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Economic transformation, skills development and labour market outcomes:
Evidence of misalignment from the Free State province.

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1. INTRODUCTION.

1.1. Background to the study

Economists and politicians alike in South Africa agree that unemployment is one of the biggest impediments to economic growth in the country. The Free State Province, in particular, has experienced high unemployment rates since the dawn of democracy, at one point having the dishonour of having the highest unemployment rate in the country.

The problem of 'skills shortages' is highly relevant to any discussion on unemployment, especially where the mismatch between skills and the labour market is attributed to the constantly changing nature of the economy. One of the findings of the National Development Plan (2012) was a poor skills profile in South Africa. The International Panel on AsgiSA (Hausmann, 2007:4) observed "It is clear from business surveys and from the general national debate that skills are in short supply and a strategy to relax this constraint is necessary". The Panel also noted that "the skills constraint is aggravated by the pattern of growth that South Africa is experiencing, and in fact is in large part its result". Unemployment has increased among low-skilled workers in South Africa, including the Free State, in spite of the fact that the local economy experienced one of the longest periods of sustained economic growth in history until 2008. This is partly attributable to a powerful labour market feature that has impacted on the labour market since the 1970s: skills biased technology change. This is a trend where, over time, relative demand for low-skilled jobs decreases while concurrently, demand for high skills jobs increases (Bhorat and Jacobs, 2010).

This phenomena can happen as an economy changes. Structural change in a modern economy frequently manifests as a shift in emphasis from the extraction of raw materials to the production of services, i.e. from primary sectors to tertiary sectors. Under these circumstances, the demand for labour in the primary sector declines whereas demand for labour especially in the services sector increases. Primary extractive industries tend to employ relatively large proportions of low and unskilled labour, and services industries tend to employ a greater proportion of intermediate to high skills workers. Consequently, any broad shift in emphasis across the economy away from primary sectors to tertiary sectors will entail a decline in demand for low-skilled labour and rising

demand for higher skilled labour. This shift away from low-skilled work such as agriculture and mining, and the increase in demand for skills to support the financial and other service industries, means highly skilled workers are in demand and of short supply (Branson and Leibbrandt, 2013).

This skill biased labour demand has had the effect of increasing unemployment levels in an economy which already suffers extraordinary levels of high unemployment. Job losses in the recent recession reflect the same bias: unskilled, less experienced and younger workers were most likely to lose their jobs. The crisis response amongst employers is therefore accentuating the basic patterns (Bhorat and Jacobs, 2010).

The gradual and unescapable shift in demand for the higher skilled in the Free State has strongly affected those population groups who were historically denied access or opportunity to complete a basic education qualification and or the opportunity to pursue post-school study i.e. the African majority. Skills biased technology change also prejudices new work-seekers who do not hold the requisite skills and qualifications and who will find it increasingly difficult to obtain sustainable employment. For young people who hope to find a job, these conditions place greater emphasis on the importance either of obtaining a Senior Certificate with the option of further study in the post school domain, or of getting training for a skill or a skill set that is valued in the labour market. The critical issue is for the individual to find an education or training opportunity that will raise their occupational skills levels to an intermediate level above those competing for unskilled or low skill occupations.

Therefore, the importance of schooling and educational attainment of the labour force is increasingly being recognised as a factor which enhances labour market flexibility and facilitates structural adjustment, as well as one which improves the adaptability of societies at large to the social, cultural and technological demands of the 21st Century. Skills are a critical asset for individuals, businesses and societies. The importance of skills is even more pronounced in a dynamic, globalized world. Building basic skills early on, by broadening and improving the quality of early childhood, is essential. However, it is also crucial to ensure that skills taught at school are relevant for the working world; that they are maintained and further improved during working life; and that they are recognized and used by employers once people are in the labour market (World

Economic Forum, 2014). It is, therefore, vital that the province adjust to the demand of the labour market and changing structure of the provincial economy and thus produce the necessary skills and expertise.

1.2. Research question

Has the Free State's workforce skills shifted in response to the changing provincial economic structure? How has this impacted on employment levels in the province?

1.3. Purpose of the study

The purpose of this study is to explore the extent of skills development and labour market outcomes in the Free State in the midst of a changing structure of the provincial economy. The current structural changes in the economy, i.e. from primary sectors to tertiary sectors dominance, result in a shift from demand for unskilled labour to a highly skilled labour force. Therefore, the need to develop a highly skilled labour force becomes even more crucial in the quest to reduce unemployment, and combat poverty and inequality in the province.

1.4. Objectives of the study

The Free State Province is experiencing a skills-biased growth. The share of employment in *mining and quarrying, agriculture, forestry and fishing and manufacturing* has declined and the share in *wholesale and retail trade, finance, real estate and business services and community services* increased. The NDP also sees skills development as critical for the development of the country. As a result of the observed increase in the demand for skilled relative to unskilled labour, mainly due to the structural change of the provincial economy, and the importance of skills development entrenched in the NDP, the study seeks to achieve the following objectives:

- Examine the impact of the transformation of the provincial economy on the skills demands of the labour market
- Explore skills development within the Free State Province's workforce since 2002.

- Investigate skills trends in terms of race and gender to determine the level of transformation as set out in the NDP.
- Investigate the impact of skills development on the labour market.

2. LITERATURE REVIEW

2.1. The impact of economic structural changes on the labour market

Since its origin, economic theory has given significant attention to structural change. The Scottish philosopher Adam Smith (1776), saw structural features as strongly related to the level of economic development, whereas for Ricardo (1817) changing composition of the productive system was a requisite for economic growth. Although the concept of structural change has been defined in different ways, the most common meaning refers to long-term and persistent shifts in the sectoral composition of economic systems (Chenery and others, 1986; Syrquin, 2007). More specifically, structural change is associated with modifications in the relative importance of different sectors over time, measured by their share of output or employment.

The development of an economy is characterized by the changes that have occurred in the structure of economic activities. In this period, some sectors increase more rapidly than others due to characteristic changes. These complicated changes include the compound effects of factors such as changes in demand patterns; emergence of opportunities such as discovery of new products and processes, substitutability of technological developments and technical factors between sectors, changes in functions of the state economy and international competition patterns (George et al., 2005).

The structural change theory examines the transformation of the economic structure of underdeveloped economies from traditional structure based on agriculture into more developed structure which is modern, directed to urbanization and in dimensions of manufacturing industry and services sectors (Mecik and Afsar, 2014). According to Kuznets (1971), there are two phases to economic development. In the first phase of the structural transformation most of the resources are transported into the agricultural sector in the beginning of the development process of

economy. In the following levels of the development, the resources are subjected to assignment from agricultural sector into industry and services sectors. In the second phase, there is the reassignment of the resources from agricultural and industrial sectors into services sectors. Syrquin (1986) indicated that the changes in economic structure are related with the development level systematically. Kuznets (1971) listed structural transformation as one of the six main features of modern economic growth. According to Gawrycka et al. (2012), the intensity of structural changes in the national economy is high in the period of accelerated technological and organizational progress, quick economic growth, modernization of the economy, structural changes and those resulting from changes in foreign trade.

Economic structural changes also impact significantly on the labour market. A developing economy typically reveals a high share of employment in the primary sector, while the share of employment in the tertiary sector is high in an advanced/developed economy. A shift from manufacturing to services and research-oriented firms in the transition economies of Bulgaria, Poland, and the Russian Federation created a skills mismatch that led to high unemployment during the 1990s. A study on Russia, for example, found high and rising demand for educated and highly skilled labour in the services and research industries (Lukyanova et al. 2007). Similarly, in Bulgaria, the risk of losing a job or being unemployed was highest and longest among workers with lower education or vocational or technical education, while those with easily adaptable skills were most likely to be employed or to find new employment within a year (Rutkowski, 2003). An examination of labour market conditions in the Slovak Republic revealed a similar scenario: while unemployment increased for all levels of education, those with secondary or lower education fared the worst (Revenga et al., 2002). Naturally, the resources in the economy shift from low productive sectors to more productive sectors in the period of the structural transformation. Findings by Mecik and Afsar (2014) on the effects of the structural transformation on the labour markets indicate that the changes in the labour productivity have a negative effect on employment. Furthermore, they concluded that the increase in the labor productivity and specialization had a positive effect on the long term unemployment ratio in economy.

It is apparent from literature that as many economies develop, their economic structure transforms from been reliant on primary industries or natural resources to becoming more services driven.

The transformation from primary to tertiary industries translates into increased demand for a highly skilled workforce. At the same time, unskilled and low-skilled labourers find it more and more difficult to stake their claim in the modern knowledge based economy, thus contributing to the inescapable challenge of chronic unemployment levels. This, therefore, necessitates the up skilling and or reskilling of the workforce to meet the skills demand of the modern economy. The education system as a result becomes an important tool in address this need for highly skilled labourers.

2.2. The relationship between education and labour market outcomes

A considerable amount of literature (for example, Mincer, 1958, 1974; Glewwe, 1996; Gangl, 2000, 2001; Hauser et al., 2000; Margolis and Simonnet, 2003; Tansel, 2004; Pascarella and Terenzini, 2005; Goldberg and Smith, 2007; Stiglitz et al., 2009; Edgerton et al., 2012) has been published on the relationship between education and labour market outcomes.

A paper by Ionescu (2012), focusing on 32 European countries, investigated certain relationships that might appear between the access to education and the labour market outcomes. The paper concluded that the higher one's level of education, the better one's chances of getting a job and keeping the status of employed person in times of crisis on labour market. Ionescu (2012), further went on to say that a higher participation in education is not necessarily associated with a higher employment rate, since the entry on the labour market occurs for some individuals as an alternative to continuing their education. Diaconu (2014) found that, in Romania, the level of education is positively linked not only to the employment rate, but also to the income level. A study by Kingdon and Söderbom (2007) investigating the education-earnings relationship in Ghana concluded that firstly, education has large indirect effects via promoting entry into (well paying) wage employment and secondly, the returns to education mostly increase with education level in Ghana so that there will be an economic incentive to reach the higher levels of education where returns are substantial. Scholars in general are in agreement that better-educated people typically have lower unemployment (Stiglitz et al., 2009) as, regularly, unemployment rates decline with increasing levels of qualifications (Gangl, 2000). Moreover, those with higher educational attainment have greater "ability to benefit from disequilibria" (Bowles et al., 2001), while the least

qualified workers are the most vulnerable to unemployment during economic downturns (Gangl, 2001).

The mechanisms by which education affects labour market outcomes can be broken down as follows:

- **Years of schooling** (Goldberg and Smith, 2007) - The findings show that the higher one's level of education, the better one's chances of getting a job and keeping the status of employed person in times of crisis on labour market.
- **Educational level attained** (Hauser et al., 2000; Pascarella and Terenzini, 2005; Edgerton et al., 2012) - Investments in education have a direct effect mainly in stimulating the achievement of positive outcomes (employment, earnings) on labour market and less in reducing the negative ones (unemployment).
- **Attainment of a particular credential** (Edgerton et al., 2012, p. 266) - In the labour market, a person's academic credentials signify to employers a specific pathway of achievement or performance, as well as the future performance potential of that person as an employee.
- **Educational system** (Damoiselet and Lévy-Garboua, 1999; Margolis and Simonnet, 2003) - The literature on the school-to-work transition suggests that the educational system plays an important role in the transition process. International comparisons of educational systems show how different aspects of the educational system are related to the school-to-work transition and emphasize the importance of a professional or technical education and private sector involvement in the educational process.
- **Investments in education** (Fasih, 2008; Ionescu, 2013) - Investments in education help to broaden access to education and hence facilitate the access to skills enabling peoples to get better jobs.
- **Schooling quality and parental educational background** (Tansel, 2004) - It is well known that earnings are also affected by school quality, parental background, and individuals' ability. In the empirical literature, some of these issues are not adequately addressed due mainly to lack of data.
- **Individuals educational track** (Margolis et al., 2001; Margolis and Simonnet, 2003) – the educational track also has an important direct effect on labour market outcomes (the time

to the first stable job and earnings), independently of the effect it has on the means of job finding.

