and less strict credit conditions.

Growth rate in the euro area is expected to pick-up and trail on a positive trajectory in 2014, after three successive years of recession in 2012 to 2013. The positive growth rate is expected to be mainly induced by the moderate economic performance in Germany. The accommodating

monetary stance, favourable labour market conditions and improved confidence in Germany are cited as amongst other factors regarded as significant role players in the growth in domestic demand in the euro zone. The robust domestic demand in Germany is reflected in greater consumption expenditure, increased investments and a healthier housing sector (OECD, 2014c).

The OECD (2014c) further expects the domestic demand in the euro zone to be slow-moving amid financial fragmentation, tight credit and a high level of corporate debt burden. Overall economic growth in the euro area is expected to intensify from -0.4 per cent in 2013 to 0.8 per cent in 2014. Modest growth of 1.3 per cent is projected for the year 2015. As highlighted by the OECD (2014c), credible asset quality reviews, stress tests and where needed, swift recapitalization or restructuring of banks are required to support the upswing and underlying growth. In addition, structural reforms in labour and product markets are crucial to enhance growth and jobs, with more attention focused on the completion of the European Union (EU) Single Market programme.

Economic performance remains moderate in Japan, with an estimated growth of 1.5 per cent in 2013. The moderate growth is attributed to the slowdown in exports and the scheduled fiscal tightening in 2014 and 2015, due to hikes in consumption tax. The effect of this fiscal consolidation is expected to be offset by better labour market conditions and increased business confidence (IMF, 2014b).

The IMF (2014b) further expects the export sector to gain strength as world trade picks up. This will however, not be strong enough to support higher growth with 2014 growth forecasted at 0.9 per cent and 1.2 per cent by the IMF (2014b) and OECD (2014e) respectively. A detailed and credible fiscal consolidation plan, bold structural reforms as well as expansionary monetary policy are essential to addressing the fiscal situation and the stimulation of economic growth in Japan, whose economy is forecasted to grow at only 1 per cent in 2015 (OECD, 2014f). The IMF (2014) expects Japanese growth to decelerate to 0.8 per cent in 2015, mostly due to the planned unwinding of fiscal stimulus.

The Brazilian economy is estimated to have grown by 2.5 per cent in 2013, a 1.5 percentage point rise from the 2012 performance (table 2.1). According to the OECD (2014a), tighter monetary policy, softer external demand and policy uncertainties due to the October elections

are likely to put stress on economic activity in 2014. Subsequently, growth rate is expected to decline to 0.3 per cent in 2014, compared to the 2.5 per cent recorded in 2013 (table 2.1). In spite of continual supply constraints in the form of tight labour market conditions and the need for tight macroeconomic policy restricting domestic demand, GDP is projected to grow at 1.4 per cent in 2015. A greater rate of investment in infrastructure, less stringent trade barriers and tax reform are essential to achieving higher economic growth in Brazil (OECD, 2014a).

Russian growth remained restrained at 1.3 per cent in 2013. In spite of strong consumption, activity was inhibited by lackluster investment and the slow global recovery. Russia's GDP growth rate was revised down and is expected to remain heavily subdued at 0.2 per cent in 2014. The fallout from emerging market financial turbulence and geopolitical tensions relating to Ukraine is an additional concern to the already weak economic activity. The moderate recovery that was under way at the end of 2013 has been brought to a standstill by the turbulence related to the events in Ukraine (OECD, 2014f).

Associated increased uncertainties and capital flight are now weighing on investor confidence. According to OECD (2014f) consumption growth will weaken as real income growth slows and consumer credit becomes more expensive, however the weak Russian currency (rubble) is anticipated to provide some support to the slowing economy and the budget. Nonetheless, the Russian economy is expected to gain some momentum with a growth rate of 1 per cent in 2015 (table 2.1).

India is projected to gain momentum in 2014, achieving a growth rate of 5.6 per cent, up from the estimated 5 per cent recorded in 2013. As is with many other developing countries, exports are expected to support growth in 2014 as a result of the depreciation of the domestic currency in 2013 (OECD, 2014). External demand is also expected to be firmer this year along with a rise in rural incomes and a decline in inflation which will boost consumption. Supply bottlenecks and fiscal consolidation is however expected to put strain on India's economic recovery. The implementation of the anticipated inflation targeting framework is expected to facilitate the anchoring of price expectations thereby positively affecting consumer confidence and business sentiment (OECD, 2014). A robust growth of 6.4 per cent is projected for the year 2015 (table 2.1).

GDP growth in China was uninterrupted in 2013, remaining at a robust rate of 7.7 per cent. It however, dropped during the first quarter of 2014 as investment fell due to tighter credit conditions. Greater emphasis on urbanization requirements and the accessibility of sectors formerly off limits to private investment are regarded as one of the supporters of investment which China should put emphasis on (OECD, 2014b). Overall, growth rate is expected to remain above 7 per cent in 2014 (table 2.1).

2.3 National economic outlook

The economic performance in SA slowed significantly in 2013, thereby recording an overall low growth rate of 1.9 per cent. The South African Reserve Bank (SARB, 2014) cites, among other factors; the adverse effects of the protracted labour disruptions in several sectors of the economy, restrained business and consumer confidence levels, structural obstacles hindering production and ongoing subdued global economic conditions as partly responsible for the national sluggish economic performance.

During the first quarter of 2014, the SA economy was plagued by a weaker rand against major currencies. This was further exacerbated by electricity supply constraints as well as sporadic labour disputes. The SARB (2014) cites reduced investor confidence emanating from the tapering of quantitative easing by the US; the on-going platinum sector strike and the significant current account deficit as strong contributing factors to the weak domestic currency.

The national economy suffered another blow in the beginning of the second quarter of 2014, whereby inflation rate hit the upper limit of the inflation target band of 3 per cent to 6 per cent and reached 6.6 per cent in May 2014[3]. In addition the, SARB[4] has further raised the repurchase (repo)[5] rate by 25 basis points to 5.75 per cent per annum in July 2014. The domestic economic outlook has since worsened significantly.

[3] See section 2.6 of this publication
[4] SARB (2014a): Statement of the Monetary Policy Committee, Issued by Gill Marcus, Governor of the SARB (17 July 2014), accessed on the 18th July 2014, available from http://www.resbank.co.za/Lists/Newsper cent20andper
[5] Repo rate is the level of interest rate charged by the SARB to the commercial banks when they borrow from the reserve bank.

Figure 2.1 shows that the economic growth improves significantly to 0.6 per cent (quarter-on-quarter) during second quarter of 2014, after contracting by -0.6 per cent in the first quarter of the same year. The largest contributors to the quarter-on-quarter increase of 0.6 per cent were contributed by general government services and the transport, storage and communication industry each contributed 0.4 percentage point based on increases of 2.9 per cent and 4.0 per cent respectively and Finance, real estate and business services contributed 0.3 of a percentage point based on an increase of 1.5 per cent.

The SARB [6] has since revised the forecast of the national growth rate down to 1.5 per cent, 2.8 per cent and 3.1 per cent in 2014, 2015 and 2016 respectively. As observed in table 2.1, these projections are in line with the expectations by the IMF. The contraction in GDP during the first quarter of 2014, the striking decline in the purchasing managers' index (PMI)[7], stark rise in producer inflation and the worsening trade deficit are collectively cited as confirming the beginning of tough economic environment. Furthermore, the SARB's leading indicator of economic activity[8] had been buoyant during the first two quarters of 2014, reflecting restrained growth expectations.

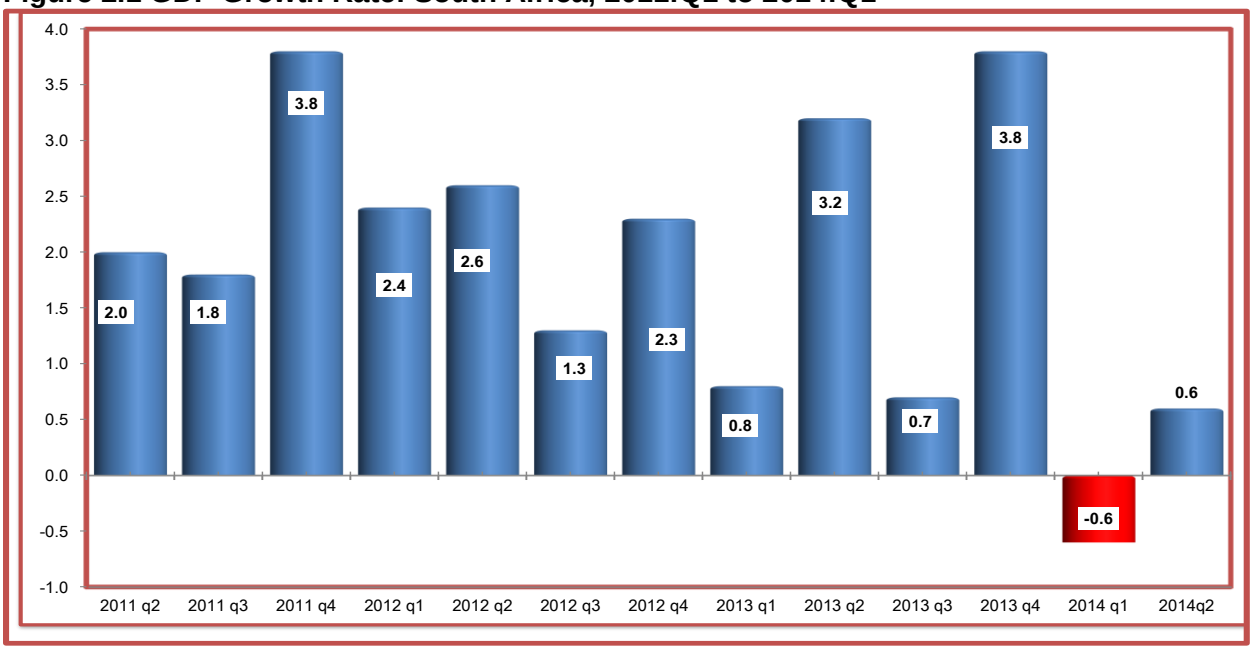
The IMF (2014c) however, expects the domestic economic activity to be driven by the faster growth in exports, which is anticipated to be a reaction to the weak rand and increased growth in world trade. The IMF further highlights that growth in SA is projected to improve modestly, underpinned by strengthening external demand but dragged down by tightening global financial conditions and domestic monetary policies, soft commodity prices, tense industrial relations, and continuing supply bottlenecks, including energy.

[6] See the Monetary policy Committee (MPC) speech by the Governor of the SARB, dated 18/9/2014, accessed on the 1st of October 2014 and available from https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/6337/MPC%20Statement%20July%202014%20final.pdf,

[7] The PMI is an indicator of the economic performance of the manufacturing sector. It is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. A PMI of more than 50 represents expansion of the manufacturing sector, compared to the previous month. A reading under 50 represents a contraction, while a reading at 50 indicates no change (http://www.investopedia.com/terms/p/pmi.asp).

[8] The composite leading indicator indicates the direction of economic activity in the next 6 to 9 months (http://www.investopedia.com/terms/c/cili.asp)

Figure 2.1 GDP Growth Rate: South Africa, 2011:Q1 to 2014:Q1



Source: www.tradingeconomics.com, 2014 and Stats SA, 2014

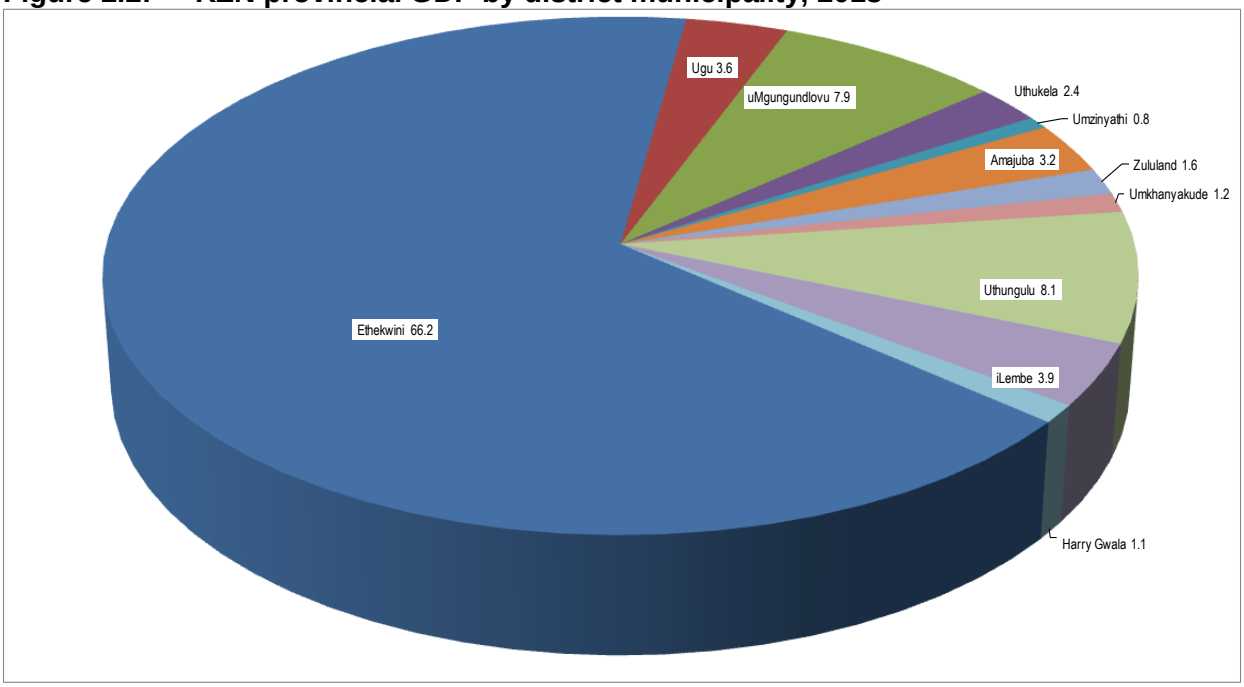
2.4 Kwazulu-Natal Provincial Review and Outlook

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 R328.9 billion in 2013, making KZN the second largest contributor to the economy of the country at 16.5 per cent, after Gauteng with 36.1 per cent. This was however slightly above 14.8 per cent recorded in the Western Cape (figure A2.1 in the appendix).

Given the economic activities that take place within eThekwini, it is therefore not surprising that the total provincial output is predominantly concentrated in the metro at 66.2 per cent. This is followed by uThungulu with 8.1 per cent and uMgungundlovu with 7.9 per cent. The least contributing districts are Umzinyathi, Harry Gwala and Umkhanyakude at the estimated rate of 0.8, 1.1 and 1.2 per cent respectively (figure 2.2).

Following the global and national trends, the provincial economy recorded a seasonally adjusted and annualized quarterly increase of 1.95 per cent in the first quarter of 2014, compared to the 1.83 per cent recorded during the fourth quarter of 2013.

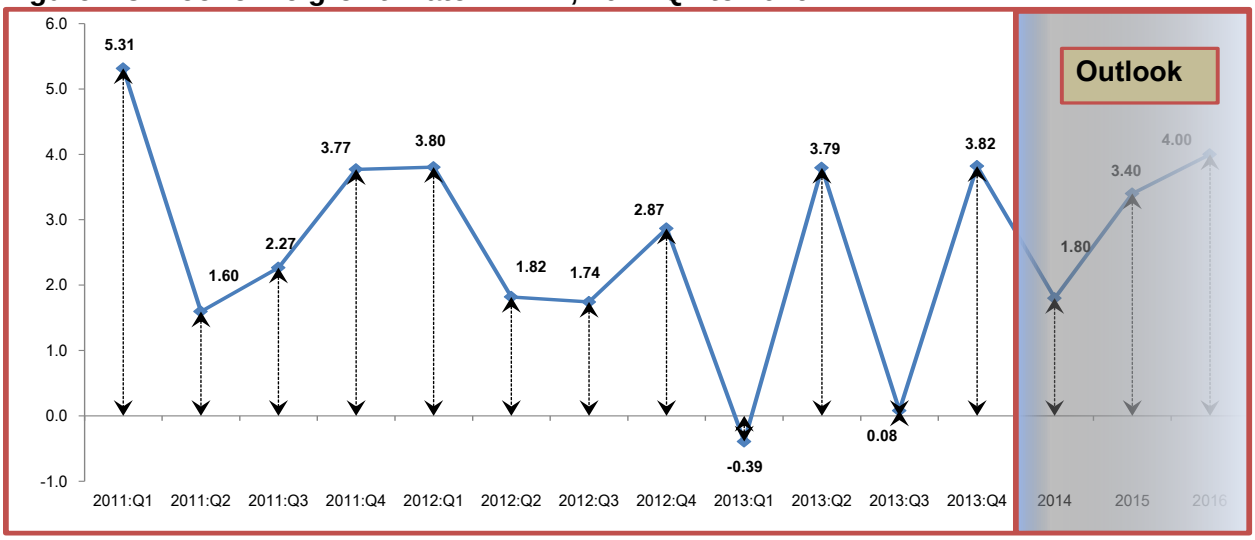
Figure 2.2: KZN provincial GDP by district municipality, 2013



Source: Global Insight, 2014

The 2014 first quarter annual growth rate indicates that the provincial economic activity is at improving levels than those experienced during the fourth quarter of 2013. The provincial economy is expected to grow by 1.8 per cent at the end of this year before accelerating to 3.3 per cent and 4.2 per cent in 2015 and 2016 respectively (figure 2.3).

Figure 2.3: Economic growth rate in KZN, 2011:Q1 to 2016



Source: KZN Treasury Economic Model, 2014 and Global Insight, 2014

The annualized growth rates in figure A2.1 in appendix indicate that both the primary (1.87 per cent) and the tertiary (1.89 per cent) economic sectors continue to record positive growth rates while the secondary sector (2.73 per cent) recorded the high levels over the first quarter 2014. The manufacturing (2.85 per cent) and construction (3.24 per cent) were the main contributors towards this good performance in the secondary sector.

2.5 International trade

This section provides an analysis of international trade with reference to exports, imports, percentage share of KZN's exports as well as exports as percentage of GDP. KZN is an open economy which embraces trade with the rest of the world. Growth and development in any economy is greatly influenced by the enhancement of international trade, which is fundamental to the creation of employment. A key challenge for SA and KZN is reducing the current account deficit by increasing the country's volume of exports. Hence, international trade can assist a country improve economies of scale and be competitive in a global market thus enhancing growth and development. Increasing exports of goods to international markets can attract foreign exchange in a country. This also adds to the GDP of a country by increasing output for both domestic and foreign consumption.

Table 2.2 shows the balance of payments on current account in the second quarter 2013 to the second quarter 2014. It is clear from the table that the deficit on the SA current account widened from R161 billion in the first quarter of 2014 to R222 billion in the second quarter of 2014. This also resulted to an increasing percentage of GDP from a revised 4.5 per cent of GDP in the first quarter of 2014 to 6.2 per cent in the second quarter of 2014.

Table 2.2: Balance of payments on current account (R billion, seasonally adjusted and annualised) in 2014

	2013			Year	2014	
	2nd Quarter	3rd Quarter	4th Quarter		1st Quarter	2nd Quarter
Merchandise exports	826	885	901	854	967	905
Net Gold exports	70	63	56	64	51	59
Merchandise imports	-983	-1039	-1002	-991	-1092	-1065
Trade balance	-87	-91	-45	-74	-75	-101
Net service, income and current transfer payments	-120	-125	-134	-124	-86	-121
Balance on current account	-207	-216	-179	-197	-161	-222
As percentage of GDP	-6.2	-6.4	-5.1	-5.8	-4.5	-6.2

Source: SARB Quarterly Bulletin, September 2014

The value of merchandise imports also contracted over the period but to a lesser extent, with the result that the deficit on the trade account of the balance of payments widened from R75 billion in the first quarter of 2014 to R101 billion in the second quarter. The current account has been negative and fluctuating in all quarters included in table 2.2. The larger trade deficit in the second quarter of 2014 coincided with a widening in the shortfall on the services, income and current transfer account with the rest of the world.

The shortfall advanced from R86 billion in the first quarter of 2014 to R121 billion in the second quarter mainly due to higher net income payments to non-resident investors. It is evident that this also resulted in an increasing percentage of GDP. This indicates that SA has not been doing well in the international market as the trade balance has been negative for all the periods under review. This implies that merchandise exports were not able to counter the effects of the import market and the weaker rand (table 2.2).

