EMPIRICAL INVESTIGATION OF THE EFFECTS OF TRADE OPENNESS ON POVERTY IN SOUTH AFRICA AND LESOTHO

by

ZIMVO MTOLO

submitted in accordance with the requirements for

the degree of

MASTER OF COMMERCE IN ECONOMICS

in the subject

INTERNATIONAL TRADE

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF. M.R. MALEFANE

SEPTEMBER 2024

DECLARATION

Name: Zimvo Mtolo

Student number: 63517272

Degree: Master of Commerce in Economics

EMPIRICAL INVESTIGATION OF THE EFFECTS OF TRADE OPENNESS ON POVERTY IN SOUTH AFRICA AND LESOTHO

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

(The dissertation will not be examined unless this statement has been submitted.)

_____ _____

SIGNATURE DATE

ABSTRACT

The study examined the impact of trade openness on poverty in South Africa and Lesotho separately. The study used the autoregressive distributed lag (ARDL) bounds testing approach with annual data from 1980 to 2019. The study used the consumption-based measure of poverty, measured by consumption expenditure as a target variable of investigation. The study further employed three measures of trade openness, which are sum of trade to GDP, the ratio of exports to GDP, and imports to GDP ratio. The use of three proxies of trade openness allowed the study to check the robustness of the results and to examine the individual effects of exports and imports on poverty. As a contribution to existing literature, the study included a dummy variable for Lesotho to capture the effect of the structural break that occurred from 1990 resulting from retrenchments of Lesotho nationals from South African mines.

The overarching aim of the study is to contribute to the ongoing literature on the extent in which trade openness impacts poverty in South Africa and Lesotho, which are members of the Southern African Customs Union (SACU). The pursuit of the present study, among other things, is motivated by SACU's mandate highlighting the need to foster sustainable economic growth and development among member countries. Such a mandate is underpinned by a focus on generating employment opportunities and alleviating poverty in the SACU area. The study provides a comparison of how the impact of trade openness on poverty differs between South Africa which is an upper-middle income country and Lesotho which is a lower middle-income country. The comparison also considers if the results differ with different proxies of trade openness.

The results show that for South Africa, in the long run and short run, trade openness does not lead to poverty reduction, irrespective of the proxy used to measure trade openness. Instead, in the long run, trade openness, proxied by the sum of trade to GDP and the ratio of imports to GDP, has a negative effect on poverty. In the short run, the sum of trade/GDP and exports/GDP are both insignificant to poverty while imports/GDP have a negative impact on poverty. For Lesotho, in the long run, sum of trade/GDP is insignificant to poverty while exports/GDP and imports/GDP have a positive effect on poverty. In the short run, the sum of trade/GDP has a positive impact on poverty, exports/GDP have a negative effect on poverty while imports/GDP are insignificant to poverty. The coefficient of the dummy variable is negative and significant in the short run, confirming the evidence of a structural break.

These results suggest that policies adopted in South Africa have not brought significant poverty alleviation. This could be an indication of a situation where policies implemented over the past tend to prevent the poor from benefiting from the gains of trade openness. Based on

the findings, the main recommendation for South Africa is that policymakers could review the policies in place and understand the unintended consequences of each policy on poverty reduction. Policymakers in Lesotho could ensure that they adopt policies that benefit the poor directly. If well implemented, such policies could provide relief that will protect the poor from short term adjustment costs arising from trade openness.

In view of the overall findings, the current study, therefore, recommends that there be a critical review of policies to assess unintended consequences of trade openness that may lead to increased poverty and ensure alignment of policies to overall poverty reduction objectives. In this context, the study recommends that the mechanism of distributing gains from trade be reviewed to ensure that gains from trade openness, such that the returns from trade, including funds from SACU revenue, are invested towards poverty reduction.