- **Curriculum type** (Gangl, 2000) - apprenticeships perform very favourably, both compared to school-based education at the same level of training and across qualificational levels, which is confirmed by unemployment rates for apprentices that are similar to those of tertiary level leavers.
- **Sector of activity** (Glewwe, 1996) - wage structures in the private sector reflects the impact of education on the workers' productivity more than they do in the public sector.

The role and importance of education in assisting individuals to find employment in the labour market can therefore not be underestimated. In conclusion, literature on the subject matter clearly indicates that investments in education have a direct effect mainly in stimulating the achievement of positive outcomes (employment, earnings) on labour market and less in reducing the negative ones (unemployment). This outcome is valuable for policy-makers as it brings evidence that employment could be sustained by allocating a larger share of GDP for public expenditure on education, while workers' hourly earnings could be improved by investing in research and development and in tertiary level of education. Equally so, higher spending on education does not guarantee superior educational outcomes. The quality of education, therefore, remains vital.

3. METHODOLOGICAL APPROACH

This study aims to explore the extent of skills development progress of the Free State's workforce and the resultant labour market outcomes. Of course, cognizance is taken of the transforming provincial economy which has a direct effect on skills requirements and the labour market. In the data set of the study; General Household Survey (GHS), Quarterly Labour Force Survey (QLFS), and Gross Domestic Product (GDP) databases from Statistics South Africa were used.

The structural transformation in an economy is generally examined by the changes of the employment and share of income in sectors. It is accepted that the most clear and easily measurable characteristic of the structural transformation in an economy is the change in the sectoral composition of labour. However, the studies directed to the structural transformation generally

suggest that the share of income and the share of employment in the sectors indicate consentaneous changes (Stahl, 2001). In the case that there are effects of structural transformation on the labour markets, in sectoral context; employment, labor productivity, fixed capital stock, value added, labour participation, export, import, real exchange rate and wages come into agenda (Mecik and Afsar, 2014). Value added of the sector, which is the determinant of the share of provincial output of the sectors in an economy, is applied in order to explain the structure of the provincial economy. In this case the analysis is based on Stats SA's GDP data and is conducted for the nine sectors of all economic activities as classified by the South African Standard Industrial Classification (SIC).

Skills development and other forms of human capital are widely recognised as key factors in economic growth. Although skills levels are not available from Statistics South Africa directly, data relating to skills is estimated from employees' types of occupations as depicted in publications such as the GHS and QLFS. For the purpose of this study the occupations have been grouped according to skill in order to get an idea of the level of skills in the Free State. The groupings is executed according to the following occupations:

- Skilled: *Manager, Professional occupations and Technicians*
- Semi-skilled: *Clerk, Sales and services, Skilled agriculture, Craft and related trade, and Plant and machine operator*
- Low-skilled: *Elementary and Domestic worker*

Trends in skills development measured according to race, gender and age group are analyzed making use of the above skills definitions for the period 2002 to 2015 due to data availability, extracted from GHS and QLFS databases.

Labour market outcomes (i.e. changes in employment levels) are presented making use of Statistics South Africa's Quarterly Labour Force Survey (QLFS). The purpose of this section of the paper is to explore whether economic transformation driven shifts in employer demand have continued to affect contemporary labour markets. The section also looks at the impact of the workforce skills base on the outcomes of the labour market. Conversely, the labour market is constantly changing and during the process influences skills development needs, therefore defining the skills needs of the province.

Lastly, an attempt is made to determine the skills level of the province by putting together the findings on the changes in the economy, skills level of the workforce and labour market performance.

4. LEGAL FRAMEWORK

The single greatest contributors to poverty are unemployment and low paid work. Government's position is clear: the new development and growth path for South Africa requires the participation of all economically active South Africans in productive activity. The policy levers to achieve faster growth, higher employment and reduced levels of poverty include skills development which must assist not only support the formal private sector growth but also labour-intensive industries, infrastructure investment, public service delivery and rural development. Quality education and training is needed at all levels (Framework for The National Skills Development Strategy, 2011/12 – 2015/16).

Skills development was facilitated by at least four important policy documents: the Skills Development Act (1998), the Skills Development Levies Act (1999), the National Skills Development Strategy (2001), and the Human Resources Development Strategy (2001).

The Skills Development Act (SDA, 1998) was successful in establishing a single national regulatory framework consisting of a National Skills Authority (NSA) and 25 Sectoral Education and Training Authorities (SETA). With this new institutional framework established under the SDA of 1998, the path was set for a substantive change to skills development and the method of training workers. However, enterprise training in South Africa was also at historic lows up to this point, and the Skills Development Levies Act (1999) sought to correct this by creating a national levy system applicable to all enterprises based on taxing one per cent of payroll expenditure. The Department of Labour's National Skills Development Strategy (DOL, 2001) reiterated the importance of learnerships that was part of the SDA. Learnerships were seen as a complement to apprenticeships, and a key method to improve skills development for high, intermediate and low-level skills. The Human Resources Development Strategy (DOL & DOE, 2001) sought to further target all three levels of skills development (Daniels, 2007).

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Box 1: Skills Development Act No. 97 Of 1998

Purposes of Act.--(1) The purposes of this Act are:

- (a) to develop the skills of the South African workforce:
 - i. to improve the quality of life of workers, their prospects of work and labour mobility; to improve productivity in the workplace and the competitiveness of employers;
 - ii. to promote self-employment; and
 - iii. to improve the delivery of social services;
- (b) to increase the levels of investment in education and training in the labour market and to improve the return on that investment;
- (c) to encourage employers:
 - i. to use the workplace as an active learning environment;
 - ii. to provide employees with the opportunities to acquire new skills;
 - iii. to provide opportunities for new entrants to the labour market to gain work experience; and
 - iv. to employ persons who find it difficult to be employed;
- (d) to encourage workers to participate in learnership and other training programmes;
- (e) to improve the employment prospects of persons previously disadvantaged by unfair discrimination and to redress those disadvantages through training and education;
- (f) to ensure the quality of education and training in and for the workplace;
- (g) to assist:
 - i. work-seekers to find work;
 - ii. retrenched workers to re-enter the labour market;
 - iii. employers to find qualified employees; and
- (h) to provide and regulate employment services.

Those purposes are to be achieved by:

- (a) establishing an institutional and financial framework comprising:
 - i. the National Skills Authority;
 - ii. the National Skills Fund;
 - iii. a skills development levy-grant scheme as contemplated in the Skills Development Levies Act;
 - iv. SETAs;
 - v. labour centres; and
 - vi. the Skills Development Planning Unit;
- (b) encouraging partnerships between the public and private sectors of the economy to provide education and training in and for the workplace; and
- (c) co-operating with the South African Qualifications Authority.

5. STRUCTURAL CHANGES IN THE FREE STATE ECONOMY

The history of capitalist economic development tells us that there is an intimate and complex relationship between the processes of economic growth and changes in economic structure (Silva and Teixeira, 2008). The relationship is that economic growth causes structural change or that structural change causes economic growth. This is because structural change is the outcome of processes that reflect the ability of a firm, industry, region or national economy to respond to new competitive pressures and new opportunities (Dietrich, 2009).

This section of the paper will provide a brief overview of the trends in the provincial economy and the ensuing change in the economic structure. The main purpose is, therefore, to help determine the skills needs of the province as a result of the structural transformation of the provincial economy.

5.1. Definition of structure

An economy may be analysed in terms of its component parts, often called 'sectors'. Sectors may be widely drawn to include groups of industries (e.g. the engineering industries) or narrowly drawn to identify parts of industries (e.g. fuel-injection equipment), depending on the said purpose. Structural change is often discussed in terms of the even more widely drawn 'primary', 'secondary' and 'tertiary' (service) sectors. It will be useful at the outset to define these, and other conventional sector headings.

- ✚ *The primary sector* – includes activities directly related to natural resources, e.g. farming, mining and oil extraction.
- ✚ *The secondary sector* – covers all the other goods production in the economy, including the processing of materials produced by the primary sector. Manufacturing is the main element in this sector which also includes construction and the public utility industries of gas, water and electricity.
- ✚ *The tertiary sector* – includes all the private sector services, e.g. distribution, insurance, banking and finance, and all the public sector services, such as health and defence.
- ✚ *The goods sector* – the primary and secondary sectors combined.

- ✚ *The production industries* – includes the entire secondary sector except construction, together with the coal and coke industries and the extraction of mineral oil and natural gas. There is an index of industrial production on this basis, and the term ‘industry’ usually refers to this sector heading.

The terms “structure” and “structural change” have become widely used in economic literature, although with different meanings and interpretations. Structural change in the context of this paper means change in the relative size of the sectors, however defined, whereby size is judged by output (contribution to GDP). This paper, accordingly, uses such notion of structural change to analyze the recent evolution of the provincial economy in a long-term perspective.

5.2. Structural changes in the Free State Province

Globally, the rise of new economic powers has generally been driven by the rapid structural transformation of their economies, featured by the shift from primary production, such as *mining and quarrying* and *agriculture, forestry and fishing* to *manufacturing*; and in *manufacturing* from natural-resource-based to more sophisticated, skill- and technology-intensive activities. With urbanisation, labor-intensive manufacturing activities grow faster than primary activities, generating new jobs, income and demand. Capital accumulation leads to a more sophisticated manufacturing structure and the economy gradually moves to skill- and technology-intensive sectors. Deepening in manufacturing sophistication corresponds to changes in the availability and quality of production factors and to the reduction of transaction costs thanks to a proper supply of infrastructure, utilities and regulatory framework (United Nations, 2009).

5.2.1. Growth Performance by Economic Activity

In analysing the nature of structural change, it is essential to firstly determine the growth rates, relative to GDP, of the various main economic activities. Table 1 below presents the output growth rates of the Free State economy by economic activity since 1996. Before closely examining the performance of the various sectors, it is important to detail the underlying trends in the economy’s performance.

Table 1: Free State's real growth of GDP by sector, 1996 – 2014

Industry	1996 - 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	1996-2014
Primary Industries	0.1	-6.8	-1.5	0.9	-5.2	3.7	-3.4	1.0	2.9	2.9	-0.2
Agriculture, forestry and fishing	18.6	-9.8	2.3	26.4	-3.5	1.0	-9.2	0.6	1.8	5.3	10.6
Mining and quarrying	-1.4	-6.0	-2.5	-5.9	-5.8	4.7	-1.4	1.1	3.3	2.2	-1.3
Secondary Industries	2.7	6.0	5.7	1.4	-4.0	3.0	1.1	0.7	0.5	1.9	2.3
Manufacturing	3.6	6.9	4.5	1.9	-7.9	5.7	1.1	0.5	0.2	2.4	2.7
Electricity, gas and water	2.3	3.0	2.6	-4.2	-2.9	2.5	1.5	0.4	0.1	0.6	1.4
Construction	0.1	6.1	16.1	7.0	11.2	-5.7	0.6	2.2	2.0	1.5	2.2
Tertiary industries	2.6	6.1	4.9	3.4	-0.6	1.8	3.0	4.0	1.8	1.4	2.7
Wholesale, retail and motor trade; catering and accommodation	2.3	6.1	4.5	1.2	-3.1	3.5	2.7	7.4	1.6	1.0	2.5
Transport, storage and communication	4.1	5.0	6.0	3.5	-1.7	1.0	2.1	1.8	0.7	2.0	3.2
Finance, real estate and business services	3.8	9.8	5.1	4.3	0.1	0.4	2.7	3.0	0.5	1.4	3.4
Personal services	3.2	5.1	5.0	3.4	-1.6	0.2	2.3	1.8	1.4	0.7	2.7
General government services	1.1	3.5	4.6	5.3	2.6	2.4	4.3	3.7	4.2	2.0	2.3
All industries at basic prices	1.9	3.1	3.7	2.6	-2.1	2.3	1.4	2.9	1.8	1.8	1.9
Taxes less subsidies on products	1.4	8.0	3.9	2.5	-4.5	4.3	7.3	3.2	0.8	0.9	2.1
GDPR at market prices	1.8	3.5	3.7	2.6	-2.3	2.5	2.0	3.0	1.7	1.7	1.9

Source: Statistics South Africa, Gross Domestic Product, 4th Quarter 2015

Primary sector

The primary sector of the economy includes the following economic activities as classified by the South African Standard Industrial Classification (SIC) of all economic activities (CSS fifth edition):

SIC 1 - Agriculture, fishing and forestry

SIC 2 - Mining and quarrying

What is evident from table 1 is that the primary sector has performed the poorest out of all sectors of the economy at an average growth of -0.2% during the period under review. The *mining and quarrying* sector in particular recorded a negative average growth of -1.3%. This implies a decline relative to other sectors of the economy, in spite of the sterling growth seen in the *agriculture, forestry and fishing* sector over the term under review.