Table 2.3: KZN's value of exports in 2003 and 2013

	2003			2013		
	Exports (R000)	% Share of KZN exports	Exports as percentage of GDP	Exports (R000)	% Share of KZN exports	Exports as percentage of GDP
KwaZulu-Natal	50 909 164		24.3	105 066 753		19.6
Ethekwini	30 279 659	59.5	22.6	60 151 044	57.3	17.1
Ugu	129 720	0.3	1.7	320 956	0.3	1.6
uMgungundlovu	4 903 056	9.6	27.6	8 859 258	8.4	20.2
Uthukela	93 043	0.2	1.8	510 958	0.5	3.9
Umzinyathi	94 713	0.2	5.5	719 798	0.7	16.2
Amajuba	493 453	1.0	6.5	723 247	0.7	4.2
Zululand	10 092	0.0	0.3	211 069	0.2	2.1
Umkhanyakude	5 267	0.0	0.2	6 211	0.0	0.1
Uthungulu	14 564 176	28.6	73.4	32 884 732	31.3	74.6
iLembe	332 268	0.7	4.7	659 349	0.6	3.1
Harry Gwala	3 716	0.0	0.1	20 132	0.0	0.3

Source: Global Insight, 2014

Table 2.3 depicts the value of exports made by KZN and the district municipalities in 2003 and 2013. The provincial proportion of exports to provincial GDP in KZN was 19.6 per cent in 2013. This proportion had declined from 24.3 per cent recorded in 2003 and this has resulted in the province adopting a strategy aimed at improving exports. The provincial export strategy encompasses five programmes covering export climate and competitiveness, market penetration, exporter development, export promotion and performance measurement, management and review. This strategy looks to both existing markets and potential markets and

speaks to the strength of the province in terms of export performance and potential. Uthungulu district municipality's proportion of exports to provincial GDP was the largest contributor at 74.6 per cent in 2013, which is higher than the contribution of 73.4 per cent recorded in 2003 (table 2.3).

EThekwini metro contributed 57.3 per cent of the provincial exports in 2013, which is lower than the contribution of 59.5 per cent realised in 2003. Although it is declining it is still at a high level. This is due to the fact that exporters enjoy the privilege of being in close proximity to the harbour, thereby minimising transport and storage costs. By the same token uThungulu district municipality, which is home to Richards Bay harbour, was the second largest contributor (31.3 per cent) to the total provincial exports[9].

Table 2.4 shows the value of imports made by KZN and the district municipalities in 2003 and 2013. EThekwini metro contributed 84.8 percentage share of the province's imports in 2013, which is higher than the contribution of 75.2 per cent realised in 2003[10]. Uthungulu followed by importing only 7.3 per cent, which is lower than the contribution of 15.3 per cent made in 2003.

Table 2.4: Percentage share value of KZN's imports in 2003 and 2013

	2003		2013	
	Imports (R000)	% Share of KZN Imports	Imports(R000)	% Share of KZN Imports
KwaZulu-Natal	33 553 144		150 304 472	
Ethekwini	25 248 152	75.2	127 398 297	84.8
Ugu	146 861	0.4	791 365	0.5
uMgungundlovu	1 933 520	5.8	8 162 247	5.4
Uthukela	184 434	0.5	644 517	0.4
Umzinyathi	31 358	0.1	256 703	0.2
Amajuba	204 877	0.6	411 113	0.3
Zululand	23 477	0.1	55 700	0.0
Umkhanyakude	6 796	0.0	123 445	0.1
Uthungulu	5 144 067	15.3	10 912 808	7.3
iLembe	628 678	1.9	1 538 037	1.0
Harry Gwala	924	0.0	10 240	0.0

Source: Global Insight, 2014

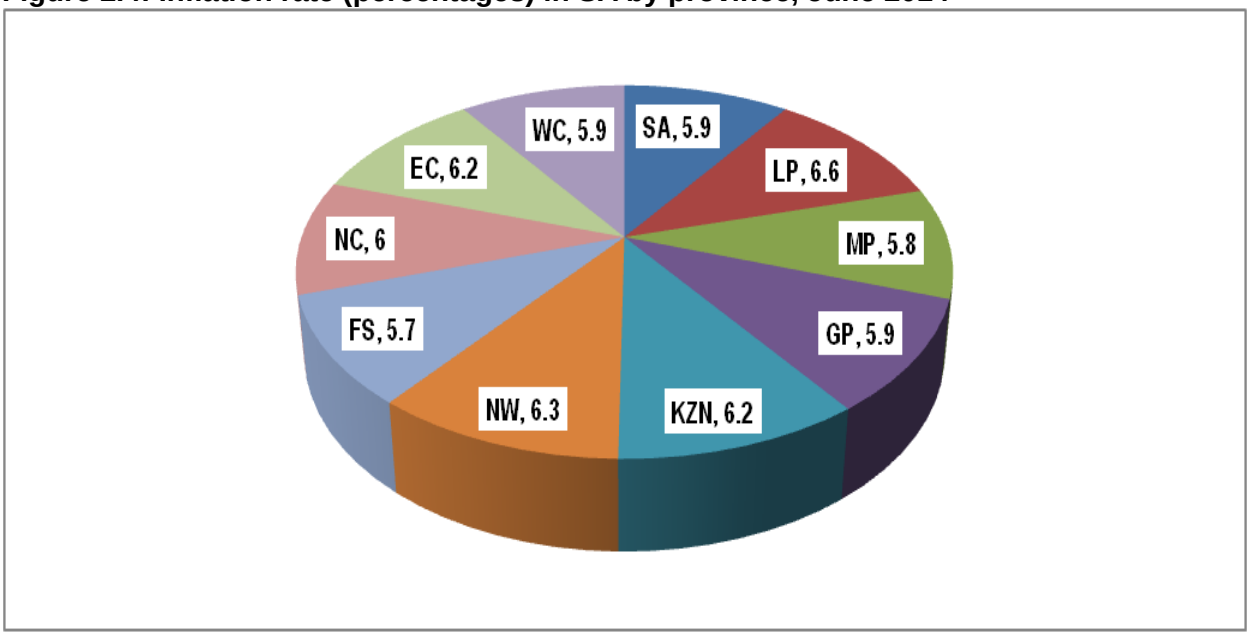
[9] Note that exports from uThungulu also come from other regions.
[10] Note that imports by eThekwini are also for other regions.

2.6 Inflation

Inflation is one of the critical indicators that affect the economic performance of a country. It adversely affects consumers' disposable income which in turn reduces purchasing power. This, as a result, has a detrimental effect on a country's economic performance in terms of GDP. Higher inflation, affects among others, the producer price index (PPI) and the consumer price index (CPI). Subsequently, the Monetary Policy Committee (MPC) of the SARB carefully monitors the inflation trends both globally and nationally and then applies appropriate monetary policy instruments as and when required. The forecast by the SARB indicates the possibility of inflation being out of the target range of 3 per cent and 6 per cent for an extended period, largely due to the impact of the depreciating currency.

Figure 2.4 shows that, the national headline CPI peaked at 5.9 per cent in September 2014. At 6.2 per cent, KZN was among the provinces with an annual inflation rate higher than national headline inflation. The highest inflation rate was recorded in Limpopo at 6.6 per cent, followed by the North West and the Eastern Cape at 6.3 per cent and 6.2 per cent respectively. The provinces with an annual inflation rate lower than or equal to headline inflation were Gauteng at 5.9 per cent, Western Cape (5.9 per cent), Free State (5.7 per cent), Mpumalanga (5.8 per cent) and Northern Cape (6 per cent).

Figure 2.4: Inflation rate (percentages) in SA by province, June 2014



Source: Stats SA, September 2014

Observation from table 2.5 indicates that, restaurants and hotels recorded the highest increase of 8.8 per cent, year-on-year, followed by food costs and education at 8.7 per cent each. The table further shows that health prices rose by 5.7 per cent in September 2014, slightly up from the 5.5 per cent recorded in August.

Table 2.5: South African main indices of consumer price index (CPI) in all urban areas, September 2014

	Weighting	Monthly	Yearly
Food	**14.2**	**0.1**	**8.7**
Non-acoholic beverages	1.2	-0.4	5.3
Alcoholic beverages	4.0	0.1	5.3
Tobacco	**1.5**	**0.3**	**7.9**
Clothing and footwear	4.1	0.7	5.5
Housing and utilities	24.5	0.7	5.8
Household contents and services	**4.8**	**0.4**	**2.9**
Health	1.5	0.4	5.7
Transport	16.4	-1.5	4.2
Communication	**2.6**	**-0.1**	**-1.3**
Recreation and culture	4.1	0	2.7
Education	3.0	0	8.7
Restaurants and hotels	**3.5**	**0.9**	**8.8**
Miscellaneous goods and services	14.7	-0.1	6.9

Source: Stats SA, September 2014

Food cost also marginally decreased to 8.7 per cent in September, mainly driven by 13 per cent increase in cost of milk, eggs and cheese and a 13 per cent rise in vegetables prices.[11] Transport cost slowed down moderately to 4.2 per cent in September, from 6.1 per cent recorded in August 2014.

2.7 Travel and tourism

2.7.1 Tourism contribution to GDP and employment

According to the World Travel and Tourism Council (WTTC, 2014), tourism has become a critical role player in the global economy. This has been witnessed by its contribution of 9.5 per cent to the global GDP in 2013. The industry is forecast to grow by 4.3 per cent in 2014. The economic environment remains a challenge globally, but the growth in the industry seems to be gaining momentum. This growth rate is cited to be supported by the emerging economies.

[11] Stats SA,

Household income continues to increase as a result of an increase in international trade, where emerging markets are becoming the target for foreign investment.

The total contribution of travel and tourism to employment, including jobs indirectly supported by the industry was 8.9 per cent of total employment. This contribution to job creation is considered to be higher than that created in mining, communication services, automotive manufacturing and chemical manufacturing sectors (WTTC, 2012).

As is the case in the rest of the world, SA Travel and Tourism has shown an extraordinary trend of growth over the period 1994 to 2012. This trajectory accelerated significantly in 2010 after the country successfully hosted the Federation International Football Association (FIFA) World Cup. According to National Department of Tourism (14 October 2012), SA is now ranked as the fourth biggest overseas tourist market in the world. This has been influenced by a number of factors which include among others: SA being the affordable country to spend holidays in, provides natural beauty of the oceans and mountains, has world class facilities and adventurous. The country is known for being a rainbow nation, which influences diversity in culture, diversity in wildlife heritage, and wild life in nature. SA is also known for its freedom struggle which put the country in the map of the world since the imprisonment of Nelson Mandela.

In 2011 the industry contributed R79.5 billion (2.7 per cent) to the GDP of the country. This contribution is only accounted for hotels, travel agents, airlines and other passenger transport services. The tourism industry is also a potential contributor to employment.

2.7.2 Growth rate in travel and tourism in SA

Tourism industry in SA is a dynamic industry which attracts both foreign and domestic tourists. According to the National Department of Tourism (NDT, 2012), overseas tourist arrivals from outside Africa experienced a significant growth of 17.1 per cent in 2012. The reasons for international tourists to visit SA is among others to spend holidays, business, study, while others were on transit to other countries. This industry can become one of the major sources of foreign income if it continues to grow at this robust rate.

The opening of the extra flights between China and SA in 2012 had a major influence in the growth of the industry. China and SA international relationship encouraged the opening of the additional centres for visa application in China. According to Zulu Kingdom Tourist Junction, during January 2013 approximately 91.5 per cent (778 406 persons) of the total 850 759 visitors in SA were on holiday, while 5.6 per cent (47 757), 1.6 per cent (13 226) and 1.3 per cent (11 370) were on transit, for study and for business purposes respectively.

2.7.3 KZN travel and tourism

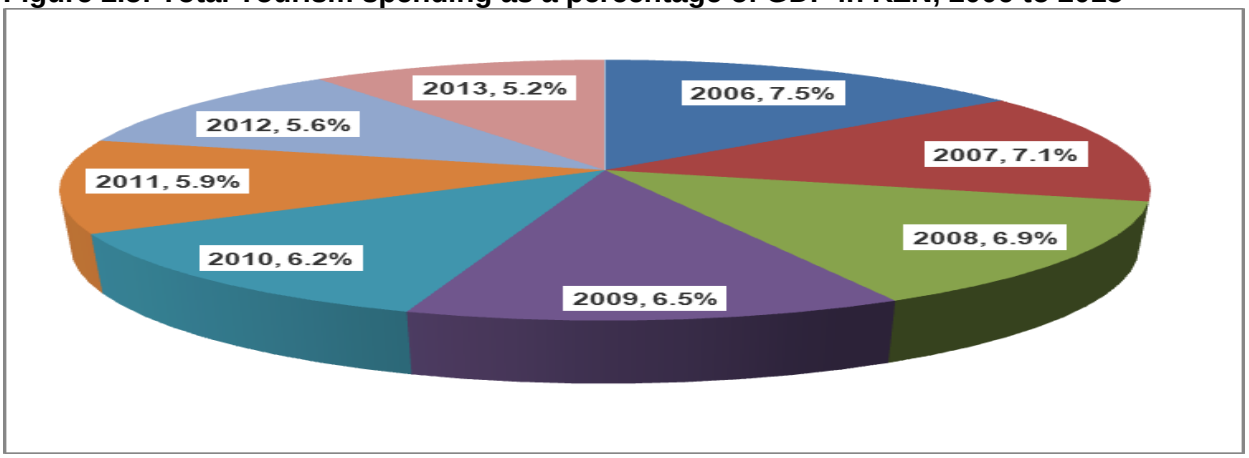
2.7.3.1 Introduction

KZN is SA's top holiday destination. This emanates from KZN being the province with diversity in activities. The province is gifted with warm Indian Ocean and golden beaches; range of mountains which provide visitors with excellent sightseeing, mountain hiking and ice climbing in winter, abseiling and white water rafting. It has wonderful game reserves where the visitors enjoy untamed wilds, the Big 5 and many species of birds.

According to KZN Travel and Tourism Guide Isimangaliso wetlands in St Lucia is the second World Heritage site. It is also home for world class sport. It hosts world class golf courses, two famous marathons (Duzi and Comrades) water swimming events and number of cycle races. It also provides visitors with rich history.

2.7.3.2 Contribution to GDP

Figure 2.5: Total Tourism spending as a percentage of GDP in KZN, 2006 to 2013



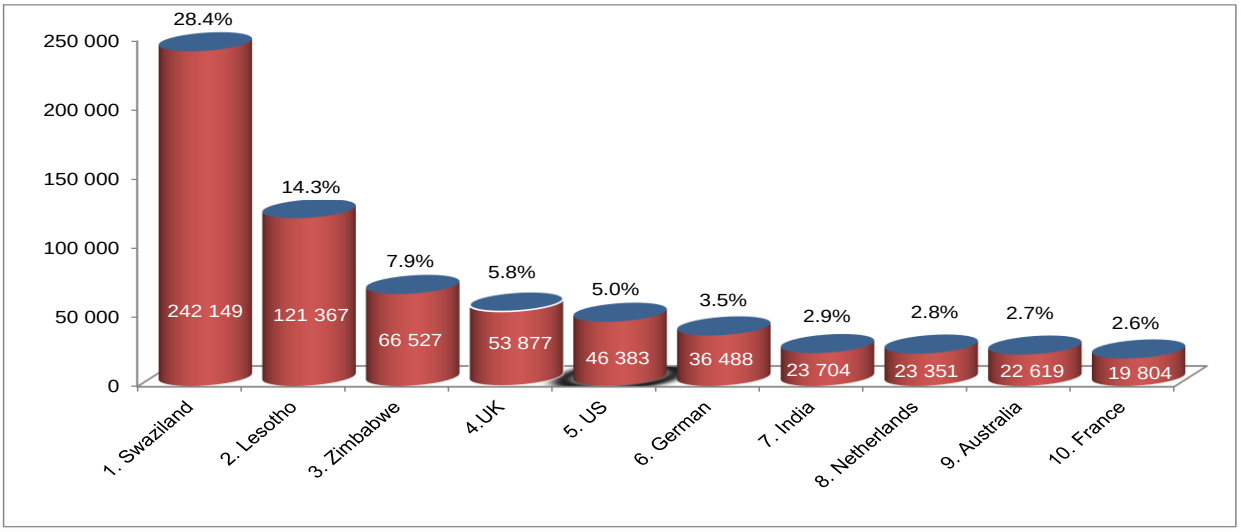
Source: Global Insight 2013

The spending in tourism in the province of KZN had been marginal since 2006 to 2013. Figure 2.5 shows the total tourism spending as a percentage of GDP in the province of KZN.

2.7.3.3 Top ten countries visiting KZN

Figure 2.6 shows the top ten countries of origin for tourists that visited the province. Seven of these are overseas countries while three of them are from within the continent, more specifically the Southern African Development Community (SADC). The UK had the highest proportion of tourists from overseas visiting KZN at 5.8 per cent followed by the US at 5 per cent while Germany, India, Netherlands, Australia and France contribute marginally at the rate between 2.6 per cent and 3.5 per cent. Within SADC, Swaziland tops the lead at 28.4 per cent, followed by Lesotho and Zimbabwe at 14.3 per cent and 7.9 per cent respectively.

Figure 2.6: KZN top ten foreign tourists by country of origin in numbers and percentages, 2012



Source: SAT, 2013

2.7.3.4 Most visited destinations in KZN

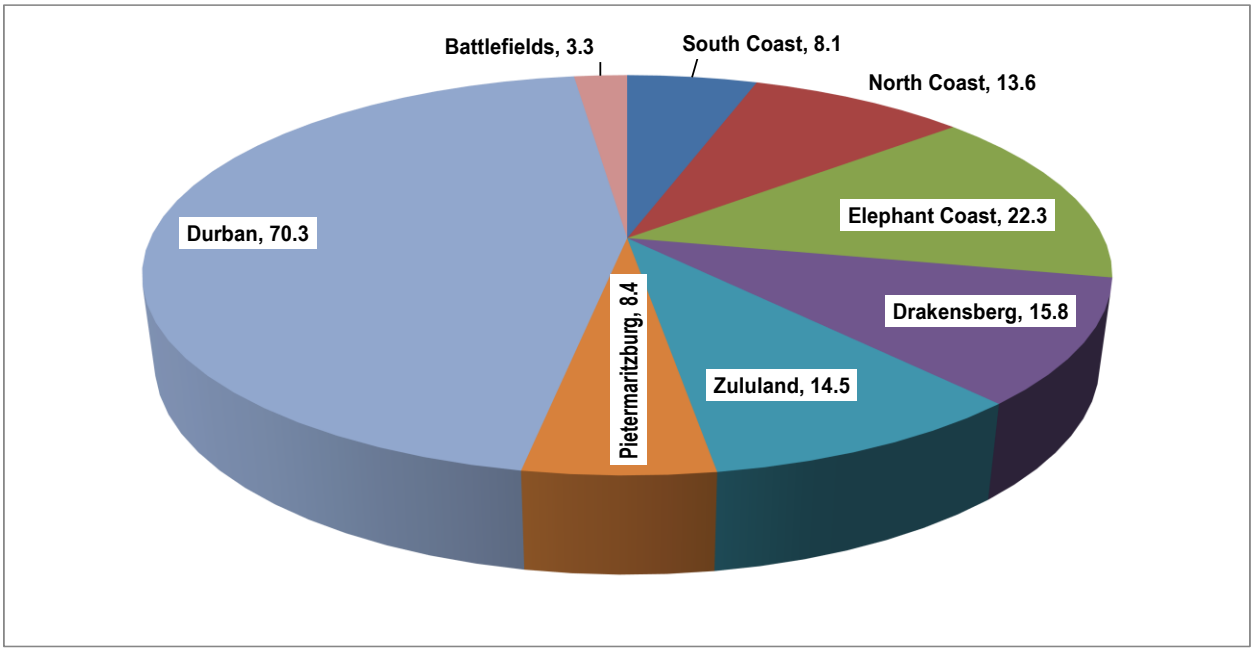
Figure 2.7 shows the destinations visited the most in the province of KZN in 2012. Durban region attracts more visitors at the rate of 70.3 per cent. There are number of factors that cause the tourists to choose this region. Infrastructure and the ocean are among a series of factors attracting tourists to Durban. Durban July Handicap attracts more tourists during the month of July for the horse racing that gives an opportunity to the designers to showcase their designs.

The city is also the custodian owner of Moses Mabhida, the most beautiful stadium in SA. The stadium hosts a number of games during the year and usually these are local and international games.

There are also other sport codes that boost tourism in the city. The city is known for its rugby, soccer and many other sport codes that originate from KZN. The comrades and Duzi marathons are both prominent sport which attract global as well as national communities of all ages, races and gender.

The second most visited destination in KZN is Elephant coast, which hosted approximately 22.3 per cent of the total tourists visited the province in 2011. The tourist visiting Elephant Coast are those that are passionate about nature.

Figure 2.7: Percentage most visited destinations in KZN, 2011



Source: SAT, 2012

2.8 Conclusion

In summary, global economic growth in 2013 was 0.1 percentage points lower than what was experienced in 2012, with advanced economies growing conservatively while emerging economies enjoyed relatively higher growth. Sub-Saharan Africa enjoyed robust and protracted

growth, which is mainly attributed to mining activity, agricultural production and investment in natural resources and infrastructure.

It is expected that in 2014 the US economy will maintain growth of 2.2 per cent and the euro area is expected to be on a positive trajectory. It is envisaged that India, one of the best economic performers in 2013, will gain momentum in 2014 and reach a growth rate of 5.6 per cent.