Keywords

Trade openness, Poverty, Economic growth, Inflation, Education, South Africa, Lesotho, Southern African Customs Union (SACU), Autoregressive Distributed Lag (ARDL)

KAKARETSO

Bofuma ke sehlooho sa bohlokwa haholo se bohareng ba Dipheo tsa Ntlafatso ya Dilemo tse Sekete le Dipheo tsa Ntlafatso ya Moshwelella jwalo ka ha di hlahiswa ke Matjhaba a Kopaneng. Kahoo, phuputso ena e batlisisa phello ya ho buleha ha kgwebo bofumeng dinaheng tse pedi tse kgethilweng tsa Mokgatlo wa Lekgetho wa Dinaha tsa Afrika e Borwa (SACU), e leng, Lesotho le Rephabliki ya Afrika Borwa. Naha ya Lesotho e nkwa e le naha e sa tswelang pele haholo mme e behilwe boemong ba naha e futsanehileng, ha Afrika Borwa e le naha e ntseng e tswela pele moruong eo hape e nkilweng e le naha e hodimo-dimo. Nako ya phuputso e akaretsa 1980 ho isa 2019, e leng nako ya sewa sa pele ho COVID-19. Phuputsong e matla ya phello ya ho buleha ha kgwebo bofumeng, phuputso e sebedisa mokgwa wa tlhahlobo ya meedi ya ho dieha ho tsamaiswa ka mokgwa o ikemetseng (ARDL) ho kopanya.

Kaha maemo a bofuma a ntse a tswela pele Afrika Borwa le Lesotho, sepheo se seholo sa phuputso ena ke ho kenya letsoho dipatlisisong tsa hore na ho buleha ha kgwebo ya matjhaba ho ama bofuma hakae dinaheng tse kgethilweng tsa SACU. Takatso ya phuputso ya jwale, hara tse ding, e susumetswa ke thomo ya SACU e totobatsang tlhokeho ya ho kgothalletsa kgolo le ntlafatso ya moruo wa moshwelella hara dinaha tseo e leng ditho. Thomo e jwalo e tshehetswa ke tsepamiso ya maikutlo hodima ho hlahisa menyetla ya mesebetsi le ho fokotsa bofuma sebakeng sa SACU.

Kemedi ya bofuma e sebedisitsweng phuputsong ena ke Malapa le Mekgatlo e sa Etsang Phaello e Sebeletsang ditshenyehelo tsa Malapa tsa ho qetela tsa tshebediso ya motho ka mong tse lekantsweng ka 2015 US$ kamehla. Tlhaloso ya kemedi ena ke hore ha ditshenyehelo tsa ho qetela tsa tshebediso ya tjhelete ya malapa di le hodimo, ho fokotsa sekgahla sa bofuma. Diphetoho tse hlalosang tse sebedisitsweng tlhahlobong di kenyelletsa ho buleha ha kgwebo, e emetsweng ke thepa e iswang kantle ho naha le e tswang kahare ho naha e le karolo ya Kakaretso ya Dihlahiswa tsa Lehae (GDP), ho phahama ha ditheko ho emetsweng ke Indekse ya Theko ya Moreki, kgolo ya moruo e emetsweng ke GDP motho ka mong, le thuto e emetsweng ke tshebediso ya tjhelete ya mmuso thutong e le peresente ya GDP.

Diphetho tse matla di senola diphumano tse latelang mabapi le hore na ho buleha ha kgwebo ho ama bofuma ka nako e kgutshwane le nako e telele jwang: sa pele, bakeng sa Afrika Borwa, phuputso e fumana hore phapang ya ho buleha ha kgwebo e bonahala ka dipalo ka katisi e mpe. Sena se fana ka maikutlo a hore keketseho ya ho buleha ha kgwebo e amahanngwa le ho theoha ha ditshenyehelo tsa tshebediso ya tjhelete malapeng, ho lebisang ho, keketseho

ya bofuma. Ha ho bapiswa, phuputso e fumana hore ho phahama ha ditheko ho na le dipalo-palo tse nang le katisi e mpe, ho bolelang hore ho eketseha ha ho phahama ha ditheko ho lebisang ho ho fokotseha ha ditshenyehelo tsa tshebediso ya ditjhelete ya malapa le keketseho e tsamaellang ya bofuma. Phuputso e fumana hore kgolo ya moruo e bonahala ka dipalo-palo ka katisi e ntle, e leng se bontshang hore ha kgolo ya moruo e ntlafala, lekeno la tjhelete la malapa le lona e ya ntlafala, kahoo bofuma bo a fokotseha. Ho phaella moo, thuto e bonahala ka dipalo-palo tse nang le katisi e ntle, e bolelang hore keketseho ya ditshenyehelo tsa mmuso thutong e lebisa ho eketseha ha ditshenyehelo tsa tshebediso ya tjhelete ya malapa le ho fokotseha ho tsamaellanang ha bofuma.