Secondary sector

The secondary sector of the economy includes the following economic activities:

SIC 3 - Manufacturing

SIC 4 - Electricity, gas and water

SIC 3 - Construction

What table 1 suggests is that as a group the secondary sector of the economy has grown better than the primary industries at 2.3% on average, driven largely by the *manufacturing* sector. The *construction* sector has also contributed significantly to growth of the secondary sector, particularly during the 2009 economic crises.

Tertiary sector

The tertiary sector of the economy includes the following economic service activities:

SIC 6 - Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants

SIC 7 - Transport, storage and communication

SIC 8 - Financial intermediation, insurance, real estate and business services

SIC 9 - Community, social and personal services

It is evident from table 1 that these service sectors are by far the fastest growing components of GDP-R, with all averaging growth higher than the GDP-R average for the 1996 to 2014 period. This indicates that one of the drivers of provincial economic growth in the Free State has been the services sector, which have also compensated for the relative decline of the primary sector. During the review period, the tertiary sector as a group grew by 2.7% on average. The *finance, real estate and business services* and *transport, storage and communication* were the fastest growing sector in the provincial economy averaging 3.4% and 3.2% respectively.

5.2.2. Changing Shares of GDP-R by sectors

These differing growth rates discussed above do suggest a change in the industrial structure of the provincial economy. The high growth in services represent a new industry establishing itself in the

domestic economy, while the steady performance in *manufacturing* speaks of an industry that has already gone through its rapid growth phase. Hence the *manufacturing* sector is now a necessary, but not growing share of the production base of the economy, given that it has already established markets and consumers in the local economy. Clearly though, should new export markets open up, the industry is likely to grow very rapidly and bolster its share of output. For the services industry though, the high growth rates are a product of expansion in domestic markets, with foreign markets thus far remaining largely untapped.

Table 2: Composition of the Free State economy by sector, 1996 – 2013

Industry	1996	1997	1999	2001	2003	2005	2007	2009	2011	2013
Primary Industries	21.9	20.1	15.5	15.1	17.2	13.9	15.9	17.6	16.5	16.0
Agriculture, forestry and fishing	7.9	7.5	5.9	6.1	6.3	3.6	4.5	5.5	4.3	4.0
Mining and quarrying	14.0	12.6	9.6	9.0	10.9	10.3	11.4	12.1	12.2	12.0
Secondary Industries	16.5	16.9	17.0	18.4	16.4	18.0	17.1	16.7	15.5	15.5
Manufacturing	10.9	11.0	11.6	13.7	12.5	14.1	12.8	10.9	9.7	9.6
Electricity, gas and water	3.3	3.4	3.1	2.8	2.4	2.3	2.1	2.7	3.1	3.3
Construction	2.3	2.5	2.2	1.9	1.5	1.6	2.2	3.1	2.7	2.5
Tertiary industries	53.3	54.6	58.5	57.7	57.5	57.9	56.5	56.6	58.2	58.0
Wholesale, retail and motor trade; catering and accommodation	11.1	11.1	11.6	10.8	10.6	10.6	10.9	13.3	14.6	13.2
Transport, storage and communication	8.3	8.5	8.7	8.7	7.4	9.0	9.8	8.5	8.4	9.0
Finance, real estate and business services	11.3	12.1	13.6	13.9	15.0	14.3	15.1	14.1	13.7	13.4
Personal services	8.9	9.3	10.2	10.8	11.2	10.6	8.7	7.4	7.1	7.1
General government services	13.7	13.5	14.4	13.5	13.3	13.4	12.0	13.3	14.4	15.1
All industries at basic prices	91.6	91.6	91.0	91.2	91.1	89.9	89.5	90.9	90.1	89.5
Taxes less subsidies on products	8.4	8.4	9.0	8.8	8.9	10.1	10.5	9.1	9.9	10.5

Source: Statistics South Africa, Gross Domestic Product, 3rd Quarter 2014

Table 2 above presents the changing share of the industrial base of the economy, as a more accurate picture of whether the growth rates in the different sectors are matched by a growing output share of national income. What is evident from the table is that the structural shifts in the economy since 1996 have been quite significant. The primary sector has seen its share of GDP-R decrease by 5.9 percentage points, from 21.9% in 1996 to 16.0% in 2013. Both the *agriculture, forestry and fishing* (-3.9 percentage) and *mining and quarrying* (-2.0 percentage) sectors have contributed significantly to this decline. The secondary sector has seen its share of GDP-R remain relatively unchanged, decreasing by only 1.0 of a percentage points, from 16.5% in 1996 to 15.5% in 2013. The source of the decline in the secondary sector has been the *manufacturing* sector which

recorded a drop of 1.3 percentage points in its share of total provincial output during the review period.

The decline in the primary sector contribution to provincial output has been compensated for by the rise of the service sectors. The tertiary sector as a whole has increased its share of GDP-R by 4.7 percentage points, from 53.3% in 1996 to 58.0% in 2013. This large share increase means that services output is now over three times that of both the primary and secondary sectors and larger than the primary and secondary sectors combined. The *general government services* sector has surpassed the *mining and quarrying* sector as the largest sector in the province with a share of 15.1% in 2013, compared to *mining and quarrying*'s shrinking share of 12.0%. The *finance, real estate and business services* (13.4% share) and *wholesale, retail and motor trade; catering and accommodation* (13.2% share) are the second and third biggest sectors in the province's economy respectively. The *mining and quarrying* sector has been relegated to fourth position, but remains a significant contributor to the province's total output.

In conclusion, it is evident that an important structural shift has taken place in the Free State provincial economy during the period under review. The structural change in the provincial economy can be characterised in the main, by a move away from primary and manufacturing production, towards a greater emphasis on output in the services sector. The key loss in production share though, lay in the primary sectors, with manufacturing production remaining largely unchanged. This reflects not only that the economy has been mimicking national and global trends, but also that the economy is well placed to exploit opportunities in a sector that is growing faster than any other in the world economy. As the structure of the Free State economy has shifted, so have the kinds of skills required. The shift from the primary to the tertiary sectors normally result in growing demand for highly skilled professionals, technicians and managers to develop, implement, operate and maintain new technologies associated with the services economies. At the same time, this technology is replacing the unskilled and low skilled labourers, farming workers, production workers and basic service workers. The declining share in production of these workers has also has the effect of increasing the share of the non-production workers; namely transport workers and clerical and sales workers. Therefore, the main beneficiaries of this structural change are the more highly skilled occupations and those associated with service sectors. The losers are

the more low skilled occupations and those associated with the primary sectors. It is therefore fitting to conclude that the shift in the Free State economy's structure to a more knowledge-based economy has increased the need for workers with reasoning, problem-solving, and behavioral skills; a positive cognitive style; and specific occupational and professional competencies. This structural transformation in the economy poses a real risk of increased marginalization of low-skilled workers in the labour market, but also creates an opportunity for the reskilling of the low skilled workers.

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Box 2: A snapshot of the main economic sectors in the South African economy*Primary sector*

Agriculture and mining have traditionally formed the backbone of the SA economy. Although they remain important contributors to the national output, they have been experiencing rapid decline in recent years. They are both particularly sensitive to changes in the value of the domestic currency. On the input side, both industries are directly impacted by the price of fuel, as well as imported equipment, which are denominated in dollar terms. Conversely, commodities in both primary sectors are sold on the world market also at dollar prices. In agriculture demand for low skilled and semi-skilled workers has declined, while the demand for skilled and highly skilled workers has been increasing significantly. Mining has also been losing jobs for the low skilled and semi-skilled, particularly in response to the fluctuations in the world price of commodities, combined with the volatile value of the Rand. Technology is taking an increasingly important role in both sectors for productive processes as well as value adding, with an attendant increase in the level of skills required in the sectors.

Secondary sector

The secondary sector comprises manufacturing, construction, transport, utilities, and other secondary industries. Although manufacturing exports have grown overall, economic output in the sector has been stagnant or declining. According to the South African Reserve Bank, the sector was growing at 5% in the year 2000, but declined in subsequent years, although it shows signs of recovery by 2002. Furthermore, any growth within the sector has tended to be capital and skills intensive. In response, government has introduced the Integrated Manufacturing Strategy (IMS) in an effort to re-invigorate the sector. The focus of the IMS focuses on re-defining the competitive advantage of SA by nurturing specific components of the value chain within key industries, and to ensure sufficient investment in them to promote growth and job creation. It aims to place greater emphasis on Information and Communications Technology (ICT) and on beneficiation of the primary commodities that remain the principal products of the SA economy and take advantage of export opportunities. Public and private initiatives are also being introduced to improve the road and rail infrastructure of the country in order to improve the haulage capacity, and thus take better advantage of trade opportunities. Such improvements are critical to the development of the economy, as this sector has the greatest potential to employ semi-skilled to skilled workers across a variety of industries.

Box 2: A snapshot of the main economic sectors in the South African economy

Services sector

The services sector is principally made up of social and community services. The biggest employer by far in this sector is government, delivering social and municipal services at local level. The needs of this sector have changed significantly in post-apartheid South Africa. Government has had to deliver services to a much larger client base. Furthermore, transformation of the public sector has entailed changing not only the equity profile of the civil servants, but also the culture of service delivery within the public service. This has resulted in a demand for a higher calibre of staff, and a more flexible approach to management and service delivery. At the same time, international demand for key professionals (especially teachers, doctors, and nurses) is placing greater pressure on the local labour market. Thus, government is competing with both domestic and international employers for skilled labour. Outside government, internationally, the service sector has proved the most versatile and flexible means of generating employment, particularly through the establishment of SMMEs. In SA, the sector is taking on an increasingly important role, as more and more public and private institutions restructure and outsource some of their non-core functions. Business services, in which information and communication technology is vital, represent the fastest growing industry, and have overtaken manufacturing in their contribution to GDP. Crime levels have also led to significant growth in industries such as private security and insurance services. At the same time, globalisation is placing greater demand on some industries, such as banking and other financial services, to become aligned to international standards in order to remain competitive locally and internationally. Again, this translates into the need for a much more flexible and sophisticated workforce that can adapt quickly to changes in the working environment.

Source: Department of Labour, State of skills in South Africa, 2003

6. FREE STATE WORKFORCE SKILLS LEVELS

There has been a shift in the last twenty years from low-skilled to semi-skilled and skilled work within the South African workforce. Comparisons of data from the 1994 October Household Survey and the 2014 QLFS show that in the first quarter of 2014, 25% of South African workers occupied skilled occupations (i.e. managers, professionals and technicians), an increase from 21% in 1994. However, a higher percentage (46%) were still in semi-skilled occupations (e.g., clerks, craft and related trades, and machine operators) in 2014, a slight decrease from 47% in 1994; and 29% were in low-skilled occupations (elementary jobs and domestic work), down from 32% in 1994 (Stats SA, 2014).

How far has the skills base in the Free State Province been responding to the demands identified in the above section? These are demands that, broadly speaking, require improvement in general education for all people of school going age, expanded access to further and higher education institutions of learning and improved responsiveness of further and higher education to the higher and intermediate levels of skills that are in demand in the various sectors of the economy. It is also important to investigate the extent to which the inequalities associated with apartheid are being redressed in the province. This section of the study will look at the improvements in the skill levels of the Free State workforce or lack thereof.