On the domestic front, economic performance slowed significantly in 2013 achieving a growth rate of 1.9 per cent. Protracted labour disruptions in several economic sectors, restrained business and consumer confidence levels have been identified as contributing factors in this regard. The inflation rate reached and surpassed the upper limit of the inflation band at 6.6 per cent in May 2014.

KZN remained the second largest contributor to the SA economy at 16.5 per cent after Gauteng (36.1 per cent) in 2013. EThekwini was the major contributor to the province's output. Growth rates in the first quarter of 2014 indicate that the level of economic activity within the province is expected to improve by the end of this year.

The country, and the province, faces a challenge in reducing its current account deficit, which has been widening and fluctuating since 2013. The annual inflation rate in KZN was higher than national headline inflation, with the hospitality industry stomaching the heaviest blow. SA has now been ranked as the fourth biggest overseas tourist market in the world. This bodes well for the country, and particularly for KZN as Durban attracts a considerable proportion (70.5 per cent) of KZN tourists.

Chapter 3: Kwazulu-Natal Sector Analysis

3.1 Introduction

The three sectors namely: primary, secondary and tertiary have been always playing a crucial role in the economy of the province of KZN. Their importance differs according to their performances. The most contributor of the three has been tertiary sector which contributes more than 60 per cent towards the GDP of the province. All the subsectors of each of these three industries are discussed in details. These subsectors are agriculture and mining under the primary sector. The secondary sector is manufacturing, electricity and construction and lastly, the tertiary sector under trade, transport, finance and community services.

3.2 Overview and outlook of the provincial sector analysis

Table 3.1 indicates that the economy of the province is mainly driven by the tertiary sector with an estimated contribution of 67.7 per cent of the value added in 2013. The value added by the tertiary sector has grown by approximately 6.9 percentage points between 1996 and 2013 and the projections indicate that, this sector will continue to dominate. Contributions by both the primary and secondary sectors have plummeted over the same period, with value added deteriorating from 9.2 per cent to 5.6 per cent and 30 per cent to 26.7 per cent, over the same period respectively.

Table 3.1: Sector contribution to the provincial real GDP (percentages), 1996 to 2016

	Estimates							Projections		
	1996	2006	2008	2009	2011	2012	2013	2014	2015	2016
Primary Sector	**9.2**	**5.7**	**5.9**	**5.7**	**5.6**	**5.6**	**5.6**	**5.4**	**5.3**	**5.2**
Agriculture	5.6	4.2	4.6	4.5	4.3	4.3	4.4	4.3	4.2	4.2
Mining	3.6	1.5	1.3	1.2	1.2	1.2	1.3	1.1	1.1	1.1
Secondary Sector	**30.0**	**29.3**	**28.8**	**27.0**	**27.2**	**27.0**	**26.7**	**26.6**	**26.5**	**26.4**
Manufacturing	24.4	24.3	23.7	21.7	22.1	22.0	21.8	21.7	21.6	21.5
Electricity	2.9	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.8
Construction	2.6	2.6	2.9	3.2	3.0	3.0	3.0	3.1	3.1	3.0
Tertiary Sector	**60.8**	**65.0**	**65.3**	**67.3**	**67.2**	**67.5**	**67.7**	**68.0**	**68.2**	**68.4**
Trade	12.8	14.6	14.1	14.3	14.6	14.8	14.9	14.9	15.0	15.0
Transport	10.6	13.1	13.3	13.7	13.5	13.4	13.4	13.6	13.7	13.7
Finance	15.2	18.6	19.5	20.1	20.1	20.2	20.3	20.6	20.8	21.1
Community services	22.2	18.7	18.5	19.2	19.0	19.0	19.0	18.8	18.7	18.6

Source: Global insight, 2014

3.3 Primary Sector

3.3.1 Overview of the Agricultural Sector

The agriculture sector[12] incorporates establishments and activities that are primarily engaged in farming activities, but also includes establishments focusing on commercial hunting and game propagation and forestry, logging and fishing. It is one of the economic sub-sectors that have been targeted in the New Growth Path (NGP) as a growth focal point, specifically due to its potential for job creation and poverty alleviation[13].

According to the Department of Agriculture, Forestry and Fisheries (DAFF), agriculture is an important engine for growth in all sectors in the economy. When compared to other sectors in KZN, the agriculture sub-sector plays a fundamental role when it comes to food security, rural development and skills development. These factors are essential to the achievement of SA's Millennium Development Goals (MDGs), which focus to a large extent on ensuring food security for the poor, fighting hunger and poverty, ensuring environmental sustainability and effectively addressing rural development (MDG Country Report, 2013).

As KZN is SA's best watered province; it has a larger area of high quality agricultural land than any other province, and it is the national leader in several agricultural products. The Midlands area between Pietermaritzburg and the Drakensberg is the heart of this high quality agricultural area and the North Coast region. Due to the good reliable rainfall and fertile soils, the region's agricultural sector has become very productive, and is known for its specialist capability in several types of farming. KZN covers an area of just over 9.2 million hectares of land of which 85 per cent is suitable for grazing and 1.5 million is arable land (Global Insight, 2013).

The agriculture, forestry and fisheries sectors are crucial to SA's socio-economic development. The agricultural industry in KZN is based on a wide variety of crops; horticulture, forestry as well as animal husbandry. However, the future of these sectors depends on critical issues such as climate change, population growth, skills shortages, changes in consumer needs and shifts in the global economy and related markets.

Field crops such as sugar and maize are scattered from the southern border of KZN to its northern border. Evidence shows that maize is the most widely grown crop in the country.

[12] www.kzntopbusiness.co.za
[13] www.info.gov.za

Horticulture sub-tropical fruits mainly bananas are produced in Port Shepstone and Port Edward. The Hluhluwe region of KZN produces pineapples.

The primary commercial forest area in SA is found in KZN with two largest forest owners, Sappi and Mondi. The forestry industry is one of the strategic economic sectors in SA, with a significant contribution towards economic growth and job creation. The ILembe District Municipality has identified the essential oils and herbs industry as a means of connecting the poor rural hinterlands with the wealthy coastal strip of KZN. Dairy farming based in Dundee has the largest Jersey stud herd in the country.

The Highveld and Midlands areas of KZN are the main beef production areas. Sheep farming is concentrated in the drier areas of the province along the Drakensberg, Vryheid and Southern Natal. The pig population in KZN is estimated to be mainly within Estcourt, Mooi River and Dalton areas.

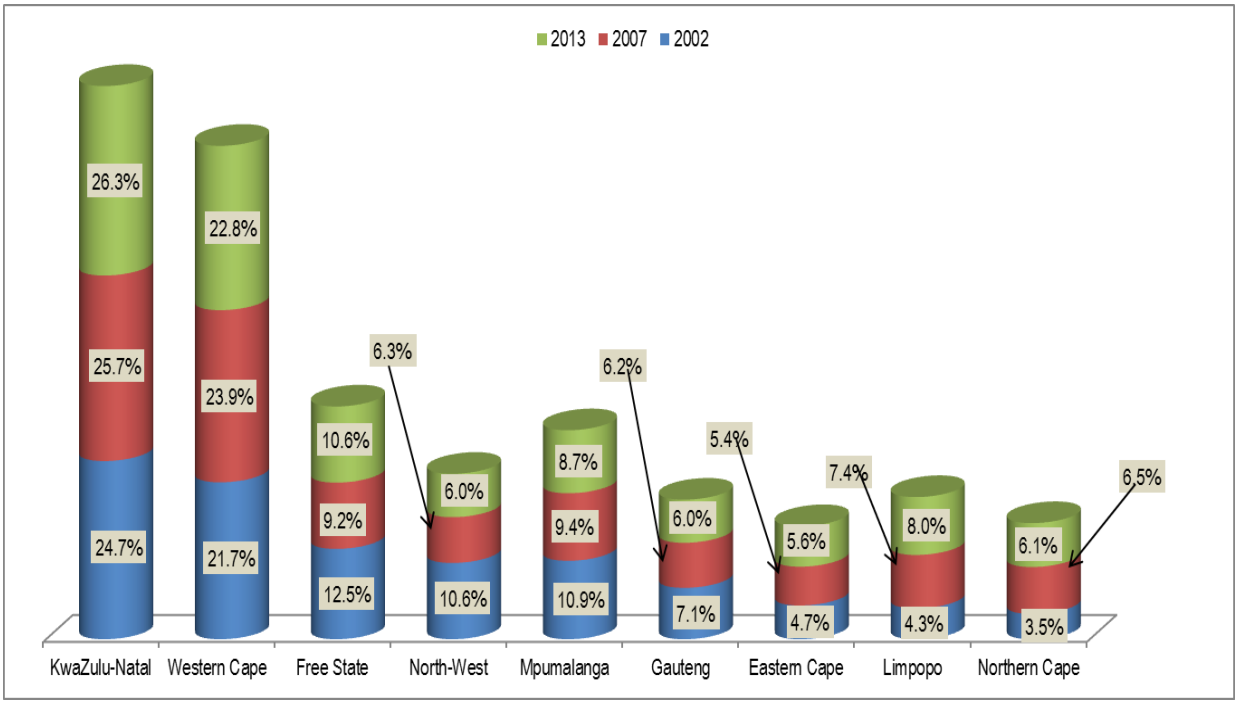
In SA there are two genetic breeds of chickens that lay eggs for the commercial market, Lohmann and Hyline. Both breeds are imported. Rainbow is the largest chicken producer and marketer in SA.

3.3.1.1 Agriculture sub-industries

The agriculture sub-sector is composed of animal production, field crops, horticulture and floriculture. It is further subdivided into agriculture and hunting; forestry and logging; and fishing, operation of fish farms. The performance of this sub-sector has a crucial role in the determination of food security, employment and overall performance of the manufacturing sector (DAFF, 2013).

According to Stats SA (2014), SA remains a net exporter of agricultural products in terms of both volume and value and has maintained a positive trade balance of agricultural, forestry and fisheries exports collectively in the third quarter of 2013. Figure 3.1 illustrates the contribution by provinces to the total agriculture sector in 2002, 2007 and 2013. Over the periods 2002, 2007 and 2013, KZN's contribution to national agriculture industry was the highest at 24.7 per cent, 25.7 per cent and 26.3 per cent, respectively.

Figure 3.1: Provincial contribution to the national agriculture industry in 2002, 2007 and 2013



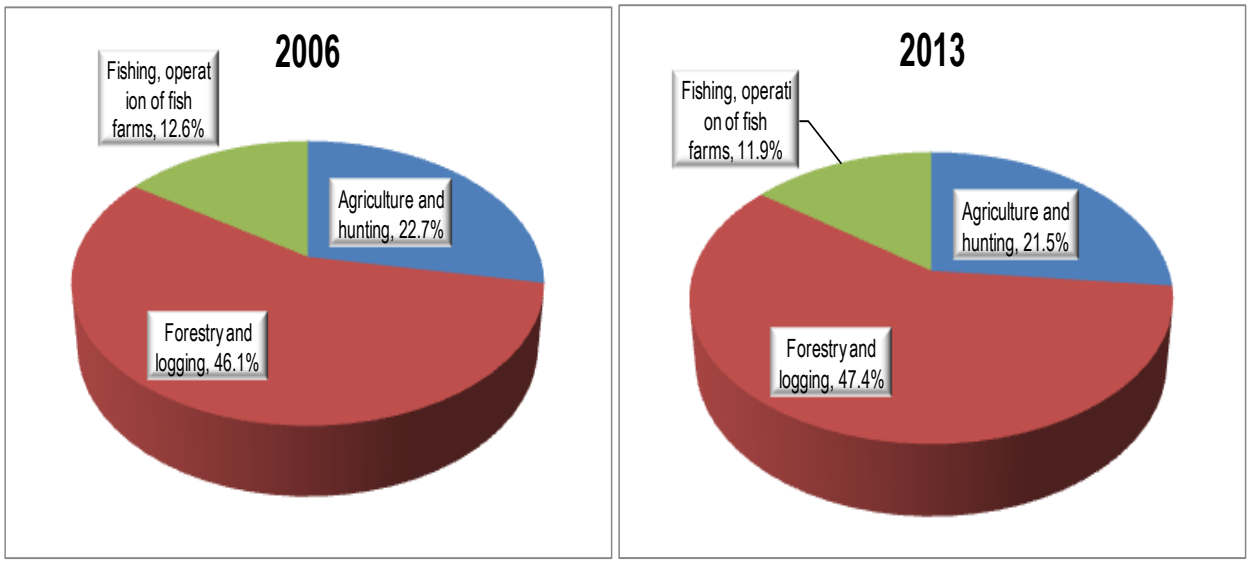
Source: Global Insight, 2014

The province of KZN was followed by the Western Cape at 22.8 per cent and the Free State at 10.6 per cent in 2013. The least contributor was the Eastern Cape (5.6 per cent), the North West at 6.0 per cent and the Gauteng (6.0 per cent) in the same period. KZN is the leading contributor because it has a large amount of agricultural land and is the major producer of high value crops in the country. The province also produces and processes more than 80 per cent of sugarcane.

3.3.1.2 Agriculture sub-sector performance in KZN

Figure 3.2 displays the contribution by KZN's three agricultural sub-sectors to KZN's agriculture industry in 2006 and 2013. Among the three, forestry and logging was the largest contributor to the KZN's agriculture industry at 47.4 per cent in 2013 followed by agriculture and hunting at 21.5 per cent. While fishing, operation of fish farms contributed the lowest share of 11.9 per cent. Although the performance of agriculture subsector is high, it has however, not improved as compared to the year 2006 (figure 3.2).

Figure 3.2: GVA contribution by KZN's agricultural sub-sector (constant 2005 prices) to KZN's agriculture industry GVA in 2006 and 2013



Source: Global Insight, 2014

Table 3.2 represents KZN's actual and forecasted growth rates of the primary industry and its sub-sectors, namely the agriculture and mining sector in 2008 to 2016. Despite the robust growth rate of 13.6 per cent recorded in 2008, the agriculture industry recorded a moderate rate of 11.1 per cent in 2013. This was due to an improvement by fishing; operation of fish farms sub-sector from an uninspiring 2.9 per cent recorded in 2012 to 6.0 per cent in 2013 followed by agriculture and hunting (3.3 to 4.0 per cent) and lastly 0.7 to 1.2 per cent contributed by forestry and logging sub-sector in the same period.

Estimates for 2014 indicate that all the three agriculture industry sub-sectors growth rates will decline to 0.1 per cent each. It is expected that agriculture industry sub-sectors will grow at an average 3.7 per cent and 5.8 per cent in 2015 and 2016 respectively. According to the KZN Barometer (2013), the sluggish performance in the sector between the years 2009 to 2012 was partly due to the drop in pork production, most likely linked to some livestock disease problems, lower volumes of crushed sugarcane, drop in maize production and lower meat production emanating from skin disease among cattle in northern KZN.

However, the KZN Business Barometer (2014) indicated that in March 2014 the agriculture in KZN was one of the drivers of growth as it expanded 3.8 per cent year-on-year. This emanates from 38 per cent increase in field crops and a 20 per cent increase in meat production.

Sugarcane crushed, which makes up the largest part of agriculture in the province, was up only by 3 per cent.

Table 3.2: Primary sector growth rates analysis, 2006 to 2017

Industries	Actual						Estimates	Forecast	
	2008	2009	2010	2011	2012	2013	2014	2015	2016
PRIMARY SECTOR	**-27.2**	**-29.5**	**22.1**	**-3.3**	**-5.8**	**33.4**	**-21.8**	**5.3**	**6.7**
AGRICULTURE INDUSTRY	**13.6**	**0.7**	**18.9**	**11.2**	**6.8**	**11.1**	**0.2**	**3.7**	**5.8**
Agriculture and hunting	18.1	-8.1	4.4	0.6	3.3	4.0	0.1	1.2	1.9
Forestry and logging	7.4	11.2	-2.7	1.8	0.7	1.2	0.1	1.2	1.9
Fishing, operation of fish farms	-11.9	-2.3	17.3	8.9	2.9	6.0	0.1	1.2	1.9
MINING INDUSTRY	**-40.7**	**-30.2**	**3.2**	**-14.5**	**-12.6**	**22.3**	**-22.1**	**1.6**	**0.9**
Mining of coal and lignite	7.1	1.3	-1.4	-9.7	2.7	-9.0	-3.8	2.0	1.0
Mining of gold and uranium ore	-24.7	-7.4	-20.6	-3.6	-15.5	15.6	-10.1	-5.4	-5.5
Mining of metal ores	-9.3	-1.8	17.8	5.7	3.7	9.0	-8.8	3.0	2.6
Other mining and quarrying	-13.8	-22.3	7.5	-6.9	-3.5	6.7	0.6	1.9	2.8

Source: Global Insight, 2014

3.3.2 Mining Industry

3.3.2.1 Overview of the mining industry

The mining industry includes the extracting, beneficiating of minerals occurring naturally, including solids, liquids and crude petroleum and gases. It also includes underground and surface mines, quarries and the operation of oil and gas wells and all supplemental activities for dressing and beneficiating for ores and other crude materials[14]. The NDP identifies *mining & quarrying* as an important sub-sector of the SA economy. It states that the sub-sector should be supported by a stable regulatory environment, reliable rail transport, a dependable electricity supply, and by research into new mining methods and additional uses for minerals (National Development Plan, 2012).

According to South Africa Yearbook (2012/13), SA holds the world's largest reported reserves of gold, platinum group metals, chrome ore and manganese ore, and the second-largest reserves of zirconium, vanadium and titanium. Ilmenite, rutile and zircon are mined on a large scale for their titanium and zirconium contents from aeolian beach dunes in the northern areas of KwaZulu-Natal.

[14] http://www.mediaclubsouthafrica.com

Large ore reserves are held by Richards Bay Minerals (RBM), a leading producer of the heavy minerals, which mines the 17 km stretch of land along a 2 km strip of coastline north of Richards Bay (the City of uMhlathuze). RBM meets about a quarter of the world's demands for these products, generating billions of rand in foreign currency. The region is rich in other minerals such as aluminium, anthracite and calcitic marbles (KZN Top Business, 2014).

In the northern interior district of Newcastle-Vryheid and in the Nongoma area, the coal consists mainly of anthracite. Much of the anthracite is railed to the coal terminal at Richards Bay, from where it is exported. Richards Bay Coal Terminal is the world's largest coal exporting terminal (Department of Economic Development and Tourism, 2012).

Table 3.3 shows the contribution of provinces to the national mining industry for the years 1996, 2001, 2006 and 2013. KZN occupied the third last place behind Northern Cape (6.8 per cent) and Free State (7.5 per cent). Mining is the least contributing industry in the primary sector in KZN at 3.3 per cent in 2013, which declined from 3.6 per cent recorded in 2006. Most provinces recorded a decrease in terms of the mining industry's contribution from 2006 to 2013. A significant amount of mining takes place in North West, Mpumalanga and Limpopo in 2013, with each province making particularly large contribution to gold mining. The direct contribution of the *mining & quarrying* sub-sector to GDP is low and declining, at 4.9 percent as of 2012 (Stats SA, 2013).

Table 3.3: Provincial contribution to the national mining industry in 1996, 2001, 2006 and 2013

	1996	2001	2006	2013
Western Cape	1.2%	0.4%	0.4%	0.3%
Eastern Cape	0.2%	0.1%	0.2%	0.2%
Northern Cape	6.4%	8.8%	7.4%	6.8%
Free State	13.6%	6.4%	8.6%	7.5%
KwaZulu-Natal	**4.7%**	**3.9%**	**3.6%**	**3.3%**
North-West	20.6%	25.0%	24.3%	25.5%
Gauteng	21.0%	12.7%	13.5%	12.1%
Mpumalanga	19.9%	21.0%	19.4%	20.2%
Limpopo	12.4%	21.6%	22.6%	24.1%

Source: Global Insight, 2014

As observed nationally, in 2013 the mining and quarrying industry declined in KZN registering a sharp negative growth of 15.6 per cent compared to a growth rate of 39.9 per cent registered in the 2nd quarter (Department of Economic Development, 2013). The steep decline in the mining

sector during the 3rd quarter weighed down GDP by 0.8 percentage points nationally compared to a 0.2 percentage points in KZN.

It is worth noting from table 3.1 that the mining industry recorded the lowest growth rate among industries at 1.3 per cent in 2013. This is projected to remain at 1.1 per cent in the years 2014, 2015 and 2016 (table 3.1). The only robust growth rate the province recorded in this sector was 22.3 per cent in 2013. According to Stats SA (2014) the mining index declined by 4.4 per cent year-on-year in March 2014 and 2.8 per cent month-on-month in April 2014. This is mainly due to a 4 per cent decline in coal mining, which accounts for 72 per cent of the sector, after the recent power outages at the Richards Bay Coal Terminal in February 2014.

