



UNIVERSITY OF THE WESTERN CAPE
DEPARTMENT OF ECONOMICS

Youth in the South African labour market – the first 25
years since the economic transition

by

Refuwe Ntamane

(3427984)

A full dissertation submitted in partial fulfilment of the requirement for the degree of Masters
of Commerce in the Department of Economics,
University of the Western Cape

Supervisor: Prof Derek Yu

July 2021

<http://etd.uwc.ac.za/>

DECLARATION

I declare that “*Youth in the South African labour market – the first 25 years since the economic transition*” is my own work, that it has not been submitted for any degree or examination in any university, and that all the sources that I have used or quoted have been indicated and acknowledged by complete references.

Refuwe Ntamane

Signature: 

Date: 31 July 2021



UNIVERSITY *of the*
WESTERN CAPE

ABSTRACT

The South African economy is confronted with various socio-economic problems. In particular, the persistently high and rising unemployment rate (especially for the youth), which has always been one of them. Unemployment has been generally classified as structural because of the mismatch between skills that the jobseekers are willing to supply and skills that are actually demanded by employers for vacancies that are available. Youths are less likely to find employment and the employed youths are more likely to be retrenched during recessions due to their lack of experience.

Therefore, the study examined how the youth has been faring in the South African labour market since the advent of democracy. It explored and analysed the demographic and education attainment characteristics of the youth labour force, employed and unemployed, using the 1995-2019 labour survey data released by Statistics South Africa. The empirical findings revealed that the male youth group was dominating in the labour force and the majority of the employed youth lived in Gauteng and KwaZulu-Natal provinces. The top industries of which the employed youth are a part, include wholesale and retail, and CSP services. Additionally, the dominating unemployed youth were found to be females, Africans, aged 25 years and younger, with low levels of education.

Furthermore, the results demonstrated that youths who were less likely to enter the labour force were females, Africans, aged between 15-24 years, not married, living in rural areas and the Eastern Cape Province, and had a great number of children below 15 years and elderly above 60 years living in the household. On the other hand, the findings also revealed that youth individuals who were more likely to be unemployed were males, Africans, aged 25-34 years and those residing in urban areas.

The study concluded by suggesting various policy recommendations, such as improving quality and quantity of education, promotion of informal sector development and youth entrepreneurship, job seeking transport subsidy and a revisit of the youth wage subsidy.

Keywords: Youth, Labour market outcomes, employment, unemployment, South Africa

JEL Codes: J00, J20

ACKNOWLEDGEMENTS

First and foremost, I would like to thank God for the power. He has vested in me to start and see this project through, the successful completion of this paper would not have been possible without His grace.

I extend my sincere gratitude to my supervisor Prof. Derek Yu, for suggesting the topic, and for his patience, understanding, thorough guidance and encouragement to complete this research paper. His constructive criticism, immense knowledge and support have assisted me during the time of my research and writing; it has been a great honour to work under his supervision.

I deeply acknowledge and wish to express my gratitude to my father and brother, Simon Ntamane and Paki Ntamane who have always shown me enormous love and support throughout my life. I am also extremely grateful to my best friend, Yanga Ntsadu, for his unparalleled support and encouragement to complete this paper. Thank you for allowing me to pursue my dreams.

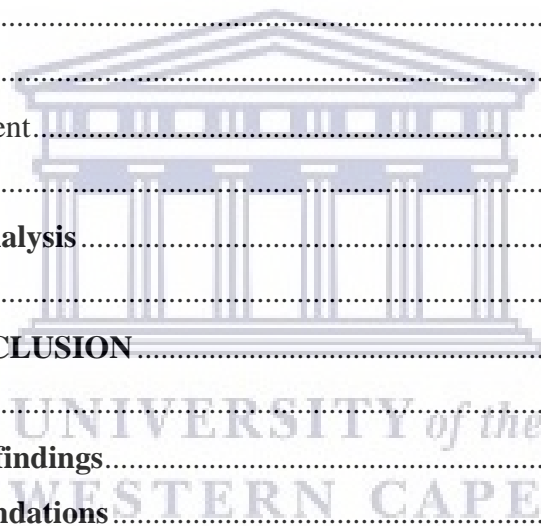
To the University of the Western Cape and National Research Foundation, thank you for giving me this opportunity and supporting me financially.

Finally, gratitude also goes to members of the Tlhakwaneng and Basieng clans, all my colleagues and close friends who directly and indirectly had a contribution in completion of this project.

TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF ABBREVIATIONS	vii
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Background and problem statement	1
1.2 Objectives of the study	1
1.3 Outline of the study	2
CHAPTER TWO: LITERATURE REVIEW	3
2.1 Introduction	3
2.2 Conceptual framework	3
2.2.1 Defining Youth	3
2.2.2 Labour force and labour force participation rate	3
2.2.3 Employed	4
2.2.4 Unemployment and unemployment rate	4
2.2.5 Types of unemployment	5
2.2.6 Other concepts	7
2.3 Theoretical Framework	8
2.3.1 Labour Supply.....	8
2.3.2 Labour Demand	11
2.3.3 Human Capital Theory.....	14
2.4 Causes of youth unemployment	16
2.5 Review of past empirical studies	16
2.5.1 Studies using cross-sectional data.....	17
2.5.2 Studies using panel data.....	19
2.6 Conclusion	21
CHAPTER THREE: METHODS AND DATA	21
3.1 Introduction	21

3.2	Methodology	22
3.3	Data	23
3.3.1	October Household Survey (OHS)	23
3.3.2	Labour Force Survey (LFS).....	24
3.3.3	Quarterly Labour Force Survey (QLFS).....	24
3.4	Limitations	25
3.5	Conclusion	25
CHAPTER FOUR: EMPIRICAL FINDINGS		26
4.1	Introduction	26
4.2	Descriptive statistics	26
4.2.1	Overall long-term trends	26
4.2.2	Labour force.....	27
4.2.3	Employment	29
4.2.4	Unemployment.....	33
4.2.5	Other results	36
4.3	Econometrics analysis	38
4.4	Conclusion	46
CHAPTER FIVE: CONCLUSION		47
5.1	Introduction	48
5.2	Review of main findings	48
5.3	Policy recommendations	49
REFERENCES		52
APPENDIX		52



LIST OF ABBREVIATIONS

AGR	Actual growth rate
CSP	Community, social & personal
CU	Chronic unemployed
EAR	Employment absorption rate
ILO	International labour organization
LF	Labour force
LFS	Labour force survey
LFPR	Labour force participation rate
MC	Marginal cost
NBS	National Bureau of Statistics
NIDS	National income dynamics study
OECD	Organisation for economic co-operation and development
OHS	October household survey
QLFS	Quarterly labour force survey
SAYPS	South African young person survey
SMMEs	Small, medium and micro-enterprises
StatsSA	Statistics South Africa
TGR	Target growth rate
TU	Transitory unemployed



LIST OF TABLES

Table 4.1: Profile of youth and adult labour force (%), selected years.....	28
Table 4.2: Profile of employed youth and adult (%), selected years.....	30
Table 4.3: Work activities of employed youth and adult (%), selected years.....	31
Table 4.4: Profile of unemployed youth and adult (%), selected years.....	33
Table 4.5: Youth and adult unemployment rates (%), selected years.....	35
Table 4.6: Target growth rates, actual growth rates and employment absorption rates, selected periods.....	37
Table 4.7: Target growth rates, actual growth rates and employment absorption rates of youth and adult by personal and geographical characteristics, 1995-2019.....	37
Table 4.8: Probit regressions on labour force participation likelihood of working-age population, selected years.....	39
Table 4.9: Probit regressions on labour force participation likelihood of youth working-age population only, selected years.....	42
Table 4.10: Heckprobit regressions on unemployment likelihood of working-age labour force (conditional on participation), selected years.....	44
Table 4.11: Heckprobit regressions on unemployment likelihood of youth labour force only (conditional on participation), selected years.....	45
Table A1: Labour market aggregates of youth working-age population, 1995-2019.....	56
Table A2: Labour market aggregates of adult working-age population, 1995-2019.....	57

LIST OF FIGURES

Figure 2.1: The impact of an increase in wages on work hours.....	9
Figure 2.2: The market labour supply curve.....	11
Figure 2.3: The firm's decision of hiring in the short run.....	12
Figure 2.4: The market labour demand curve.....	14
Figure 2.5: Potential earnings stream of a Matriculant compared to a Graduate.....	15
Figure 4.1: Labour force participation rates of youth and adults (%), 1995-2019.....	26
Figure 4.2: Unemployment rates of youth and adults (%), 1995-2019.....	27



UNIVERSITY *of the*
WESTERN CAPE

CHAPTER ONE: INTRODUCTION

1.1 Background and problem statement

Since the advent of democracy, the South African labour market has been confronting various persistent socio-economic problems, such as poverty, inequality, skills scarcity and high unemployment, especially amongst the youth. Focusing on unemployment, it has been generally classified as structural because of the mismatch between skills that the jobseekers are willing to supply and skills that are actually demanded by employers for vacancies that are available (Yu, 2012). According to Statistics South Africa (StatsSA) (2021), the unemployment rate was 32.5% and the labour force participation rate was 56.6% in the fourth quarter of 2020.

The high level of unemployment has been a serious issue, mainly for the youth, given the youth unemployment rate is much higher at 58.1% in the last quarter of 2020 (StatsSA, 2021). The youth population is regarded as the most vulnerable group of the working-age population as they are the most inexperienced. As a result, it is not easy for many young jobseekers to find their first job in the formal economy as they struggle. When the economy does not perform well and suffers recession, the youth group is most likely to be the first to be retrenched. Since it has been a quarter of a century since the advent of democracy, this study aims to comprehensively examine what has been happening to the youth in the 1995-2019 period.

1.2 Objectives of the study

The general objective of the study is to examine how the youth has been faring in the South African labour market since the advent of democracy, while specific objectives are as follows:

- Examine the geographical, personal and educational characteristics of the youth labour force, employed and unemployed.
- Investigate changes in the labour force participation rate (LFPR) and unemployment rates of the youth cohorts over the years.
- Examine the work activities of the youth who are employed.
- Examine the duration of seeking work as well as time gap since last worked (if ever employed) of unemployed youth.
- Conduct various multivariate econometric analyses to investigate labour force participation likelihood and unemployment likelihood of youth population, by controlling for various personal- and household-level characteristics.

1.3 Outline of the study

The paper is structured in the following manner. Chapter One provides background and problem statement of the study, followed by research objectives and lastly, an outline of the study. Chapter Two firstly provides definitions of key labour market concepts, followed by theoretical framework employed in the study and lastly, a review of past empirical studies related to the study. Thereafter, Chapter Three presents the description and analysis of methods to be used as well as the data source and limitations encountered. Chapter Four then presents and discusses the empirical findings, before Chapter Five concludes the study.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter provides and outlines the following components, conceptual framework, theoretical framework and review of past empirical studies. The section of conceptual framework provides the definition of youth used in South Africa as well as definitions of other key concepts used throughout the study pertaining to employment and unemployment. The theoretical literature section then follows explaining theories that are fundamental to the study. This is followed by a section of review of past empirical studies conducted, before the chapter is concluded by identifying the research gaps.

2.2 Conceptual framework

2.2.1 Defining Youth

The description of youth can vary in each country and its composition can be influenced by issues pertaining to society, culture and politics. However, South African National Youth Commission Act of 1996 defines youth as individuals aged 14-34 years (Du Toit, 2003). However, the permitted minimum working age for an individual to enter the labour market in South Africa is 15 years and the discussions around the determination of youth employment and unemployment in the country use this as the minor level of individuals in the labour market (Du Toit, 2003). For this study, we will define youth as people who were aged 15-34 years of age at the time of survey interview.

2.2.2 Labour force and labour force participation rate

Labour force (LF) consists of the entire working-age population (15-64 years), whether they are employed or unemployed, who are available and willing to work for the manufacturing of economic goods and services while labour force participation rate (LFPR) refers to the percentage of the working-age population that forms part of the labour force (Yu and Roos, 2018a). In South Africa, in the third quarter of 2021 the LFRP rate declined from 57.5% to 55.2% (StatsSA, 2021).

Additionally, the LFPR can be calculated in narrow and broad terms by including the discouraged jobseekers as part of the LF in broad definition. The discouraged jobseekers refer individuals who were not employed during the seven days before the interview, wanted to

work, would accept a job if offered but they have not been actively seeking work. They are categorised as inactive under the narrow definition but included as unemployed under the broad definition, i.e., broad labour force equals the sum of narrow unemployed and discouraged work-seekers (Yu, 2013).

2.2.3 Employed

StatsSA (2020) defines employed as working-age individuals who have worked in the last seven days for at least one hour for any kind of remuneration. Individuals who had a job, were self-employed or had a business during the reference week but were temporarily absent at work are also included in the definition. According to StatsSA (2021), the number of employed persons decreased by 660 000 in the third quarter of 2021 to 14.3 million.

2.2.4 Unemployment and unemployment rate

There are two definitions by StatsSA (2020) to derive unemployment statistics, namely narrow and broad definitions. According to the narrow definition used in the October Household Survey (OHS), Labour Force Survey (LFS) and Quarterly Labour Force Survey (QLFS), the unemployed individuals in the labour force are people who:

- Have not worked for at least an hour in the last seven days before the interview.
- Wanted to work, were available and have not already made arrangements to start or return to work during the survey interview (one week in the OHS and QLFS and two weeks in the LFS).
- Have actively looked for a job and tried to start a business in the four weeks before the survey interview.

On the other hand, the description for the broad unemployment in the OHS and LFS is similar. However, the third criterion above is excluded as the broad definition required individuals to only desire to be employed. The difference between the number of unemployed derived from broad and strict definition is therefore equal to the number of discouraged jobseekers (Yu and Roos, 2018c). The broad definition in the QLFS consists of the number of strictly defined unemployed and discouraged work-seekers.

The unemployment rate is the percentage of labour force who are unemployed (Yu and Roos, 2018c; StatsSA, 2020). It is therefore expressed as: $(\text{number of unemployed} / \text{labour force}) \times$

100. In addition, below is how the narrow and broad unemployment rate is derived, and it can be clearly seen that according to the broad definition, discouraged work seekers are included as a portion of both the labour force and unemployed, but they are considered as inactive under the narrow definition (Yu and Roos, 2018c). Unemployment rate was 34.9 % in the third quarter of 2021 (StatsSA, 2021).

- Narrow unemployment rate = $\frac{\text{Narrow unemployed}}{\text{Employed} + \text{Narrow unemployed}} \times 100$
- Broad unemployment rate = $\frac{\text{Narrow unemployed} + \text{Discouraged workseekers}}{\text{Employed} + \text{Narrow unemployed} + \text{Discouraged workseekers}} \times 100$

2.2.5 Types of unemployment

2.2.5.1 Structural unemployment

Structural unemployment is defined as the incapability of the economy in providing employment to unemployed individuals even during high periods of economic growth due to structural imbalances (Barker, 2015). The economy is unable to accommodate the existing unemployed individuals as well as new individuals entering the labour market. This type of unemployment can be caused by several factors, such as prompt growth of the labour force, as well as employment of capital and technology that is skills-intensive (Yu and Roos, 2018c).

Assuming the number of individuals seeking employment is equal to the number of job opportunities available for offer, there is no imbalance between the quantity of labour supplied and demanded. According to Borjas (2016c), structural unemployment would still occur if individuals seeking employment are classified as not suitable for the job in terms of qualifications and skills. There are constant fluctuations between different sectors of the economy in terms of performance; some are growing while others are declining leading to retrenchment of workers.

It would be easy for retrenched workers to move from underperforming to growing sectors if skills across sectors were easily transferrable (Borjas, 2016c). However, skills and qualifications might be too specific for an individual's previous job, thereby causing retrenched workers to stay out of employment for a long time, as they may need to change and redirect their skills. As a result, structural unemployment increases due to the mismatch of skills between the demanded skills by employers and supplied skills by workers (Borjas, 2016c).