Box 3: Definition of skill

The 1997 Green Paper, Skills Development Strategy for Economic and Employment Growth in South Africa, defined skill as the necessary competencies that can be expertly applied in a particular context for a defined purpose. The Green Paper went further to outline a number of competencies that denote what is meant by a 'skill'. These include:

- Practical competence – the ability to perform a set of tasks
- Foundational competence - the ability to understand what we or others are doing and why
- Reflexive competence – the ability to integrate or connect our performance with an understanding of the performance of others, so that we can learn from our actions and are able to adapt to changes and unforeseen circumstances.

Although skills levels are not available from Statistics South Africa directly, data relating to skills may be estimated from employees' types of occupations as depicted in publications such as the GHS and QLFS. These occupation types are presented in the first column of table 3 below. For the purpose of this study the occupations have been grouped according to skill, shown in the second column of the table.

Table 3: Grouping of occupations according to skills level

Occupation	Grouping according to skills level
Manager Professional Technician	Skilled
Clerk Sales and services Skilled agriculture Craft and related trade Plant and machine operator	Semi-skilled
Elementary Domestic worker	Low-skilled

Source: Statistics South Africa, Youth employment, unemployment, skills and economic growth, 1994–2014

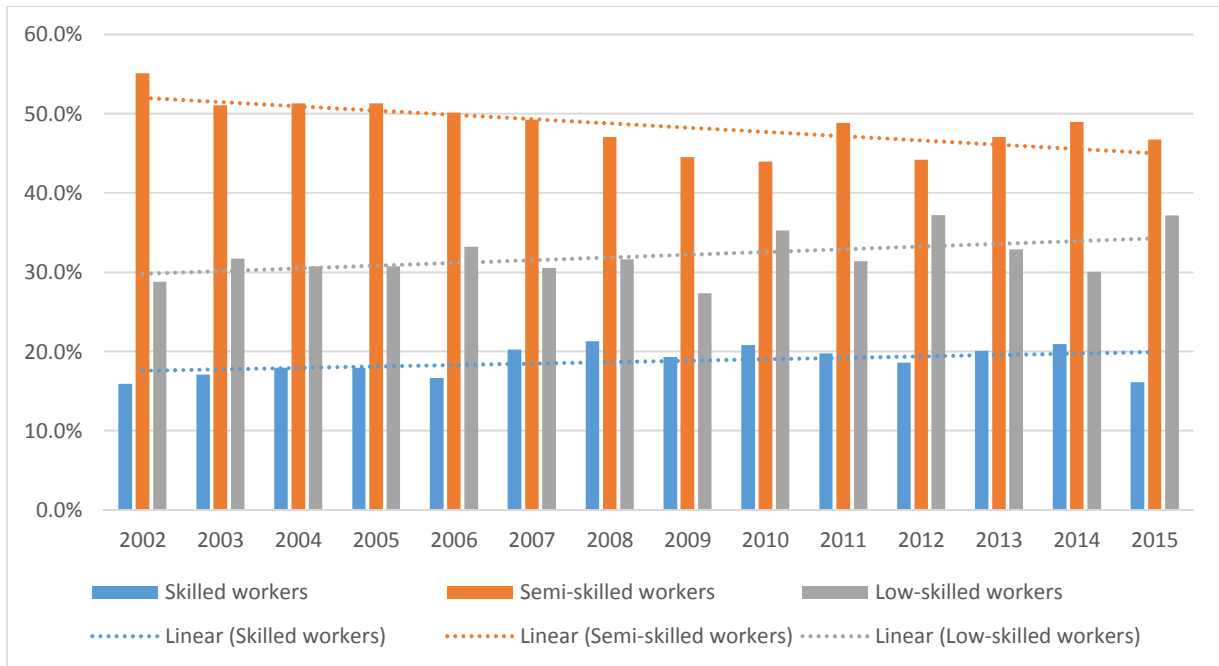
6.1. Skills levels trends

The evidence presented in this sections points to a change in the skills profile of the Free State workforce between 2002 and 2015. The change in the composition of the workforce, by level of skill, is illustrated in figure 1 below. The proportion of skilled workers in the Free State workforce has increased steadily over the period under review, although there was a dip in 2015. Between 2002 and 2014 the proportion of skilled workers as percentage of the provincial workforce increased from 15.9% to 21.0%. However, in 2015 the proportion of skilled workers declined to 16.1%.

The semi-skilled as a percentage of the workforce decreased from 55.1% in 2002 to 46.7% in 2015; representing a fall of 8.4 percentage points. The majority of the Free State's workers fall under the semi-skilled group, though decreasing as a share of the employed.

A substantial increase was recorded in the proportion of the workforce deemed to be unskilled. In 2002, the proportion of low-skilled workers was estimated at 28.8%. This increased significantly to 37.2% in 2015; an increase of 8.4 percentage points (Stats SA, 2015).

Figure 1: Proportion of employment by three skills categories: Free State Province



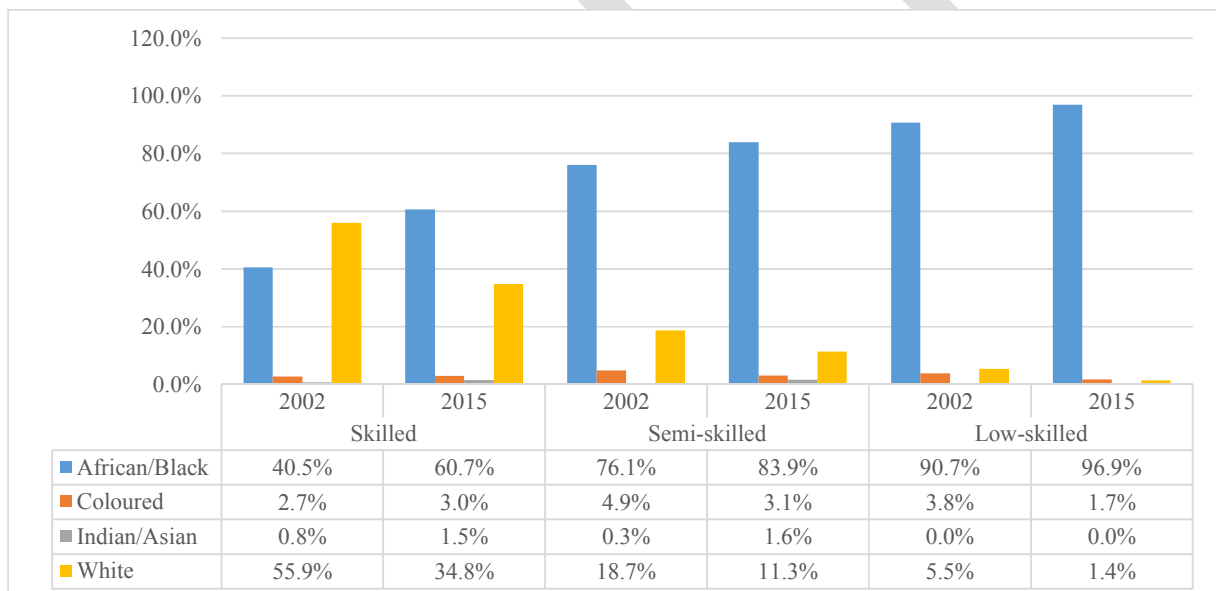
Source: Statistics South Africa, General Household Survey, 2002 - 2007 and Quarterly Labour Force Survey, 2008 – 2015

It is evident from figure 1 above that the Free State workforce has become less skilled over the past 13 years which is contradictory to the needs of the labour market identified in the discussion about the transformation of the provincial economy. According to this data, the skilled workers have increased marginally, while the low-skilled increased considerably at the expense of the semi-skilled. In 2015, 16.1% of the province’s workers occupied skilled occupations, 46.7% were in semi-skilled occupations and 37.2% in low-skilled occupations (Stats SA, 2015).

6.2. Trends in terms of race

In 2015, an estimated 60.7% of all employed in the skilled occupations were Africans, up by 20.2 percentage points from 40.5% in 2002. The share of Whites decreased by 21.1 percentage points from 55.9% in 2002 to 34.8% in 2015. In term of employment in low-skilled occupations, the African population makes up a staggering 96.9% of the workers, while Whites are only 1.4%. The proportion of African increased by 6.2 percentage points during the review period, while the proportion of Whites decreased by 4.1%. Coloureds also recorded a decrease of 2 in th.1 percentage points in skills level group.

Figure 2: Proportion of employment by skill level and population group: Free State Province



Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

The decrease in the proportion of white employment within skilled employment, and the corresponding increase in the proportion of the other population groups within skilled employment gives some indication of the transformation in the Free State labour market. It is, however, only a part of the story, and misleading if not examined further, because the breakdown of skills levels by population group fails to show the highly skewed nature of employment in terms of these two

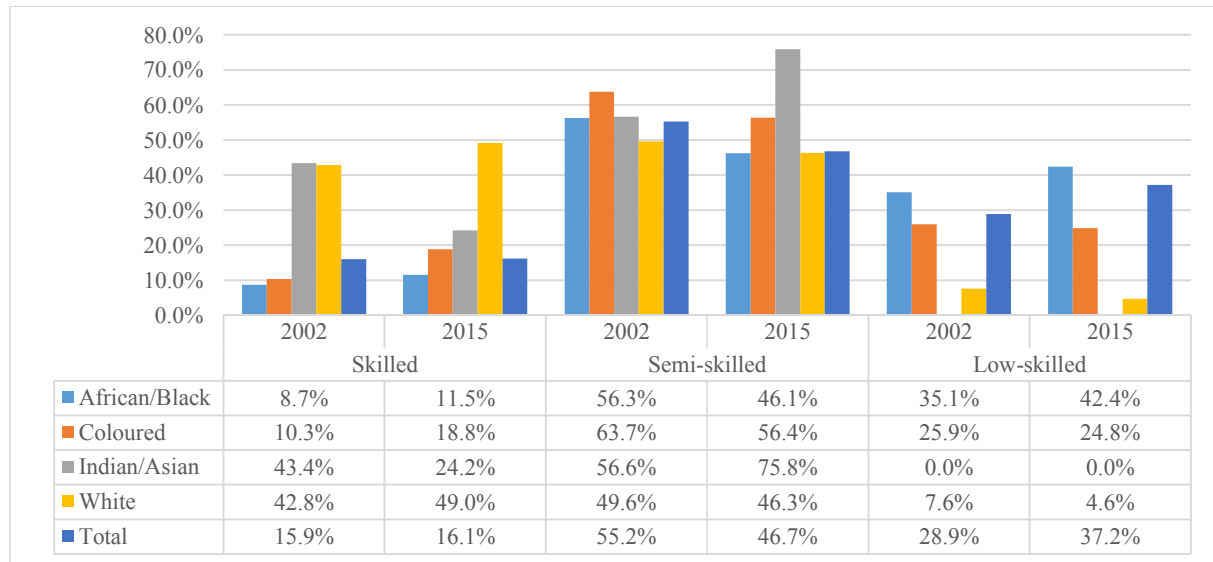
categories. To convey the extent of the imbalances it is necessary to analyse employment in terms of the breakdown of each population group by skills level.

Figure 3 below depicts employment composition of skills groups by population group for the period 2002 to 2015. This illustrates that within population groups, the white population had the highest proportion of skilled employment in 2015 at 49.0% (up from 42.8% in 2002) compared with 11.5% in the African population (up from 8.7% in 2002). Such was the legacy of lingering apartheid employment practices. For Coloureds and Indian/Asian the proportion of skilled workers was estimated at 18.8% and 24.2% respectively in 2015. The percentage of skilled workers increased by 2.8 percentage points for Africans, 8.5 percentage points for Coloureds, and 6.2 percentage points for Whites between 2002 and 2015. For the India/Asian population the skilled workforce decreased by 19.2 percentage, exaggerated by the fact that this population makes a small amount of the Free State's labour force. Therefore, there was a general increase in the proportion of skilled employment for all population groups, except India/Asian population group. The extent of the increase, however, was vastly different. The highest increase was observed in the Coloured population (8.5 percentage points), followed by Whites (6.2 percentage points) and then Africans (2.8 percentage points).