In SA, gold production appears to be in long-term sustainable decline. The decline in South Africa has been compounded by prolonged labour disputes that took place in 2012 and 2013, which disrupted production of both gold and platinum. The strike problems in the mining sector, although it is far removed from KZN, have an influence on spending on durable goods, such as cars and houses (KZN Business Barometer, 2014).

3.3.2.2 Mining sub-sector performance in KZN

Table 3.4 shows the GVA contribution of the mining sub-sector in KZN for the year 2006 and 2013. Among the four sub-sectors mining of coal and lignite was the largest mining sub-sector in 2013 with a share of 5.8 per cent followed by other mining and quarrying with a share of 5.2 per cent. It is noted that the shares of gold and uranium ore, metal ore mining as well as other mining and quarrying decreased whereas the share of coal and lignite mining increased from 4.7 per cent in 2006 to 5.8 per cent in 2013. The contribution by gold and uranium ore is insignificant at almost zero per cent.

Table 3.4: GVA contribution by KZN's mining sub-sector (constant 2005 prices) to KZN's mining industry GVA, 2006 and 2013

Mining Sub-sectors	2006	2013
Mining of coal and lignite	4.7%	5.8%
Mining of gold and uranium ore	0.1%	0.0%
Mining of metal ores	3.7%	2.5%
Other mining and quarrying (incl 22)	6.9%	5.2%

Source: Global Insight, 2014

According to the KZN Barometer (2014), the sluggish performance in the mining sub-sectors is therefore not a surprise due to recent power outages at the Richards Bay Coal Terminal and

prolonged national labour disputes that took place in 2012 and 2013, which disrupted production of both gold and platinum.

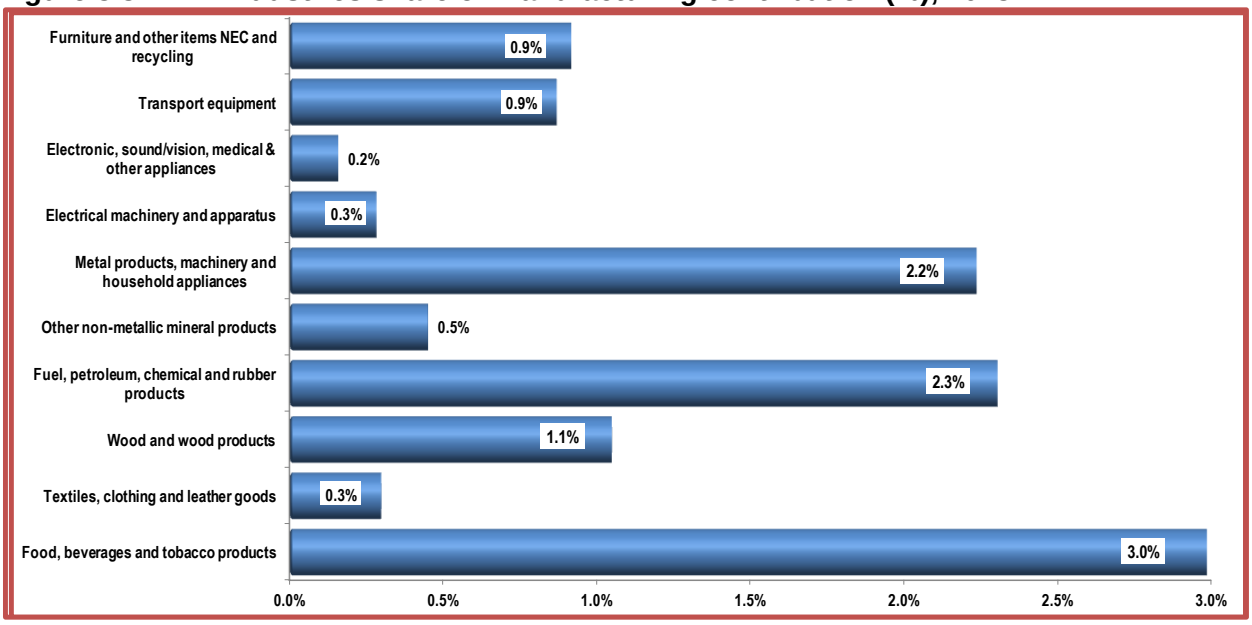
3.4 Secondary sector

3.4.1 Overview of Manufacturing

As observed in table 3.1, the secondary sector contributed 26.7 per cent towards provincial GDP in real terms in 2013. The largest contributing industry in the economy of the province is manufacturing at 21.8 per cent in 2013. However, the stark decline in the sector's contribution to the economy of the province over the period 1996 to 2014, coupled with a move towards new technologies and value-adding within the global manufacturing sector highlights the urgent need for the province to stimulate growth within this labour-absorptive sector.

SA is home to a well-developed and established manufacturing sector which has shown solidity and potential to compete lucratively in the international arena. The sector is also a stimulant for growth in activities of other sectors such as services. It plays a pivotal role in employment creation and national economic empowerment. Numerous prospects lie in this sector, which present opportunities to immensely accelerate the country's growth and development.

Figure 3.3: KZN industries share of manufacturing contribution (%), 2013



Source: Global Insight, 2014

Manufacturing is one of the significant industries in the economy of the province, thereby contributing 24.4 per cent to the provincial economy in 1996. It however, plummeted to 21.8 per cent in 2013 and is further expected to drop slightly to 21.7 per cent in 2014. The critical industries in the manufacturing in 2013 were *food, beverages and tobacco products* (5.4 per cent); *metals* (2.6 per cent); *chemicals* (2.4 per cent); *wood & wood products* (2 per cent); *automotive* (1.3 per cent); as well as *furniture & recycling* (1.2 per cent) (figure 3.3).

3.4.2 Automotive

The *automotive sub industry*[15] is an imperative source of foreign investment for SA. It provides a platform for forming business relationships with many of the major multinationals such as BMW, Toyota, Ford and Volkswagen. These multinationals make use of SA as an investment destination as they enjoy low production costs and are strategically positioned to allow them access to other markets in the Sub-Saharan Africa region. SA has a competitive advantage in terms of sound macroeconomic policies, which have effects on the current pervasive lower interest rates, which reduces the cost of operating in the country.

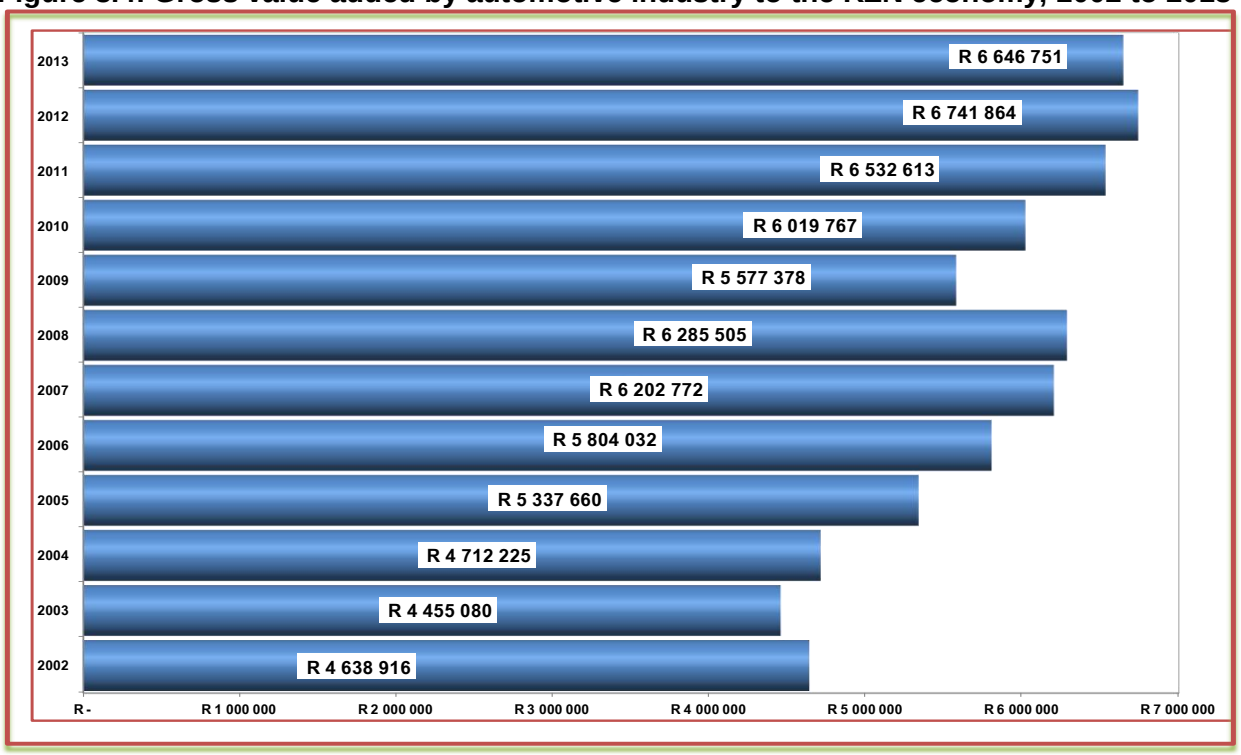
The automotive industry employs approximately 30 344 individuals, as of the beginning of the fourth quarter of 2013. Employment in the industry grew by a modest 1.5 per cent from 29 903 employees on average, in the third quarter of 2013. A sales report released by the National Association of Automobile Manufacturers of South Africa (NAAMSA) [16] revealed that, a total of 54 571 vehicles were sold in September 2013. This figure increased to 60 854 in September 2014, thus representing a robust growth of 11.5 per cent, between September 2013 and September 2014.

Figure 3.4 shows value added by the *automotive industry* towards the provincial real GDP for the period 2002 to 2013. As can be observed from the bullish overall pattern displayed by the figure, the overall value added by the industry increased significantly from an estimated R4.64 billion in 2002 to R6.65 in 2013.

[15] The *automotive sub industry* is made up of passenger cars & light trucks; medium & heavy duty trucks; trailers; car parts and accessories

[16] See National Association of Automobile Manufacturers of South Africa, accessed on the 30 October 2014 available at http://www.naamsa.co.za/flash/total.html.

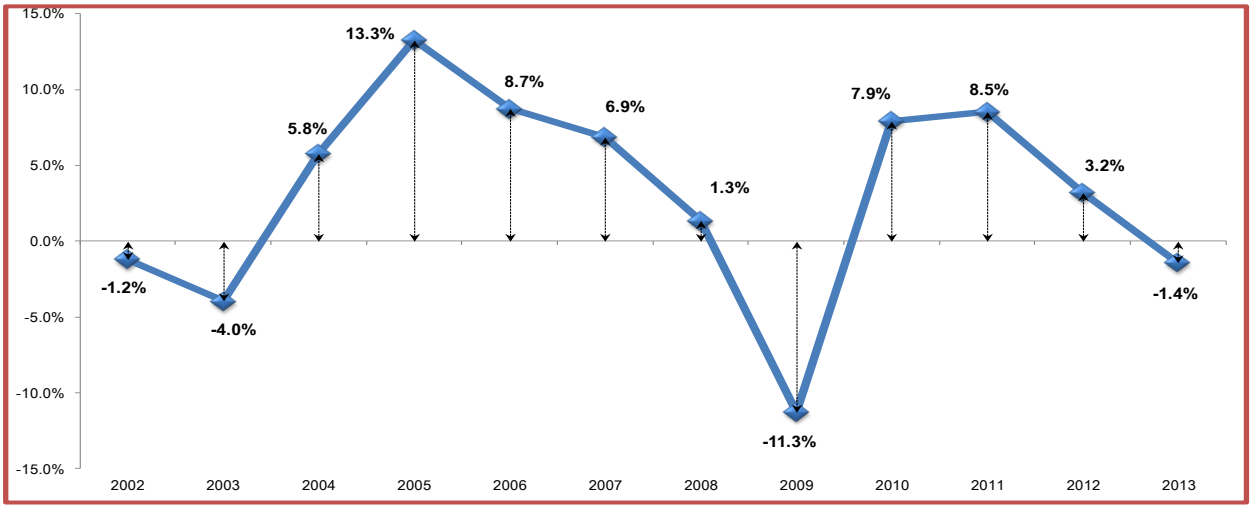
Figure 3.4: Gross value added by automotive industry to the KZN economy, 2002 to 2013



Source: Global Insight, 2014

The growth rates showed in figure 3.5 reveal that performance in this industry is highly susceptible to global economic cycles. During the period 2001 to 2002 the US economy suffered a recession and the performance by the *automotive industry* in KZN followed suit thereby contracting by minus 4 per cent.

Figure 3.5: Annual growth rate in the KZN automotive industry, 2002 to 2013



Source: Global Insight, 2014

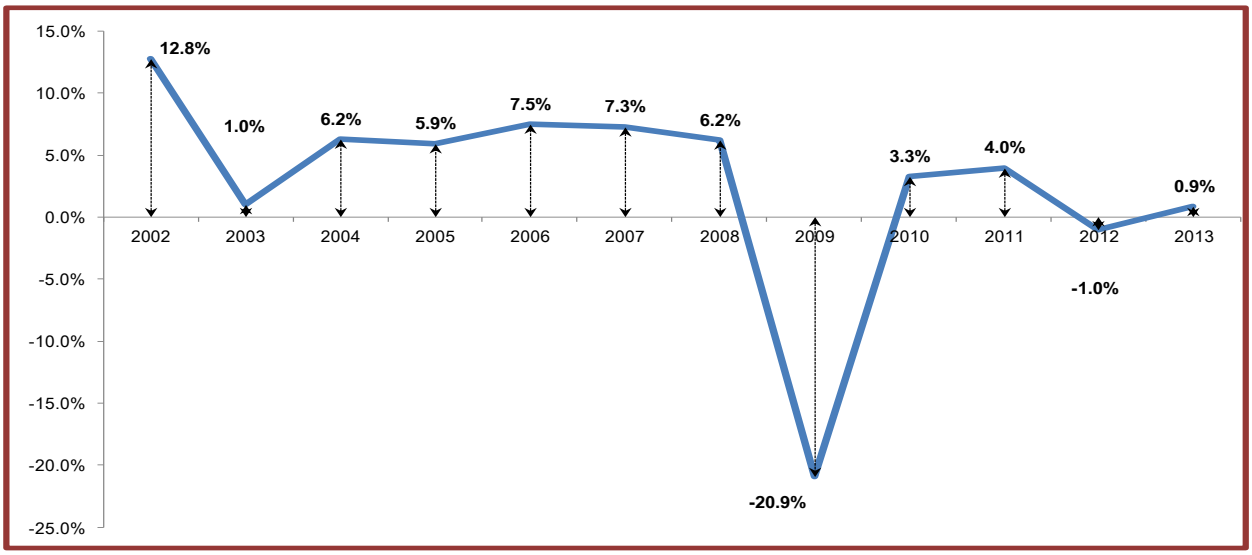
A similar pattern was observed during the 2009 global recession, whereby output in this industry contracting by negative 11.3 per cent, after it plummeted from R6.3 billion in 2008 to R5.5 billion in the following year. Apart from those contractions, stemming from international factors such as weak demand by trade partners, the industry has enjoyed enduring growth, especially in 2005 when it recorded the highest growth rate of 13.3 per cent.

3.4.3 Metals

The *metals industry* encompasses the shaping of metals and the performance of metal finalizing operations. Firms in this industry deal with plating and coating using ferrous and nonferrous metal products. In SA, the industry is active in the production of metal slabs, railway track bars, wire and plates using mostly aluminum. A number of industries and sectors including mining, construction and automotive make use of metals as inputs and add value to their products.

The key *metals industry* firms in KZN include Tata Steel located in Richards Bay, which focuses mainly on the production of ferrochrome for export purposes; Safal Steel in Cato Manor which supplies metal coated steel coils; and Newcastle Works, a plant by Arcelor Mittal which employs approximately 1850 employees and produces about 1.6 million tons of finished metal products. Others include McDonald Holdings, BHP Billiton, Hulamin and Assmang.

Figure 3.6: Average annual growth rate in the KZN metals Industry, 2002 to 2013



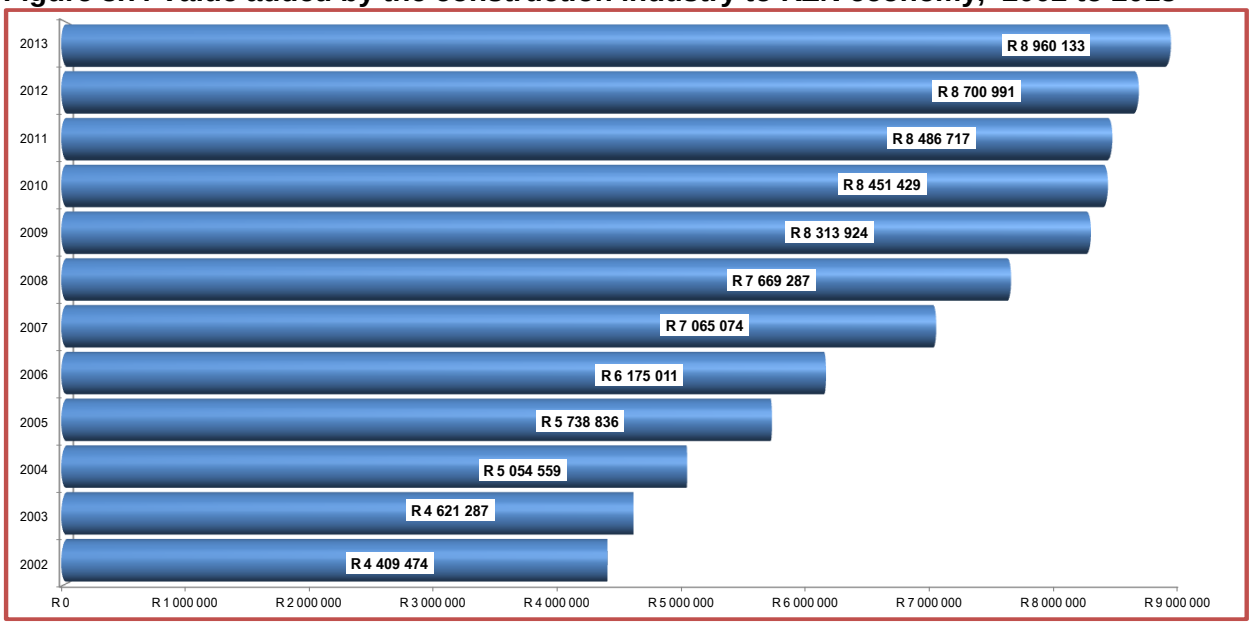
Source: Global Insight, 2014

Figure 3.6 reveals that prior to the 2009 global recession and after that of US in 2002 , the metals industry enjoyed steady robust growth rate, increasing by 12.8 per cent in 2002 and 6.2 per cent in 2008. A sharp decline in growth was observed in both recessions, but it was more severe in the latter, due to the magnitude of the recession.

3.4.4 Construction industry

Construction is one of the critical sectors in an economy. Its contribution to the economy of the province increased from an estimated R4.4 billion in 2002 to approximately R8.9 billion in 2013, translating to an annual average growth rate of 6.7 per cent (figure 3.7).

Figure 3.7: Value added by the construction industry to KZN economy, 2002 to 2013



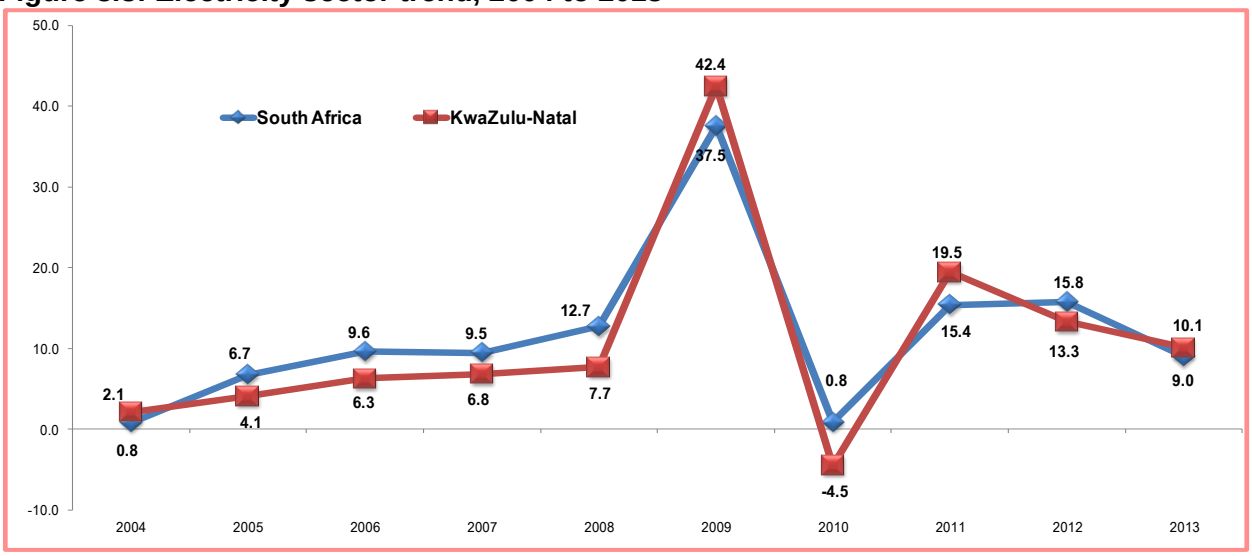
Source: Global Insight 2014

In 1996 the construction industry accounted for 2.6 per cent of the KZN's gross value added (GVA). Its contribution peaked at 3.2 per cent in 2009 before remaining constant at 3 per cent between 2011 and 2013 (table 3.1). The sector employed an excess of 100 thousand people in 2013. The industry shows a moderate upward trend in the provincial growth rate of the construction industry. This was abruptly interrupted in 2010, partly due to the completion of the 2010 FIFA (Federation of International Football Association) world cup projects.