Pens (1968) stated that the mismatch may also be between locations of available jobs and residence of job seekers, age, and gender of job seekers.

Moreover, the unemployed individuals are stuck with obsolete skills and human capital that are no longer needed by employers. According to Borjas (2016c), this type of unemployment may be reduced by the government through the provision of training programs that would equip workers with set of skills that are demanded at present time. Ehrenberg and Smith (2011c) argue that this type of unemployment would be rapidly eradicated by market adjustments if wages were completely flexible and occupational or geographic mobility costs were low. However, structural unemployment exists because these conditions are unlikely to prevail in reality. Lastly, in the South African context, this is the most serious type of unemployment.

2.2.5.2 Other types of unemployment

According to Yu and Roos (2018c), cyclical unemployment takes place when both aggregate demand (for goods and services) and demand for labour are low, when the economy is in recession. As a result, there are no jobs that can be created for new people who want to enter the labour market, with some existing workers losing their jobs during this period.

Seasonal unemployment happens when individuals are without employment only during a certain time in the year because they work in sectors where they are not needed all year round (Ehrenberg and Smith, 2011c). For instance, the demand for agricultural workers decreases and remains low after the planting season is over and only increases in the harvesting season. Similarly, in the tourism industry, some of the tourist destinations are attractive for their sunny and beautiful beaches. During winter season when it is rainy and cold, people will not want to visit and there will not be a reason for resorts to keep their employees. Therefore, some tourism sector workers will be unemployed during the winter season in the year when the demand for sightseeing in South Africa is low.

Lastly, frictional unemployment occurs when individuals change jobs and move from one place to another and vacancies are hard to fill. The employers and employees need time to find one another and digest the information about the value of the job match (Borjas, 2016c). This type of unemployment does not normally last long and its duration can be decreased further by

improving labour market information to enable employers and employees to find one another faster and more effectively (Yu and Roos, 2018c).

2.2.6 Other concepts

2.2.6.1 Target growth rate

Target growth rate (*TGR*) measures how quick employment needs to expand in order to provide work for all the net entrants to the labour market over a given period (say from period *X* to period *Y*) (Oosthuizen, 2006). The given period does not need to be two consecutive years and the *TGR* is calculated as follows:

$$TGR = \frac{LF_Y - LF_X}{E_X}$$

where *LF* refers to the number of labour force and *E* stands for the number of the employed. The *TGR* is independent of the rate or level of unemployment in the base year *X* since it only captures the growth required to only provide employment to new entrants since period *X*.

2.2.6.2 Actual growth rate

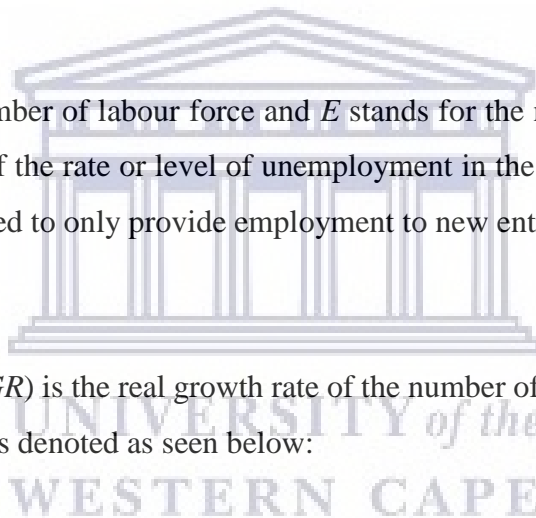
The actual growth rate (*AGR*) is the real growth rate of the number of employed from period *X* to period *Y* (Yu, 2012). It is denoted as seen below:

$$AGR = \frac{E_Y - E_X}{E_X}$$

2.2.6.3 Employment absorption rate

The employment absorption rate (*EAR*) represents the ratio between the *AGR* and *TGR*, and measures the proportion of the net increase in the labour force from period *X* to period *Y* that finds employment during the same period (Oosthuizen, 2006). It is expressed as a percentage:

$$EAR = \frac{E_Y - E_X}{LF_Y - LF_X} = \frac{AGR}{TGR}$$



The higher the employment absorption rate, the better the actual relative to the targeted employment performance. An *EAR* of 100% indicates a situation where an increase in the labour force is accounted fully by an increase in employment. There is a possibility of an *EAR* of more than 100% where employment grows more than labour force, i.e., employment is increasing while unemployment is decreasing (Oosthuizen, 2006).

2.3 Theoretical Framework

2.3.1 Labour Supply

2.3.1.1 Individual labour supply

Borjas (2016a) describes the labour supply theory as numerous number of working-age individuals who are willing to be available and offer themselves for employment at different wage rates. Furthermore, labour supply theory refers to a situation where individuals are required to determine the time they are willing to allocate to work and leisure activities in terms of their preferences. Individuals seek to maximise their well-being by consuming goods bought in the market place (such as cars and homes) and through leisure. Therefore, individuals must enter the labour market and work to earn income that will enable them to purchase the preferred goods (Borjas, 2016a).

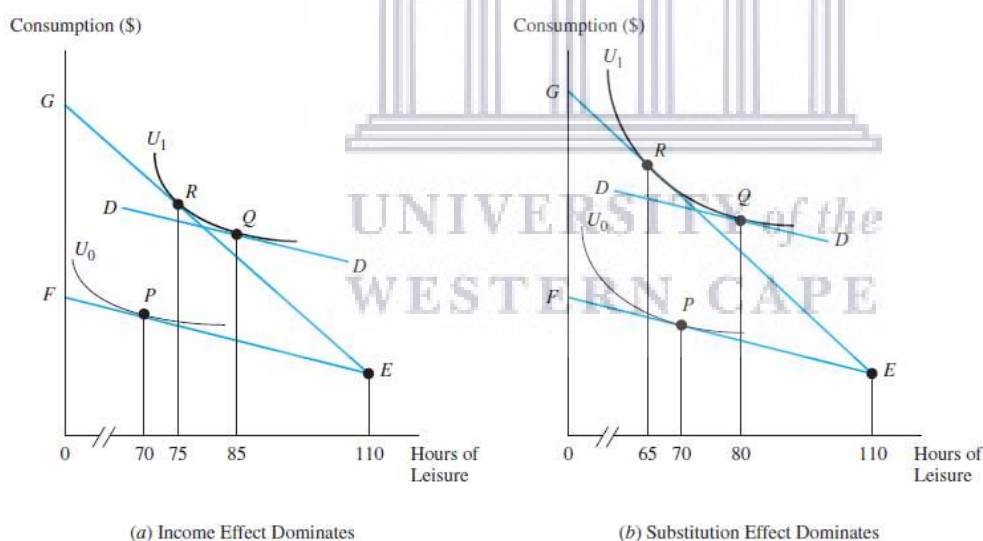
Ehrenberg and Smith (2011a) state that there is a positive relationship between the quantity of labour supplied to a particular market and the dominant wage rate with other wage rates held constant. The consumption and leisure decisions are made throughout the individual's entire working life; working individuals can thus trade off some of the leisure time today in order to receive additional consumption tomorrow (Borjas, 2016a). For example, an individual who decides to spend a lot of time working today will be able to save a great amount of money/income that will enable increased consumption tomorrow.

The decision on time spent participating in the labour market is influenced by factors such as the possible income or wage and non-wage income to be earned and can be illustrated in the form of an indifference curve and budget line. An indifference curve demonstrates the preferences of an individual for several and different combinations of income and leisure time that result in the same level of satisfaction; i.e. the higher the indifference curve the more satisfied the individual is likely to be (Yu and Roos, 2018a). Although there are various indifference curves for an individual, he or she is constrained by the number of hours in a day

and the available wage rate (and non-labour income). This is demonstrated by a budget line constraint that shows several combinations of income and hours of leisure that a person can enjoy given a specific wage rate (Yu and Roos, 2018a).

Figure 2.1 demonstrates what happens to the income and substitution effects when there is a change in the wage rate, specifically an increase. There is an initial move from point P to point Q and another move from point Q to point R . The first movement from P to Q is an income effect that results from the change in the income of a worker with wages held constant. The income effect separates the change in the consumption bundle encouraged by the extra income generated by the wage increase. The point Q has to lie to the northeast of point P because both goods and leisure are normal goods; this enables more consumption of both goods and leisure. As a result, the income effect causes leisure hours to increase from 70 to 85 hours and work hours to decrease by 15 hours per week (Borjas, 2016a) in Figure 2.1(a), for example.

Figure 2.1: The impact of an increase in wages on work hours



Source: Borjas (2016a:39)

The movement from Q to R represents substitution effect, which explains the outcome of the wage increase on the consumption bundle of a worker with utility held constant (Borjas, 2016a). The utility or real income of a worker is static by moving along an indifference curve. Therefore, the substitution effect separates the effect of the increase in the price of leisure on hours of work, with real income held constant. Additionally, the movement from point Q to point R demonstrates the substitution away from leisure time and towards consumption of other

goods. That is to say, as the wage increases, the worker decreases the time dedicated towards leisure activities from 85 to 75 hours and increase the consumption of goods. As a result of the substitution effect, the rise in wage thus decreases the leisure demand and increases the working hours by 10 hours, in Figure 2.1(a), for example.

Since the income effect is more dominant in Figure 2.1(a), the increase in wage rate results in longer leisure hours (from 70 to 75) but reduction of work hours (from 40 to 35), between the initial and new equilibrium points (*P* and *R* respectively). On the contrary, Figure 2.1(b) demonstrates the outcome when the substitution effect is more dominant, as the increase in wage rate leads to shorter leisure hours (from 70 to 65) but longer work hours (from 40 to 45). In other words, there is a positive relationship between wage rate and work hours in this case, when substitution effect is stronger than income effect.

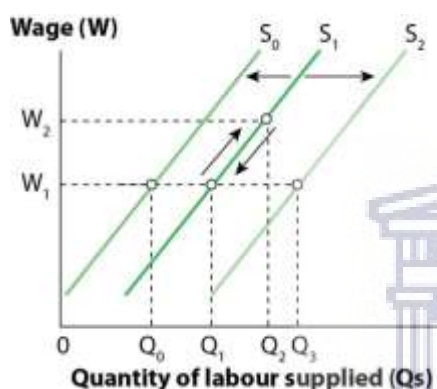
2.3.1.2 Factors affecting market labour supply

The market labour supply, which is the horizontal sum of the individual labour supply, can be influenced by numerous factors. Yu and Roos (2018a) discussed that the actions such as eradicating the discriminative laws and legislations that were followed during the period of apartheid and executing new legislations that promote equality among people could influence the market labour supply positively. The previously disadvantaged individuals such as African females are encouraged to look for employment and participate in the labour market. A person's educational attainment could also have an impact on the market labour supply; individuals with higher qualifications and skills stand better chances of acquiring employment than those who do not. People would be inspired to study and train if the cost of education and training was cheaper, this would later cause a rise in market labour supply (Yu and Roos, 2018a).

Another influential factor is transportation, as the high costs associated with moving to potential work places could discourage individuals to look for employment. The market labour supply could increase by shifting rightwards if these costs were cheaper. Implementation of policy innovations that can enable people to have access to cheaper public transport could expressively improve the market labour supply (Yu and Roos, 2018a).

Figure 2.2 shows the labour supply curve of the market, which results from the addition of all individual supply curves; it is positively sloped denoted as S_1 . When assuming the wage rate W_1 , the quantity of labour supplied is Q_1 . Suppose the discriminative labour acts from the apartheid era are removed, the labour supply curve shifts to the right and can be denoted as S_2 . At the same wage of W_1 , quantity of labour supplied rises from Q_1 to Q_3 . On the other hand, if the wage rate declines from W_2 to W_1 , quantity of labour supplied will decrease from Q_2 to Q_1 , as a result of the downward movement along the curve S_1 .

Figure 2.2: The market labour supply curve



Source: Yu & Roos (2018a: 51).

2.3.2 Labour Demand

2.3.2.1 Individual labour demand

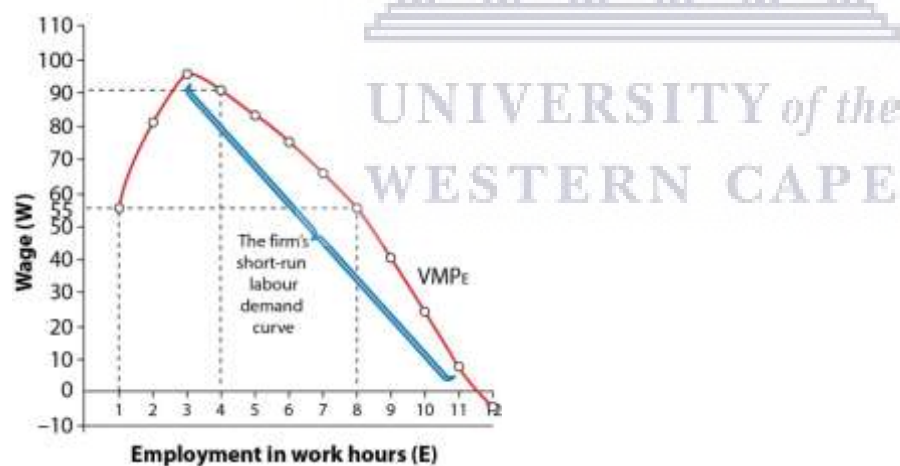
Ehrenberg and Smith (2011b) assert that labour demand is a derived demand; i.e., individuals are employed because of the contributions they make in producing the goods and services sold by the firm. It is important to first know that firms do not employ individuals for only filling available vacancies in the firm but rather employ individuals because of the demand for goods and services wanted and desired by consumers (Borjas, 2016b). Basically, the demand for labour basically depends on the demand for the product that the employer or producer is producing, influenced by the consumer purchase preferences (Borjas, 2016b; Ehrenberg and Smith, 2011b). Factors such as the cost of labour, and the goods and services produced, affect the demand for labour.

Workers are paid wages and may receive benefits as the government has an influence over the working conditions of employees. There are vital social and political implications associated with the determinants of the labour demand that cause a rise in firms' cost of employing

workers. They are namely laws on minimum wages, employment subsidies, limitations on firing employees, pension regulations, controls on immigrations, requirements of safety, unemployment benefits that are supported by the employer through payroll taxes and pension provided by the government (Borjas, 2016b; Ehrenberg and Smith, 2011b).

Figure 2.3 illustrates the way in which the firm's decision of hiring works in the short term and can be expressed as follows: $W = VMP_E$, where W denotes the market wage per hour and VMP_E is the value of the marginal product of labour (which is derived by multiplying marginal product of labour with the per-unit price of the product, in a perfectly competitive market). The marginal product of labour refers to the change in the firm's total production that occurs as a result of employing an additional unit of labour, holding capital constant; whereas the value of marginal product of labour is the change in total revenue associated with employment of an additional unit of labour holding capital constant (Yu and Roos, 2018b). The increase in (VMP_E) becomes smaller and smaller as more labour is employed, as per the law of diminishing marginal returns (Yu and Roos, 2018b).

Figure 2.3: The firm's decision of hiring in the short run



Source: Yu & Roos (2018b: 81).

This is with the assumption that the firm is in a perfectly competitive labour market and capital is fixed. If the firm hires more labour to increase production, the marginal cost (MC) of labour would be equal to the market wage (W). Therefore, to maximise profit, the firm will hire additional workers for as long as their VMP_E is greater than his or her MC . Additional units of labour in the firm will only be employed up to a point where VMP_E is equal to MC , providing

VMP_E is declining (Yu and Roos, 2018b). Nevertheless, the employer would hire more workers should MC decrease and be less than VMP_E and more profits would be obtained from hiring more workers.