An estimated 42.4% of the African workforce was employed in low-skill occupation in 2015, compared to just 4.6% of the Whites. The proportion of Africans in low-skilled occupations has increased by 7.3 percentage points from 35.1% in 2002, while those of the White population decreased by 3.0 percentage points. Around 24.8% of the Coloured population were in low-skill occupation, a 1.1 percentage decline from 25.9% in 2002. Transformation of the Free State workforce has not materialized in the review period, instead the racial division have deepened. The decrease in the proportion of white employment within low-skilled employment, and the corresponding increase in the proportion of African within low-skilled employment, and the relatively small increase in the proportion of skilled African employment gives some indication of the lack transformation in the Free State labour market during the last 13 years.

Although there might be traces of transformation evident in figure 2 above, figure 3 certainly tells a different story. The lack of progress in building the skills profile within the African population is highlighted by figure 3 and needs to be addressed as a matter of urgency.

Figure 3: Skills levels by population groups: Free State Province

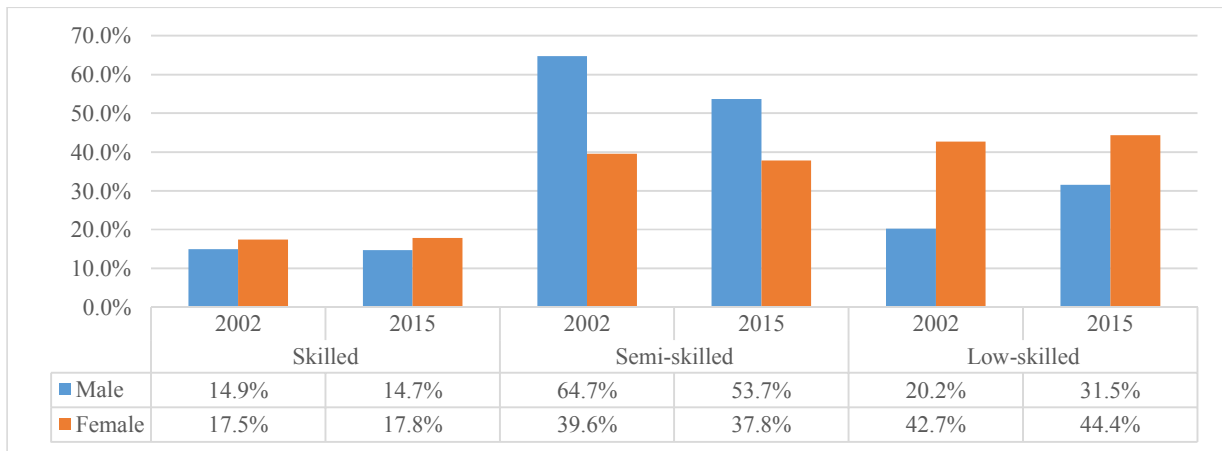


Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

6.3. Trends in terms of gender

Figure 4 below illustrates trends in terms of skills levels by gender. The majority of the male workforce in the province were employed in semi-skilled occupations in 2015, whilst the majority of the females were in low-skilled occupations. The proportion of males employed in skilled occupation decreased from 14.9% in 2002 to 14.7% in 2015, whereas for females it increased from 17.5% in 2002 to 17.8% in 2015. For both gender groups, declines were observed in the semi-skilled occupation as proportion of the workforce for each gender.

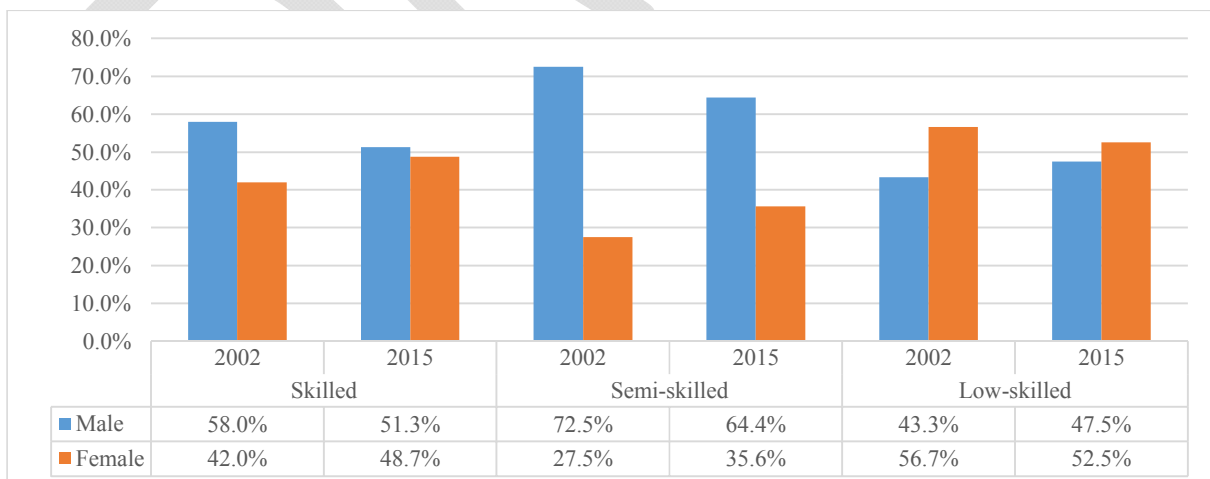
Figure 4: Skills levels by gender: Free State Province



Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

Skilled occupations are dominated by males with a share of 51.3% compared to females' share of 48.7%. Encouragingly, there has been a decline in the gap between males and females in skilled occupations, meaning employment of females in skilled occupations has increased between 2002 and 2015. In terms of low-skilled occupations, females still dominate but to a lesser extent. Figure 5 below indicates an improvement in the skills development of females.

Figure 5: Proportion of employment by skill level and gender: Free State Province

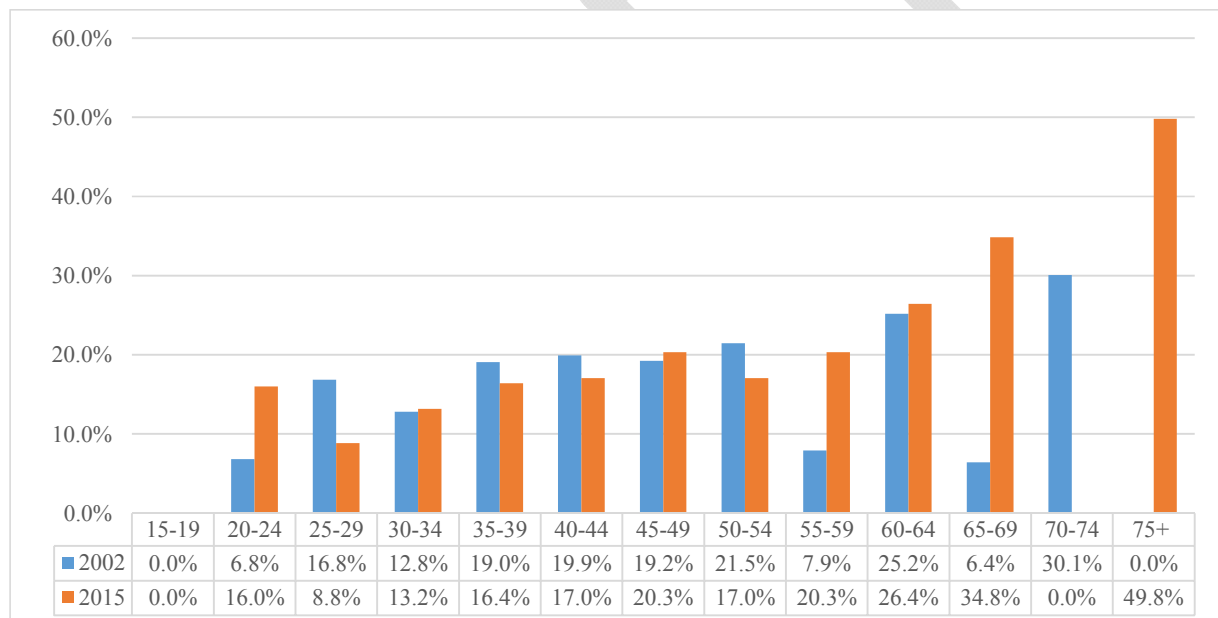


Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

6.4. Trends in terms of age groups

Figure 6 below depicts the extent of skilled workers for different age groups between 2002 and 2015. For the group 20-24 there has been a significant increase in the percentage of skilled workers, from 6.8% in 2002 to 16.0% in 2015. However, for the age group 25-29 a substantial decline was observed. Generally, there was a decline in the share of skilled workers among the youth for the period under review. For the older generation (55-75+ years of age), a colossal increase in the share of skilled workers was recorded. This makes sense as increased work experience would normally result in increased skill level.

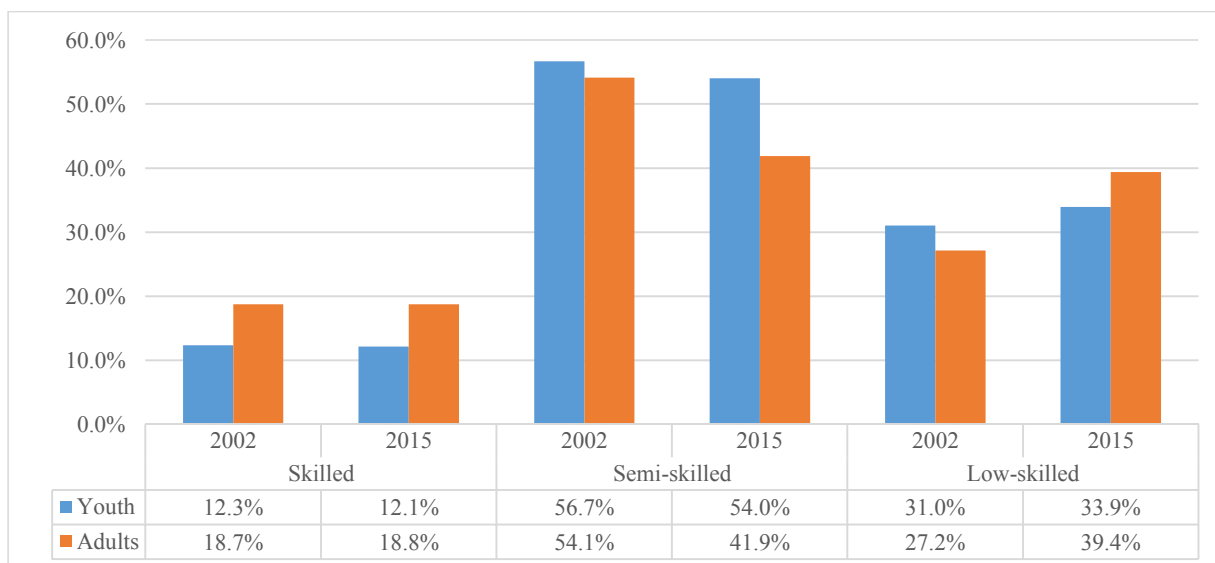
Figure 6: Percentage of workers in each age group who are skilled: Free State Province



Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

A major concern extracted from the data in figure above is the apparent decrease of youth in skilled occupation as a percentage share of the youth workforce. Skills development in the youth category remains critical for the province and needs to be address urgently as this category also bears the brunt of the chronic unemployment.

Figure 7: Proportion of youth and adult workers by skill level: Free State Province



Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

Figure 7 above depicts skills level trends within the youth¹ and adult² working population. Starting with the youth, the proportion of skilled workers in this category has decreased by 0.2 of a percentage point; from 12.3% in 2002 to 12.1% in 2015. In the same category, the share of workers in semi-skilled occupations decreased by 2.7 percentage points which together with the decrease in the proportion of skilled workers resulted in an increase in the proportion of low-skilled workers by 2.9 percentage points. All of this points to a deteriorating skills level for the youth in the province.