3.4.5 Electricity

The KZN Business Barometer (2014)[17] suggests that the electricity usage in KZN has gained momentum since the beginning of 2014. This increase is partly due to higher electricity demand in the winter months as consumers use more electricity for heating purposes.

Figure 3.8: Electricity sector trend, 2004 to 2013



Source: Global Insight, 2013

Figure 3.8 indicates the changes in electricity sector, the marginal indicates that electricity sector is declining national and provincial (KZN) in 2013 compared to 2012. In 2012 the contribution was 13.3 and 15.8 per cent in KZN and National respectively, but in 2013 period it had decline to 10.1 and 9 per cent contribution KZN and National, which affects the economy of the country.

The KwaZulu-Natal electricity index was up only 0.8% year-on-month, compared to growth in excess of 4% for several months last year. Month-on-month, the index dropped 8.9%. Even before the recent general load-shedding by Eskom, several big electricity users have already cut their usage substantially at request of Eskom, and this is reflected in the electricity index drop. These cutbacks are expected to continue and even get worse in the coming winter months.

[17] The KZN Business Barometer is compiled by Mike Schussler of Economists.co.za. The monthly updated version of the publication is available on request.

3.5 Tertiary Sector

The tertiary sector remains the highest contributor to the KwaZulu-Natal economy. The broad sector grew at 2.4 per cent over the 2003 to 2013 period. This time period includes the impact of the 2008 to 2009 recession during which the sector continued to grow from 65.3 per cent in 2008 to 67.3 per cent in 2009. This sector encompasses services such as trade, transport, finance as well as community services.

Table 3.5: Tertiary sector contribution to GDP (%), 2003 to 2013

	2006	2011	2013
Tertiary Sector	**65.0**	**67.2**	**66.7**
Trade	14.6	14.6	14.7
Transport	13.1	13.5	13.2
Finance	18.6	20.1	20.1
Community service	18.7	19.0	18.7

Source: Global Insight, 2014

Table 3.5 showed that from 2003 to 2006, community services was the dominant sub-sector. However, from the year 2007 till 2013, the finance sub-sector appeared as the leading sub-sector, followed by the community services, trade and finally the transport sub-sector. In 2013, the finance sub-sector contributed 20.1 per cent to the province's GDP.

Table 3.6: Tertiary sector growth rate analysis (%), 2004 to 2013

	2006	2011	2013	Average
Tertiary Sector	**5.7**	**4.2**	**2.1**	4.0
Trade	6.4	5.1	2.5	4.6
Transport	5.2	2.9	1.8	3.3
Finance	7.7	4.8	2.4	5.0
Community service	3.8	3.7	1.6	3.0

Source: Global Insight, 2014

Table 3.6 depicts fluctuating growth rate of the tertiary sector as well as its sub sectors from 2004 to 2013. The tertiary sector's growth rate of 2.1 per cent in 2013 was recorded and was lower than that of 2012 growth rate (3.1 per cent). The table indicate that the finance sub-sector growth rate also declined during the 2012 to 2013 period, from 3.4 per cent to 2.4 per cent, respectively. It is clearly noted that the trade sub-sector recorded the highest grow rate in 2013 (2.5 per cent), followed by the finance at 2.4 per cent and the transport sub-sector (1.8 per cent).

Community service is the least contributing sub-sector in the tertiary sector in KZN at 1.6 per cent in 2013, which was a decline from 2.6 per cent contributed in 2012. The tertiary sector grew at an average of 4.1 per cent per annum between 2004 and 2013.

3.5.1 Transport

There has been a tremendous improvement in the transport system in South Africa, especially in major cities that are economic growth engines of the country. As indicated in chapter two, section 2.4 of this publication, the economic performance in SA is concentrated on three provinces, namely Gauteng, KZN and Western Cape at a rate of 36, 16 and 14 per cent contribution respectively. It is within this perspective that, KZN becomes relevant when transport infrastructure is under scrutiny.

Compared to KZN, Gauteng and the Western Cape have considerably improved their respective transport infrastructure. Johannesburg for example has implanted the state of art transport system that competes with most of the world's famous cities. Gautrain for instance has been regarded as the most improved mode of transport in the country. This improvement is further supported by Bus Rapid Transit (BRT) which has added more value to Gauteng commuters. The city of Cape Town in the Western Cape follows closely with the state of art BRT transport system. Despite being the key participant in the economy of the country, KZN is however trailing in so far as BRT is concerned.

Although the province has good public transport system; however it has a huge challenge of being dominated by rural surroundings which poses challenges in the construction of roads and other related infrastructural activities. The province is also the best contributor when it comes to efficient air and sea transport system in the country. It has the third busiest airport in South Africa which makes the eighth busiest airport in Africa. On the same note, KZN has the busiest port in Africa which enables the province to have a potential of hosting cargos that are on transit to other countries in the continent.

3.5.1.1 Transport as a contributor to GDP

According to the Trade and Investment KwaZulu-Natal (TIKZN), in 2011 transport contributed 11.5 per cent to the province's GDP while the difference in the first quarter of 2014 was

marginal at 11.9 per cent. This makes the industry to be among the most critical role players in the economy of the province. The latter provides KZN with a comparative advantage as its contribution to the national transport is above average compared to other provinces (Bizcommunity, 2014).

3.5.2 Trade

Trade is one of the components of tertiary sector, which comprises of retail trade, wholesale trade, restaurants and hotels as well as sales and repairs of motor vehicles. According to the KZN barometer July 2014 it is indicated that due to the uncertainty of the economy, retail sales has declined by 0.2 per cent year on year, on the contrary, wholesale trade grew by 3.6% year on year.

3.5.2.1 Retail trade overview

Retail industry has shown massive growth over the years, the construction of new and expansion of old shopping centres gives evidence that retail trade is booming. This growth is mostly influenced by country's economic conditions. Favourable economic environment stimulate consumption by household which results in an increase in a value of retail sales trade. Financial crises in 2009 had a negative impact on expenditure by consumers which resulted in less spending.

After 2009 the economy recovered and the recovery resulted in a number of shopping centres being built throughout the country, in both suburbs and rural. Construction of the Shopping malls mushroomed which assisted in stimulating jobs that contributed in the economic growth of the country.

Retail industry comprises of several clusters namely: general dealers, retailers of food, beverages and tobacco, retailers in pharmaceutical and medical goods, cosmetics, household furniture retailers, appliances, hardware retailers, paint and glass, textiles retailers, clothing and footwear. All the above-mentioned clusters can face economic cycles depending on seasons, for example in festive season the retail sales are up.

3.5.2.2 Retail Trade Sales, Month on Month

The table below indicates that in December 2013, general dealers had more sales than any other retailers, they amounted to 29679, but in January 2014 they decreased by 26.5 percent. The retailers of household furniture, appliances and equipment had the least sales amounting to 4055 in December 2013, and they have been decreasing from February 2014 to April 2014.

Table 3.7: Retail Trade Sales, SA by Type of Retail Cluster, December 2013 to June 2014 in Millions

Types of retail stores	13-Dec	14-Jan	14-Feb	14-Mar	14-Apr	14-May	14-Jun
General dealers	29679	21809	20844	22196	19990	21630	21872
Retailers of food,beverages and tobacco in specialised stores	7565	4632	4310	4931	4845	4812	4617
Retailers in pharmaceutical and medical goods, cosmetics and toiletries	4389	4100	3805	3990	4121	4079	3938
Retailers in textiles,clothing, footwear and leather goods	19460	11392	11050	10602	12660	12692	11230
Retailers in household furniture, appliances and equipment	4055	2593	2377	2558	2542	2683	2495
Retailers in hardware, paint and glass	5149	3931	4423	4291	4019	4367	4531

Source: Stats SA 2014

All sales are decreasing during the month of January. The decrease in sales after December is due to the end of festive season and most people do not have extra cash to spend. General dealers lead in sales compared to the rest of other clusters in all periods under review. Textile is the second after the latter followed by food, beverages and tobacco, hardware paint and glass, pharmaceutical and medical goods cosmetic and toiletries and household furniture appliances and equipment (table 3.7).

Table 3.8: Provincial contribution to the national trade sector

	Actual			Estimated		
	2004	2008	2012	2013	2014	2015
Wholesale and commission trade	13.3%	13.7%	14.5%	14.7%	14.7%	14.8%
Retail trade and repairs of goods	18.1%	18.4%	19.6%	20.1%	20.2%	20.2%
Sale and repairs of motor vehicles, sale of fuel	18.3%	18.5%	19.4%	19.7%	19.7%	19.7%
Hotels and restaurants	16.3%	16.7%	17.7%	18.0%	18.0%	18.0%

Source: Global Insight, 2014

Table 3.8 shows the actual contribution by KZN province for the years 2004, 2008 and 2012 as well as the estimated contributions from year 2013 to 2015. There had been an increase in the retail trade and repairs of goods in the province from year 2004 and 2008, it is estimated that by 2015, the trade sales will be amounting to 20.2 per cent. Hotels, restaurants, sale and repairs of goods are expected to remain constant at 18.0 per cent and 19.7 per cent respectively.

3.5.3 Finance

An economy's financial markets are critical to its overall development. Banking systems and stock markets enhance growth, which is a focal factor in poverty reduction. Strong financial systems provide reliable and accessible information that lowers transaction costs, which in turn bolsters resource allocation and economic growth (World Bank, 2014).

The finance sector plays several important roles in the economy; specifically those of credit and liquidity provision and risk management.

Credit fuels economic activity by allowing businesses to invest beyond their cash on hand, households to purchase homes and vehicles without saving the entire cost in advance, and governments to smooth out their spending by mitigating the cyclical pattern of tax revenues and to invest in infrastructure projects. Liquidity[18] provision is another cornerstone of the finance sector as businesses and households need to have a contingency for unexpected needs for cash. Banks are the main direct providers of liquidity, both through offering demand deposits that can be withdrawn any time and by offering lines of credit (Beck, 2011).

Businesses and households can also utilise finance as risk management tool by pooling their risks from exposures to financial market and commodity price risks through derivatives transactions.

South Africa has developed a well regulated banking system that compares favourably with many industrialised countries[19].

According to the Human Science Research Council (HSRC, 2008), the sub-sectors that supply financial services as well as use them in the South African economy are wide-ranging. These include commercial or retail banks, central banking, insurance (long-term and short-term), pension funding, financial advice, inter-firm banking and insurance, investment or asset management, consumer credit, finance and leasing, call centres and BPO (Business Process Outsourcing), government departments dispersing finance at national, provincial and local

[18]Liquidity can mean many different things. One dimension of liquidity is the availability of credit or the ease with which institutions can borrow or take on leverage. This is generally referred to as funding liquidity. Another dimension of liquidity is the ease with which market participants can transact, or the ability of markets to absorb large purchases or sales without much effect on prices. This is what is generally called market liquidity (www.newyorkfed.org)

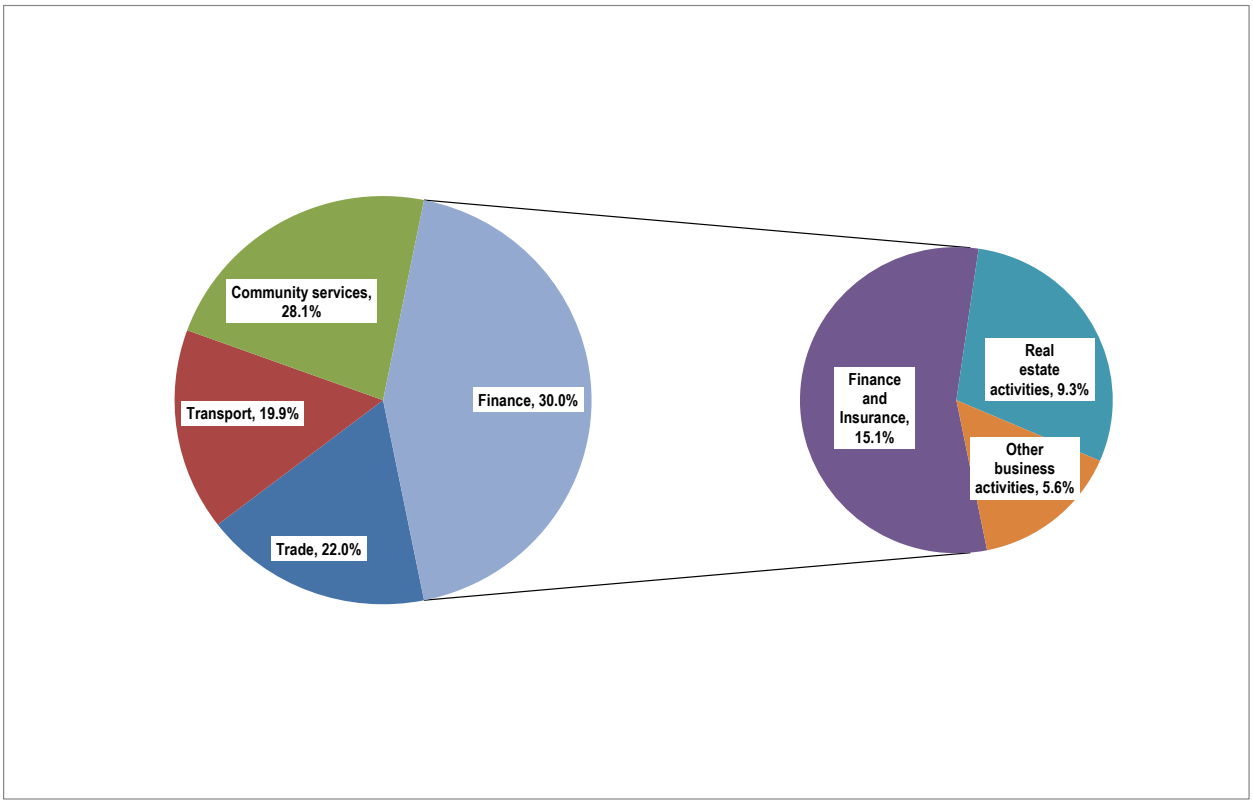
[19] www.banking.org.za

levels, tax collection (SARS), accountancy, auditing and book-keeping, micro-finance, major activities selected.

Between the years 2003 and 2013, the Finance sector in KZN recorded growth of 70.5 per cent. This sector experienced considerable growth between 2004 and 2008; however, this growth has waned in recent years - in the advent of the economic recession in particular.

The Finance sector can be disaggregated into three subsectors, namely *Finance and Insurance*, *Real estate activities*, and *Other business activities*. *Finance and Insurance* comprises establishments primarily engaged in financial transactions (i.e. transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. The *real estate activities* subsector consists of establishments engaged in property owning and letting, real estate development, estate agency activities, rent collection, appraisals and valuations, and subletting of fixed property.

Figure 3.9: Finance sector contribution to Tertiary sector in KZN, 2013



Source: Global Insight, 2014

Real estate activities promote the KZN economy in the sense that businesses and society cannot function without the services of commercial property, including the provision of offices, shops, factories, housing and many other forms of real estate. The commercial property sector delivers and manages the infrastructure needed for entrepreneurship to thrive. It is therefore a fundamental source of employment and economic growth.

The finance sector in 2013 contributed 30.1 per cent to the province's tertiary sector. Of this 30.1 per cent, the *Finance and insurance* subsector contributed 15.9 per cent, 8.3 per cent was realised from *Real estate activities*, and 5.9 per cent was due to *Other business activities* (figure 3.9).

Table 3.9: Growth in KZN Gross Value Added by sector, 2003 to 2013

	2001			2013		
	Finance and Insurance	Real estate activities	Other business activities	Finance and Insurance	Real estate activities	Other business activities
Western Cape	19.7%	24.5%	15.7%	20.9%	22.2%	16.8%
Eastern Cape	10.7%	5.2%	6.9%	8.7%	6.1%	5.4%
Northern Cape	1.8%	1.1%	1.1%	1.7%	1.1%	1.0%
Free State	5.6%	2.5%	4.8%	4.5%	2.9%	4.7%
KwaZulu-Natal	**12.3%**	**15.3%**	**12.7%**	**13.6%**	**14.7%**	**13.5%**
North-West	3.6%	3.2%	2.5%	3.4%	5.5%	2.3%
Gauteng	37.9%	38.5%	48.5%	41.3%	30.9%	51.0%
Mpumalanga	4.1%	3.9%	3.2%	3.1%	6.0%	2.3%
Limpopo	4.2%	5.8%	4.6%	2.8%	10.6%	3.0%
South Africa	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Global Insight, 2014

In 2013, the *Real estate activities subsector* (14.7 per cent) suffered a decline in contribution when compared with that of 2001 (15.3 per cent). Despite this decline, the subsector maintained its position as the third highest contributor by province. *Finance and insurance* gained some momentum with an increase in contribution of 1.3 per cent from 12.3 per cent in 2001 to 13.6 per cent in 2013. *Other business activities* increased its contribution by 0.8 per cent between the 2001 and 2013 (table 3.11).

3.5.4 Community services

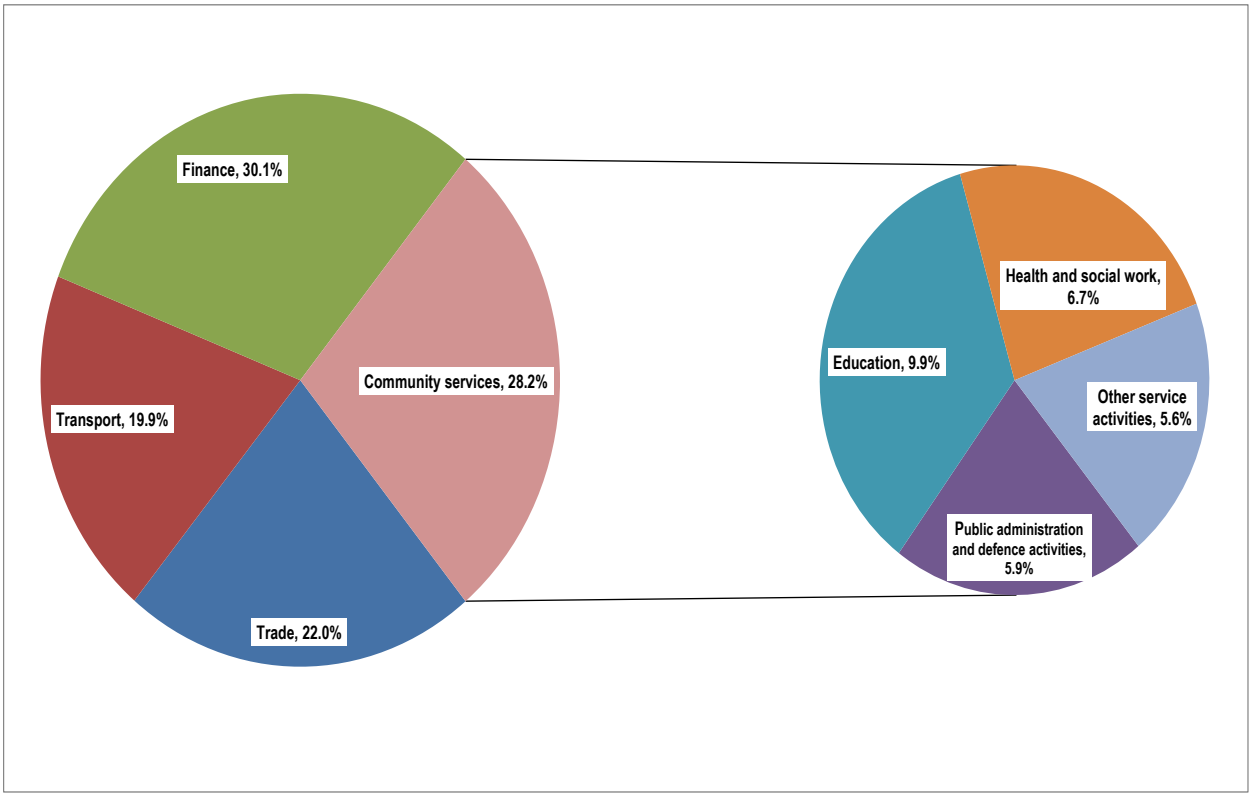
The community services sector is mainly concerned with the delivery of public goods and services to the final consumer, the provincial populace. This sector therefore encompasses the provision of services such as healthcare, education, and social services i.e. social protection.
"Education is the most powerful weapon to change the world" (Mandela). It is one of the factors that can assist in poverty alleviation, thus rendering greater prospects for income generation. It is from this backdrop that South Africa had chosen education as one of the national priorities.
Social protection can have a positive impact on growth in developing countries in a number of ways. It can finance investment in health and education, protect assets that help people earn an income, encourage risk taking, promote participation in the labour market, and ease the pain of economic transition" (DFID, 2006). According to the OECD (2002), the welfare-enhancing role of social security in an economy, such as that of South Africa, where annuity markets are absent and individuals face borrowing constraints may be important. In those circumstances, a system of social security is good for overall welfare, because it enables people to get insurance against risks which the private sector finds hard to pool and manage such as sickness and unemployment,

Health is an important form of human capital. It can enhance workers' productivity by increasing their physical capacities, such as strength and endurance, as well as their mental capacities, such as cognitive functioning and reasoning ability. This, on an aggregate level, would translate to a higher GDP for the economy, and higher per capita incomes. Higher per capita incomes in turn would positively impact measures of aggregate health such as life expectancy or child mortality. Social scientists commonly regard these correlations as reflective of a causal link running from income to health. "Higher incomes promote access to many of the goods and services believed to produce health and longevity, such as a nutritious diet, safe water and sanitation, and good health care, but this standard view has been challenged in recent years by the possibility that the income-health correlation is also explained by a causal link running the other way, from health to income" (Bloom and Canning, 2005). Notwithstanding the aforementioned functions of a public health sector, the sector also protects all sectors of the economy from hazards such as infectious disease outbreaks.