Figure 2.3 shows that as each next worker is employed, his or her additional contribution to total production will be smaller than that of the worker hired before them, indicated by a downward slope of VMP_E between $E = 3$ and $E = 12$. If the wage rate is R95, the firm will hire three labour hours. The VMP_E of the third worker is precisely equal to the wage rate; therefore, the firm will not make profit if it hires more than three labour hours (Yu and Roos, 2018b). In actuality, the firm will decrease its profit by employing additional hours because the VMP_E of the next worker will be less than the current wage rate of R95. Assuming the firm hires an extra labour hour to increase production, the cost of the fourth labour hour would be R95 while its VMP_E is only R90. Therefore, it is not wise to hire the fourth labour hour at a R95 wage rate as the firm is not maximising profit (Yu and Roos, 2018b).

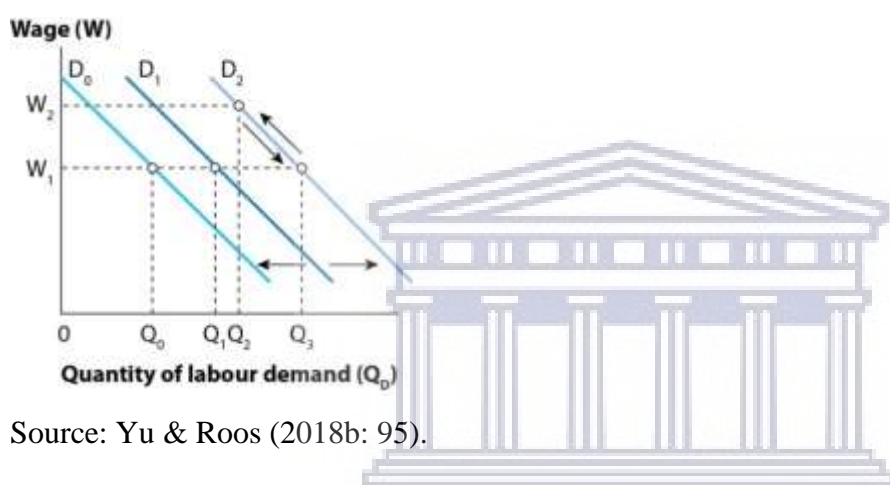
If the wage rate decreases to R40, the firm would make more profit because the VMP_E of four to nine labour hours is greater than R40 (Yu and Roos, 2018b). When nine labour hours are employed, the firm cannot earn any higher profit by hiring more labour. The wage rate will subsequently be equal to the VMP_E again. Therefore, the VMP_E will also be the demand curve for labour (Yu and Roos, 2018b).

2.3.2.2 Factors affecting labour market demand

The market demand can be influenced by several factors. Assuming that there is no further growth in the number of the unemployed, the economic growth should cause a rise in demand for labour considering that economic growth is directly linked with creation of employment (Yu and Roos, 2018b). The labour demand of a firm would increase if the price of the good and/or worker's productivity increases, as it would subsequently cause an increase in the market labour demand. Additionally, firms are reluctant to employ a number of workers as there are possibilities of strikes being initiated by workers when they have certain demands and want to be heard. The firms in the market may thus choose to have less labour and more capital. Lastly, there would be a rise in the labour market demand if capital is relatively more expensive, but labour and capital are substitutes (Yu and Roos, 2018b).

Figure 2.4 shows the labour demand curve for the market, there is a negative relationship between the wage and the quantity of labour demanded as the demand curve is downward sloping. Assuming that there is a rise in the wage rate, from W_1 to W_2 , this would lead to a decrease in the quantity of the labour demanded from Q_3 to Q_2 along the market demand curve denoted as D_2 . Equally, when there is a decline in the wage rate from W_2 to W_1 , the quantity of the labour demanded rises from Q_2 to Q_3 along the same curve. There is a movement along the market labour demand curve as a result of the market wage change (Yu and Roos, 2018b).

Figure 2.4: The market labour demand curve



Source: Yu & Roos (2018b: 95).

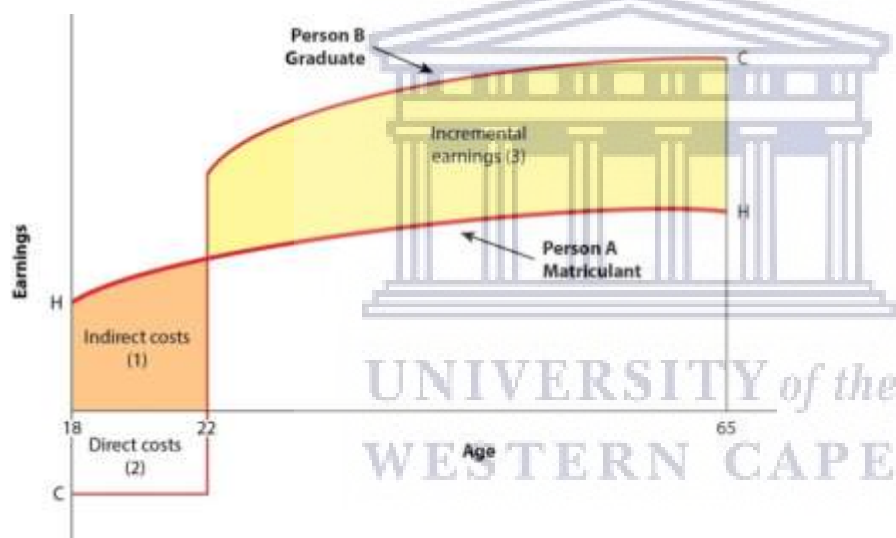
Suppose there is an increase in labour productivity, the labour demand increases and the market labour demand shifts to the right from D_0 to D_1 . The shift of the curve increases the quantity of labour demanded from Q_0 to Q_1 units at the wage rate of W_1 . On the contrary, if there is continuous absenteeism of labour from work, and labour productivity consequently decreases, the market labour demand shifts to the left from D_1 to D_0 , and as a result, the quantity of labour of labour demanded decreases from Q_1 to Q_0 units (Yu and Roos, 2018b).

2.3.3 Human Capital Theory

Heckman (2000) describes human capital as a mixture of education and training, human capacity and abilities gained through experiences of life that increase the productivity and efficiency of workers. Individuals with high educational attainment and in possession of high academic certificates and qualifications are expected to earn high remunerations (Barker, 2015). The high educational attainment causes an increase in the level of skills developed and eventually improves an individual's stock of human capital, productivity and level of efficiency in the workplace.

Additionally, there are two types of costs associated with improving an individual's level of education, namely direct and indirect costs (Yu and Roos, 2018d). Direct costs represent expenses associated to studying, such as tuition and books, while indirect costs refer to the opportunity costs associated with taking the decision to further education rather than getting into the labour market and earning a salary. The rate of return is calculated to determine whether the investment made of acquiring education would be valuable. This is done by taking into consideration and comparing the total of both the direct and indirect costs with the increase in earnings of the individual to help determine the profitability of education and training. The analysis of cost-benefit of education can be described in a form of a graph – see Figure 2.5.

Figure 2.5: Potential earnings stream of a Matriculant compared to a Graduate



Source: Yu and Roos (2018d: 235).

The line HH in Figure 2.5 shows the earnings profile of individual A who immediately starts working after matric and earns an income, whereas the line CC represents the earnings stream of another individual denoted as B who went to a university and incurred direct and indirect costs. Individual B can earn a higher salary than that of individual A immediately when entering the labour market after four years of study. The figure shows that the decision to invest in education would be worthwhile if the area of incremental earnings (3) is greater than the total costs area (the sum of areas (1) and (2)), in present value terms.

2.4 Causes of youth unemployment

This section briefly analyses the main causes of youth unemployment in South Africa. There are numerous reasons providing an explanation of why youth unemployment in the country is so high. Firstly, young people have expectations that are very high about their likelihood of finding employment and reservation wages that are too high. They are not willing to work in smaller firms because wages in these firms tend to be low and therefore their unrealistic wage reservations and expectations hinder their willingness to search for or accept work (Rankin and Roberts, 2011; De Lannoy et al., 2020).

Secondly, it is argued that another challenge faced by young people is lack of information, as they have limited and inadequate knowledge about the labour market in terms of where and how they could find job opportunities (Rankin and Roberts, 2011). The knowledge scarcity starts with limited career guidance at school, young people from a disadvantaged background are not thoroughly informed about the need to choose subjects that match their skills and interests (De Lannoy et al., 2020). Yu (2011) mentioned that even if information was easily accessible, there is also a lack of financial resources and mobility to seek employment. These limitations result in young people not relocating to places where job opportunities exist and stay in their areas with scarce employment opportunities.

Another main reason for high youth unemployment is their education level. Young individuals with a high level of education have better chances of acquiring employment than their peers with lower levels of schooling. This is due to the economy demanding highly skilled labour; therefore, young people who dropped out early from school or with incomplete secondary education are placed at a significant disadvantage in the labour market. They are faced with a possible long unemployment experience and have the high risk of becoming discouraged as their level of education is not sufficient to guarantee employment (Mlatsheni and Ranchhod, 2017; Lam, Leibbrandt and Mlatsheni 2008). Youths with post-secondary education in study fields such as Humanities and Arts also struggle to find employment, as there already exists an excessive supply of graduates from these fields (Mlatsheni and Rospabe, 2002).

Ingle and Mlatsheni (2016) indicated that youths take longer to find their first jobs in the labour market due to a lack of experience. There are presumptions that employers are reluctant to take risks and prefer to hire individuals with work experience instead. The risks consist of higher training costs for young people whose productivity is not proven and who might leave for other

jobs upon training. The employers also do not hire youths because in adherence to labour market regulations, they may not be able to fire them easily should they not perform (Bernstein, 2014). Additionally, young people often lack soft skills, which include communication skills, personal presentation, work readiness capabilities and ability to compete with older workers (Yu, 2011). Lastly, young people are more likely to be laid off when there is economic recession.

2.5 Review of past empirical studies

2.5.1 Studies using cross-sectional data

Yu (2012) looked at youths in the South African labour market focusing on changes between 1995 and 2011. The study focused on investigating various characteristics of the employed and unemployed youth by using the OHS, LFS and QLFS data from 1995-2011. The study empirical findings indicated that the youth LF increased by 54.3% during the 16-year period (from 3.72 million 1995 to 5.74 million 2011).

The empirical findings also showed that youth employment increased by only 28.14% from 2.63 million in 1995 to 3.37 million in 2011. Regarding the employed youths' demographics, the black share increased from below 55% in 1996 to about 75% in 2011. The male youth share was more dominant in all surveys, with roughly 59% in 2011; about 50% of the youth workers lived in either Gauteng or KwaZulu-Natal, and about 33% lived in urban areas. Furthermore, regarding educational attainment, the percentage of the employed youth having at least a Matric, increased from 47.1% in 1995 to 53.2% in 2011.

The number of narrow youth unemployed massively increased from 1.08 million in 1995 to 2.37 million in 2011; i.e., a rise of 119.4% between the surveys. There were no significant changes shown in demographic characteristics of the youth across all surveys: about 90% of youth unemployed were blacks, the female share was more dominant and almost half of youth unemployed lived in Gauteng or KwaZulu-Natal. Lastly, the unemployed youth were more educated over time, as the percentage with at least Matric increased from about 33% to almost 47% between 1995 and 2011.

Bhorat and Oosthuizen (2007) analysed the total experience of young LF aged 15-34 years, with the aid of the OHS 1995 and LFS 2005 data. The empirical findings indicated that in terms

of youth unemployment, the unemployment rates among the African group were higher than that of the other three race groups. Equally so, the youth gender differences were statistically significant with females being more likely to be unemployed than males. Concerning educational attainment, the study only analysed the 2005 data and found that the youth unemployment rate of degree holders was much lower at 13.2%, compared to those with only Matric (29.2%).

Graham and Mlatsheni (2015) looked at youth unemployment in South Africa and possible solutions to challenges that are encountered by youth whether they are in the labour market or not. The study found that youth unemployment rate increased from 33% in 2008 to 37% in 2015. The absorption rate of the youth in the labour market declined from 36% to 33%. Additionally, the authors found that the rate of youth who had given up seeking employment increased from 4% to 8%. Lastly, the youth unemployment rate of individuals with post-Matric qualifications was much lower at 8%, compared to those without Matric (55%).

Altman (2007) looked at labour market challenges faced by youth in South Africa, then examined and interpreted results from the existing literature. Upon analysing the 2005 LFS data, with specific focus on youth unemployment by age and educational attainment, the study indicated that education plays a vital role in increasing chances of youth in securing employment. As such, the youth unemployment rate radically declined as educational attainment increased. Approximately 30% of individuals between the ages of 25-34 years with Matric or less were unemployed, compared to only 13% and 8% for those with a post-school Diploma and Bachelor Degree respectively.

Mlatsheni and Rospabe (2002) used the OHS 1999 data to investigate high youth unemployment in South Africa for youth individuals aged 15-30 years. In terms of racial differences, the study found that Africans, Indians and Coloured youth did not have sufficient access to employment compared to White young people. Also, it is evident from the study that there was a great discrimination against young women in wage employment, as young males had 60% more chances of acquiring a job from an employer than young females.

The authors also found that educational attainment level played a vital role in increasing the possibility of jobseekers finding employment. However, the majority of youth, mostly African,

either suffered from deficiencies in education because they dropped out of school at a young age, or their skills were not recognised by employers even if they possessed qualifications needed and considered of high demand. Lastly, youth residing in urban areas were more likely to find employment than those residing in, and who may have migrated from, rural areas.

2.5.2 Studies using panel data

Rankin and Roberts (2011) used the South African Young Person Survey (SAYPS) data conducted in provinces of Gauteng, KwaZulu-Natal and Limpopo between July 2006 and November 2006. The authors investigated whether high youth unemployment may be caused by reservation wages that are higher than predicted wages offered by both small and large firms. Focusing on Africans between the ages of 20 and 34 years, the study found that more than 36% of unemployed youth had reservation wages higher than the predicted wages, whereas more males than females had high reservation wages. Additionally, in terms of firm size, approximately 19% had reservation wages higher than what they may get in large firms.

Additionally, the Rankin and Roberts study found a positive relationship between youth employment, age, educational attainment and the ability to speak English fluently. Young individuals who did not speak English very well were less likely to find employment in large firms, as well as young females with children in any firm size. Educational attainment for employment mattered more in large firms and less significantly in small firms, as the effect of higher education associated with higher wages is greater in large firms. The results concluded that high reservation wages decline with age as people get more knowledge about the labour market.

Mlatsheni and Ranchhod (2017) used the first three waves of the National Income Dynamics Study (NIDS) conducted in 2008-2012 by focusing on young individuals who were still enrolled in school in wave 1 (2008). The total youth employment rates were approximately 18.8%, 28.7% and 33.5% for individuals without Matric, with Matric and post-Matric tertiary qualification, respectively. In addition, the location of origin of youth plays a vital role in getting a job, as youth who remained in rural areas suffered much worse employment outcomes than rural youth who migrated to urban areas. In terms of gender, young males were more likely to be employed and were dominant in the labour market.

Lastly, Wakefield, Yu & Swanepoel (2020) examined labour market dynamics focusing on transitory unemployment and chronic unemployment using the first four waves of NIDS conducted in 2008-2015, the balanced panel data consisted of individuals between the ages of 15-65 years. The youngest cohort aged 15-24 years of the balanced panel accounted for 12%, while those aged 25-34 years accounted for 29% and lastly, those aged 35-44 years at 24%. The authors found that young individuals between the ages of 25-44 years were most exposed to unemployment as they accounted for 59% and 53% of the chronic unemployed (CU) and transitory unemployed (TU), respectively.