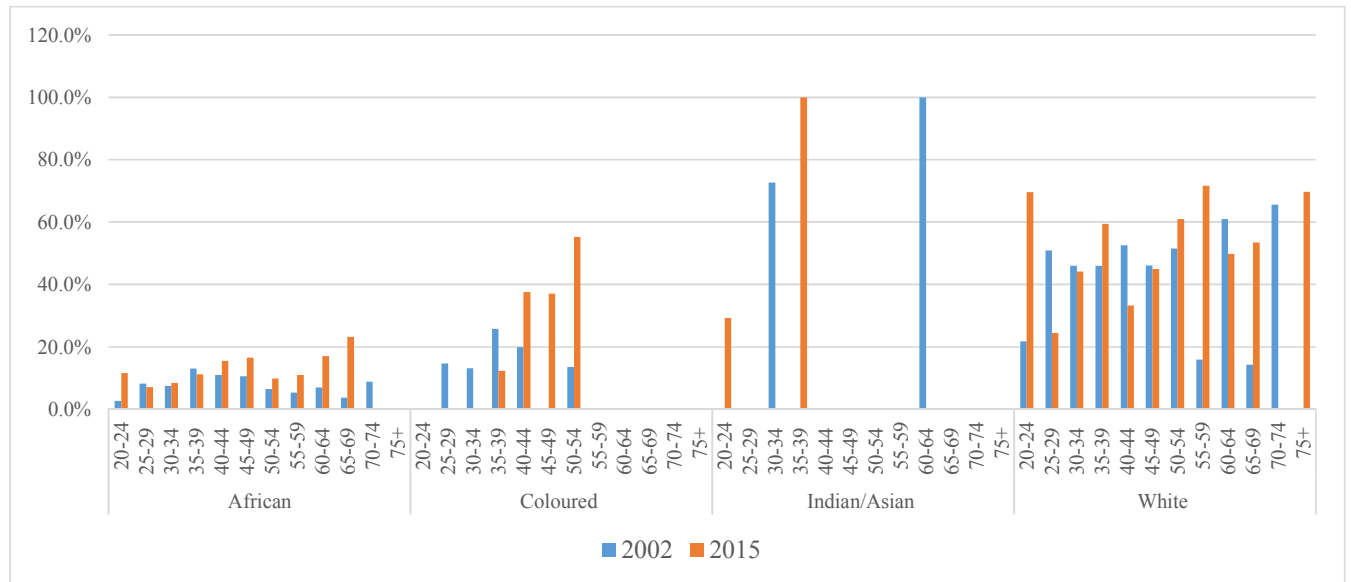
In the case of adult workers, there has been a marginal increase in the proportions of skilled workers from 18.7% in 2002 to 18.8% in 2015; an increase of 0.1 of a percentage point. The proportion semi-skilled has shown a weighty decrease of 12.2 percentage points, from 54.1% in 2002 to 41.9% in 2015. Lastly, the proportion of adult workers employed in low-skilled occupations increased from 27.2% in 2002 to 39.4% in 2015, representing a rise of 12.2 percentage points. Skills development in this group of the population is also not inspiring as the proportions

¹ Workers between the ages of 15 and 34 years old

² Workers above the age of 35

of the skilled workers has remained virtually unchanged while that of low-skilled has increased substantially.

Figure 8: Proportion of skilled workers in each age group by race: Free State Province



Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

Figure 8 above shows the changes in the percentages of workers in each age group according to race who are skilled for the period 2002 to 2015. As illustrated in the figure, there were much weaker gain in the African group across all age groups. For Africans, the percentage of workers in skilled occupations increased significantly in the age groups 60-64 and 70-74 years by 10.1 and 19.5 percentage points respectively. However, there were declines in the age group 25-29 and 35-39 by 1.1 and 1.9 percentage points. The majority of the skilled workers in the African group are in the age group 65-69 years with a percentage share of 23.2% in 2015; a massive increase from 3.7% in 2002 (Stats SA, 2002 and 2015).

Contrary to the African population, a significant percentage of the White population is employed in the skilled occupation. Major increases in workers employed in skilled occupation were observed in the age groups 20-24 years (47.8 percentage points), 55-59 years (55.8 percentage

points), 65-69 years (39.3 percentage points) and 75+ years (69.7 percentage points). It is clear from figure 8 that the White population still dominates the skilled occupations.

In summary, statistics from Statistics South Africa (GHS and QLFS data) indicate the following on the level of skills development in the Free State over the period 2002 to 2015:

- The share of skilled workers have increased marginally, while the low-skilled increased considerably at the expense of the semi-skilled. In 2015, 16.1% of the province's workers occupied skilled occupations, 46.7% were in semi-skilled occupations and 37.2% in low-skilled occupations.
- Within population groups, the white population had the highest proportion of skilled employment in 2015.
- There was uneven distribution of progress within population groups. Within African employment, the growth in skills, as a proportion, was much lower than in the other population groups
- Almost half of the African workforce is employed in low-skilled occupations.
- Skilled occupations are dominated by males, but there has been a decline in the gap between males and females.
- The legacy of Apartheid is still evident by the racial and gender division of skill levels.
- Transformation has failed to materialize during the period under review

Box 4: NDP Key Findings: Inadequate education system

- SA faces a low growth, middle income trap, characterised by:
 - Weak competition for goods and services
 - High unemployment
 - Low savings
 - A POOR SKILLS profile
- The quality of education for most black children is poor
- By the end of Grade 12, SA has lost HALF of every cohort entering the schooling system which wastes human potential and harms life-chances of our youth
- The post-school system is not well designed to meet our skills development needs
- The performance of universities is uneven
- Further education and training (FET): too small, poor output, not effective (65% of college students unable to find work experience)
- Problems with sectoral education and training authorities (SETAs):
 - Poor governance
 - Inadequate human resources
 - Poor management
 - No proper monitoring and evaluation
 - No accurate records of beneficiaries and impact
 - No linkages with the post-school sector

Source: The Presidency, National Development Plan, 2012

7. REVIEW OF THE FREE STATE LABOUR MARKET

The structural transformation in an economy is generally examined by the changes of the employment and economic output share of sectors. It is accepted that the most clear and easily measurable characteristic of the structural transformation in an economy is the change in the sectoral composition of labour. In this section of the paper, recent evidence on the nature of demand shifts for skilled and less skilled workers is considered. The purpose of this section of the paper is to try to determine whether economic transformation driven shifts in employer demand have continued to affect contemporary labour markets.

7.1. Overview of the Free State labour market

The Free State labour force (i.e. the number of employed and unemployed people) was estimated at 1 165 000 people in the second quarter of 2015, compared to 1 147 000 in the second quarter of 2014; representing an increase of about 1.6%. The reason for this increase in the labour force is solely due to an increase in the number of people employed (53 000 or 7.1%). During this period, the number of unemployed people decreased by 8.7%; from 401 000 in 2014 to 366 000 in 2015. It is disheartening to observe that the number of discouraged work-seekers increased 22.5% during the same period under review. This means that the number of unemployed people did not decrease only as a result of people finding employment, but also due to the increase in the number of people who have given up hope of finding employment and thus desist from searching. The increase in the number of discouraged work-seekers thus is reflective of the lack of confidence work-seekers have in the economy to create jobs, and also the extent of long-term employment.

The unemployment rate in the Free State Province decreased by 3.6 percentage points year on year, but increased by 1.0 of a percentage point quarter to quarter in the second quarter of 2015. The rate of unemployment averaged 32.7% in the last five quarters, with the highest recorded in quarter 2 of 2014 at 35.0%. Nationally, Free State has the second highest unemployment rate behind the Northern Cape. The national unemployment rate is estimated at around 25%. Clearly, unemployment in the Free State is a major challenge to policy-makers, averaging above the national rate, which by international standard is still considered significantly high.

Table 4: Overview of the Free State labour market

	Apr- Jun 2014	Jul- Sep 2014	Oct- Dec 2014	Jan- Mar 2015	Apr- Jun 2015	Qrt to Qrt change	Year on year change	Qrt to Qrt change	Year on year change
	Thousand						Percent		
Population 15-64 years	1 855	1 858	1 862	1 865	1 869	3	13	0.2	0.7
Labour Force	1 147	1 154	1 138	1 152	1 165	13	18	1.1	1.6
Employed	745	755	772	802	798	-4	53	-0.5	7.1
Formal sector (Non-agricultural)	495	499	507	518	520	3	25	0.5	5.0
Informal sector (Non-agricultural)	105	128	136	127	124	-4	19	-2.8	17.9
Agriculture	62	54	54	82	74	-7	12	-9.0	19.2
Private households	83	73	75	75	80	5	-3	6.1	-3.1
Unemployed	401	399	367	350	366	16	-35	4.7	-8.7
Not economically active	708	705	723	713	704	-9	-5	-1.3	-0.7
Discouraged work-seekers	76	78	77	92	93	1	17	1.4	22.5
Other(not economically active)	632	627	647	621	610	-11	-22	-1.7	-3.5
Rates (%)									
Unemployment rate	35.0	34.6	32.2	30.4	31.4	1.0	-3.6	1.0	
Employed / population ratio (Absorption)	40.2	40.6	41.5	43.0	42.7	-0.3	2.5		
Labour force participation rate	61.8	62.1	61.1	61.8	62.3	0.5	0.5		

Source: Statistics South Africa, Quarterly Labour Force Survey, 2nd Quarter 2015

According to the 2011 Census, the labour market picture looked more bleak in 2011 than it did in 1996. The number of employed people decreased by 7.2%, whilst the number of unemployed increased by 4.7% resulting in the unemployment rate increasing from 30.2% in 1997 to 32.6% in 2011. The share of employed people as a percentage of the working age population decreased from 43.1% in 1996 to 38.3% in 2011; representing a fall of 4.8 percentage points. This means that the burden on the employed to support those who cannot find employment is increasing continuously (See table 5 below) .

Table 5: Labour market and unemployment rates (official): Census 1996, 2001, 2011 and Community Survey 2007

Free State	1996		2001		2007		2011		1996 - 2011	
	Total	% Share	Total	% Share	Total	% Share	Total	% Share	% Growth	Share Change
Employed	699 727	43.1%	589 732	33.9%	709 056	40.2%	649 661	38.3%	-7.2%	-4.8%
Unemployed	299 688	18.5%	445 982	25.6%	396 692	22.5%	313 793	18.5%	4.7%	0.1%
Not economically active	624 769	38.5%	706 415	40.5%	659 557	37.4%	732 517	43.2%	17.2%	4.7%
Unemployment Rate	30,0		43,1		35,9		32,6			0.0%
Working age population	1 624 183	100.0%	1 742 128	100.0%	1 765 305	100.0%	1 695 971	100.0%	4.4%	0.0%

Source: Statistics South Africa, Census 2011

7.2. Employment trends

An examination of structural change on total employment in each sector is revealing as to which sectors lost or gained most as a result of structural change. Table 6 below illustrate the number of people employed in each sector of the provincial economy for the period 1996 to 2013. The number of people employed in the primary industries have declined dramatically during the review period, while those employed in the tertiary industries have been on a rapid increase; which coincides with the transforming structure of the provincial economy. In 1996, the primary industries employed about 209 580 workers, but this decline by 57.0% to 90 877 in 2013. The number of people employed in the secondary industries have remain virtually the same at an average of about 110 604. The beneficiaries in term of employment numbers are the tertiary industries with an increase in employment of 35.9%; from 387 393 in 1996 to 526 468 in 2013. The transformation of the provincial economy from primary industries to the services industries can also be seen in the labour market, with human resources been transferred from the primary industries to the tertiary industries. The primary industries shed an estimated 118 703 jobs during the period under review, whilst the tertiary industries gained about 139 075 new jobs. The majority of the jobs lost during this period were in mining (-80 303). Agriculture shed 38 401 jobs followed by manufacturing with 7 252 jobs lost. The community services and trade created the most jobs at 61 343 and 57 336 respectively. It is clear from the table that the labour market transformation is in full swing with the tertiary industries staking their dominance.