The health care industry, broadly defined, includes a wide range of businesses; drug manufacturers (including pharmaceuticals and biotechnology), diagnostics and device manufacturers, hospitals, insurance providers, and health technology and information providers.

The community services sector contributed 28.2 per cent of the tertiary sector in 2013. This amount was comprised of 8.8 per cent in respect of *Education*, 8.7 per cent *Health and social work*, 5.9 per cent *Public administration and defence activities* and 5.6 per cent *Other service* activities.

Figure 3.10: Community services contribution to Tertiary sector in KZN, 2013



Source: Global Insight, 2014

In 2001, in terms of *Public administration and defence activities*, KZN was the fourth highest contributor by province (10.9 per cent) after Gauteng (34.8 per cent), Western Cape (12.1 per cent) and the Eastern Cape (12.0 per cent). KZN was the second highest contributor by province towards *Education* (17.2 per cent) and *Health and social work* (16.3 per cent) after Gauteng 23.8 per cent and 37.7 per cent, respectively. These contributions increased only marginally in 2013.

Table 3.10: Growth in KZN Gross Value Added by sector, 2003 to 2013

	2001				2013			
	Public administration and defence activities	Education	Health and social work	Other service activities	Public administration and defence activities	Education	Health and social work	Other service activities
Western Cape	12.1%	8.7%	12.9%	10.0%	12.0%	8.7%	12.7%	9.8%
Eastern Cape	12.0%	15.3%	11.0%	7.0%	11.7%	15.0%	10.7%	6.7%
Northern Cape	3.7%	2.6%	1.9%	2.0%	3.7%	2.6%	1.9%	1.9%
Free State	8.1%	7.2%	6.5%	4.9%	7.7%	6.8%	6.2%	4.6%
KwaZulu-Natal	10.9%	17.2%	16.3%	14.1%	11.0%	17.5%	16.3%	14.0%
North-West	6.0%	6.2%	4.8%	4.4%	5.8%	6.1%	4.6%	4.2%
Gauteng	34.8%	23.8%	37.7%	50.4%	36.4%	25.1%	39.2%	52.0%
Mpumalanga	5.1%	7.4%	4.3%	3.7%	4.8%	7.1%	4.0%	3.4%
Limpopo	7.3%	11.6%	4.6%	3.6%	6.9%	11.1%	4.4%	3.4%
South Africa	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Global Insight, 2014

3.6 Conclusion

The sectors are dominated by the tertiary sector where its performance has been exceeding all sectors for all the years under review. The dominance of this sector does not give the province the full advantage in the economy because it provides services which mostly cannot be exported to increase foreign exchange and minimise the deficit. The sector is also led by community service which is finance by government, yet the government role should be to create an environment for other sectors to contribute in the economy positively. The sector also does not have full potential of creating jobs because it is a service sector. Contrary, primary sector is the least performing sector where agriculture and mining are the dominating industries. Considering the geographical situation of the province, agriculture is expected to be the dominating performer, but it is not so, therefore, the province has a task to monitor the performance of this sector, especially agricultural industry. Manufacturing has been dominating the secondary sector for all the years under review. Even-though the performance of manufacturing is high but it has not reach its full potential because the country is continuing with importation of manufactured goods. The country should put more emphasis on value adding instead of exporting minerals and agricultural produce so as to improve GDP of the country while creating sustainable jobs. Agro processing and minerals beneficiation can enhance growth rate in the economy.

Chapter 4: Labour Dynamics in KZN

4.1 Introduction

As correctly pointed out by Maswanganyi (2014), employment in South Africa has been very unstable and the instability could persist as more and more businesses are adversely affected by supply side constraints such as labour disputes and electricity supply problems resulting in firms resorting to retrenchments in order to stay afloat. Maswanganyi further argues that in January 2014, retrenchment levels were at a 10 year high with approximately 36 290 jobs being shed mostly in construction and manufacturing.

With this backdrop in mind, this chapter therefore focuses on the labour market analysis in KZN. It starts by providing a brief review of the employment trend in SA, which is followed by the employment by sector in KZN. The chapter proceeds by presenting an analysis of the employment by sector as well as both the labour participation and labour absorption rates. The chapter concludes by presenting a review of unemployment rate and labour productivity in KZN.

4.2 Employment

The labour force[20] comprises of all persons who are employed and unemployed. Table 4.1 shows the labour force characteristics of SA in the period 2013 and 2014. According to Stats SA (2014), the national number of employed persons increased by 39 000 whereas the number of unemployed increased by 87 000 between the first and the second quarters of 2014. This resulted in a 3 percentage points increase in the unemployment rate and 0.1 of a percentage point decrease in the absorption rate (table 4.1).

The South African labour force recorded a 126 000 (0.6 per cent) increase on a quarterly basis from the first quarter of 2014 to the second quarter of 2014. The year-on-year labour force increased by 585 000 (3 per cent) from the second quarter in 2013 to the second quarter of 2014. According to the Adcorp Employment index report (2014) overall employment grew by 26 090 in June 2014, with 11 000 created by government and 7 000 by stated-owned enterprises. However, considerable job losses were experienced in manufacturing (15 000), mining (2 000) and construction (1 000).

[20] www.businessdictionary.com

Table 4.1: Characteristics of labour force in SA, 2013 to 2014

	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	Apr-Jun 2014	Qtr-to-qtr change	Year-on-year change	Qtr-to-qtr change	Year-on-year change
	Thousand							Per cent	
Population 15-64 yrs	**34 712**	**34 868**	**35 022**	**35 177**	**35 332**	**155**	**620**	**0.4**	**1.8**
Labour Force	**19 663**	**19 916**	**20 007**	**20 122**	**20 248**	**126**	**585**	**0.6**	**3**
Employed	14 692	15 036	15 177	15 055	15 094	39	403	0.3	2.7
Unemployed	4 972	4 880	4 830	5 067	5 154	87	182	1.7	3.7
Not economically active	15 049	14 952	15 015	15 055	15 084	29	35	0.2	0.2
Unemployment rate (%)	25.3	24.5	24.1	25.2	25.5	3.0	0.2	1.2	0.8
Employed / population ratio (Absorption) (%)	42.3	43.1	43.3	42.8	42.7	-0.1	0.4	-0.2	0.9
Labour force participation rate (%)	56.6	57.1	57.1	57.2	57.3	0.1	0.7	0.2	1.2

Source: Stats SA, 2014

KZN contributes an average of 17 per cent to the national employment. EThekwini metropolitan has consistently been the highest employing municipality, accounting for about 52.3 per cent of those employed in the province (table A4.1 in appendix). Between the second quarter of 2014 and the first quarter of 2014 the provincial labour force increased by 63 000 (2 per cent). It is clear that this resulted in a 3.0 per cent points increase in the unemployment rate and 0.8 of a percentage point decrease in the absorption rate. The year-on-year labour force increased by 113 000 (3.6 per cent) from the second quarter in 2013 to the second quarter of 2014.

Table 4.2: Characteristics of labour force in KZN, 2013 to 2014

	Apr-Jun 2013	Jul-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	Apr-Jun 2014	Qtr-to-qtr change	Year-on-year change	Qtr-to-qtr change	Year-on-year change
	Thousand							Per cent	
Population 15-64 yrs	**6 502**	**6 527**	**6 549**	**6 572**	**6 596**	**23**	**93**	**0.4**	**1.4**
Labour Force	**3 136**	**3 235**	**3 154**	**3 186**	**3 249**	**63**	**113**	**2**	**3.6**
Employed	2 440	2 569	2 527	2 527	2 480	-47	41	-1.8	1.7
Unemployed	696	666	627	659	769	110	72	16.6	10.4
Not economically active	3 366	3 291	3 395	3 386	3 347	-40	-20	-1.2	-0.6
Unemployment rate (%)	22.2	20.6	19.9	20.7	23.7	3.0	1.5	14.5	6.8
Employed / population ratio (Absorption) (%)	37.5	39.4	38.6	38.4	37.6	-0.8	0.1	-2.1	0.3
Labour force participation rate (%)	48.2	49.6	48.2	48.5	49.3	0.8	1.1	1.6	2.3

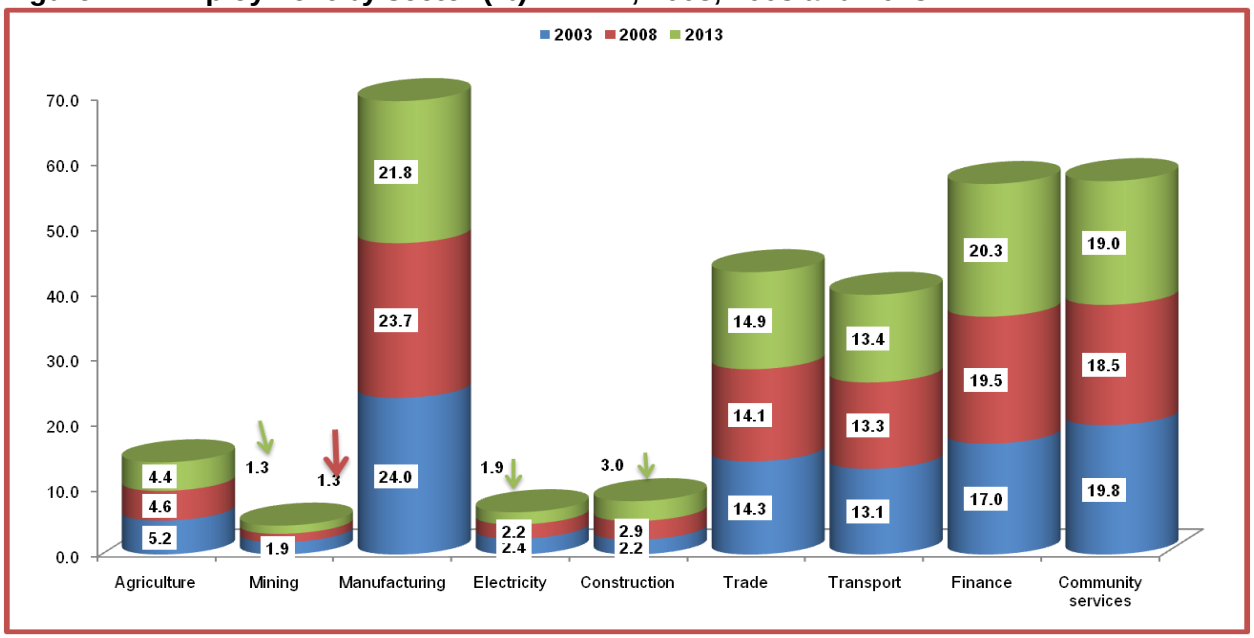
Source: Stats SA, 2014

4.3 Employment by sector

Manufacturing had been the highest employing industry in KZN between 2003 and 2013. Notably, its contribution towards job creation is however deteriorating. In 2003, the industry recorded a massive contribution of 24 per cent towards employment in the province. This has however, deteriorated to 21.8 per cent in 2013. Compared to the rest of the sectors, finance is the only industry showing significant improvement in terms of contribution towards employment (figure 4.1).

Disturbingly, despite the comparative advantage the province has in agriculture, contribution to employment by this industry is also on the downward trajectory. Most of the jobs that were lost during the period under review came from the *agriculture and hunting* as well the *forest and logging* subsectors.

Figure 4.1: Employment by sector (%) in KZN; 2003, 2008 and 2013



Source: Global Insight, 2014

4.4 Labour absorption rate

The labour absorption rate measures the proportion of the working-age population that is employed. Table 2.1 shows that the labour absorption rate in SA was 42.7 per cent[21] at the end

[21] Labour absorption rate = employed ÷ population; = (15 094 ÷ 35 332) X 100 = 42.7 per cent.

of the second quarter 2014, which was slightly lower than the 42.8 per cent recorded at the end of the first quarter 2014 (table 4.1), but still below the NDP target of 61 per cent by 2030. The labour force participation rate was 57.3 per cent at the end of the second quarter 2014, which is higher than the rate recorded at the end of the first quarter 2014. This is however, still below the NDP target of 65 per cent by 2030 (NDP, 2013).

In the second quarter of 2014, the labour absorption rate in KZN was 37.6 per cent, which was lower than that of the 38.4 per cent recorded at the first quarter of 2014 (table 4.2). It is however clear for SA and KZN, that there exists an inverse relationship between labour absorption and unemployment that holds that the higher the absorption rate the lower the unemployment rate vice versa.

4.5 Labour Force Participation Rate

The labour force participation rate (LFPR)[22] provides an indication of the relative size of the supply of labour available to engage in the production of goods and services for a specified period (ILO KILM, 2013). Table 4.1 evinces that, with the estimated working age population of 35.1 million in the first quarter of 2014, the national labour force recorded 20.1 million. This resulted to the LFPR of 57.2 per cent. Both the working age population as well as the labour force increased to 35.3 million and 20.2 million respectively in the second quarter of 2014. The LFPR subsequently increased slightly to 57.3 per cent at the end of the second quarter of 2014.

As evident in table 4.2, KZN followed the same positive trajectory, with the total labour force reaching 3.2 million in the second quarter of 2014, up from the 3.1 million estimated in the first quarter of the same year. This as a result led to a slight improvement in the LFPR which rose to 49.3 per cent compared to the 48.5 per cent recording during the first quarter.

4.6 Unemployment

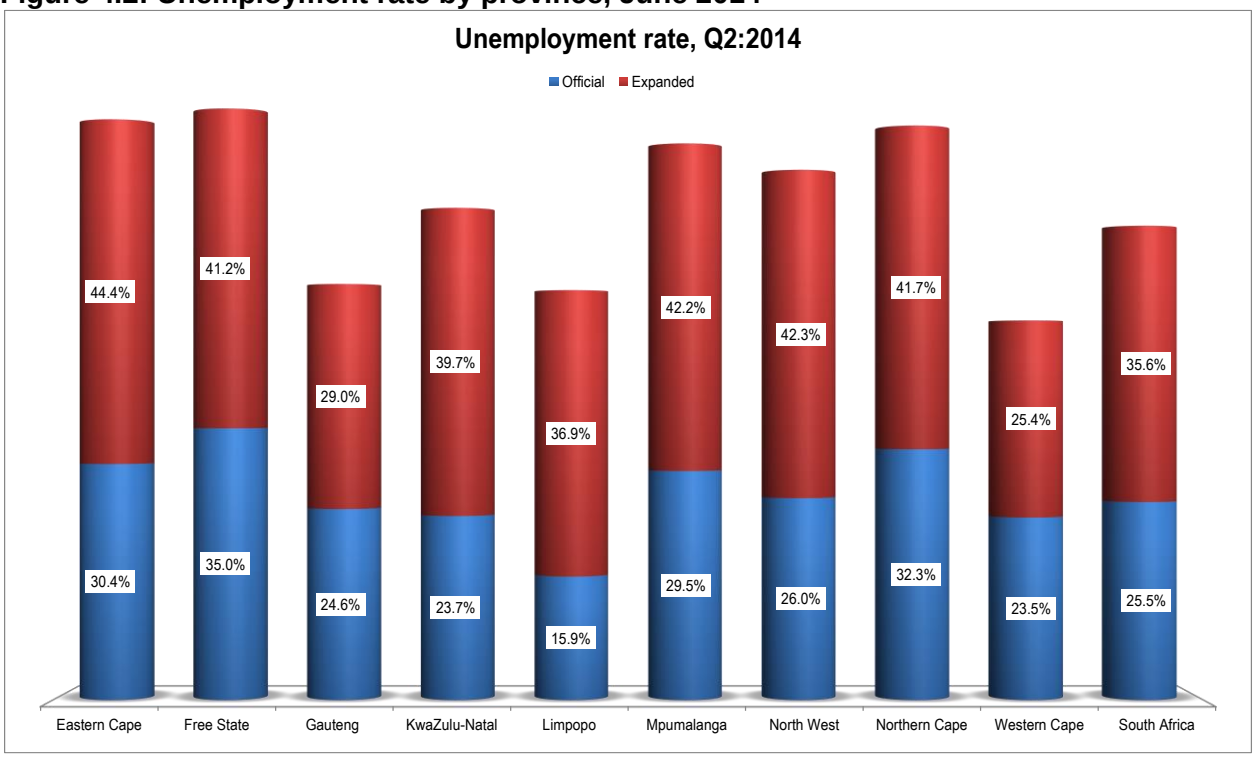
Unemployment is a major challenge hampering the economic performance of the country; it leads to high levels of poverty and low levels of human development. It is in this respect that

[22] The labour force participation rate (LFPR) is a measure of the proportion of a region's working-age population that engages actively in the labour market, either by working or looking for work. It is calculated as follows: Economic Active Population (EAP) ÷ Population

government is vigorously pursuing policies such as the NDP, New Growth Path, Industrial Development Strategy, Industrial Policy Action Plan, Special Economic Zones and many more. The aforementioned policies are aimed directly at addressing these undesired social ills. The integration of the previously disadvantaged majority of South Africans into the main economic stream is also critical in overcoming these challenges.

Between quarters one and two of 2014, the official unemployment rate increased in five of the nine provinces. The largest increases were recorded in Northern Cape, KZN and the Western Cape at 3.3, 3, and 2.6 percentage points respectively. During the same period the official unemployment rate decreased by 2.5, 1.7 and 1.2 percentage points in Limpopo, North West and Gauteng respectively (figure 4.2).

Figure 4.2: Unemployment rate by province, June 2014



Source: Stats SA, 2014

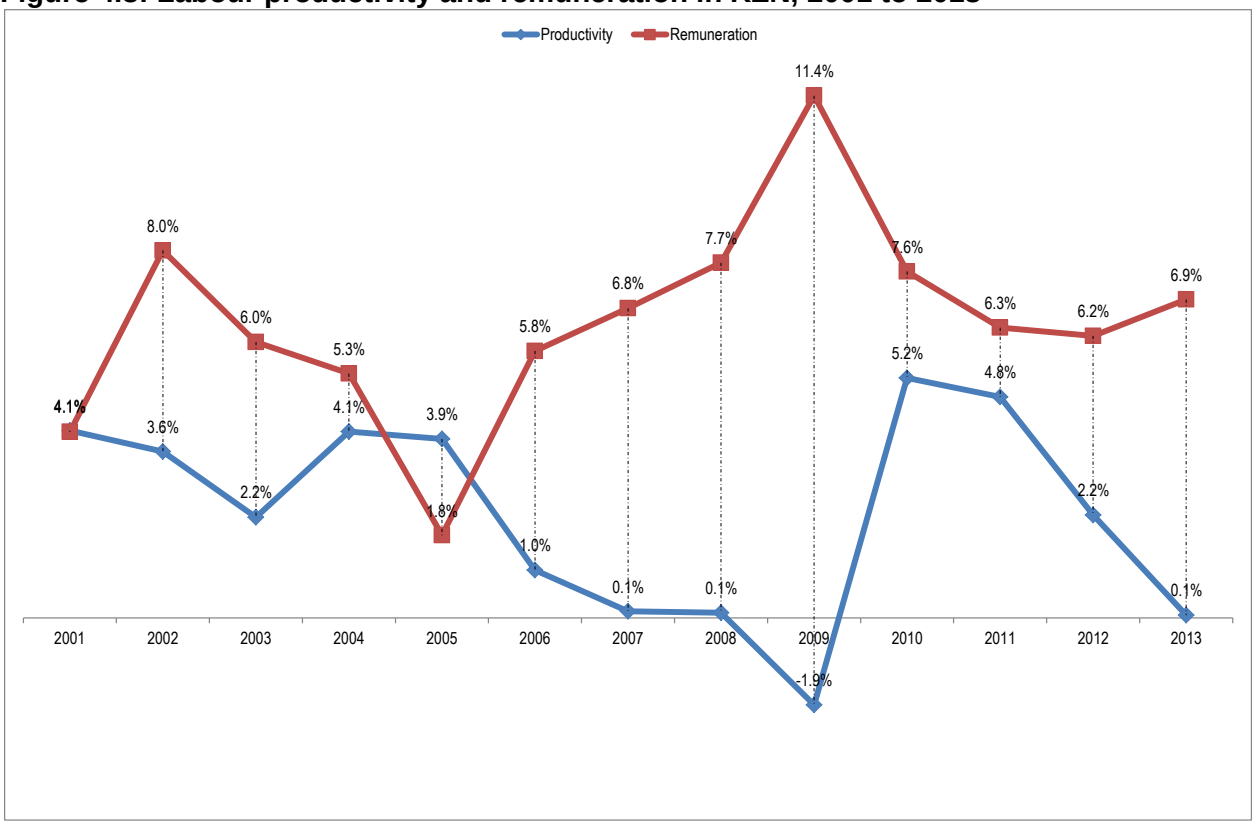
4.7 Labour productivity

The relationship between wages and productivity, or more specifically, the relationship between wage and productivity growths has become one of particular policy relevance in recent years, in light of the recent economic crisis and emerging imbalances. Many studies have been dedicated

to the importance of labour productivity growth, reason being that “the rate of productivity growth can have an enormous effect on real output and living standards” (Steindel and Stiroh, 2001). KZN and the whole of South Africa in general, is grappling with labour market conditions which are characterised by a high wage bill and dwindling productivity levels.