This Wakefield et al. study also found that, in comparison to other age cohorts, the youngest cohort was significantly less likely to be consistently employed. Conversely, those aged 25-34 years were significantly more likely to experience both transitory and chronic unemployment with an average marginal effect of 5.3% in CU and 8.9% in TU. Lastly, empirical findings indicated that both CU and TU groups shared the same characteristics of female Africans aged 24-44 years, who lived in urban areas of Gauteng, KwaZulu-Natal and Eastern Cape, did not complete high secondary education.

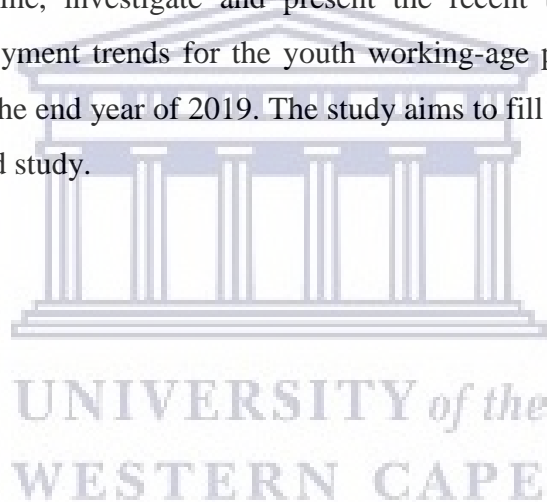
Adebimpe, Adetunji, Nwachukwu & Hieu (2021) analysed the challenges of COVID-19 pandemic on the youth unemployment in Nigeria using the published data from National Bureau of Statistics (NBS) for the year 2020. The results indicated that COVID-19 pandemic increased youth unemployment and had a negative impact on industrial manufactures, crude oil companies, energy companies, education and financial institutions, communication, technology, entertainment companies and labour force constituents. The youth unemployment rate that is those aged between 15 – 34 years increased from 26.7% to 30.1% in the fourth quarter of 2020. This indicates that about 23 million youths remained unemployed and approximately 2.9 million of the total Nigerians is a combination of both unemployed graduates and postgraduates.

Shakur, Sa'at, Aziz, Abdulla & Rasid (2020) determined factors of unemployment among job seeking youth in the East Coast of Peninsular Malaysia. The study employed a survey with a sample of 1083 youths between the ages of 18-29 from three states namely Kelantan, Pahang and Terengganu. Factors affecting youth unemployment in the states were found to be gender, marital status, education and training, age and experience. Results indicated that the majority

of youth respondents were unemployed with young women facing more challenges in finding employment compared to young men. In terms of education, there was still a number of graduates who are unemployed and majority of the unemployed youth never attended any career course/training. Lastly, married youth people were less likely to be offered employment by industries compared to single youth.

2.6 Conclusion

The research gaps found from reviewing past empirical studies are as follows; firstly, the youth labour market trends were not covered in all provinces in great detail, specifically lacking employment and unemployment statistics in provinces covering rural areas such as the Eastern Cape. Secondly, the existing literature is outdated, with the continuous changes in the economy, there is a need to examine, investigate and present the recent trends. In participation, employment and unemployment trends for the youth working-age population are looked at using the latest data until the end year of 2019. The study aims to fill in the gaps identified by conducting a more updated study.



CHAPTER THREE: METHODS AND DATA

3.1 Introduction

The chapter provides an overview of the methodology and data employed in the study. In analysing the demographic and education characteristics of the employed and unemployed youth labour force, the study makes use of data from the 1995-1999 OHS, 2000-2007 LFS and

2008-2019 QLFS conducted and released by StatsSA. The chapter is structured in the following manner, Section 3.2 provides an outline and explanation of the methodology used in the study, Section 3.3 provides examinations on the data that the study employed, followed by limitations encountered in Sections 3.4; the chapter is then concluded in Section 3.4.

3.2 Methodology

This study is a cross-sectional analytical study and makes use of quantitative methods to make analysis on youth in the labour market. In the study, the working-age population is divided into two groups. The first group is individuals between the ages of 15-34 years, referred to as youths. The second group consists of individuals aged 35-64 years, referred to as adults.

The study conducts comprehensive descriptive statistics comparing the groups of youths and adults in terms of the labour force composition, looking at demographic characteristics of gender, race, province, geographical area as well education attainment. Other comparisons are on the labour force participation rate, employment likelihood and work activities if one is employed, and composition of unemployed people as well as unemployment likelihood. The above comparisons enable the study to make analysis and determine if the youths fared better in the labour market in 2019 than in 1995 and whether they are catching up with the adult group.

The study will then move on to conduct various multivariate regressions, namely probit regressions on labour force participation probability and Heckprobit regressions on employment probability conditional on participation. One drawback of the descriptive analyses is that they are restricted to taking into account only one or two variables when describing labour force, employment or unemployment (Oosthuizen, 2006). In contrast, multivariate analyses investigate the role of numerous factors or explanatory variables in influencing whether or not a youth individual is employed – conditional on participation. In the probit regressions, the dependent variable is binary (one: LF, zero: inactive). Similarly, the dependent variable is also binary in the Heckprobit regressions (one: employed, zero: unemployed).

The latter regressions are achieved by applying a two-step Heckman method in order to avoid selection bias on the employment likelihood regression. The first step is to estimate the labour force participation probit using certain variables that are household precise, which would

influence the decision of an individual to enter the labour force. The estimations from this equation are used to derive the inverse Mills ratio (λ), which is included in the employment probit, making labour force participation conditional.

The referent variables that are used to perform a Heckprobit regression on employment likelihood of a narrow youth labour force are race, age, gender, province, educational attainment, marital status as well as the λ derived from the probit regression on labour force participation likelihood. The specification of regression models can be expressed as:

$$Y = f(\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \lambda)$$

Where Y denotes the binary variable, β_1 - β_7 stand for the explanatory variables and λ is the derived λ .

3.3 Data

3.3.1 October Household Survey (OHS)

The OHS was conducted annually from 1993 to 1999 by StatsSA to measure the labour market. The survey was based on a probability sample of the large number of households ranging from 16 000 in 1996 to 30 000 in 1997, size decreased to 20 000 in 1998 and increased to 30 000 in 1999 (StatsSA, 2000). The survey method was designed in the form of a questionnaire, and covered households and their members in all provinces of South Africa. It also covered demographic variables such as age, gender, employment, unemployment and level of education of individuals in the household.

The questionnaire first asks questions to distinguish employed from economically inactive people and the unemployed, followed by a section that asks questions on the employed's activities, such as occupation, industry, work hours, whether or not the person is employed in the formal or informal sector, trade union membership, wages, as well as working conditions (e.g. paid leave and pension fund contributions by employer). Finally, a section on unemployment with questions such as whether the person has worked before, how long the unemployed person has been seeking work and how long has the person been unemployed.

3.3.2 Labour Force Survey (LFS)

The LFS was introduced in 2000 to replace the OHS and it was conducted semi-annually by StatsSA. The survey was precisely designed to measure the South African labour market and address a diversity of issues associated with the labour market such as unemployment patterns as well as the industrial and occupational structure of the economy (StatsSA, 2007). The labour market situation data was collected by visiting the households living in sampled places of residence in all nine provinces, these visits were done by the workers hired and trained by StatsSA. A face-to-face interview was held for every visited household to complete the LFS questionnaire. The sample for the last LFS data collection of 2007 was approximately 67 000 adults of working age population, individuals between the ages of 15 and 65 years residing in over 30 000 households across South Africa (StatsSA, 2007). The LFS questionnaire covered the same questions as the OHS questionnaire. However, some of questions were structured and asked in a different manner than before and allocated in different sections of the questionnaire.

3.3.3 Quarterly Labour Force Survey (QLFS)

The QLFS was introduced in 2008 to replace the LFS survey and is conducted on a quarterly basis. The survey is conducted by StatsSA and is household-based. The purpose of the survey is to collect data on activities related to the labour market, with focus on individuals who are between the ages of 15 and 64 years (StatsSA, 2020). It is important to note that unlike OHS and LFS that occurred in a particular month, QLFS occurs on a quarterly basis.

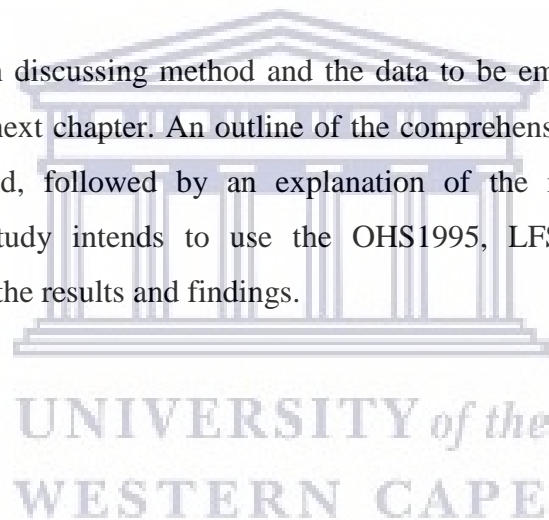
When comparing the QLFS questionnaire with the LFS and OHS questionnaire, there are extreme changes in the QLFS questionnaire in terms of design, classification and the formation of some questions, introduction of new questions and questions that are no longer asked. The LFS questionnaire had 78 questions asked in total in the first four sections, while there are only 64 questions asked in each of the first three sections in the QLFS questionnaire (Yu, 2009). There are two added newly derived variables in the QLFS, namely unemployment status and underemployment. These variables are derived from four questions in the third section of the LFS questionnaire and are currently, people who have lost their job (i.e., job loser), are a job leaver, new entrant or re-entrant, and other – last worked more than five years ago (Yu, 2009).

3.4 Limitations

With the above three different surveys, namely OHS, LFS and QLFS differentiated and explained, the study does not make use of all the data set surveys conducted throughout all the years from 1995 to 2019 as this causes the study to be impractical. Therefore, only four surveys, namely OHS1995, LFS2003, QLFS2011 and QLFS2019Q3 (with an eight-year gap between them), are analysed comprehensively in the empirical analysis, unless stated otherwise. In addition, whilst QLFS 2020 data is available, it will not be included for the analysis given the huge fluctuations in the labour market outcomes because of the COVID-19-related lockdowns on the economy (the impact of the pandemic on the youth individuals' labour market outcomes can be examined as another study of its own).

3.5 Conclusion

Chapter Three focused on discussing method and the data to be employed in the empirical analysis to follow in the next chapter. An outline of the comprehensive descriptive statistics characteristics is provided, followed by an explanation of the multivariate regressions employed. Lastly, the study intends to use the OHS1995, LFS2003, QLFS2011 and QLFS2019Q3 to produce the results and findings.



CHAPTER FOUR: EMPIRICAL FINDINGS

4.1 Introduction

This chapter provides the empirical evidence on how the youth has been faring in the labour market using the aforementioned data conducted by StatsSA (OHS, LFS and QLFS). Section 4.2 presents the results of the descriptive statistics. Section 4.3 conducts the econometric analysis by discussing the results of probit regressions on labour force participation likelihood and Heckprobit regressions on unemployment likelihood (conditional on participation), before section 4.4 concludes the chapter.

4.2 Descriptive statistics

4.2.1 Overall long-term trends

This section investigates and evaluates the demographic and educational attainment characteristics of the labour force (LF) of the youth, employment, work activities and unemployment of the youth. First, Figure 4.1 depicts the youth and adult labour force participation rates (LFPR). This rate for youth and adults decreased between 1995 and 1997 and thereafter fluctuated within the range of 42%-50% and 60%-69%, respectively. The youth LFPR peaked at about 52% in 2008, before declining by nearly five percentage points to approximately 48% in 2011. It then slightly increased to almost 50% in 2019. On the other hand, the adult LFPR was at its highest in 2000 at 70% and again reached the same rate in 2019, after fluctuations throughout the years.

Figure 4.1: Labour force participation rates of youth and adults (%), 1995-2019

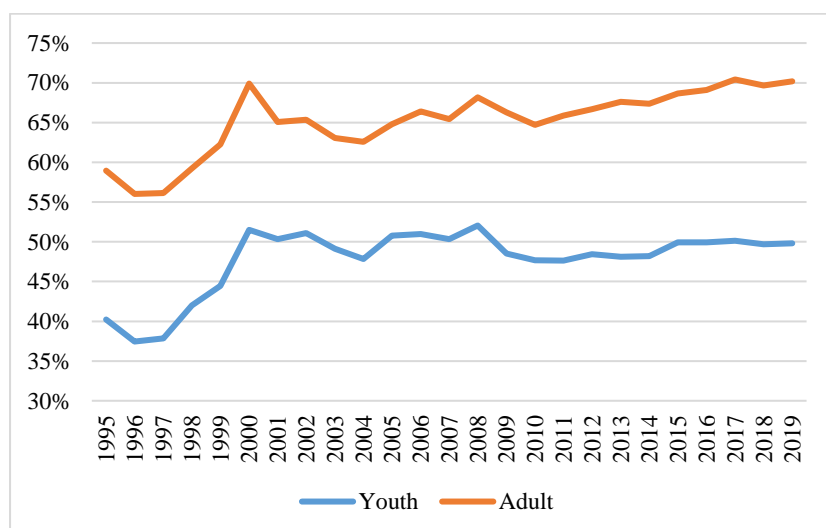
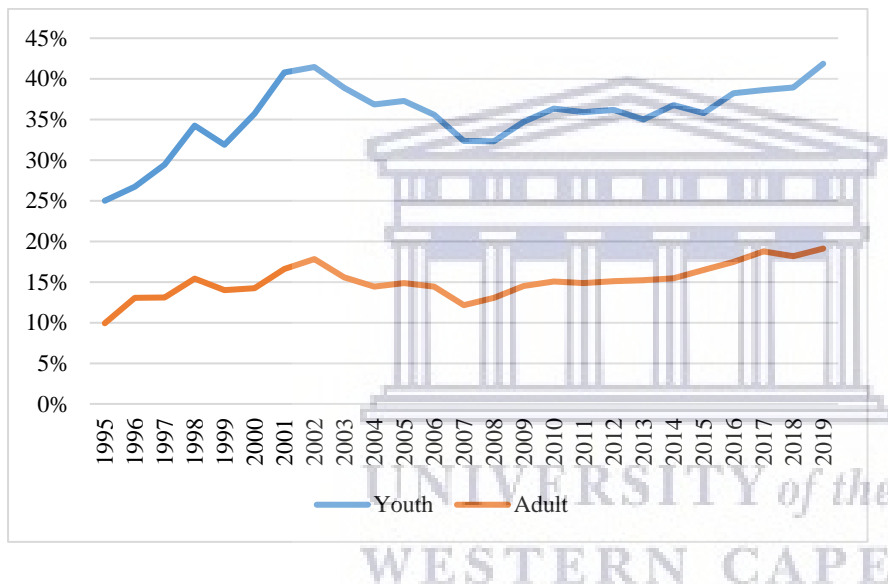


Figure 4.2 presents the youth and adults' unemployment rates in 1995-2019. Both rates increased between 1995 and 1998 before declining in 1999, the increase was greater for the youth. It went up again since 2000 (peaked at about 41% for the youth and 18% for the adults). A decrease was experienced again since 2003 and the rate fluctuated between approximately 32% and 39% for the youth. It was at its highest in 2019, at about 42% and 19% for the youth and adults, respectively. Compared to the adults' rate, the youth unemployment rate has always been greater. This could be explained by the fact that young people were relatively less educated and less experienced (Oosthuizen, 2006; Yu, 2012).

Figure 4.2: Unemployment rates of youth and adults (%), 1995-2019



4.2.2 Labour force

Table 4.1 compares the demographic and educational attainment characteristics of the youth and adult labour force (LF) between 1995 and 2019. Throughout the years in the study, the male share of the youth LF has always been more dominant, ranging between 54% and 56%, whereas males accounted for 54%-60% of the adult LF. With regard to race, the African share of the youth LF increased from 67.51% in 1995 to 81.44% in 2019. For the same period, the African share of adult LF also increased from 68.34% to 76.92%. In addition, about three quarters of youth LF was aged between 25-34 years.