Diphetho tsa Afrika Borwa di kenya letsoho diphuputsong tse teng tse fumaneng hore ho buleha ha kgwebo ho kenya letsoho hampe phokotsong ya bofuma. Sena se bolela hore ho buleha kgwebong ho amahanngwa le ho fokotseha ha ditshenyehelo tsa tshebediso ya tjhelete ya malapa, kahoo bofuma bo a eketseha. Bakeng sa Lesotho, diphumano tsa hona jwale di dumellana le diphumano tse fetileng, ho latela moo ho fumanweng hore bolokolohi ba kgwebo ha bo fetole phokotso ya bofuma dinaheng tse sa tswelang pele moruong.

Diphetho tsa Lesotho di bontsha hore thuto ke yona feela e fapaneng e nang le kamano e kgolo le bofuma. Sena se bolela hore keketseho ya ditshenyehelo tsa mmuso thutong e baka keketseho ya ditshenyehelo tsa tshebediso ya ditjhelete ya malapa, le ho fokotseha ha bofuma kamora moo. Dikatisi tsa ho buleha ha kgwebo, ho phahama ha ditheko le kgolo ya moruo ha di na thuso ho latela dipalo.

Diphetho tsena di fana ka maikutlo a hore maano a amohetsweng Lesotho ha a so ka a tlisa phokotso ya bofuma. Sena e ka ba sesupo sa boemo boo maano a kentsweng tshebetsong nakong e fetileng a atisang ho thibela mafutsana ho rua molemo melemong ya ho buleha ha kgwebo, kgolo ya moruo le thuto e ntlafetseng. Ka hona, baetsi ba maano ba Lesotho ba ka nahana ho hlahloba maano a hajwale le ho supa maano a tla fella ka hore ho be le basebetsi ba atlehang le ba amanang le phokotso ya bofuma. Bakeng sa Afrika Borwa, baetsi ba maano ba ka hlahloba maano a teng le ho utlwisisa diphello tse sa lebellwang tsa leano le leng le le leng la phokotso ya bofuma.

Ka lebaka la diphumano tse akaretsang, phuputso ya hajwale e kgothalletsa hore ho be le tshekatsheko e hlokolosi ya melemo e fumanwang ponahatsong ya kgwebo, e le hore dipoelo tse tswang kgwebong, ho kenyeletswa le ditjhelete tse tswang lekenong la SACU, di tle di tsetelwe bakeng sa phokotso ya bofuma. Sena se ka etswa ka sepheo se hlakileng sa ho utlwisisa phello e sebetsang ya maano a jwalo ho ba futsanehileng ka nako e kgutshwane le e telele.

Mantswe a sehlooho

Ho buleha ha kgwebo, Bofuma, kgolo ya moruo, Ho phahama ha ditheko, Thuto, Afrika Borwa, Lesotho, Mokgatlo wa Lekgetho wa Dinaha tsa Afrika e Borwa (SACU), ho dieha ho tsamaiswa ka mokgwa o ikemetseng (ARDL)

ACKNOWLEDGEMENTS

I would like to extend my sincere gratitude and appreciation to:

- The Most High God for sustaining me during this time. Without Him I would not have gotten this far.
- my Supervisor, Professor Malefane, for her patience, kindness, inspiration, motivation and overall dedication to supporting me during this time.
- my mother and my sister who have allowed me the space and the time to focus my attention and energy on my studies. I thank them for their understanding, support and love.
- my loving 4-year-old daughter, Adumise Mtolo, for being the reason I have held on.
- my friend, Dr Simphiwe Hlatshwayo, for her advice and sharing her reflection from her own journey.
- all my friends who have been a great pillar of strength, helping me to balance work, studies, and other obligations.

Your encouragement, love and support carried me to the finalisation of my studies.

DEDICATION

I dedicate this work to my daughter, Adumise Mtolo, my reason for not giving up.