Table 6: Number of people employed per sector

	1996	1997	1999	2001	2003	2005	2007	2009	2011	2013
Agriculture	93 993	91 838	109 427	107 197	93 147	78 008	69 257	60 980	55 286	55 592
Mining	115 587	111 391	68 363	55 213	53 175	43 166	45 882	41 632	36 896	35 284
Primary Industries	209 580	203 229	177 790	162 410	146 322	121 173	115 139	102 612	92 182	90 877
Manufacturing	65 690	66 040	75 963	77 327	72 227	70 417	69 318	65 623	60 484	58 438
Electricity	3 479	3 295	3 074	2 765	2 607	2 467	2 585	2 884	3 026	3 251
Construction	37 156	33 768	34 036	33 091	32 938	40 052	46 818	47 094	45 177	44 950
Secondary Industries	106 325	103 102	113 073	113 183	107 772	112 936	118 721	115 601	108 688	106 639
Trade	96 605	103 601	137 323	159 550	158 217	167 448	170 946	165 592	157 487	153 941
Transport	20 395	20 583	23 388	23 636	23 812	27 587	30 918	32 402	32 112	31 981
Finance	62 071	61 132	65 781	63 336	60 854	68 681	77 912	78 643	75 052	75 495
Community services	121 923	124 255	145 575	149 194	147 856	153 990	162 073	170 403	175 365	183 266
Households	86 398	85 103	94 896	97 383	92 277	92 366	96 309	92 332	84 958	81 784
Tertiary Industries	387 393	394 673	466 962	493 098	483 016	510 071	538 158	539 372	524 973	526 468

Source: IHS Global Insight, Regional eXplorer, 2015

As already demonstrated in table 6 above, the share of the primary industries in employment in the Free State has decreased drastically between 1996 and 2013 from 29.8% to a mere 12.6%. On the other hand the share of the tertiary industries has increased momentarily from 55.1% in 1996 to 72.7% in 2013. Almost three quarters of the workers are employed in the tertiary industries. The biggest employers in 2013 were the community services (25.3%), trade (21.3%) and private households (11.3%), all of which are the services sectors. Agriculture, however, remains a significant contributor to employment in the province with a share of 7.7% in spite of its decline in importance. The mining sector's fall is the most profound. In 1996, mining was the second largest employer with a share of 16.4% but has since been relegated to a share of only 4.9% in 2013 (see table 7 below).

The structural change in the provincial economy has clearly been accompanied by the transfer of resources to the services sectors. These changes have indeed necessitated the need to reskill the human capital in skills demanded by the now dominant tertiary industries. The service sector jobs that have increased in importance differ in some significant respects from traditional manufacturing and low-skills jobs typically found in the primary industries. Service industries have a higher incidence of part-time and temporary workers, rely more on unpaid overtime and make greater use of flexible work arrangements. At the same time, the proportion of workers with at least a university degree is, on average, higher in services than in manufacturing, suggesting that

work is becoming more knowledge-intensive. An examination of the labour market indicates that structural change is indeed supporting the province's evolution towards a knowledge-based economy.

Table 7: Employment share by sector

Industries	1996	1997	1999	2001	2003	2005	2007	2009	2011	2013	Average (1996-2013)
Agriculture	13.4%	13.1%	14.4%	13.9%	12.6%	10.5%	9.0%	8.0%	7.6%	7.7%	10.9%
Mining	16.4%	15.9%	9.0%	7.2%	7.2%	5.8%	5.9%	5.5%	5.1%	4.9%	7.6%
Primary Industries	29.8%	29.0%	23.5%	21.1%	19.9%	16.3%	14.9%	13.5%	12.7%	12.6%	18.6%
Manufacturing	9.3%	9.4%	10.0%	10.1%	9.8%	9.5%	9.0%	8.7%	8.3%	8.1%	9.2%
Electricity	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%
Construction	5.3%	4.8%	4.5%	4.3%	4.5%	5.4%	6.1%	6.2%	6.2%	6.2%	5.3%
Secondary Industries	15.1%	14.7%	14.9%	14.7%	14.6%	15.2%	15.4%	15.3%	15.0%	14.7%	15.0%
Trade	13.7%	14.8%	18.1%	20.8%	21.5%	22.5%	22.1%	21.9%	21.7%	21.3%	20.3%
Transport	2.9%	2.9%	3.1%	3.1%	3.2%	3.7%	4.0%	4.3%	4.4%	4.4%	3.6%
Finance	8.8%	8.7%	8.7%	8.2%	8.3%	9.2%	10.1%	10.4%	10.3%	10.4%	9.3%
Community services	17.3%	17.7%	19.2%	19.4%	20.1%	20.7%	21.0%	22.5%	24.2%	25.3%	20.9%
Households	12.3%	12.1%	12.5%	12.7%	12.5%	12.4%	12.5%	12.2%	11.7%	11.3%	12.3%
Tertiary Industries	55.1%	56.3%	61.6%	64.1%	65.5%	68.5%	69.7%	71.2%	72.3%	72.7%	66.5%

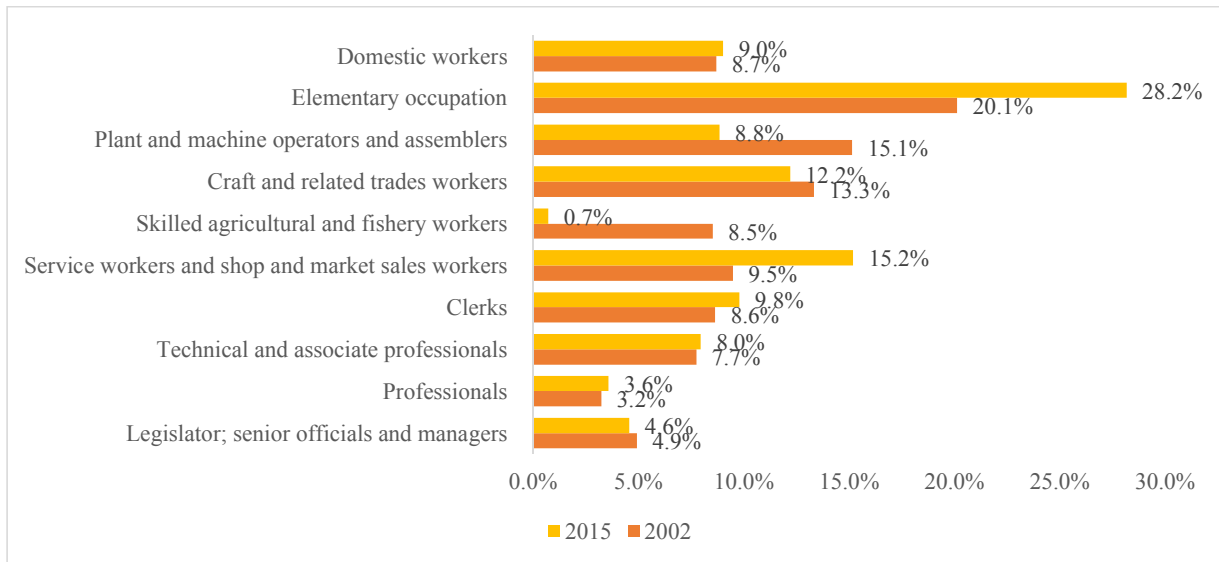
Source: IHS Global Insight, Regional eXplorer, 2015

Structural shifts in the economy will impact on occupational groups in the economy due to different sectors of the economy having different occupational mix requirements. For instance, primary sectors make greater use of unskilled or semi-skilled labour, while services make greater use of professionals. Differences in the growth of sectors will then indirectly translate into differences in the growth of occupational groups (Bhorat, et al,). The main structural changes in the economy were outlined in section four. It was shown that the primary change in the Free State economy since 1996 has been the dramatic decline of the primary sector and the rapid rise of the services sector, with the secondary sector largely unchanged.

Trends that one would expect to see, based on the structural transformation of the provincial economy, is a rising share of the more skilled labour that is associated with capital-intensiveness production (i.e. professionals and managers) in addition to the declining share of the lower skilled occupations such as labourers, farming and forestry workers, production workers and basic services workers. Naturally, the declining share of one component of employment may lead to a

statistical increase in the share of other occupational groups and therefore one may expect the share of non-production occupations to increase such as clerical and sales and transport occupations.

Figure 10: Share of employment by occupation: Free State Province



Source: Statistics South Africa, General Household Survey, 2002 and Quarterly Labour Force Survey, 2015

Figure 10 above displays trends in the share of employment by occupation. The figure shows that between 2002 and 2015 a considerable share of employees in the Free State were in *elementary occupations*, and it has increased significantly from 20.1% to 28.2% during this period. Substantial declines recorded in the semi-skilled category were largely due to declines in the *skilled agriculture and fisheries workers* (7.8 percentage points), followed by *plant and machine operators and assemblers* (6.3 percentage points) and *craft and related trades workers* (1.1 percentage points). The skilled occupation *legislator; senior officials and managers* also decreased, though by a meagre 0.3 of a percentage point.

The semi-skilled occupations remain the largest employers in the province although their percentage share has declined by 8.4 percentage points, from 55.1% in 2002 to 46.7% in 2015. In 2015 an estimated 376 820 workers were employed in this category, down from 427 262 workers

in 2002. The skilled occupations only increased by a mere 5.0%, from 123 316 workers in 2002 to 129 809 in 2015 (Statistics SA, 2015).

Although the structural transformation of the provincial economy is indicative of the growing demand for a skilled workforce, the majority of the employed are still found in semi-skilled occupations and to a lesser extent in the low-skilled. Only a small fraction (around 8.2%) were employed in the skilled occupation in 2015. The changes in the provincial economy have not translated in changes in the labour market, which could be explained by the lack of appropriate skills in the province. The following section looks into the level of education of the province's workforce.

7.3. Level of education

According to table 8 below, the supply of labour in the unskilled labour market is huge, while the demand for labour in that market is low. An estimated 90.7% of the labour force has matric or less, while only 9.3% has post-secondary school qualification. It is, therefore, clear that the supply of labour in the unskilled labour market in the Free State is huge, while the demand for labour in that market is low. Supply is renewed through simple population growth in the absence of good education and skills training. Demand decreases as technology provides more efficient ways of performing the tasks. On the opposite end of the scale, the supply of labour in the highly skilled labour market is very limited and the demand very high. Only just over 2% of the Free State labour force has a degree or higher qualification. Emigration of educated and skilled population to other provinces and outside the country reduces supply and immigration of skills into the province is in limited quantities. Efficiency gains of high technology most help skilled workers to be more productive, increasing the profit from the products and services they offer, thus further increasing demand.

Table 8: Labour market indicators by highest level of education, 1st quarter 2015.