Ideally, high levels of productivity should be rewarded by higher remuneration. Therefore, the lines in the graph should move close together, and in a similar pattern to reflect this. However, it is evident from the figure 4.3 that this is not the case. For a considerable number of years (with the exception of 2005), remuneration levels in KZN have been consistently high when compared to the levels of productivity. The gap between these two variables was widest between 2006 and 2009. Productivity levels did however gain momentum in 2010, presumably in the build up to the soccer World Cup and in the wake of the economic slump. It would appear that since the year 2011, productivity levels are declining again.

Figure 4.3: Labour productivity and remuneration in KZN, 2001 to 2013



Source: Own calculations using data from Global Insight, 2014

4.8 Conclusion

Labour dynamics of the country are cascaded down to provinces whereby employment by province is analysed, characteristic of labour in SA as well as in the province of KZN. Employment by sector shows that manufacturing is the highest followed by community services. It is good that manufacturing is providing the most when it comes to job creation but when it comes to community services, it raises a concern since government should be providing an environment conducive for the private sector to create jobs.

Unemployment is alarming when it comes to expanded unemployment rate. This type of unemployment ranges from 30 per cent to above 40 per cent in all provinces. This kind of unemployment raises concerns because it shows that most people have stopped looking for employment. There are repercussions that can emanate from the latter statement; which can lead to the escalation of crime, poverty and depression. Productivity and remuneration also does not give a good picture in the economy of the province. The rate shows that remunerations are exceeding productivity in almost all the years. A country with less productivity is less innovative, export less, and import more which result in widening of the deficit while reducing foreign exchange reserves.

Chapter 5: Relationship between Business Confidence Indicators and Real GDP? – A Regional Spatial Panel Approach

5.1 Introduction

There had been growing literature on confidence indicators and their use in monitoring or forecasting short-term economic developments (The European Central Bank (ECB), 2002). The ECB further argues that these indicators are now regularly followed by both public and private institutions to get an indication of the current economic situation and in some cases to assist in predicting short term developments.

The ECB (2006) further conducted a study in which the European Commission's Economic Sentiment Indicator was applied. This indicator combines confidence in the manufacturing, construction, retail and non-retail services with that of consumer confidence. The ECB argues that one of the main advantages of this methodology is parsimony. However, the ECB also use various confidence surveys separately. In addition, Latvijas Banka (2008), states that timely information about processes occurring in the economy is crucial for the analysis and decision making for economic policy purposes. This chapter specifically refers to business confidence stating that although the indicator captures only partial information on domestic activity, it has a significant advantage over GDP statistics in terms of availability.

Developing from these strands of work, this study investigates the possible relationship between regional business confidence and regional economic growth in KZN. The chapter covers empirical work conducted mainly by the ECB and other studies, starting firstly by developing a business confidence index series and an economic growth rate series for each of the five regions in the province. This is followed by the construction and evaluation of the panel. The chapter proceeds by focusing on the application of panel data econometric techniques to empirically test or evaluate the relationship between regional business confidence and economic growth.

5.2 Estimating regional business confidence index

The gross domestic product (GDP) for each of the three regions of eThekwini, Msunduzi and uMhlathuze is estimated using a national provincial regional structure model. The model uses national GDP estimates as published by Stats SA to estimate the GDP for each of the three regions. The model is very similar to models used by IHS Global Insight and Quantec in their regional economic estimates.

The base year for the model is determined by updating the latest available figure of regional GDP as released by Stats SA from the release date of November 1994 to the start of the model, 2005. This is done by estimating the structural relationships from various national provincial regional proxies such as fuel consumption and buildings reported as completed and applying these to the latest national gross domestic product figures.

Table 5.1: Fuel consumption structure as a percentage of national, 2008 to 2011

	2008	2009	2010	2011
KZN	16.6	16.83	15.09	16.8
Ethekwini	9.68	10.46	8.6	9.75
Msunduzi	1.16	1.43	1.3	1.36
Umhlathuze	1.09	1.07	0.9	0.91

Source: Own calculations using data from the Department of Energy, 2014

Table 5.1 indicates the structural relationships between national fuel consumption and regional fuel consumption over the period. These structural relationships form the basis of the national provincial regional structure model from which the regional gross domestic product are estimated.The equation applied in calculating the estimated regional gross domestic product is as follows:

$$GDP_{it} = GDP_{st} \text{ X } \left[\frac{\sum \frac{P_{in}}{P_{sn}}}{n}\right] \quad (1)$$

Where

$i = Particular\ regional\ economyo/proxy$

$s = National\ economy/proxy$

$s = National\ economy/proxy$

$t = annual\ period$

$n =$ number of national and regional proxies

$P =$ national economic proxies such as fuel consumption

$GDP_{it} =$ regional gross domestic product at time t

GDP_{st} = national gross domestic product at time t

It is important that only proxies that are relevant, reliable and timeous that can be disaggregated to a regional level and that have a proven relationship with economic output are used. There are unfortunately not many such proxies. The growth rates in GDP for each of the five regions are displayed in table 5.2.

Table 5.2: Changes in regional GDP, 2005 to 2013

	Msunduzi	eTthekwini	uMhlathuze
2005	5.76	5.76	5.76
2006	5.53	5.53	5.53
2007	5.87	5.87	5.87
2008	2.46	5.14	9.93
2009	5.02	-4.2	-13.12
2010	-0.09	5.26	10.83
2011	3.97	3.49	3.43
2012	3.63	2.15	0.49
2013	2.8	2.1	0.6

Source: Own calculations using data from Stats SA, 2014

The business confidence indicator for each of the five regions is estimated using a primary survey method[23], which is conducted yearly via the regional chamber of business and other regional business organizations. It is important to note that the surveys are conducted at the same time each year, that is, March and April of each year, in order to ensure consistency.

The business confidence index (BCI) is calculated or derived from the gross percentage of respondents responding the questionnaire. The equation applied in calculating the BCI is specified as follows:

$$BCI = \left(\frac{\sum B_{it}\ C_{it}\ G_{it}\ G_{it}\ H_{it}}{\sum A_{it}\ B_{it}\ C_{it}\ D_{it}\ E_{it}\ F_{it}\ G_{it}\ H_{it}\ I_{it}\ J_{it}}\right) \quad (2)$$

Where

$i = particular\ local\ economy$

$t = period$

$B_{it} = Good\ response\ to\ Present\ business/trading\ conditions\ are?$

[23] The survey is an online anonymous business survey designed specifically to generate data and information on a number of regional economic characteristics and trends, and the general level of business confidence in the particular regional economy. It is conducted using the World Wide Web (web) through a survey company located in Cape Town. More details on the questionnaire is available on the full paper which is available on request.

$C_{it} = Fair\ response\ to\ Present\ business/trading\ conditions\ are?$

$D_{it} = Poor\ response\ to\ Present\ business/trading\ conditions\ are?$

$E_{it} = Very\ poor\ response\ to\ Present\ business/trading\ conditions\ are?$

$F_{it} = such\ better\ response\ to\ Your\ expected\ sales\ performance\ over\ the\ next\ year?$

$G_{it} = Better\ response\ to\ Your\ expected\ sales\ performance\ over\ the\ next\ year?$

$H_{it} = Same\ response\ to\ Your\ expected\ sales\ performance\ over\ the\ next\ year?$

$I_{it} = Worse\ response\ to\ Your\ expected\ sales\ performance\ over\ the\ next\ year?$

$J_{it} = Much\ worse\ response\ to\ Your\ expected\ sales\ performance\ over\ the\ next\ year?$

The business confidence index varies between 0 and 100 and should therefore be interpreted as follows: that is a value of 50 is indicative of neutrality, 100 indicates extreme confidence and 0 indicates extreme lack of confidence. Regional Business Confidence Index for each of the five regions is displayed in table 5.3.

Table 5.3: Regional business confidence index, 2005 to 2013

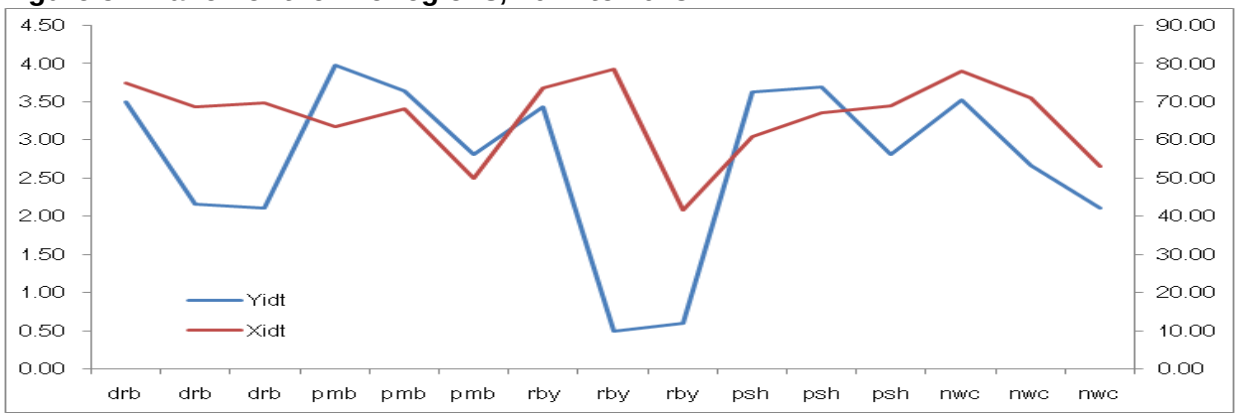
	Msunduzi	eThekwini	uMhlathuze
2005	83.6	57.1	89.7
2006	82.6	72.8	81.1
2007	83	81.09	80.9
2008	65.95	68.13	61.38
2009	63.5	65.75	69.05
2010	58.88	68.5	66.65
2011	63.45	74.95	73.7
2012	68.2	68.55	78.55
2013	49.95	69.65	41.65

Source: Own calculations using KZN Provincial Treasury Model, 2014

5.3 Constructing and evaluating the panel

The panel extends the regions to include the Newcastle and Hibiscus Coast (Port Shepstone) regions that is five regions, but decreases the number of years from 2005 to 2013 (9 years) and 2011 to 2013 (3 years) since the business surveys were only conducted in the two regions from 2011 onwards. The methodologies used to generate the gross domestic product estimates and the business confidence indices for the two regions are the same as for the other three regions. The panel is displayed in figure 5.1.

Figure 5.1 Panel for the five regions, 2011 to 2013



Source: Own calculations using KZN Provincial Treasury Model, 2014 and Stats SA 2014

Where drb is Ethekwini, pmb is Msunduzi, rby is Umhlathuze, psh is Hibiscus Coast and nwc is Newcastle. Tables A5.1 and A5.2, display the variation for the dependent and explanatory variables and the regressors. The tables also include the overall variation (variation over time and regions), between variation (variation between regions) and within variation (variation within regions over time). It must however be stated that the panel does suffer from a lack of time series data which does pose some risks with regard to the investigation of potential non-stationarities. The model therefore potentially will suffer from misspecification bias, poor fit and statistical insignificance.

5.4 Econometric analysis of the panel

5.4.1 Pooled Model

Pooled data occur when there is a "time series of cross sections," but the observations in each cross section do not necessarily refer to the same unit (Baltagi 2009). The pooled model assumes the following:

- All the usual OLS assumptions are not violated
- The constant is constant across all units i
- That the effect of any given X on Y is constant across observations (assuming that there are no interactions in $\boldsymbol{X}$).

However in most panels there is some form of heterogeneity across units and over time suggesting the following:

- One possible violation of the above assumptions is that the intercepts vary
- The other possibility is that there is a constant intercept but that the effects of X on Y differ across either units or time.

The above possible violations may distort the “true” relationship between the dependent and independent variables across entities. It must therefore be noted that this type of model is the most restrictive (it specifies constant coefficients) and therefore not much used in the literature. However for illustrative purposes this model will be included.

Regional gross domestic product (Y_{idt}) will be the dependent variable whilst regional business confidence (X_{idt}) will be the explanatory variable. The regional identifiers are noted as id whilst the time identifiers are noted t. The traditional linear model for the panel will look as follows:

$$Y_{idt} = \alpha + \beta X_{idt} + \varepsilon_{idt} \quad (3)$$

Where

Y_{idt} = *Regional gross domestic product at time t*

X_{idt} = *Rregional business confidence at time t*

$id = 1, \dots, N$

$t = 1, \dots, N$

$\varepsilon_{idt} = error\ term$

5.4.2 Fixed Effect Model

The fixed effects model is a statistical model that represents the observed quantities in terms of explanatory variables that are treated as if the quantities were non-random. The within estimator (fixed effect model) is used to refer to an estimator for the coefficients in the regression model. If it is assumed fixed effects, the study imposes time independent effects for each entity that are possibly correlated with the regressors.

By including fixed effects (group dummies), one is controlling for the average differences across regions in any observable or unobservable predictors, such as differences in quality, sophistication and others. The fixed effect coefficients soak up all the across-group action. What is left over is the within-group action. The one-way error component model allows cross-section heterogeneity in the error term represented by the following:

$$Y_{idt} = \alpha + \beta X_{idt} + F_{id} + \varepsilon_{idt} \quad (4)$$

Where

Y_{idt} = *Regional gross domestic product at time t*

X_{idt} = *Rregional business confidence at time t*

F_{id} = *Individual effects*

$id = 1, \dots, N$

$t = 1, \dots, N$

$\varepsilon_{idt} = error\ term$

$\varepsilon_{idt} = \mu_i + \nu_{it}$

Where

$\mu_i = Unobservable\ individual\ effects$

$\nu_{it} =$ well behaved disturbance

However the cross section fixed effect model is much more reliable that the pooled model, that is, sum squared error 6.91 versus 15.2.

5.4.3 Within Q estimation

The within $\boldsymbol{Q}$ estimation makes use of demeaning the data and therefore the individual effects are ignored. The β coefficient is estimated and the individual effects are calculated. Table A5.3 in appendix shows the coefficients of the $\boldsymbol{Q}$ estimation.

5.4.4 Testing the joint validity of Fixed Cross and Time Effects

The null hypothesis of no individual (cross and time) effects is tested with the applied Chow or F-test, combining the residual sum of errors for the regression both with constraints and without. F = 2.7 (cross section fixed effects) which is less than the critical value of 3.86 $\{F(n-1), (\ n_t\ - n - k)\}$ at 5 per cent probability value, thus suggesting that the individual cross effects are not valid and therefore the cities are homogeneous and can be pooled.

F = 2.6 (time fixed effects) which is bigger than the critical value of 3.98 $\{F(n-1), (\ n_t\ - n - k)\}$ the 5 per cent probability value, thus suggesting that the individual time effects are not valid and therefore the cities are homogeneous and can be pooled.

5.5 Random Effect Model

Random effects models are also known as multilevel or mixed models. In a random effects model, the unobserved variables are assumed to be uncorrelated with (or, more strongly, statistically independent of) all the observed variables. Random effects models seem to have at least two major advantages over fixed effect models: Firstly the possibility of estimating shrunken residuals; secondly the possibility of accounting for differential cross section effectiveness through the use of random coefficients models. Random effects assume that the entity's error term is not correlated with the predictors which allows for time-invariant variables to play a role as explanatory variables.

The basic linear random effect model can be presented as follows:

$$Y_{idt} = \alpha + \beta X_{idt} + \varepsilon_{idt} + u_{idt} \quad (5)$$

Where

Y_{idt} = *Regional gross domestic product at time t*

X_{idt} = *Rregional business confidence at time t*

$i_d = 1, \ldots., N$

$t = 1, \ldots., N$

$\varepsilon_{idt} = error\ term$

5.6 Fixed or Random: Hausman Test

To decide between fixed or random effects it is possible to run a Hausman test where the null hypothesis is that the preferred model is random effects versus the alternative hypothesis which is the fixed effects (Green, 2008, chapter 9). It basically tests whether the unique errors (u_{id}) are correlated with the regressors.

5.7 Two-Way Error Component Regression Model – Fixed Effects

The two-way error component model with individual and time fixed effects are displayed table A5.X2. The city fixed effects and time fixed effects are displayed in the table below.

Table 5.4: Cross Section and Period Effects

City	Cross Section Effect	Date	Period Effects
DRB	-0.22435	2011/01/01	0.812051
PMB	0.800662	2012/01/01	-0.27415
RBY	-1.21515	2013/01/01	-0.53791
PSH	0.635141		
NWC	0.003693		

Source: Own calculations using KZN Provincial Treasury Model, 2014 and Stats SA 2014

The total average individual effect is as follows:

- Durban = 1.12
- Pietermaritzburg = 2.15
- Richards Bay = 0.13
- Port Shepstone = 1.98
- Newcastle = 1.35

5.8 Testing the Joint Validity of Fixed Effects (Individual and Time effects)

The null hypothesis of one common intercept across time and cross-sections versus the alternative of an intercept for each year and cross-section is tested with the applied Chow or F-test, combining the residual sum of errors for the regression both with constraints and without. The test is for the joint significance for the cross-section and time dummies effects.

F = 5.33 (cross section and time fixed effects) which is greater than the critical value of 4.21 $\{F(n = t - 2), (n - 1)(t - 1) - k\}$ at the 5 per cent probability value thus suggesting that the individual cross and time affects are valid and therefore the cities are heterogeneous across time.

5.9 Two-Way Error Component Regression Model - Random Effects

The specification for the two-way random-effects model is:

$$\mu_{it} = \mu_i + \delta_t + \nu_{it} \quad (6)$$

Where:

$\mu_{it} = error\ term$

$\mu_i = unobserved\ individual\ effect$

$\delta_t = unobserved\ time\ effect$

$\nu_{it} = stochastic\ disturbance$

The city random effects and time random effects are displayed in table 5.5.

Table 5.5: Cross Section and Period Effects

City	Cross Section Effect	Date	Period Effects
DRB	-0.19873	2011/01/01	0.698551
PMB	0.677358	2012/01/01	-0.25175
RBY	-1.00574	2013/01/01	-0.4468
PSH	0.527633		
NWC	-0.00051		

Source: Own calculations using KZN Provincial Treasury Model, 2014 and Stats SA 2014

The total average individual effect is as follows:

- Durban = 1.49
- Pietermaritzburg = 2.4
- Richards Bay = 0.69
- Port Shepstone = 2.22
- Newcastle = 1.7

5.10 Model Selection

Eight models have been specified and tested. Table 5.6 displays the sum of squared residuals for each of the eight models utilized in this chapter. It is clear that the Pooled-Model showed the worst results, whilst the two-way error component fixed effect regression model exhibits the best results.

Table 5.6: Sum of squared residuals, 2011 to 2013

	Sum squared resid
Pooled Model	15.2
Cross Section Fixed Effect Model	6.9
Within, Q, Estimation	6.9
Time Fixed Effect Model	10.3
Cross Section Random Effect Model	9.7
Time Random Effect Model	12.0
Two-Way Error Component Fixed Effect Regression Model	**2.7**
Two-Way Error Component Random Effect Regression Model	4.7

Source: Own calculations using KZN Provincial Treasury Model, 2014 and Stats SA 2014

The panel data estimation results for the various model specifications are presented in table 5.7. It is again evident that the two-way error component fixed effect regression model exhibits the best results compared to other seven models used in this chapter. It must be noted that no correction for serial correlation was done, thus it cannot be stated that the models are free from

serial correlation problems. Unfortunately, given the limited data available, the method proposed by Baltagi (2001) to correct for serial correlation cannot be performed.