TABLE OF CONTENTS

ABSTRACT ..... **ii**

ACKNOWLEDGEMENTS ..... **vii**

DEDICATION ..... **viii**

LIST OF FIGURES ..... **xii**

LIST OF TABLES ..... **xiii**

LIST OF ABBREVIATIONS AND ACRONYMS ..... **xiv**

CHAPTER 1 ..... **1**

INTRODUCTION **1**

1.1 Background 1

1.2 Problem Statement 4

1.3 Research question, objectives, and hypothesis of the study 5

1.3.1 Research Question 5

1.3.2 Objectives of the study 6

1.3.3 Hypotheses of the study 6

1.4 Significance of the study and motivation for selected countries 8

1.5 Justification for selected countries 9

CHAPTER 2 ..... **11**

OVERVIEW OF TRADE AND POVERTY IN SOUTH AFRICA **11**

2.1 Introduction 11

2.2 An overview of South Africa's trade flows 11

2.2.1 Background 11

2.2.2 Trends in exports in South Africa 11

2.2.3 Trends in imports in South Africa 15

2.2.4 Trends in Poverty and Trade openness in South Africa 18

2.3 Trade policy developments in South Africa (1980–2021) 20

2.3.1 Coordinated attempts at liberalisation from the 1980s 20

2.3.2 Recent developments: trade policy reform from 1990 21

2.3.3 Trade agreements 22
2.4 An overview of poverty trends and poverty reduction strategies in South Africa 26
2.4.1 Overview of poverty outlook in South Africa 26
2.4.2 Poverty reduction strategies in South Africa (1990–2019) 29
2.5 Conclusion 34
CHAPTER 3 36
OVERVIEW OF TRADE AND POVERTY IN LESOTHO 36
3.1 Introduction 36
3.2 An overview of Lesotho's trade flows 36
3.2.1 Background 36
3.2.2 Trends in exports in Lesotho 38
3.2.3 Trends in imports in Lesotho 40
3.2.4 Trends in Trade Openness and Poverty in Lesotho 43
3.3 An overview of poverty trends and poverty reduction strategies in Lesotho 48
3.3.1 Overview of poverty outlook in Lesotho 48
3.3.2 Poverty reduction strategies in Lesotho (1980–2019) 51
CHAPTER 4 57
THEORETICAL AND EMPIRICAL LITERATURE REVIEW 57
4.1 Introduction 57
4.2 Theoretical linkages between trade and poverty 57
4.2.1 Heckscher-Ohlin trade theory 57
4.2.2 Stolper-Samuelson theorem 58
4.2.3 Alternative approach: Winters (2000) 59
4.2.4 Institutional approach 61
4.3. Controversies on trade policy orientation and its implications for poverty reduction 62
4.4 Empirical studies on international trade and poverty 62
CHAPTER 5 69
METHODOLOGY 69

5.1 Introduction 69
5.2 Empirical model and definition of variables 69
5.2.1 Empirical model 70
5.2.2 Theoretical and Empirical Underpinnings of the Model 72
5.3. Estimation techniques 76
5.3.1 Stationarity tests 76
5.3.2 Cointegration test 77
5.3.3 Error correction model 78
CHAPTER 6 80
DISCUSSION OF EMPIRICAL FINDINGS 80
6.1 Introduction 80
6.2 Descriptive Statistics 80
6.3 Results of unit root tests 82
6.4 Long run estimation and discussion of the results 85
6.5 Short run estimation and discussion of the results 92
CHAPTER 7 103
CONCLUSION 103
7.1 Introduction 103
7.2 Summary of the study 103
7.3 Summary of the empirical findings and policy recommendations 106
7.4 Limitations of the study and areas for future research 108
REFERENCES 109

LIST OF FIGURES

Figure 1: Exports of goods and services (% of GDP) in South Africa (1980-2022) 13

Figure 2: Top five export products in South Africa (Nominal terms - US$ Thousands) 14

Figure 3: Imports of goods and services (% of GDP) in South Africa (1980-2022)..... 16

Figure 4: Top five import products in South Africa (Nominal terms - US$ Thousand)..... 17

Figure 5: South Africa's trade composition (Nominal terms - 1992, 2000 and 2019)..... 18

Figure 6: Poverty and Trade Openness in South Africa (1980–2022)..... 20

Figure 7: Exports of goods and services (% of GDP) in Lesotho (1980-2022)..... 39