The top three most dominant provinces that represent the youth LF shares are Gauteng, KwaZulu-Natal and Western Cape; they are also the top three dominant provinces for the adult LF. Approximately half of the youth LF were from the Gauteng and KwaZulu-Natal provinces,

accounting for 28.92% and 16.31%, respectively, in 2019, followed by Western Cape and Eastern Cape with their respective shares of 13.42% and 10.60% in the same period. Regarding the educational attainment of LF, the proportion of youth LF with Matric or above increased from 40.65% in 1995 to 53.77% in QLFS 2019 (an increase of 13.12 percentage points). During the same period, the proportion of the adult LF increased from 27.27% to 49.23% (an increase of 21.96 percentage points). The mean years of educational attainment of both youth and adult LF increased throughout the years from 1995 to 2019. In addition, the youth LF has always been more educated on average than the adult LF.

Table 4.1: Profile of youth and adult labour force (%), selected years

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Gender								
Male	56.10	54.94	55.80	55.03	60.44	55.85	54.40	54.34
Female	43.90	45.06	44.20	44.97	39.56	44.15	45.60	45.66
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Race								
African	67.51	73.73	78.80	81.44	68.34	70.70	71.00	76.92
Coloured	13.89	11.35	10.76	9.91	9.65	9.48	10.76	9.57
Indian	3.75	3.49	2.69	2.41	3.20	3.04	2.99	2.87
White	14.85	11.41	7.76	6.24	18.81	16.70	15.25	10.64
Unspecified	0.00	0.03	0.00	0.00	0.00	0.09	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age Cohort								
15-24 years	30.17	32.67	28.57	25.97	0.00	0.00	0.00	0.00
25-34 years	69.83	67.33	71.43	74.03	0.00	0.00	0.00	0.00
35-44 years	0.00	0.00	0.00	0.00	56.96	52.11	53.16	51.63
45-54 years	0.00	0.00	0.00	0.00	30.73	33.96	33.70	34.39
55-64 years	0.00	0.00	0.00	0.00	12.32	13.94	13.14	13.99
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Province								
Western Cape	15.19	13.28	13.88	13.42	11.99	12.57	14.49	13.99
Eastern Cape	10.03	10.67	9.97	10.60	11.00	11.75	8.40	8.73
Northern Cape	2.48	1.96	2.26	2.07	2.15	1.95	1.95	1.91
Free State	7.06	6.71	6.05	5.57	7.85	7.62	5.62	5.02
KwaZulu-Natal	19.65	21.22	16.84	16.31	17.80	17.26	14.84	15.08
North West	7.66	7.09	5.40	6.03	8.05	8.16	5.91	5.94
Gauteng	26.78	25.92	30.78	28.92	27.53	26.13	34.76	33.93
Mpumalanga	5.71	6.55	8.00	9.08	6.43	6.57	7.05	7.57
Limpopo	5.44	6.62	6.82	7.99	7.19	7.98	6.98	7.83
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 4.1: Continued

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Education Category								
None	4.40	1.64	0.77	0.43	11.54	9.12	4.15	2.48
Incomplete primary	14.78	9.47	4.74	3.17	18.48	19.65	11.50	7.68
Incomplete secondary	39.57	41.74	43.00	41.91	41.70	38.30	39.77	39.32
Matric	28.44	35.46	37.15	38.74	15.26	18.09	24.13	29.10
Matric + Cert./Dip.	8.81	7.21	9.59	7.99	7.47	7.61	10.79	9.79
Degree	3.40	4.20	3.88	7.04	4.54	6.34	8.29	10.34
Unspecified	0.61	0.29	0.87	0.72	1.00	0.89	1.36	1.28
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean (years)</i>	<i>9.45</i>	<i>10.21</i>	<i>10.84</i>	<i>11.13</i>	<i>8.14</i>	<i>8.46</i>	<i>9.96</i>	<i>10.63</i>

4.2.3 Employment

Table 4.2 presents the demographic characteristics of the employed youth and adult. Looking at the gender share of the employed youth, the male share was more dominant throughout all the years with about 58% in 2019. The employed youth African share increased from 62.22% in 1995 to 76.02% in 2019, while the employed adult African share increased from 66.64% to 74.23% in the same period. This could mean that the introduction of the Affirmative Action policy and Employment Equity Act may be working well to promote the previously disadvantaged Africans in finding employment in the post-apartheid South African labour market. With regard to the age cohort, the majority of youth employed were aged 25-34 years (1995: 74.45%; 2019: 81.34%).

Almost half of the employed youth lived in Gauteng and KwaZulu-Natal provinces, with share proportions being 27.90% and 17.51% in 2019, respectively. Similarly, a significant proportion of the employed adults resided in the same provinces. As far as the educational attainment of the employed youth is concerned, they became more educated over the years, as indicated by the fact that the proportion of the employed youth with at least Matric qualifications increased from 44.06% in 1995, to 58.38% in 2019. The proportion for the elderly employed was even greater compared to the employed youth as it increased from 29.19% in 1995 to 52.45% in 2019. This result attests that the South African economy has become more capital-intensive with an increase in demand for high skilled and more educated labour (Bhorat et al., 2015; Yu, 2012).

Table 4.2: Profile of employed youth and adult (%), selected years

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Gender								
Male	59.74	59.31	59.22	58.06	61.98	56.74	54.78	54.51
Female	40.26	40.69	40.78	41.94	38.02	43.26	45.22	45.49
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Race								
African	62.22	64.77	74.09	76.02	66.64	67.63	68.93	74.23
Coloured	14.77	13.40	11.29	11.19	9.71	9.89	10.65	10.09
Indian	4.34	4.44	3.57	3.31	3.29	3.26	3.26	3.24
White	18.67	17.35	11.05	9.49	20.36	19.11	17.17	12.44
Unspecified	0.00	0.03	0.00	0.00	0.00	0.10	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age Cohort								
15-24 years	25.55	23.88	21.84	18.66	0.00	0.00	0.00	0.00
25-34 years	74.45	76.12	78.16	81.34	0.00	0.00	0.00	0.00
35-44 years	0.00	0.00	0.00	0.00	56.05	50.18	50.75	49.21
45-54 years	0.00	0.00	0.00	0.00	31.12	34.79	34.78	35.21
55-64 years	0.00	0.00	0.00	0.00	12.83	15.03	14.47	15.59
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Province								
Western Cape	16.48	15.77	14.85	15.34	12.32	13.39	14.37	15.13
Eastern Cape	9.03	9.59	9.67	8.88	10.20	11.42	8.43	8.39
Northern Cape	2.40	2.02	2.11	2.05	2.10	1.98	1.95	1.91
Free State	7.77	6.34	6.19	5.08	8.04	7.78	5.57	4.74
KwaZulu-Natal	18.49	19.93	18.86	17.51	17.63	17.11	15.90	15.66
North West	7.53	6.73	4.84	5.82	8.20	8.22	5.79	5.90
Gauteng	27.59	26.83	28.64	27.90	27.91	25.58	33.57	32.62
Mpumalanga	5.65	6.89	7.33	8.08	6.58	6.73	7.00	7.20
Limpopo	5.07	5.90	7.51	9.32	7.02	7.80	7.42	8.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Education Category								
None	4.45	1.81	0.79	0.55	11.27	9.20	4.09	2.49
Incomplete primary	14.24	9.27	5.10	3.11	17.88	18.79	11.21	7.44
Incomplete secondary	36.59	36.58	38.71	37.06	40.64	36.21	37.36	36.25
Matric	29.00	36.31	36.85	39.24	16.03	19.00	24.40	29.51
Matric + Cert./Dip.	10.75	9.26	11.98	9.37	8.15	8.57	12.02	10.73
Degree	4.31	6.42	5.58	9.67	5.01	7.37	9.50	12.21
Unspecified	0.66	0.35	1.00	1.01	1.01	0.87	1.42	1.36
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean (years)</i>	<i>9.61</i>	<i>10.42</i>	<i>10.98</i>	<i>11.31</i>	<i>8.27</i>	<i>8.63</i>	<i>10.11</i>	<i>10.79</i>

Table 4.3 presents the work activities of the employed youths and adults. Firstly, the top three dominant occupations of which the employed youth forms part, are elementary occupations, services and sales workers, as well as clerks, accounting for 24.96%, 19.36% and 12.66%, respectively, in 2019. The top two occupations also apply for the employed adults, with the third one being craft and related trades.

With regard to employment by skills level, the results indicate that the skilled share in 2019 is greater in employed adults (approximately 26%) compared to the skills share in employed youth (only about 19%). This result is not surprising as adults employed have been working in the labour market for longer and have therefore accumulated the work experience, attended further training/studies needed to climb up the rank to work in skilled occupations.

Table 4.3: Work activities of employed youth and adult (%), selected years

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Occupation								
Managers	3.29	5.24	5.36	5.96	6.97	8.81	10.58	10.41
Professionals	3.15	4.73	5.24	5.13	3.67	4.81	6.07	6.30
Technicians	11.72	9.54	9.45	7.66	10.69	10.67	11.75	8.97
Clerks	14.54	12.48	13.03	12.66	9.73	8.22	9.00	9.04
Services and sales workers	12.70	14.69	18.18	19.36	10.28	9.67	12.34	15.56
Skilled agricultural workers	0.87	2.83	0.25	0.34	1.50	3.12	0.62	0.43
Craft and related trades	11.18	12.35	12.86	12.27	12.30	13.08	12.15	11.33
Operators and assemblers	10.62	8.63	7.94	7.77	12.58	11.20	8.59	8.43
Elementary occupations	25.79	23.80	23.14	24.96	23.91	20.84	20.43	21.78
Domestic workers	6.15	5.73	4.56	3.88	8.36	9.60	8.48	7.72
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Total	100.00	100.0	100.00	100.00	100.00	100.00	100.00	100.00
Skills level								
Unskilled	31.93	29.52	27.70	28.84	32.27	30.43	28.91	29.51
Semi-skilled	49.91	50.97	52.25	52.41	46.39	45.28	42.70	44.80
Skilled	18.16	19.51	20.05	18.75	21.34	24.29	28.39	25.69
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 4.3: Continued

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Industry								
Agriculture	14.43	11.55	4.97	6.05	12.18	9.89	4.38	4.98
Mining	4.36	3.74	2.37	2.34	5.03	5.76	2.50	2.68
Manufacturing	15.93	13.37	12.50	10.75	14.91	13.81	13.37	10.75
Utilities	0.76	0.72	0.56	0.71	1.03	0.87	0.58	0.87
Construction	4.28	5.97	8.92	8.77	5.19	5.72	7.45	7.82
Wholesale & Retail	18.63	24.58	27.19	25.73	17.18	18.66	19.17	18.05
Transport & Communications	4.87	4.95	5.87	6.08	5.30	4.53	5.61	5.90
Finance	6.85	12.14	14.86	15.52	5.67	7.60	12.15	15.06
Community, social & personal (CSP) services	22.45	15.66	16.68	18.70	23.99	22.00	24.51	24.55
Private household	7.45	7.33	6.08	5.31	9.51	11.17	10.22	9.33
Others	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sector								
Primary	18.79	15.29	7.34	8.39	17.21	15.65	6.88	7.66
Secondary	20.97	20.06	21.98	20.23	21.13	20.40	21.40	19.44
Tertiary	60.25	64.66	70.68	71.34	61.65	63.96	71.66	72.89
Others	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Regarding the broad industry category, the top most dominant industries that the employed youths and adults were part of, were wholesale and retail, community, social and personal (CSP) services and finance. Nearly half of the employed youth were from the wholesale and retail, and CSP services industries, accounting for 25.73% and 18.70%, respectively, in 2019, followed by the finance and manufacturing with their respective shares of 15.52% and 10.75% in the same period.

Looking at the results by sector, for both employed youths and adults, the tertiary sector share was the greatest, followed by the secondary sector and lastly, the primary sector. The tertiary sector share showed an increasing trend over the years for both employed youths and adults, and the share in youths was slightly smaller (71.34%) compared to the share in adults (72.89%) in 2019.

4.2.4 Unemployment

The demographic characteristics of the unemployed youth and adult are depicted in Table 4.4. Looking at gender, while the male share was more dominant in the case of employed, the female share was more dominant in the case of unemployed in most years. It is only in 2019 that the unemployed female share (49.19%) was lower compared to the male share (50.81%). In all selected years, the African share of the unemployed youth was always dominant compared to other races, with its share being over 80%.

Almost half of the unemployed individuals resided in Gauteng and KwaZulu-Natal provinces. About 49% of the unemployed youth did not complete secondary education in 2019. Nonetheless, the proportion with at least Matric or above qualifications increased from 30% in 1995 to 48% in 2019, which indicates that the unemployed youth actually became more educated overtime.

Table 4.4: Profile of unemployed youth and adult (%), selected years

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Gender								
Male	45.17	48.07	49.70	50.81	46.50	51.04	52.20	53.63
Female	54.83	51.93	50.30	49.19	53.50	48.96	47.80	46.37
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Race								
African	83.36	87.78	87.20	88.98	83.79	87.35	82.87	88.26
Coloured	11.27	8.12	9.80	8.13	9.18	7.23	11.41	7.39
Indian	2.00	1.99	1.13	1.17	2.35	1.81	1.46	1.31
White	3.37	2.08	1.87	1.73	4.69	3.59	4.26	3.04
Unspecified	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age Cohort								
15-24 years	44.02	46.48	40.58	36.13	0.00	0.00	0.00	0.00
25-34 years	55.98	53.52	59.42	63.87	0.00	0.00	0.00	0.00
35-44 years	0.00	0.00	0.00	0.00	65.17	62.59	66.94	61.86
45-54 years	0.00	0.00	0.00	0.00	27.20	29.42	27.54	30.91
55-64 years	0.00	0.00	0.00	0.00	7.63	7.99	5.53	7.23
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 4.4: Continued

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Province								
Western Cape	11.31	9.36	12.13	10.76	9.01	8.08	15.19	9.14
Eastern Cape	13.06	12.37	10.52	12.98	18.32	13.52	8.26	10.19
Northern Cape	2.72	1.86	2.53	2.10	2.60	1.82	1.96	1.90
Free State	4.91	7.29	5.80	6.25	6.11	6.77	5.87	6.21
KwaZulu-Natal	23.11	23.23	13.24	14.64	19.36	18.12	8.72	12.64
North West	8.07	7.65	6.39	6.31	6.64	7.86	6.63	6.10
Gauteng	24.36	24.48	34.61	30.34	24.10	29.12	41.58	39.46
Mpumalanga	5.90	6.00	9.20	10.47	5.11	5.74	7.30	9.14
Limpopo	6.56	7.75	5.58	6.15	8.74	8.96	4.49	5.23
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Education Category								
None	4.26	1.37	0.73	0.27	13.97	8.71	4.51	2.44
Incomplete primary	16.38	9.77	4.10	3.24	23.94	24.31	13.13	8.68
Incomplete secondary	48.49	49.84	50.65	48.65	51.34	49.67	53.60	52.34
Matric	26.76	34.12	37.68	38.05	8.30	13.19	22.58	27.37
Matric + Cert./Dip.	2.97	4.00	5.33	6.08	1.30	2.36	3.76	5.81
Degree	0.68	0.71	0.85	3.39	0.27	0.76	1.41	2.41
Unspecified	0.46	0.20	0.65	0.32	0.88	1.00	1.00	0.95
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean (years)</i>	8.98	9.88	10.59	10.88	6.92	7.56	9.15	9.97
Ever worked before								
Yes	27.80	29.57	44.20	48.62	60.26	68.55	83.70	86.21
No	72.20	70.43	55.80	51.38	39.74	31.45	16.30	13.79
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Duration of seeking work								
Less than 6 months	12.32	17.83	14.95	17.41	9.62	14.63	17.42	18.05
6-12 months	20.97	13.47	16.98	12.66	12.95	8.49	12.73	9.30
1-3 years	33.16	29.19	27.70	24.17	27.33	19.07	15.56	15.36
More than 3 years	28.75	31.88	40.10	45.18	46.30	51.45	54.15	56.71
Other/Unspecified	4.80	7.63	0.26	0.59	3.78	6.36	0.14	0.58
Total	100.00	100.00	100.00	100.00	100.00	100.0	100.00	100.00

The results also indicate that a much lower proportion of the unemployed youth worked before. The proportion of the unemployed youth that has never worked before was much higher over all the years with its share of 72.20 % in 1995 and still very high at 51.38% in 2019, compared to only 13.93% in 2019 for the unemployed adult. This result means that many youths struggle to find their first job. Finally, about 45% of the unemployed youths had been seeking employment for over three years in 2019, while the corresponding share was approximately

57% for the unemployed adult during the same period. This result suggests that chronic unemployment was serious for both youths and adults.