The overall results of the business confidence real GDP growth rate relationship are consistent with some of the empirical findings of previous studies. It is estimated that the business confidence and real GDP growth rate coefficient is between 0.013 and 0.039.

Table 5.7: Business confidence in the five regions of KZN, 2011 to 2013

	Pooled	Fixed Effect	Random Effect	Two Way Fixed Effects	Two Way Random Effects
Constant	0.875	0.127	0.421	**1.348**	1.692
	-0.6402	-0.9409	-0.7933	-0.3679	-0.2685
Confidence	0.028	0.039	0.035	**0.013**	0.016
	-0.3218	-0.1324	-0.1524	-0.5892	-0.4541
Adjusted R	0.004	0.346	0.089	**0.668**	-0.03
Fixed Effects		2.699		**5.33*** **	
F test					
Random effects			1.37		0.988
LM test					

Source: Own calculations using KZN Provincial Treasury Model, 2014 and Stats SA 2014

P-values reported in parenthesis
* indicates significance of the coefficients or rejection of the null hypothesis on a 10% level of significance
** indicates significance of the coefficients or rejection of the null hypothesis on a 5% level of significance
*** indicates significance of the coefficients or rejection of the null hypothesis on a 1% level of significance

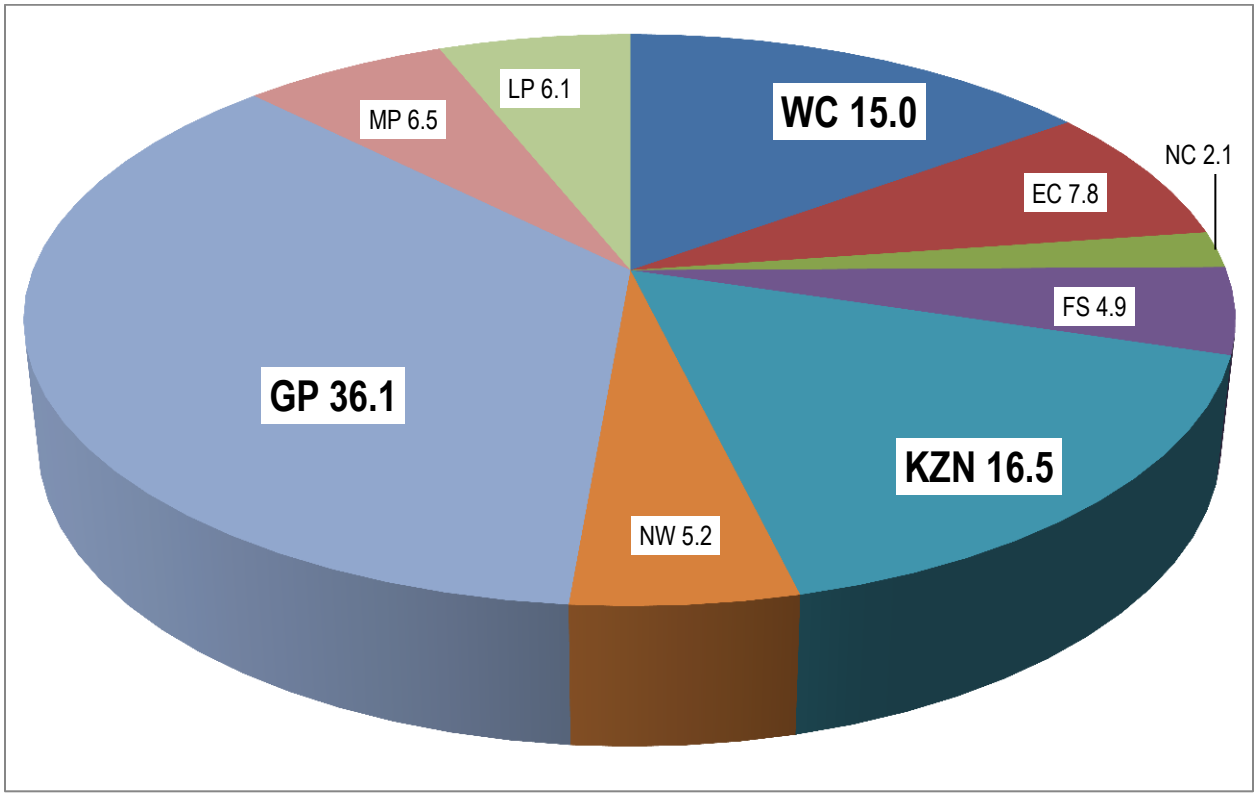
5.11 Conclusion

The study used panel data estimation techniques to assess the relationship between business confidence and real GDP growth rate on a regional basis. Due to the fact that these techniques incorporate both time-series and cross-section dimensions of data, in theory, the degrees of freedom of the estimation should improve, thus generating more representative coefficient estimates. Another important reason for using these techniques is the fact that the study was able to acknowledge regional heterogeneity, therefore capturing unobservable regional-specific effects.

Unfortunately, given the limited data available, these superior estimates are less likely to have been achieved and the presence of serial correlation could not be corrected for. Nonetheless, the estimation results suggest that, based on a variety of specifications using panel data econometric techniques, regional business confidence and regional real GDP growth rate display a positive relationship.

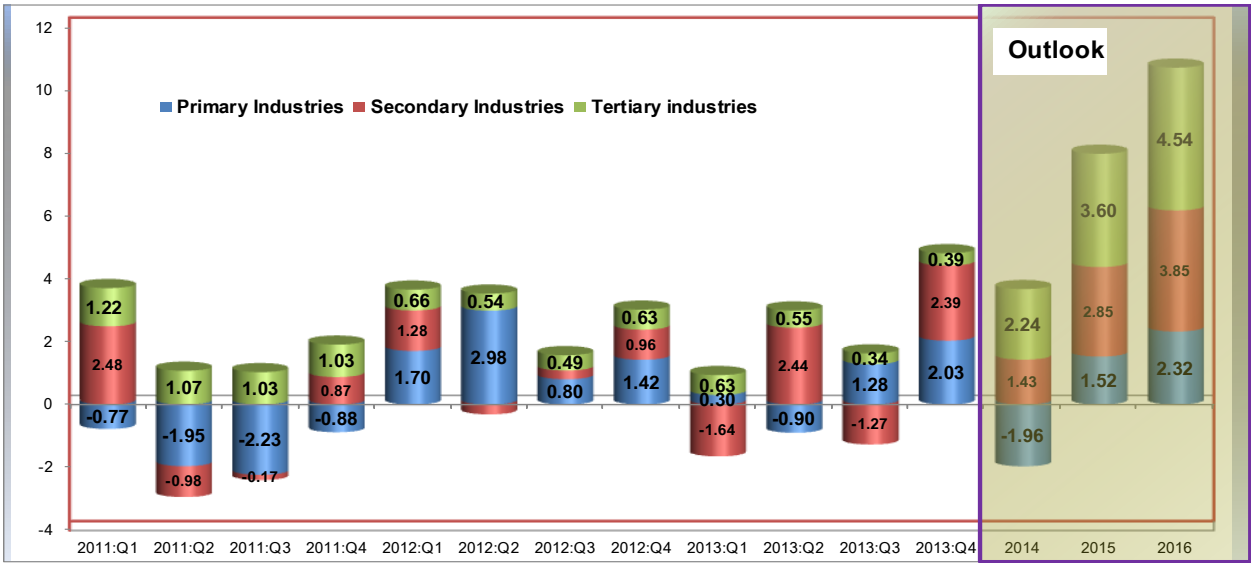
Appendix

Figure 2.1: Contribution to national Real GDP (percentages) by province, 2013



Source: Global Insight, 2014

Figure A2.2: Quarter to quarter sector growth rate, 2011:Q1 to 2013: Q2



Source: Stat SA (2014), Global Insight (2014) and KZN Provincial Economic Model (2014)

Table A4.1: Total employment in KZN by district municipalities, 2002 to 2013

	Total Employment		Percentage share of employmnent	
	2002	2013	2002	2013
National Total	11 410 542	14 054 677		
KwaZulu-Natal	**1 976 292**	**2 392 337**	**17.3**	**17.0**
Ethekwini	**1 021 392**	**1 250 220**	**51.7**	**52.3**
Ugu DM	103 436	132 041	5.2	5.5
uMgungundlovu DM	225 719	272 914	11.4	11.4
Uthukela DM	99 551	105 427	5.0	4.4
Umzinyathi DM	35 519	46 167	1.8	1.9
Amajuba DM	90 093	88 195	4.6	3.7
Zululand DM	73 782	86 629	3.7	3.6
Umkhanyakude DM	47 670	63 893	2.4	2.7
Uthungulu DM	143 101	165 636	7.2	6.9
iLembe DM	87 336	116 107	4.4	4.9
Harry Gwala DM	48 694	65 107	2.5	2.7

Source: Global Insight, 2014

Table A5.1: Variation for the regional GDP, 2011 to 2013

Id	Time	GDP	Individual Mean	Overall Mean	Overall Dev	Between Dev	Within Dev	Within Dev Mod
id	t	Yidt	Yid	$\bar{Y}$	Yidt - $\bar{Y}$	Yid - $\bar{Y}$	Yidt - Yid	Yidt - Yid + $\bar{Y}$
DRB	2011	3.49	2.58	2.74	0.75	-0.16	0.91	3.64
DRB	2012	2.15	2.58	2.74	-0.58	-0.16	-0.43	2.31
DRB	2013	2.1	2.58	2.74	-0.64	-0.16	-0.48	2.26
PMB	2011	3.97	3.47	2.74	1.24	0.73	0.51	3.24
PMB	2012	3.63	3.47	2.74	0.9	0.73	0.16	2.9
PMB	2013	2.8	3.47	2.74	0.06	0.73	-0.67	2.07
RBY	2011	3.43	1.51	2.74	0.69	-1.23	1.92	4.66
RBY	2012	0.49	1.51	2.74	-2.24	-1.23	-1.01	1.72
RBY	2013	0.6	1.51	2.74	-2.14	-1.23	-0.91	1.83
PSH	2011	3.62	3.37	2.74	0.89	0.63	0.25	2.99
PSH	2012	3.69	3.37	2.74	0.95	0.63	0.32	3.05
PSH	2013	2.8	3.37	2.74	0.06	0.63	-0.57	2.17
NWC	2011	3.52	2.76	2.74	0.78	0.02	0.76	3.49
NWC	2012	2.66	2.76	2.74	-0.07	0.02	-0.1	2.64
NWC	2013	2.1	2.76	2.74	-0.64	0.02	-0.66	2.08

Source: Stat SA (2014), Global Insight (2014) and KZN Provincial Economic Model (2014)

Table A5.2: Variation for the regional Business Confidence Index (BCI), 2011 to 2013

Id	Time	conf	Individual Mean	Overall Mean	Overall Dev	Between Dev	Within Dev	Within Dev Mod
Id	t	Xidt	Xid	$\bar{\bar{X}}$	Xidt - $\bar{\bar{X}}$	Xid - $\bar{\bar{X}}$	Xidt - Xid	Xidt - Xid + $\bar{\bar{X}}$
DRB	2011	74.95	71.05	65.84	9.11	5.21	3.9	69.74
DRB	2012	68.55	71.05	65.84	2.71	5.21	-2.5	63.34
DRB	2013	69.65	71.05	65.84	3.81	5.21	-1.4	64.44
PMB	2011	63.45	60.53	65.84	-2.39	-5.31	2.92	68.76
PMB	2012	68.2	60.53	65.84	2.36	-5.31	7.67	73.51
PMB	2013	49.95	60.53	65.84	-15.89	-5.31	-10.58	55.26
RBY	2011	73.7	64.63	65.84	7.86	-1.21	9.07	74.91
RBY	2012	78.55	64.63	65.84	12.71	-1.21	13.92	79.76
RBY	2013	41.65	64.63	65.84	-24.19	-1.21	-22.98	42.86
PSH	2011	61	65.67	65.84	-4.84	-0.18	-4.67	61.18
PSH	2012	67	65.67	65.84	1.16	-0.18	1.33	67.18
PSH	2013	69	65.67	65.84	3.16	-0.18	3.33	69.18
NWC	2011	78	67.33	65.84	12.16	1.49	10.67	76.51
NWC	2012	71	67.33	65.84	5.16	1.49	3.67	69.51
NWC	2013	53	67.33	65.84	-12.84	1.49	-14.33	51.51

Source: Stat SA (2014), Global Insight (2014) and KZN Provincial Economic Model (2014)

Table A5.3: Within or *Q* Model

Id	Time	GDP	Conf	Individual Mean	Individual Mean	Dev GDP	Dev Conf
id	t	Yidt	Xidt	$\bar{Y}$id.	$\bar{X}$id.	$\dot{y}$ = yidt - $\dot{y}$id.	$\dot{x}$=xidt-xid.
DRB	2011	3.49	74.95	2.58	71.05	0.91	3.9
DRB	2012	2.15	68.55			-0.43	-2.5
DRB	2013	2.1	69.65			-0.48	-1.4
PMB	2011	3.97	63.45	3.47	60.53	0.51	2.92
PMB	2012	3.63	68.2			0.16	7.67
PMB	2013	2.8	49.95			-0.67	-10.58
RBY	2011	3.43	73.7	1.51	64.63	1.92	9.07
RBY	2012	0.49	78.55			-1.01	13.92
RBY	2013	0.6	41.65			-0.91	-22.98
PSH	2011	3.62	61	3.37	65.67	0.25	-4.67
PSH	2012	3.69	67			0.32	1.33
PSH	2013	2.8	69			-0.57	3.33
NWC	2011	3.52	78	2.76	67.33	0.76	10.67
NWC	2012	2.66	71			-0.1	3.67
NWC	2013	2.1	53			-0.66	-14.33

Source: Stat SA (2014), Global Insight (2014) and KZN Provincial Economic Model (2014)

References

Baltagi, B. H., (2009) Econometric Analysis of Panel Data. John Wiley & Sons Ltd 4th edition

Bank of Albania, (2011) "Modeling the Quarterly GDP- Role of Economic and Surveys Indicators"

Beck, T., (2011) The Role of Finance in Economic Development: Benefit, Risk, and Politics. Available Online online: http://ssrn.com/abstract=1974471. Discussion Paper No. 2011-141. [Accessed on 13 November 2014]

Binette, A. & Chang, J., (2013) "*CSI:* A Model for Tracking Short-Term Growth in Canadian Real GDP" Bank of Canada

Bizcommunity.com (2014) KZN second largest contributor to GDP. Available online: http://www.bizcommunity.com/Article/196/357/116699.html [Accessed 11 November 2014]

Department of Agriculture, Forestry and Fisheries (2013) Quarterly Economic Overview of the Agriculture, Forestry and Fisheries sector: July 2013 to September 2013

Department of Economic Development and Tourism (2002) Ezomnotho the KZN Quarterly Economic Overview [Accessed on 13 November 2014]

Department of Economic Development and Tourism (2013) Annual Performance Plan 2013/2014. Available online: http://kznded.gov.za [Accessed on 13 November 2014]

Department of International Development (2006) Social protection and economic growth in poor countries. Available Online: http://www.gsdrc.org/docs/open/sp16.pdf [Accessed on 13 November 2014]

Department of Mineral Resources (2014) South Africa Year Book 2012/13

European Central Bank (2003) "*Can Confidence Indicators be Useful to Predict Short Term Real GDP Growth?*" Working Paper 133

European Central Bank (2006) "*Short-Term Forecasts of Euro Area Real GDP Growth: An Assessment of Real Time Performance Based on Vintage Data*" Working Paper 622

European Public Real Estate Association (2012) Real Estate in the Real Economy: Supporting growth, jobs and sustainability. Available Online: http://www.epra.com/media/Real_estate_in_the_real_economy_-EPRA_INREV_report_1353577808132.PDF [Accessed on 13 November 2014]

Global Insight (2013) IHS Global Insight, ReX Regional Explorer

Greene W.H., (2008) Econometric analysis. Upper Saddle River, N.J: Prentice Hall 6th edition

ILO KILM (2013) International Labour Organisation, Key Indicators of the labour market. Available online: http://www.ilo.org/global/about-theilo/newsroom/news/WCMS_232094/lang--en/index.htm [Accessed 3 November 2014]

IMF (April 2014) World Economic Outlook. Recovery Strengthens, Remains Uneven. Available online: www.imf.org [Accessed 5 May 2014]

IMF (January 2014) World Economic Outlook Update, an update of the key WEO projections, is the tide rising? Available online: www.imf.org [Accessed 03 February 2014]

IMF (July 2014) World Economic Outlook Update, an update of the key WEO projections, An Uneven Global Recovery Continues. Available online: www.imf.org [Accessed, 04 August 2014]

IMF (October 2014) World Economic Outlook Update. Legacies, Clouds, Uncertainties. Available online: www.imf.org [Accessed 02 November 2014]

Kumo, W.L. Rieländer, J. & Omilola, B., (2014) African Economic Outlook: South Africa Available online: http://www.africaneconomicoutlook.org/en/countries/southern-africa/south-africa/ [Accessed 02 June 2014]

KZN Business Barometer (2014) KZN Business Barometer (March 2014)

KZN Business Barometer (2014) KZN Business Barometer (July 2014)

KZN Top Business (2014) KZN Agriculture. SESALOS. Available online: http://kzntopbusiness.co.za/site/agriculture [Accessed 11 August 2014]

Latvijas Banka (2008) "*Short-Term Forecasts Of Latvia's Real Gross Domestic Product Growth Using Monthly Indicators*" Working Paper 5-2008

Millennium Development Goals (2013) The Millennium Development Goals, Country Report 2013. Republic of South Africa. Statistics South Africa. Pretoria

National Development Plan (2011) National Development Plan 2030, Our Future-make it work. Available online: http://npconline.co.za/medialb/downloads [Accessed 17 July 2014]

National treasury (2014) World Economic Outlook update.Pretoria, Government Printer

OECD (2002) Social Protection and Growth. Available Online: http://www.oecd.org/eco/growth/22023319.pdf. [Accessed 13 November 2014]

OECD (2014) Japan - Economic forecast summary (May 2014) Available online: http://www.oecd.org/economy/japan-economic-forecast-summary.htm [Accessed 02 June 2014]

OECD (2014) Brazil - Economic forecast summary (May 2014) Available online: http://www.oecd.org/eco/outlook/brazil-economic-forecast-summary.htm [Accessed 02 June 2014]

OECD (2014) China - Economic forecast summary (May 2014) Available online: http://www.oecd.org/eco/outlook/china-economic-forecast-summary.htm [Accessed 02 June 2014]

OECD (2014). Euro Area - Economic forecast summary (May 2014) Available online: http://www.oecd.org/eco/outlook/euro-area-economic-forecast-summary.htm [Accessed 02 June 2014]

OECD (2014) India - Economic forecast summary (May 2014) Available online: http://www.oecd.org/eco/outlook/india-economic-forecast-summary.htm [Accessed 02 June 2014]

SARB (2014) Quarterly Bulletin (June 2014 No. 272). South African Reserve Bank, Pretoria. Available online:https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/6273/01Full%20Quarterly%20Bulletin%20%E2%80%93%20June%202014.pdf [Accessed 21 August 2014].

SARB (2014) Quarterly Bulletin (September 2014 No. 273). South African Reserve Bank, Pretoria. Available online: https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/6403/01Full%20Quarterly%20Bulletin%20%E2%80%93%20September%202014.pdf [Accessed 10 September 2014]

South Africa Year Book (2012/13) Agriculture, Forestry and Fisheries

Stats SA (2014) Agriculture survey 2012 (Preliminary) Statistical Release P1101 (28 November 2013) Pretoria, Government Printer

Stats SA (2014) Mining Production and Sales (Preliminary) Statistical Release P2041 (10 July 2014) Pretoria, Government Printer

Stats SA (2014) Quarterly Labour Force Survey, Q2:2014 Statistical Release P0211 Pretoria, Government Printer

Stats SA (2014) Retail Trade Sales (Preliminary). Statistical Release P6141.1 (May 2014). Pretoria, Government Printer

TIKZN (2013) KwaZulu-Natal economy by sector. Available online: http://www.tikzn.co.za/Key_Sectors/Overview_of_Key_Sectors.aspx [Accessed 11 November 2014]

TIKZN (2013) Wholesale, Retail Trade, Household Goods, Hotels and Restaurants. Available online: http://www.tikzn.co.za/Key_Sectors/Wholesale.aspx [Accessed 26 October 2014]

WTTC (2014) Travel & Tourism Economic Impact 2014 .Available online: http://www.wttc.org/summits/previous-summits/global-summit-2012/ [Accessed on 11 November 2014]

Zulu Kingdom Tourist Junction (2014). Available online: http://www.zulu.org.za/ [Accessed on 6 November 2014]