Figure 8: Top five export products in Lesotho (thousand US$) 40

Figure 9: Imports of goods and serviced (% of GDP) in Lesotho (1980-2022)..... 41

Figure 10: Top five import products in Lesotho (thousand US$) 42

Figure 11: Lesotho's trade composition (2000, 2008 and 2017) 43

Figure 12: Trade openness and Poverty in Lesotho (1980–2022) 44

Figure 13: Household consumption expenditure per capita in SACU-US$ (1980–2020) 51

Figure 14: Plot of CUSUM and CUSUMQ for South Africa and Lesotho (Model 1)..... 99

Figure 15: Plot of CUSUM and CUSUMQ for South Africa and Lesotho (Model 2)..... 100

Figure 16: Plot of CUSUM and CUSUMQ for South Africa and Lesotho (Model 3)..... 101

LIST OF TABLES

Table 1: Trade-related interventions in South Africa (1980–2021) 25

Table 2: Poverty indicators in South Africa (1980–2019) 28

Table 3: Projected and actual results of key economic indicators based on GEAR (1996–2000) 31

Table 4: Trade-related interventions in Lesotho (1980–2021) 47

Table 5: Poverty indicators in Lesotho (1994–2017) 50

Table 6: List of empirical studies 67

Table 7: Data sources and variable description 76

Table 8: Descriptive Statistics for South Africa 81

Table 9: Descriptive Statistics for Lesotho 81

Table 10: Results of unit root test for South Africa 82

Table 11: Results of unit root test for Lesotho 83

Table 12: Results of the long run estimation for South Africa and Lesotho (Model 1-3) 91

Table 13: Results of the error correction model (Model 1) for South Africa and Lesotho 96

Table 14: Results of Model 2 for South Africa and Lesotho 97

Table 15: Results of Model 3 for South Africa and Lesotho 98

Table 16: Summary of empirical findings 102

LIST OF ABBREVIATIONS AND ACRONYMS

ACP	African, Caribbean and Pacific Group of Countries
ADF	Augmented Dickey-Fuller
AfCFTA	African Continental Free Trade Agreement
AGOA	African Growth and Opportunity Act
AIC	Akaike Information Criterion
ARDL	Autoregressive Distributed Lag
ASGISA	Accelerated and Shared Growth Initiative of South Africa
BBBEE	Broad-Based Black Economic Empowerment
BEDCO	Basotho Enterprise Development Corporation
BEE	Black Economic Empowerment
CUSUM	cumulative square of residuals
CUSUMQ	cumulative sum of squared residuals
DW	Durbin-Watson
EIF	Enhanced Integrated Framework
EPA	Economic Partnership Agreement
EU	European Union
FDI	Foreign Direct Investment
FGLS	Feasible Generalised Least Squares
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GEAR	Growth Employment and Redistribution
GEIS	The General Export Incentive Scheme
GMM	System Generalised Method-of-Moment
IMF	International Monetary Fund
LDCs	least developed countries
MERCOSUR	Common Market of the South
NDP	National Development Plan
NPISHs	Non-Profit Institutions Serving Households
OECD	Organisation for Economic Cooperation and Development
PP	Phillips-Perron
PPP	Purchasing Power Parity
PRS	Poverty Reduction Strategy
PRSP	Poverty Reduction Strategy Paper
RDP	Reconstruction and Development Programme

SACU	Southern African Customs Union
SACUM	SACU Member States and Mozambique
SADC	Southern African Development Community
SADCC	Southern African Development Coordination Conference
SDGs	Sustainable Development Goals
TDCA	Trade, Development and Cooperation Agreement
TIDCA	Trade, Investment and Development Cooperative Agreement
TRALAC	Trade Law Centre for Southern Africa
UK	United Kingdom
US$	United States Dollar
USA	United States of America
WTO	World Trade Organisation

CHAPTER 1
INTRODUCTION

1.1 Background

South Africa and Lesotho, among other nations, actively participate in addressing the Sustainable Development Goals (SDGs) established by the United Nations. The SDGs represent a universal initiative to eliminate poverty, safeguard the environment, and ensure global peace and prosperity by 2030. Alleviating poverty stands as the very first goal of the SDGs, and both South Africa and Lesotho, given their intricate socio-economic histories, encounter distinctive challenges in this pursuit (United Nations, 2021).