Table 4.5: Youth and adult unemployment rates (%), selected years

	Youth				Adult			
	1995	2003	2011	2019	1995	2003	2011	2019
Gender								
Male	20.14	34.04	31.99	38.65	7.63	14.22	14.27	18.86
Female	31.22	44.83	40.87	45.80	13.40	17.26	15.57	19.42
Race								
African	30.88	46.32	39.75	45.74	12.17	19.23	17.35	21.94
Coloured	20.25	27.85	32.71	34.33	9.51	11.91	15.72	14.79
Indian	13.18	22.18	15.23	20.41	7.18	9.29	7.17	8.85
White	5.63	7.08	8.71	11.53	2.44	3.38	4.14	5.43
Age Cohort								
15-24 years	36.50	55.35	51.03	58.23	N/A			
25-34 years	20.04	30.93	29.89	36.13				
35-44 years	N/A				11.35	18.70	18.71	22.91
45-54 years					8.79	13.48	12.15	17.19
55-64 years					6.16	9.13	6.32	9.89
Province								
Western Cape	18.63	27.39	31.41	33.55	7.51	9.97	15.60	12.49
Eastern Cape	32.59	45.10	37.86	51.30	16.53	17.89	14.67	22.29
Northern Cape	27.40	36.97	40.20	42.38	12.30	14.48	15.10	18.97
Free State	17.39	42.30	34.50	47.00	7.66	13.78	15.58	23.62
KwaZulu-Natal	29.40	42.58	28.21	37.56	10.81	16.37	8.72	16.03
North West	26.28	41.95	42.59	43.86	8.13	15.02	16.70	19.69
Gauteng	22.72	36.74	40.37	43.90	8.66	17.36	17.79	22.23
Mpumalanga	25.97	35.64	41.33	48.26	7.97	13.52	15.34	23.07
Limpopo	30.09	45.60	29.43	32.18	12.04	17.54	9.49	12.77
Education Category								
None	24.03	32.61	34.78	25.00	11.94	14.90	16.18	18.89
Incomplete primary	27.68	40.15	31.15	42.86	12.81	19.26	17.01	21.64
Incomplete secondary	30.63	46.45	42.32	48.60	12.20	20.20	20.03	25.45
Matric	23.50	37.45	36.44	41.11	5.43	11.38	13.89	17.98
Matric + Cert./Dip.	8.51	21.58	20.00	31.81	1.65	4.78	5.19	11.32
Degree	5.00	6.52	7.74	20.14	0.78	1.91	2.58	4.47
Unspecified	19.44	28.00	26.58	19.18	8.71	18.18	11.19	14.37

Table 4.5 above presents the youth and adult unemployment rates in terms of demographic characteristics for selected periods. The results show that the female youth unemployment rate was greater than the male youth unemployment rate throughout the years (their respective rates

being 45.80% and 38.65% in 2019). The situation was relatively the same for adults. Moreover, the African youth unemployment rate was the highest in all the years accounting for 45.74% in 2019, which was four times higher than the White youth unemployment rate of 11.53%. At least the African youths caught up when comparing them to White youths, because the (African youth unemployment rate/White unemployment rate) ratio declined from 5.48 in 1995 to 4.04 in 2019.

Looking at different age groups, the results indicated that the unemployment rate was always higher in the 15-24 years cohort compared to the 25-34 years cohort. This result can be explained by the fact that these young people were relatively less educated and experienced. For adults, unemployment rate was the greatest for those aged 35-44 years in all selected years, with a share of 22.91% in 2019. When moving to the older age groups, the unemployment rate declined. Lastly, this rate was the highest in 2019 in all age groups. The provinces with the highest unemployment rate were the Eastern Cape, Mpumalanga and Free State for both youths and adults (their respective share for the youths were 51.30%, 48.26% and 47.00% in 2019). The unemployment rate was highest for those with low levels of education, with the incomplete secondary category dominating throughout the years for both youths and adults accounting for 48.60% and 25.45%, respectively, in 2019.

4.2.5 Other results

Table 4.6 presents the target growth rates (TGR), actual growth rate (AGR) and the employment absorption rate (EAR) for certain years. The EAR was over 100% for the youth at 106.01% for the period 2003-2011, which was really good and indicated that employment grew more than the labour force increase. Unfortunately, things shockingly went downhill in the 2011-2019 period, as EAR dropped to only 11.14%, and it was attributed to the very low AGR of 2.20%.

In addition, looking at the 24-year period as a whole for the youth, the TGR was 97.39%, which means that the youth employment needed to grow by 97.39% to absorb all net entrants into the LF. Unfortunately, in actual fact, youth employment only grew by 34.14% (AGR), therefore the EAR was only 35.05%, which means that only 3.5 out of 10 LF entrants eventually found employment. The situation was much better in adults as the EAR more than doubled that of the youth at 73.79%.

Table 4.6: Target growth rates, actual growth rates and employment absorption rates, selected periods

	Youth			Adult		
	TGR	AGR	EAR	TGR	AGR	EAR
1995-2003	57.86	16.82	29.07	34.67	23.00	66.35
2003-2011	11.65	12.35	106.01	38.06	33.24	87.35
2011-2019	19.74	2.20	11.14	38.02	25.75	67.74
1995-2019	97.39	34.14	35.05	143.79	106.10	73.79

Furthermore, Table 4.7 depicts TGR, AGR and EAR results from 1995 to 2019 in terms of demographic characteristics for youths and adults. The EAR proportion difference between the two genders for youths was not significant, with males and females accounting for 34.79% and 35.36%, respectively. The TGR for female youths at 112.42% was, however, relatively high compared to that of male youths, which was 87.26%. In terms of race, the EAR for White youths was outstanding as it was over 100% at 110.13% but was only 40.59% for African youths. AGR was negative and only -2.05% for those aged 15-24 years. As a result, EAR was the lowest and negative at -2.66%. Looking at provinces, EAR was way lower than TGR for youths in all provinces, such that even the most privileged provinces, namely Western Cape (38.22%) and Gauteng (31.72%), accounted for EAR less than 40%. Lastly, degree holder youths enjoyed a high EAR, which is just above 70%.

Table 4.7: Target growth rates, actual growth rates and employment absorption rates of youth and adult by personal and geographical characteristics, 1995-2019

	Youth			Adult		
	TGR	AGR	EAR	TGR	AGR	EAR
Gender						
Male	87.26	30.35	34.79	115.12	81.24	70.57
Female	112.42	39.75	35.36	190.46	146.52	76.93
Race						
African	157.30	63.84	40.59	180.25	129.58	71.89
Coloured	29.23	1.54	5.26	140.81	114.14	81.06
Indian	13.09	2.09	16.00	114.29	102.38	89.58
White	-28.87	-31.79	110.13	30.64	25.92	84.59
Age Cohort						
15-24 years	77.05	-2.05	-2.66	N/A		
25-34 years	104.33	46.52	44.59			
35-44 years	N/A			121.90	80.93	66.39
45-54 years				171.90	133.14	77.46
55-64 years				176.48	155.04	87.85

Table 4.7: Continued

	Youth			Adult		
	TGR	AGR	EAR	TGR	AGR	EAR
Province						
Western Cape	64.97	24.83	38.22	181.37	153.34	84.55
Eastern Cape	122.57	31.93	26.05	98.46	69.62	70.70
Northern Cape	60.38	14.15	23.44	117.55	87.64	74.56
Free State	44.44	-12.28	-27.63	50.73	21.46	42.31
KwaZulu-Natal	61.79	27.03	43.74	105.78	82.98	78.44
North West	48.94	3.63	7.41	75.84	48.33	63.72
Gauteng	112.44	35.67	31.72	200.28	140.90	70.35
Mpumalanga	236.69	92.34	39.01	185.07	125.97	68.06
Limpopo	220.63	146.64	66.46	170.67	148.04	86.74
Education Category						
None	-109.18	-83.16	76.17	-57.39	-54.43	94.85
Incomplete primary	-86.92	-70.65	81.28	-5.26	-14.25	270.83
Incomplete secondary	120.12	35.84	29.83	132.67	83.83	63.19
Matric	177.51	81.50	45.92	356.60	279.22	78.30
Matric + Cert./Dip.	62.16	16.91	27.21	204.09	171.15	83.86
Degree	271.05	200.53	73.98	425.88	403.14	94.66

4.3 Econometrics analysis

Table 4.8 presents the probit results of the LF participation likelihood of the working-age population for selected years. The reference categories are: 35-64 years of age, African race, female gender and Eastern Cape province. Each figure on the table represents a percentage comparison to its respective reference category. When we look at the gender category, we find that the male category has positive and statistically significant marginal effects for all the selected years, after controlling for differences in other characteristics. This indicates that compared to the male group, the female group was significantly less likely to enter the LF. It is also notable, however, that the difference between male and female LF participation has decreased over the years, especially between 1995 and 2003.

The comparison between race groups using Africans as the reference category shows that in 1995 the Coloured group was 25.52% more likely to enter the LF than their African counterparts. The White group on the other hand was 11.71% less likely to enter. By 2019, the African group was relatively more likely to enter the LF than previously. This is shown by a decrease in participation likelihood of the Coloured group from 25.52% to a statistically insignificant marginal effect of 2.29%. The Indian and White group both had increasingly

negative marginal effects, meaning both were less likely to participate in the labour market compared to their African counterparts. These findings are not surprising because the previously disadvantaged groups most likely felt more optimistic to actively seek work in the labour market, with the abolishment of the past unfair labour legislations.

Table 4.8: Probit regressions on labour force participation likelihood of working-age population, selected years

	Marginal effects			
	1995	2003	2011	2019
Gender: Male	0.5720***	0.4412***	0.4394***	0.4231***
Race: Coloured	0.2552***	0.0706**	0.0242	0.0229
Race: Indian	-0.0182	-0.2949***	-0.3759***	-0.3167***
Race: White	-0.1171***	-0.3238***	-0.3483***	-0.3220***
Province: Western Cape	0.3942***	0.2570**	0.3431***	0.1876***
Province: Northern Cape	0.2465***	0.0886**	0.1621***	0.0529
Province: Free State	0.3152***	0.1532***	0.1938***	0.1355***
Province: KwaZulu-Natal	0.1910***	0.1366***	0.0485*	-0.1033***
Province: North West	0.1887***	0.0240	0.0138	-0.0999***
Province: Gauteng	0.4034***	0.1836***	0.3127***	0.1796***
Province: Mpumalanga	0.1442***	0.1510**	0.3034***	0.2665***
Province: Limpopo	-0.2020***	-0.1287***	0.0034	-0.1597***
Area type: Urban	0.0751***	0.1692***	0.3443***	0.2070***
Age: 15-24 years	-0.9890***	-0.9434***	-1.1211***	-1.2271***
Age: 25-34 years	0.0973***	0.1064***	0.0501**	0.0315
Education years	-0.0460***	-0.0444***	-0.0540***	-0.0243***
Education years squared	0.0069***	0.0084***	0.0101***	0.0078***
Married	0.2408***	0.1469***	0.1134***	0.0937***
Number of children in household	-0.0356***	-0.0660***	-0.0525***	-0.0248***
Number of elderly in household	-0.3016***	-0.3700***	-0.3412***	-0.3431***
Number of observations	80 387	62 544	5 2338	42 540
Observed probability	0.4771	0.5478	0.5562	0.5950
Predicted probability at x-bar	0.4685	0.5592	0.5708	0.6150
Chi-squared statistic	14 593	9 020	9 634	8 330
Prob > Chi-squared	0.0000	0.0000	0.0000	0.0000
Pseudo R-squared	0.2124	0.2093	0.2486	0.2310

*** Significant at 1%

** Significant at 5%

* Significant at 10%

At our starting point (year 1995), the data shows that residents in all provinces were positively more likely to participate in the LF with the exception being Limpopo, who were 20.20% less likely to enter the LF. The data shows residents of Gauteng (40.34%), Western Cape (39.42%)

and Free State (31.52%) being the highest three that were most likely to enter the LF when compared to Eastern Cape. A snapshot years later in 2019, however, shows a different picture. KwaZulu-Natal and North West residents were now less likely to enter the LF compared to Eastern Cape, while Eastern Cape had comparatively improved against all provinces (except for Mpumalanga) when comparing to year 1995. The greater likelihood of entering the LF for the rest of the provinces, except Mpumalanga, was relatively decreased.

In 1995, individuals residing in urban areas were shown to be more likely to enter the LF than those in rural areas. This has remained consistent as shown by the positive statistically significant marginal effects throughout all the years. Moving on to age group comparison, we compare the reference category (35-64 years) to two age groups. The first age group, 15-24 years, show negative statistically significant marginal effects in all the years indicating that they were less likely to enter the LF. One of the reasons for this could be that they were most likely still busy completing their studies at school or university. On the other hand, the data shows that the 25-34 years group were more likely to enter the LF over the years, excluding 2019. This result is not surprising because people should immediately and desperately seek employment in the labour market upon completing their studies from their mid-20s.

The education years squared marginal effects were all positive throughout the period demonstrating a greater likelihood for people to enter the LF as they get educated. In fact, there was a non-linear and convex relationship between education years and LF participation likelihood, i.e., as educational attainment improved, LF probability increased, but this increase took place at an increasing rate as the person became more educated. The empirical findings also show that married individuals were more likely to enter the LF shown by positive significant marginal effects in all the years.

The number of children under the age of 15 years in the household has negative marginal effects in all selected years, signifying that the greater the number of young children living in the household, the lower the likelihood that an individual will be part of the LF. This could be explained by the possibility of some females that may decide to stay at home to be full-time mothers to look after children. Similarly, the number of elders over the age of 60 years is also significantly negative in all selected years, signifying that the greater the number of pensionable-aged individuals in the household, the less likely working age individuals will be

to participate in the LF. Some individuals could rely on the old-age grant income of the elderly for survival and decide not to seek for work in the labour market (Festus et al., 2015).

Presented in Table 4.9 are the probit results of the LF participation likelihood of the working-age youth population only, for selected years. This includes anyone between the age of 15 to 34 years. The female youth group in this case was significantly less likely to enter the LF. This is indicated by positive statistically significant marginal effects for the male youth group in all years.

Comparison across races shows that in 1995, all youth groups; namely Coloured (47.41%), Indian (24.13%) and White (21.47%), were more likely to enter the LF than their youth African counterparts. By 2019, however, likelihood of participation by the youth African group had improved when compared to all races relative to the starting point of comparison (1995). Only the youth Coloured group had positive and statistically significant marginal effects (though less in magnitude compared to 1995). The youth Indian group was no longer statistically significant, and the White youth group now had negative and significant marginal effects.