Highest education level	Share of Employed	Share of Unemployed	Unemployment rate	Discouraged job seeker share	Other not economically active share	Labour force share
Grade R/0	0.2%	0.0%	0.0%	0.7%	0.1%	0.1%
Grade 1/Sub A	0.9%	0.4%	16.7%	1.4%	1.5%	1.0%
Grade 2/Sub B	0.8%	0.4%	18.2%	1.4%	1.8%	1.1%
Grade 3/Standard 1	1.8%	0.9%	19.2%	2.8%	1.4%	1.5%
Grade 4/Standard 2	1.5%	0.7%	19.0%	2.1%	3.1%	1.9%
Grade 5/Standard 3	2.4%	0.9%	15.2%	2.1%	2.1%	2.0%
Grade 6/Standard 4	3.9%	3.2%	27.0%	4.9%	4.8%	4.1%
Grade 7/Standard 5	5.3%	5.2%	31.1%	5.6%	6.9%	5.9%
Grade 8/Standard 6/Form 1	6.4%	8.2%	37.0%	10.4%	10.6%	8.4%
Grade 9/Standard 7/Form 2	6.6%	9.7%	40.3%	6.9%	13.3%	9.5%
Grade 10/Standard 8/Form 3	12.0%	18.0%	40.8%	15.3%	14.3%	14.1%
Grade 11/Standard 9/Form 4	11.5%	17.1%	40.5%	14.6%	13.7%	13.5%
Grade 12/Standard 10/Form 5/Matric	29.7%	30.1%	31.8%	25.0%	16.4%	24.9%
NTC I/N1/NIC/(v) Level 2	0.1%	0.2%	50.0%	0.0%	0.3%	0.2%
NTC II/N2/NIC/(v) Level 3	0.1%	0.0%	0.0%	0.0%	0.4%	0.2%
NTC III/N3/NIC/(v) Level 4	0.1%	0.2%	50.0%	1.4%	0.1%	0.2%
N4/NTC 4	0.6%	0.0%	0.0%	0.7%	0.6%	0.5%
N5/NTC 5	0.3%	0.2%	25.0%	0.0%	0.1%	0.2%
N6/NTC 6	0.7%	0.7%	33.3%	0.7%	0.6%	0.7%
Certificate with less than Grade 12/Std 10	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%
Diploma with less than Grade 12/Std 10	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%
Certificate with Grade 12/Std 10	2.1%	0.7%	13.8%	0.0%	0.3%	1.1%
Diploma with Grade 12/Std 10	4.4%	1.1%	10.3%	1.4%	1.3%	2.6%
Higher Diploma	1.1%	0.2%	7.1%	0.0%	0.1%	0.5%
Post Higher Diploma (Masters; Doctoral Diploma)	0.5%	0.0%	0.0%	0.0%	0.3%	0.3%
Bachelor's Degree	2.8%	0.2%	2.9%	0.0%	0.6%	1.4%
Bachelor's Degree and Post Graduate Diploma	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%
Honours Degree	0.7%	0.0%	0.0%	0.0%	0.0%	0.3%
Higher Degree (Masters/PhD)	0.7%	0.0%	0.0%	0.0%	0.1%	0.3%
Other	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%
Do not know	0.5%	0.4%	25.0%	0.0%	0.1%	0.3%
No schooling	1.5%	1.3%	29.2%	2.8%	4.8%	2.7%
N=	100.0%	100.0%	31.5%	100.0%	100.0%	100.0%

Source: Statistics South Africa, SuperWeb, Quarterly Labour Force Survey, 1st Quarter 2015

Unemployment in the Free State is highest among those with no Grade 12/Matric as illustrated in table 8 above. For those with just Grade 12/Matric, the unemployment rate is estimated at around 31.8%. To make matters worse, those leaving school without Grade 12/Matric have the highest unemployment rate at around 40%.

What table 8 above is essentially saying is the following:

1. A matric/national certification without university exemption subjects and marks is poor preparation for employment. About 24.9% of the labour force has it and just over a third of them are unemployed. In the first quarter of 2015, this group represented around 30.1% of unemployed Free State residents.
2. Worse than completing a national certificate is leaving school without one. Nearly half (40.5%) of those with Standard 9 / Grade 11 and wanting to work are unemployed.
3. An overwhelming 95.8% of the discouraged job-seekers are those with only Grade 12 or less.
4. Unemployment is most prominent amongst the less skilled (i.e. those with Grade 12 or less). The evidence lends greater support to the hypothesis that education reduces the likelihood of unemployment.
5. A key feature of structural unemployment is that unemployment is not universal. Pockets experience close to full employment while other groups have high unemployment. This table clearly indicates a problem of structural unemployment in the province.

Education is key to unemployment and growth. Unless it is recognised that education is the most important long-term solution to structural unemployment, and steps are taken the problem of unemployment will continue to persist in the province. Skilled labourers are by and large employed in the province, whereas unskilled labourers are unemployed at 30% to 40% levels.

8. DEMAND FOR SKILLS

Improving the ability of policy-makers, planners and researchers to identify skills that are in short supply or for which demand exists, has become an important challenge in the policy-making environment. The demand for skills can be analysed in relation to a number of labour market and economic indicators. An informed understanding of demand for skills will require a combined analysis of as many relevant factors as possible over a period of time. Typically, the demand for skills is influenced by, but not limited to, the following factors, which on their own, are unlikely to provide a clear picture of the demand that may exist for skills in an economy:

- Changes in the main economic sectors in which people are employed;
- Employment trends by occupational group at the sector level;
- Trends in the geographic location of employment of people in different sectors and occupations;
- The formal qualifications of workers, across sectors and occupations; and
- The types and levels of skills that are utilised by firms (e.g. basic, intermediate, specialist, managerial, etc.).

The preceding sections provided an analysis of firstly, the main economic sectors in the Free State, classified as the primary, secondary, and services sectors. The aim of this section was to highlight key features of these sectors and their relation to the economy as a whole. Secondly, a profile of the skills base of the Free State was provided and lastly, an analysis of the performance of the provincial labour market was conducted. Taking a selection of the above variables, a picture emerges of the state of demand for skills in Free State Province over the recent past.

An analysis of the structure of the provincial economy revealed the following:

- The decline in the primary sector contribution to provincial output has been compensated for by the rise of the service sectors; the services sector has shown the largest growth.
- The *general government services* sector has surpassed the *mining and quarrying* sector as the largest sector in the province.
- The *finance, real estate and business services* and *wholesale, retail and motor trade; catering and accommodation* have expanded significantly over the last twenty years
- Manufacturing remains a significant contributor to the provincial output, but its share contribution has been declining.
- Mining as a sector shows moderate decline, however, this has been associated with large-scale job losses as mining houses turn to technology to improve profitability.

With respect to the labour force:

- Employment share of the tertiary sector increased significantly at the expense of the primary sector.

- The share of the government sector increased significantly, making government the biggest employer in the province with a quarter of the workforce employed in this sector.
- The services sectors employ about 60% of the Free State's workforce
- The transformation of the provincial economy from primary industries to the services industries can also be seen in the labour market, with human resources been transferred from the primary industries to the tertiary industries
- Unemployment is highest amongst the less skilled individuals.
- Highly skilled individuals are more likely to find employment than their low-skilled counterparts.

And finally, on the existing level of skills of the workforce:

- The Free State workforce has become less skilled over the past 13 years which is contradictory to the needs of the labour market identified in the discussion about the transformation of the provincial economy.
- The skilled workers have increased marginally, while the low-skilled increased considerably at the expense of the semi-skilled.
- Within population groups, the white population had the highest proportion of skilled employment in 2015.
- There was uneven distribution of progress within population groups. Within African employment, the growth in skills, as a proportion, was much lower than in the other population groups
- Almost half of the African workforce is employed in low-skilled occupations.
- Skilled occupations are dominated by males, but there has been a decline in the gap between males and females.
- The legacy of Apartheid is still evident by the racial and gender division of skill levels; i.e. skilled, technical, professional and managerial posts are still dominated by Whites.
- African workers remain underrepresented in certain high skill occupations and this should also form a focal point in linking skills and equity where training can assist chances for promotion and mobility in the workforce.
- Transformation has failed to materialize during the period under review.

- Employment equity remains a challenge, with the majority of senior management and professional posts still held by white males.

The analysis presented here reflects the state of the skills in the Free State, based on a selection of a few key indicators. Although it is not possible to draw linear conclusions based on such analysis the findings provide pointers to researchers, analysts and policy makers on where possible shifts may occur within the local labour market and where imbalances could arise.

9. POLICY RECOMMENDATIONS

The analysis in this study strongly suggests that two broad trends are likely to be occurring in the employment occupational distribution of the province's labour market. Firstly, the demand for skilled professionals is likely to increase, largely as a result of the changing nature of the economy. Secondly, in the aggregate, the demand for labourers will either stagnate or in certain sectors (i.e. primary sectors), decline considerably. Given the racial-skills overlap in the provincial labour market, these changes also map almost perfectly onto racial groups. More specifically, it is primarily African workers (largely low-skilled) that will more likely experience a non-increasing demand for their services, while White workers (being disproportionately skilled) are likely to be in greater demand. This is based on the assumption that the race-skills proportions remain unchanged in the short to medium-term.

To tackle these identified challenges, the following policy interventions are recommended. Firstly, it is absolutely critical to design policies that are aimed at raising the number of skilled individuals in the provincial economy, at a rate and magnitude that has not been achieved in the past. Secondly, equally important, part of this skills enhancement strategy must have an inherent racial component, which will ensure that the skills composition of the workforce starts mismatching with its racial composition.

In addition to the two interventions, it is important that those employed in the diminishing primary sectors are reskilled or provided with some form of skills upgrade. To deal with labourers bearing the brunt of structural change in the economy, Bhorat et al (2008) endorse the Social Plan policy

emanating from the mining industry. The Social Plan recognises that labourers will suffer disproportionately from sectoral adjustments, and hence interventions may be required to ease the high economic and welfare costs of the adjustment period.

Government needs to pursue SMME development strategies that would incorporate the unemployed and those participating in survivalist activities in a more stable informal sector with stronger linkages into the formal economy. The priority would be more on job creation than significant skills upgrading. Appropriate low skills training in operating and sustaining SMMEs, self-employment, basic literacy and numeracy training would be the most important components of such a strategy.

Government should create a programme which is aimed at improving information on skills shortages in order to have clear and mutual understanding of the skills demands of the province. Development of a skills profile of the province is crucial in this regard.

There is an unacceptably high percentage of the current workforce that have low education levels, and, in general, low literacy levels among youth is still an issue. These trends will further contribute to skills gaps in the future. The number of people with less than high school education and the high school drop-out rate is still too high. To address this problem, there has to be an improvement in the quality of education and training and its responsiveness to labour market needs. A comprehensive strategy to reduce skills mismatches requires first that the quality of education is secured and participation raised, up until the end of the secondary level. Second, it demands a diversification approach to providing education, recognizing that both medium skills (provided through technical and vocational education) and high skills (provided through tertiary education) are required in the labour market and for economic growth. And third, it implies improving the relevance of education and training for the labour market through strengthened channels of communication between education and workplace actors, as well as public-private partnerships. There is also a need for more effective linkages between the secondary and post-secondary systems and employment opportunities. Students are not always following the appropriate programmes that will help them fully avail of opportunities in the labour market. These

challenges are seen to be contributing to skills shortages and gaps in the supply of post-secondary graduates.

The importance of career planning and preparing youth for future labour market cannot be emphasized enough. There needs to be a major focus on appropriate in-school career counselling with an emphasis on early intervention. Counsellors, youth, parents and the general community need access to valid and up-to-date labour market information so they can be better informed about the range of available employment options. Youth are currently planning their careers without exposure to the full range of options, especially about opportunities in the skilled trades occupations. Parents need to be better informed about opportunities in the province, and employment counsellors need to ensure their work with youth includes a stronger focus on matching career choices with labour market opportunities.

Combating the skills crisis should not be the exclusive preserve of government. The Free State government and its partners (employers, business, training establishments – colleges, universities) should work towards the development of learnership programs and curricula that adhere to the needs of business and government. In fact, these stakeholders should ensure that curriculum planning and coordination become a priority in learnership programme management. These programmes should specifically targeted the youth.

Apprenticeship: Employers and the education system have a vital role to play in supporting the development and retention of experienced and qualified apprentices and journeypersons in the province to help meet emerging demands and skills shortages.

10. CONCLUSION

An important feature of the structural change that has occurred over the past decade or so has been the growing awareness of the importance of “human resources” as a factor in economic performance. Even when unemployment has been at its highest, there has been evidence of skill shortages, which in turn have been interpreted as signs of qualitative mismatches between labour supply and demand. It has become increasingly evident that a well-educated and trained labour

force is critical to the process of adjustment to economic change and technological innovation and indeed, is critical to the competitiveness of individuals, enterprises, and entire economies.

The relationship between educational attainment and unemployment is strongest for those with the lowest level of attainment; they consistently face the highest incidence of unemployment. The lack of education and poor levels of skills and experience have made a serious dent on human capital, whereas human capital plays a pivotal role in economic growth and the development of a region. Therefore, any economic policy that does not recognise that until education is fixed, we will suffer high and persistent unemployment is ill-informed. It cannot be stressed hard enough that education and skills development are key to combating unemployment and inducing economic growth.

DRAFT

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