Although South Africa has made efforts in mitigating poverty, substantial challenges still endure. The National Development Agency (2019), in its assessment of poverty-reduction strategies in South Africa, highlighted that the country is faced with elevated levels of income inequality and unemployment, contributing to the persistent rise in poverty. In response to this, South Africa has some initiatives in place to improve social protection programmes, enhance educational and healthcare access, and foster inclusive economic growth. Similarly, Lesotho also grapples with elevated poverty rates, particularly in the rural areas where people continue to face obstacles such as restricted access to fundamental services, limited economic opportunities and limited access to social services (World Bank, 2019).

Since the end of apartheid, South Africa has implemented trade liberalisation measures which have resulted in reduced tariff rates and increased trade openness. However, the country continues to face challenges in achieving substantial economic growth and reducing high unemployment levels. Poverty levels have risen despite these efforts. By 1994, many quantitative restrictions had been lifted (except those related to agricultural products), while also becoming a signatory to the Marrakesh Agreement under the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) during that year. South Africa committed to binding 98% of its tariff lines. Additionally, the commitment entailed reducing the number of tariffs and streamlining commodity lines (Mabugu and Chitiga, 2007 and Edwards, 2006).

In the case of Lesotho, over the past two decades, the country has capitalised on the opportunities afforded by globalisation. The export-led growth model adopted in Lesotho relied largely on its preferential market access to the US through the African Growth and Opportunities Act. This served as a key enabler positioning Lesotho to attract significant foreign direct investment in the textile and apparel sector. Despite that, even after over a decade of export-led growth, poverty levels in Lesotho remain high while inequality has worsened. This suggests that while trade has played a role in economic growth for Lesotho, it

has not effectively translated into poverty reduction and equitable distribution of income (Arenas, Engel, Kotschwar and Maliszewska, 2018). Based on existing evidence, it emerges that although in some cases, trade leads to a reduction in poverty, this trend is particularly pronounced in countries characterised by well-established financial sectors, elevated levels of education, and robust institutional frameworks.

Empirical evidence on the impact of trade openness on poverty reduction is mixed. As a result, evidence from previous studies suggests that the extent to which trade impacts poverty depends on various factors specific to the subject under study. For instance, in developing countries, Beck, Demirguc-Kunt and Levine (2007) and Kpodar and Singh (2011) find that trade does not have an impact on poverty. Likewise, Dollar and Kraay (2001) and Bayar and Sezgin (2017) and Li, Islam and Fatema (2017) find no compelling evidence to suggest that there is a relationship between trade and poverty in both developed and developing countries. On the other hand, Guillaumont-Jeanneney and Kpodar (2011) find a negative relationship between trade and poverty when sampling developed countries that are considered as low-income countries. Similarly, Onakoya, Johnson and Ogundajo (2019) confirm a negative relationship between trade and poverty in Africa. In contrast, Le Goff and Singh (2014) and Fambeu (2021) find no significant relationship between trade and poverty in sub-Saharan Africa.

From a poverty point of view, by means of the $1.90 purchasing power parity (PPP) per day, the actual number of people living below the poverty line in Lesotho was 49.7% of the population in 2017, which was down from 56.6% in 2002. In comparison, in South Africa, 55.5% of the population were living below the poverty line of $1.90 per day (World Bank, 2020). In the case of South Africa, some of the most distinguished drivers of poverty include the macroeconomic dynamics of the country as well as the dynamics related to the labour market.

South Africa also faces declining levels of income per capita, contributing to declining tax income collected by the government and imposing limitations of using redistributive fiscal policy as a tool to distribute income (National Treasury, 2024). In addition to macroeconomic dynamics, the South African labour market has been identified as the chief factor behind the nation's social woes. Alongside this observation, the high unemployment rate in the country is further aggravated by factors such as political uncertainty, weak economic growth and spatial aspects to employment (Francis and Webster, 2019).

Linking the experiences of the two countries, one can argue that one of the reasons that Lesotho's economy is closely linked to South Africa could be associated with its proximity to South Africa. Through the course of history, the Lesotho nationals have been migrating to South Africa looking for opportunities in the mines. Hence, poverty levels in Lesotho have

been driven by factors emanating from inside the economy and external factors including those from South Africa. As an example, the economic downturn in 1998 led to loss of economic activity in selected sectors, which in turn contributed to work stoppages and unemployment. On the other hand, other factors including large family size with low income, retrenchment from South African mines, and lack of access to arable land have also contributed to poverty in Lesotho (Omole, 2003 and Rantšo and Ralitjeleng-Mahlelebe, 2023).