Regarding provinces, it is demonstrated by results that in 1995, the youth residents in Limpopo were the only ones who were less likely (by 34.03%) to enter the LF than those in the Eastern Cape, while Mpumalanga was not statistically significant. The data shows that the youth from the rest of the other provinces were most likely to enter the LF. This is indicated by positive and statistically significant marginal effects on all the other seven provinces for the year 1995. This, however, had changed by 2019. KwaZulu-Natal and North West youth residents had now become less likely to enter the LF. Mpumalanga youth residents were now significantly (22.80%) more likely to enter. Western Cape (17.78%), Gauteng (10.71%) and Free State (9.94%) were also still more likely to enter the LF than Eastern Cape youth but all with lower magnitudes compared to 1995. The marginal effect for the Northern Cape was no longer statistically significant, indicating that youth residents were no more or less likely to enter the labour force than those of the Eastern Cape.

Table 4.9: Probit regressions on labour force participation likelihood of youth working-age population only, selected years

	Marginal effects			
	1995	2003	2011	2019
Gender: Male	0.4243***	0.3472***	0.3937***	0.3595***
Race: Coloured	0.4741***	0.2530***	0.1516***	0.2187***
Race: Indian	0.2413***	-0.0596	-0.2685***	-0.1306
Race: White	0.2147***	-0.0952**	-0.2825***	-0.2547***
Province: Western Cape	0.4707***	0.3264***	0.3918***	0.1778***
Province: Northern Cape	0.2637***	0.0824	0.2744***	0.0164
Province: Free State	0.2280***	0.0785**	0.1909***	0.0994*
Province: KwaZulu-Natal	0.2395***	0.1808***	0.0102	-0.1881***
Province: North West	0.1823***	-0.0114	-0.0163	-0.1011*
Province: Gauteng	0.3570***	0.1045***	0.2877***	0.1071***
Province: Mpumalanga	0.0407	0.0690*	0.2564***	0.2280***
Province: Limpopo	-0.3403***	-0.2386***	-0.1311***	-0.2880***
Area type: Urban	0.0569***	0.1984***	0.3442***	0.2078***
Age: 25-34 years	0.9865***	0.9758***	1.1149***	1.1974***
Education years	-0.1279***	-0.1469***	-0.1455***	-0.0918***
Education years squared	0.0104***	0.0143***	0.0150***	0.0117***
Married	0.4359***	0.2640***	0.2795***	0.2872***
Number of children in household	-0.0647***	-0.0916***	-0.0748***	-0.0418***
Number of elderly in household	-0.0830***	-0.1331***	-0.0844***	-0.0903***
Number of observations	45 823	35 215	28 269	21 773
Observed probability	0.4028	0.4912	0.4758	0.4989
Predicted probability at x-bar	0.3784	0.4945	0.4718	0.5013
Chi-squared statistic	9 449	5 847	5 832	4 869
Prob > Chi-squared	0.0000	0.0000	0.0000	0.0000
Pseudo R-squared	0.2381	0.2415	0.2740	0.2563

*** Significant at 1%

** Significant at 5%

* Significant at 10%

The marginal effects of urban areas are positive statistically significant in all years, meaning that youth individuals living in urban areas were more likely to enter the LF than those in rural areas. In terms of age groups, the youth in the 25-34 years group was significantly more likely to enter the LF. This is showed by positive statistically significant marginal effects in all the years. The years between 2011 and 2019 show a notable increase in likelihood for the 25-34 years cohort to participate more. This is the age group where most individuals seek work after studying to develop their careers and support their families hence this result is not surprising. The education years squared marginal effects are all positive throughout the period demonstrating more likelihood for the youth to enter the LF as they get educated.

The results also portray that married youth individuals were more likely to enter the LF, presented by positive significant marginal effects throughout selected periods. The marginal effects of number of children under the age of 15 in the household are negative and significant in all selected years. This indicates that the likelihood that a youth individual will be part of the LF is low when there is a great number of young children that live in the household. Correspondingly, the number of elders over the age of 60 years is also significantly negative in all selected years, demonstrating that the greater the number of pensionable-aged individuals in the household, the less likely youth individuals will be to participate in the LF.

Table 4.10 presents the Heckprobit regression results on the unemployment likelihood of working-age labour force, conditional on participation for selected years. Firstly, the lambda is statistically significant for all four years, thereby implying the presence of sampling selection bias and the need to run the unemployment regressions as two-step Heckprobit models to control LF participation likelihood. The positive, statistically significant marginal effects for the male group in 1995 and 2019 years indicate that the female group was significantly less likely to be unemployed.

In the comparison across races, the data shows all marginal effects were significantly negative and this was consistent throughout all the years. This indicates that in all the selected periods, Africans were more likely to be unemployed. The results were somewhat mixed in the case of provincial variables. For instance, Western Cape and KwaZulu-Natal results were not statistically significant in 1995, but were 12.57% and 33.02%, respectively, significantly less likely to be unemployed than those in the Eastern Cape in 2019. Those living in Northern Cape and Gauteng were more likely to be unemployed in 1995 but the opposite took place in 2019 for Northern Cape, while results remained the same for Gauteng. Limpopo residents were always less likely to be unemployed in all selected periods, with 2019 being the most significant at 54.15%.

Table 4.10: Heckprobit regressions on unemployment likelihood of working-age labour force (conditional on participation), selected years

	Marginal effects			
	1995	2003	2011	2019
Gender: Male	0.2143***	0.0342	0.0096	0.1063***
Race: Coloured	-0.1502***	-0.4237***	-0.2383***	-0.2826***
Race: Indian	-0.5374***	-0.7607***	-0.5670***	-0.6960***
Race: White	-0.9044***	-1.2603***	-1.0116***	-1.0125***
Province: Western Cape	0.0468	-0.0438	0.1967***	-0.1257***
Province: Northern Cape	0.1857***	0.1283**	0.1579***	-0.0118
Province: Free State	-0.1527***	0.0331	0.0345	0.0703
Province: KwaZulu-Natal	0.0380	0.0448	-0.3017***	-0.3302***
Province: North West	-0.0892**	-0.0265	0.0850*	-0.1464***
Province: Gauteng	0.0931**	0.0824**	0.3201***	0.1415***
Province: Mpumalanga	-0.0921**	-0.0797*	0.1731***	0.1314***
Province: Limpopo	-0.2390***	-0.0698	-0.3586***	-0.5415***
Area type: Urban	0.3486***	0.3596***	0.1070***	0.0783***
Age: 15-24 years	-0.1106**	0.5027***	0.4938***	0.2626***
Age: 25-34 years	0.4926***	0.5750***	0.5152***	0.5161***
Education years	0.0567***	0.1018***	0.1364***	0.1755***
Education years squared	-0.0022***	-0.0046***	-0.0071***	-0.0085***
Lambda	1.6347***	1.1321***	0.8398***	1.1268***
Number of observations	37 189	33 564	26 879	24 780
Observed probability	0.1763	0.2801	0.2503	0.2924
Predicted probability at x-bar	0.1350	0.2375	0.2157	0.2638
Chi-squared statistic	3 833	3 183	2 205	2 550
Prob > Chi-squared	0.0000	0.0000	0.0000	0.0000
Pseudo R-squared	0.1621	0.1656	0.1283	0.1225

*** Significant at 1%

** Significant at 5%

* Significant at 10%

Furthermore, results show that individuals in urban areas were more likely to be unemployed than those in rural areas, demonstrated by statistically positive marginal effects in all selected years. Compared to the 35-64 years reference age group, those aged 15-24 years were only significantly less likely to be unemployed in 1995. This changed over the years as all the other selected years up to 2019 show that the 15-24 years group was significantly more likely to be unemployed. When compared to the adult cohort of 35-64 years age group, those aged between 25-34 years were more likely to be unemployed across all selected years, even until 2019. The education years squared marginal effects are all significantly negative in all years signifying that the more individuals get educated, the less the likelihood to be unemployed.

Presented in Table 4.11 are Heckprobit regression results on unemployment likelihood of youth labour force only, conditional on participation for selected years. Firstly, the results indicate that the marginal effects in all years for lambda are statistically significant, suggesting that there is sampling selection bias and the two-step Heckprobit approach is, therefore, both justified and necessary.

Table 4.11: Heckprobit regressions on unemployment likelihood of youth labour force only (conditional on participation), selected years

	Marginal effects			
	1995	2003	2011	2019
Gender: Male	0.0908***	-0.0561*	-0.0776**	0.0952**
Race: Coloured	-0.0051	-0.3666***	-0.1916***	-0.1654***
Race: Indian	-0.4411***	-0.6844***	-0.6584***	-0.6712***
Race: White	-0.7444***	-1.3286***	-1.1951***	-1.1968***
Province: Western Cape	0.1687***	0.0046	0.1329**	-0.0772
Province: Northern Cape	0.2734***	0.1798***	0.2342***	-0.0235
Province: Free State	-0.1478***	0.0566	-0.0016	0.0603
Province: KwaZulu-Natal	0.1482***	0.0767	-0.3356***	-0.5183***
Province: North West	0.0102	-0.0097	0.0874	-0.1902***
Province: Gauteng	0.1490***	0.0248	0.3317***	0.0810
Province: Mpumalanga	-0.0951*	-0.1231**	0.1771***	0.1505**
Province: Limpopo	-0.3339***	-0.1825***	-0.4607***	-0.7688***
Area type: Urban	0.3953***	0.4288***	0.0947**	0.1513***
Age: 25-34 years	0.6166***	0.1980***	0.0940	0.7133***
Education years	-0.0109	0.0630***	0.1422***	0.1749***
Education years squared	0.0013	-0.0011	-0.0066***	-0.0052***
Lambda	1.7652***	1.4089***	0.9812***	1.7934***
Number of observations	17 516	16 256	12 320	10 914
Observed probability	0.2504	0.3894	0.3600	0.4203
Predicted probability at x-bar	0.2130	0.3638	0.3403	0.4088
Chi-squared statistic	2 186	1 728	962	983
Prob > Chi-squared	0.0000	0.0000	0.0000	0.0000
Pseudo R-squared	0.1485	0.1452	0.0989	0.0963

*** Significant at 1%

** Significant at 5%

* Significant at 10%

Comparison across genders for the youth yielded mixed results. The male youth group was 9.08% (1995) and 9.52% (2019) significantly more likely to be unemployed than the female youth group, while it was significantly less likely to be unemployed in 2003 and 2011. The results show a unanimous trend when comparing the likelihood of unemployment across races. In 1995, the Indian and White youth groups were 44.11% and 74.74% significantly less likely

to be unemployed than the African youth group, the youth Coloured group was not statistically significant. By 2019, all youth race groups were significantly less likely to be unemployed; the magnitude had significantly widened compared to 1995. This indicates that African youth had, compared to all other races, become increasingly likely to be unemployed over the years.

Youth residents in Western Cape (16.87%), Northern Cape (27.34%), KwaZulu-Natal (14.82%) and Gauteng (14.90%) were significantly more likely to be unemployed than those in the Eastern Cape in 1995. Those living in Free State, Mpumalanga and Limpopo were significantly less likely to be unemployed, while North West residents were statistically insignificant. Reverse findings were observed in 2019 for all provinces except Limpopo.

The marginal effects of urban areas are significantly positive across all selected periods, signifying that youths living in rural areas were less likely to be unemployed. In terms of age group, those aged 25-34 years were more likely to be unemployed, compared to those aged 15-24 years in all years except 2011, as the result was statistically insignificant. Lastly, education years squared marginal effects were statistically insignificant in 2019 and 2003. They became significantly negative in 2011 and 2019; this indicates that the likelihood to be unemployed lessened as youth became educated.

4.4 Conclusion

This chapter examined the labour market trends of youth and adult groups in South Africa for the period 1995-2019. Section 4.2 evaluated descriptive statistics, looking at demographic and educational attainment characteristics of the LF of the youth, employment, work activities and unemployment of the youth. Section 4.3 examined probit regressions on labour force participation likelihood and Heckprobit regressions on unemployment likelihood (conditional on participation).

The descriptive analysis section revealed that the male youth group dominated in the LF and almost half of employed youth lived in Gauteng and KwaZulu-Natal provinces. The dominant industries for employed youth were wholesale and retail, and CSP services. Additionally, the prevailing unemployed youth were found to be females, Africans, those aged younger than 25 years and with low levels of education.

The findings portrayed and discussed in section 4.3 suggested that the youths were significantly more likely to be unemployed than adults. If we only focused on youth individuals, Table 4.11 shows that youth who possess the following characteristics are significantly more likely to be unemployed, namely males, Africans, individuals aged 25-34 years and those residing in urban areas. The findings were somewhat mixed in the case of provinces where reverse results were observed in 2019 from what they were in 1995.



CHAPTER FIVE: CONCLUSION

5.1 Introduction

This chapter concludes the study. First, section 5.2 presents the review of main findings on how the youth has been faring in the South African labour market using the advent of democracy. Section 5.3 provides the policy recommendations on alleviating high youth unemployment.

5.2 Review of main findings

The empirical findings of this study indicated that both the youth LFPR and unemployment rate increased since the advent of democracy and economic transition. In examining the characteristics of the youth thoroughly, the descriptive results suggested that unemployment was more dominant among females and Africans with mean age slightly above 20 years. These young people largely resided in KwaZulu-Natal and Gauteng provinces. The descriptive statistics also showed that high youth unemployment was associated with low levels of education (approximately 49% did not complete secondary education in 2019). Another status linked to high unemployment is inactive labour market status, and people who have never worked before and for whom it had taken a long time to find their first job, indicating the seriousness of chronic unemployment.

Moreover, in most demographic characteristics, the youth TGR exceeded the youth AGR, which signified that the extent of employment growth was not rapid enough to absorb the net entrants into the LF, resulting in low EAR (below 100%). This, therefore, had a contribution in persistent and high levels of youth unemployment.

Reviewing the econometric analysis, the results of the probit model on labour force participation likelihood of the youth working-age population only revealed that young individuals, who were significantly less likely to participate or enter the LF, were the female group, African race, aged 25-34 years, living in rural areas, who do not have spouses. Another important finding was that LF entry was significantly less likely on youth who had a great number of children below 15 years and elderly above 60 years in the household.

Lastly, the Heckprobit model results on unemployment likelihood of youth labour force only, (conditional on participation) suggested that youth individuals who were significantly more likely to be unemployed were the male group, Africans, individuals aged 25-34 years and those living in traditional areas.

5.3 Policy recommendations

There is a compelling need for policies aimed at alleviating the persistent youth unemployment problem, the study yields five main policy recommendations. Firstly, the government should aim and focus on *improving the quality and quantity of education* provided in the economy. Education data shown by various global studies suggests that South African students have relatively poor education quality compared to their peers (Festus et al., 2016) and (National Treasury, 2011). The state's focus should be on bettering the education system such that it results in a reduction of dropout rates, as well as channelling and enabling students into tertiary education. This can be done by increasing and equalising educational resources across all schools nationally, and focusing on providing improved basic literacy and numeracy skills (Murtin, 2013). Additionally, the government can aim to improve the offering of second-chance programmes intended to create employment opportunities for the low educated and unemployed youth and to motivate their re-entry into education (National Treasury, 2011).

Another key area of employment creation relates to the *promotion of youth entrepreneurship*. A stronger focus on entrepreneurship can be introduced by the government in schools and increase investments in entrepreneurial training programmes (Organisation for Economic Co-operation and Development (OECD), 2015). Incorporating entrepreneurship with technical training can inspire youths interested in starting their own business in the future to choose to participate in traineeships and raise social status of vocational training (Organisation for Economic Co-operation and Development International Labour Organization – OECD and ILO, 2014). Awareness on existing programmes can be raised and continuous support to new entrepreneurs can be provided, this will assist in equipping less skilled youths with required knowledge to sustain themselves. It is found that programs focusing on the provision of business skills and grant financing access to low-skilled entrepreneurs have higher success rates in initiating sustainable self-employment (World Bank, 2021).

In addition, there are several main barriers to entry of doing business well in South Africa that the government should put more attention to address and assist in bettering the process. The top five barriers are namely procedures and costs associated with starting a business, dealing with permits for construction, getting access to electricity, property registration and well as credit access (World Bank, 2019). In the process of helping and encouraging entrepreneurship and self-employment creation, World Bank (2021) advocates for softening and relaxation of legal constraints and rules such as requirements for licensing and registration, zoning laws, specific industry regulations that exclude informal businesses, and specific sector regulations that includes informal businesses.

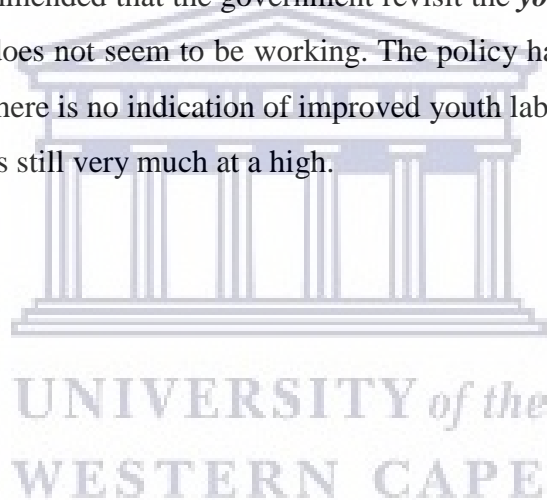
The spatial distribution of the population is another area of concern that can be focused on, to improve youth job creation. This relates to where there is a spatial disconnection between where the jobs are and where the majority of the employed and unemployed reside; this is worrying, particularly for those residing in rural areas furthest away from any employment nodes. Therefore, it becomes extremely expensive for unemployed people to go out and find employment, as jobs exist in areas that are extremely expensive to get to (Bhorat, 2012). The government can provide a *transport subsidy* to young unemployed individuals so they will be able to go into high-employment density areas to look for jobs (Bhorat, 2012). This will assist in eliminating the spatial barrier between the unemployed youth and employment nodes. Transport subsidy for job-seeking purposes have been implemented in Ethiopia (for an approximate period of four months for study purposes) (Frankling, 2015). This prevented job seekers from giving up search and surveyed participants experienced positive labour market outcomes, the transport subsidy therefore proved to be working well,

There is a great need for *promotion of informal sector development*, where the youth can seek work to temporarily survive in cases where they have really failed to find employment in the formal sector. Bhorat (2012) advocates for the need of statement procurement rules to be aligned with and reach the informal sector. The proposal is, where possible, big government contracts where recipients should be required to partner with an informal sector enterprise with tender submissions. The outcomes should be monitored to ensure that informal sector partners are remunerated accordingly, as agreed. Additionally, there should be precise government procurement contracts that target encouraging and growing informal micro-enterprises (Bhorat, 2012). This inclusion will aid in reaching small informal enterprises, which are invariably more

labour-intensive compared to their large counterparts, and ultimately reach the unemployed youth.

Furthermore, the government should focus on understanding potential barriers associated with entry to informal sector and provide adequate support. These are namely lack of access to credit, infrastructure and services, lack of provision of training facilities, market access and business development programs as well as crime (Kingdom and Knight, 2004). The equivalent support provided by the state to the formal sector small, medium and micro-enterprises (SMMEs) should be applied to the informal sector business with more concentration (Xaba et al., 2002).

Lastly, it is strongly recommended that the government revisit the *youth wage subsidy policy* as soon as possible, as it does not seem to be working. The policy has been implemented for almost 10 years now and there is no indication of improved youth labour market outcomes, as the youth unemployment is still very much at a high.



REFERENCES

- Adebimpe, O.I., Adetunji, A.T., Nwachukwu, C. and Hieu, V.M. (2021). COVID-19 pandemic challenges: the youth unemployment in Nigeria. **Journal of Contemporary Issues in Business and Government**. 27(1), 1323-6903.
- Altman, M. (2007). **Youth labour market challenges in South Africa**. Pretoria: Human Sciences Research Council.
- Barker, F. (2015). Chapter 9: Human capital and the demand for skilled workers. **The South African labour market: theory and practice**. Revised 5th edition. Pretoria: Van Schaik Publishers: 218-220.
- Beinstein, A. (2014). **South Africa's key challenges: tough choices and new directions**. The Annals of the American Academy of Political and Social Science. 652: 20-47.
- Bhorat, H. & Oosthuizen, M. (2007). Young people and the labour market. **Africa Insight**. 37(3): 388-403.
- Bhorat, H. (2012). **A nation in search of jobs: six possible policy suggestions for employment creation in South Africa**. DPRU Working Paper 12/150. Cape Town: Development Policy Research Unit, University of Cape Town.
- Bhorat, H., Naidoo, K., Oosthuizen, M. and Pillay, K. (2015). **Demographic, employment, and wage trends in South Africa**. World Institute for Development Economic Research Working Paper 2015/141. Helsinki: United Nations University.
- Borjas, G.J. (2016a). Chapter 2: Labour Supply. **Labor Economics**. 7th edition. New York: McGraw-Hill Education: 21-40.
- Borjas, G.J. (2016b). Chapter 3: Labour Demand. **Labor Economics**. 7th edition. New York: McGraw-Hill Education: 84-102.
- Borjas, G.J. (2016c). Chapter 12: Unemployment. **Labor Economics**. 7th edition. New York: McGraw-Hill Education: 503-504.
- De Lannoy, A., Graham, L., Patel, L. & Leibbrandt, M. (2020). Why is youth unemployment so intractable in South Africa? A synthesis of evidence at the micro-level. **Journal of Applied Studies**. 1(2), 115-14-31
- Du Toit, R. (2003). **Unemployed youth in South Africa: The distressed generation?** Paper presented at the Minnesota International Counselling Institute (MICI) Conference, July 27 – August 01.

- Ehrenberg, R.G. & Smith, R.S. (2011a). Chapter 2: Overview of the labour market. **Modern labour economics: Theory and public policy**. 11th edition. New York: Prentice Hall: 40-51.
- Ehrenberg, R.G. & Smith, R.S. (2011b). Chapter 3: The demand for labour. **Modern labour economics: Theory and public policy**. 11th edition. New York: Prentice Hall: 59- 69.
- Ehrenberg, R.G. & Smith, R.S. (2011c). Chapter 14: The Unemployment. **Modern labour economics: Theory and public policy**. 11th edition. New York: Prentice Hall: 508-522.
- Festus, L., Kasongo, A., Moses, M., & Yu, D. (2015). **The South African labour market, 1995-2013**. ERSA Working Paper 493. Cape Town: Economic Research Southern Africa.
- Festus, L., Kasongo, A., Moses, M., & Yu, D. (2016). The South African labour market, 1995-2015. **Development Southern Africa**. 33(5), 579-599.
- Franklin, S. (2015). **Location, search costs and youth unemployment: A randomized trial of transport subsidies in Ethiopia**. CSAE Working Paper WPS/2015-11. Oxford: University of Oxford.
- Graham, L. & Mlatsheni, C. (2015). **Youth unemployment in South Africa: Understanding the challenge and working on solutions**. South African Child Gauge Children's Institute. Cape Town: University of Cape Town.
- Heckman, J.J. (2000). Policies to foster human capital. **Research in Economics**. 54(1): 3-56.
- Ingle, K. & Mlatsheni, C. (2016). **The extent of chum in the South African youth labour market: evidence from NIIDS 2008–2015**. SALDRU Working Paper 201: Rondebosch: University of Cape Town.
- Kingdon, G. and Knight, J. (2004). Unemployment in South Africa: The nature of the beast. **World Development**, 32(3): 391-408.
- Lam, D., Leibbrandt, M. and Mlatsheni, C. (2008). **Education and youth unemployment in South Africa**. SALDRU Working Paper Number 22. Cape Town: Southern Africa Labour and Development Research Unit, University of Cape Town.
- Mlatsheni, C. & Ranchhod, V. (2017). **Youth labour market dynamics in South Africa: Evidence from NIDS 1-2-3**. REDI 3×3 Working paper 39. Rondebosch: University of Cape Town.

- Mlatsheni, C. & Rospabe, S. (2002). **Why is youth unemployment so high and unequally spread in South Africa?** Development Policy Research Unit Working Paper 02/65
Rondebosch: Development Policy Research Unit, University of Cape Town.
- Murtin, F. (2013). **Improving Education Quality in South Africa.** Working Paper No. 1056. Paris: Organisation for Economic Co-operation Development (OECD).
- National Treasury (2011). **Confronting youth unemployment: policy options for South Africa.** Pretoria: National Treasury. [Online]. Available:
<http://www.treasury.gov.za/documents/national%20budget/2011/Confronting%20youth%20unemployment%20-%20Policy%20options.pdf>
- Oosthuizen, M.J. (2006). **The post-apartheid labour market: 1995–2004.** Development Policy Research Unit Working Paper 06/103. Rondebosch: Development Policy Research Unit, University of Cape Town.
- Organisation for Economic Co-operation and Development (2015). **Tackling high youth unemployment.** [Online]. Available:
<https://www.oecd.org/southafrica/south-africa-tackling-youth-unemployment.pdf>
- Organisation for Economic Co-operation and Development and International Labour (2014). **Promoting better labour market outcomes for youth.** Melbourne: Organisation for Economic Co-operation Development. [Online]. Available:
<https://www.oecd.org/g20/topics/employment-and-social-policy/OECD-ILO-Youth-Apprenticeships-G20.pdf>
- Rankin, N.A. & Roberts, G. (2011). Youth unemployment, firm size and reservation wages in South Africa. **South African Journal of Economics.** 79(2), 128-145.
- Shakur, E.S.A., Sa'at, N.H., Abdulla, S.S. & Rasid, N.H.A. (2020). Determining unemployment factors among job seeking youth in the East Coast of Peninsular Malaysia. **Journal of Asian Finance, Economics and Business.** 7(12), 565-576.
- Statistics South Africa (2000). **October Household Survey: 1999.** Pretoria: Statistics South Africa.
- Statistics South Africa (2008). **Labour Force Survey: September 2007.** Pretoria: Statistics South Africa.
- Statistics South Africa (2021). **Quarterly Labour Force Survey: 2020Q4.** Pretoria: Statistics South Africa.
- Wakefield, H., Yu, D. & Swanepoel, C. (2020). Revisiting transitory and chronic unemployment in South Africa. **Development Southern Africa.** Forthcoming.

- World Bank. (2019). **Doing business 2020**. Washington DC: World Bank.
- World Bank. (2021). **Building back better from COVID-19, with a special focus on jobs**. Washington DC: World Bank.
- Xaba, J., Horn, P. & Motala, S. (2002). **The informal sector in Sub-Saharan Africa**. ILO Working Paper on the Informal Economy, Employment Sector. Geneva: International Labour Organisation.
- Yu, D. (2009). **The comparability of Labour Force Survey (LFS) and Quarterly Labour Force Survey (QLFS)**. Stellenbosch Economic Working Paper 08/09. Stellenbosch: Stellenbosch University.
- Yu, D. (2012). **Youths in the South African labour market since the transition: A study of changes between 1995 and 2011**. Stellenbosch Economic Working Paper 18/12. Stellenbosch: Stellenbosch University.
- Yu, D. (2013). **Youth unemployment in South Africa since 2000 revisited**. Stellenbosch Economic Working Paper 04/13. Stellenbosch: Stellenbosch University.
- Yu, D & Roos, P. (2018a). Chapter 2: The supply of labour. **Frans Barker's the South African labour market**. 6th edition. Pretoria: Van Schaik Publishers: 11-51.
- Yu, D & Roos, P. (2018b). Chapter 3: The demand for labour. **Frans Barker's the South African labour market**. 6th edition. Pretoria: Van Schaik Publishers: 57-95.
- Yu, D & Roos, P. (2018c). Chapter 7: Unemployment in South Africa. **Frans Barker's the South African labour market**. 6th edition. Pretoria: Van Schaik Publishers: 199-201.
- Yu, D & Roos, P. (2018d). Chapter 8: Human capital and the demand for skilled workers. **Frans Barker's the South African labour market**. 6th edition. Pretoria: Van Schaik Publishers: 234-236.

APPENDIX

Table A1: Labour market aggregates of youth working-age population, 1995-2019

	(1 000s)				Rate (%)	
	Employed	Unemployed	Inactive	Working-age population	LFPR	Unemployment rate
1995	4 400	1 467	8 721	14 588	40.22	25.00
1996	4 086	1 490	9 312	14 888	37.45	26.72
1997	4 044	1 689	9 416	15 149	37.84	29.46
1998	4 285	2 231	9 003	15 519	41.99	34.24
1999	4 808	2 252	8 824	15 884	44.45	31.90
2000	5 462	3 032	7 996	16 490	51.51	35.70
2001	4 962	3 416	8 269	16 647	50.33	40.77
2002	5 049	3 578	8 257	16 884	51.10	41.47
2003	5 140	3 273	8 714	17 127	49.12	38.90
2004	5 231	3 052	9 035	17 318	47.83	36.85
2005	5 564	3 306	8 600	17 470	50.77	37.27
2006	5 808	3 207	8 673	17 688	50.97	35.57
2007	6 070	2 902	8 848	17 820	50.35	32.35
2008	6 443	3 076	8 770	18 289	52.05	32.31
2009	5 857	3 115	9 518	18 490	48.52	34.72
2010	5 675	3 237	9 788	18 700	47.66	36.32
2011	5 775	3 237	9 911	18 923	47.62	35.92
2012	5 922	3 358	9 875	19 155	48.45	36.19
2013	6 065	3 263	10 054	19 382	48.13	34.98
2014	5 973	3 472	10 151	19 596	48.20	36.76
2015	6 348	3 535	9 906	19 789	49.94	35.77
2016	6 158	3 814	9 995	19 967	49.94	38.25
2017	6 189	3 895	10 037	20 121	50.12	38.63
2018	6 143	3 920	10 197	20 260	49.67	38.95
2019	5 902	4 250	10 229	20 381	49.81	41.86

Table A2: Labour market aggregates of adult working-age population, 1995-2019

	(1 000s)				Rate (%)	
	Employed	Unemployed	Inactive	Working-age population	LFPR	Unemployment rate
1995	5 099	562	3 942	9 603	58.95	9.93
1996	4 880	734	4 407	10 021	56.02	13.07
1997	5 050	762	4 545	10 357	56.12	13.11
1998	5 085	927	4 134	10 146	59.25	15.42
1999	5 548	902	3 912	10 362	62.25	13.98
2000	6 762	1 124	3 397	11 283	69.89	14.25
2001	6 206	1 234	3 998	11 438	65.05	16.59
2002	6 235	1 353	4 023	11 611	65.35	17.83
2003	6 272	1 157	4 352	11 781	63.06	15.57
2004	6 399	1 079	4 474	11 952	62.57	14.43
2005	6 723	1 176	4 293	12 192	64.79	14.89
2006	6 979	1 179	4 126	12 284	66.41	14.45
2007	7 223	999	4 345	12 567	65.43	12.15
2008	8 118	1 221	4 358	13 697	68.18	13.07
2009	7 985	1 358	4 757	14 100	66.26	14.53
2010	7 994	1 416	5 137	14 547	64.69	15.05
2011	8 357	1 459	5 081	14 897	65.89	14.86
2012	8 661	1 540	5 100	15 301	66.67	15.10
2013	8 996	1 615	5 084	15 695	67.61	15.22
2014	9 173	1 676	5 257	16 106	67.36	15.45
2015	9 519	1 881	5 203	16 603	68.66	16.50
2016	9 706	2 057	5 265	17 028	69.08	17.49
2017	10 023	2 314	5 183	17 520	70.42	18.76
2018	10 281	2 287	5 476	18 044	69.65	18.20
2019	10 509	2 484	5 524	18 517	70.17	19.12