Furthermore, Lesotho's geographic position, in which the country is completely surrounded by South Africa, makes it a unique case compared to other landlocked countries. This is because while other Southern African nations rely heavily on South Africa, they still maintain direct land connections to the broader African region. Additionally, no other states are as closely tied to the South African mining industry through the migrant labour system as Lesotho (Cobbe, 2012 and Southall, 1990,). The close ties between South Africa and Lesotho, therefore, imply that economic conditions in South Africa have a significant impact on Lesotho's economy.

Since the early 1990s, the number of Basotho that were hired as mineworkers in South Africa started to decrease. This was referred to as the "migration shocks" and represented a time when lay-off were on an increase, contracts were not being renewed and hiring rates were at the lowest. Although there was a persistent decline in the number of the Basotho migrant mine workers, the Central Bank of Lesotho still maintained that the South African mining industry is a key contributor to growth in South Africa and nearby countries. The declining number of migrant mine workers has significant economic consequences for Lesotho, including reduced household incomes due to declining remittances and a threat to government revenue from customs union grants (Coplan and Thoahlane, 1995).

While Lesotho and South Africa experience poverty in varying levels, through external assistance, they have drafted policies aimed at reducing poverty in their respective economies. Lesotho's Poverty Reduction Strategy (PRS) emphasises the relevance of trade policies to boosting economic growth and transforming for the better the lives of the poor communities (International Monetary Fund, 2006). The PRS, which was adopted in 2004, places significant emphasis on trade, with the country enhancing its competitiveness and productivity, while also broadening its export portfolio. The PRS was formulated in response to rising poverty levels in Lesotho. Its main objectives were to create sustainable economic growth through employment, access to education and health case, provision of infrastructure as well as improving safety and security.

To respond to the stubborn poverty levels in Lesotho post the PRS, the Enhanced Integrated Framework (EIF) was established in 2009. The primary objective was to deliver focused strategic assistance to the agricultural sector, placing a strong emphasis on enhancing value

chains and quality standards. The EIF plays a role in diminishing poverty and unemployment, with direct benefits extended to women and youth through its initiatives. Furthermore, the EIF has facilitated the creation of a favourable trade environment for the government and has played a role in negotiating entry into new markets for goods and services originating from Lesotho (Enhanced Integrated Framework, 2023).

In the case of South Africa, the country has implemented at least three categories of poverty alleviation strategies. The initial approach, implemented in the 1980s, entailed assisting impoverished households through social grants which were primarily distributed as pensions, child support, and grants for disabled individuals. The second strategy centres on economic empowerment by expanding involvement in the economy, exemplified by initiatives like Broad-Based Black Economic Empowerment (BBBEE) and land reform. The Restitution of Land Rights Act was enacted in 1994, while BBBEE was first introduced as the Black Economic Empowerment (BEE) Act in 2003. The third aspect involves augmenting resources for essential social services such as education, health, housing, and water. The main driver behind the third aspect was the Reconstruction and Development Programme (RDP) which prioritised basic needs such as access to jobs, housing, water, education, food and electricity (Matube, 2005).

1.2 Problem Statement

This study is placed within the context of fundamental issues facing both South Africa and Lesotho as highlighted by the SDGs. Poverty in South Africa and Lesotho represents a significant crisis, manifesting in various forms and impacting a large portion of the population. In South Africa, the percentage of people living below $1.90 per day fell from 68% in 2005 to 56% of the population in 2010; however, the estimate for 2022 shows an increase to 62.6% of the population living below the $2.15 poverty line (World Bank, 2024a). In Lesotho, poverty fell from 68% to 56% of the population between 2005 and 2010. The estimates for 2022 using $2.15 per day show an improvement of 32.4% of the population that still lives below the poverty line (World Bank, 2024b). The poverty-related statistics for South Africa and Lesotho, therefore, indicate that a considerable proportion of the population in these two countries live below the poverty line.

Lesotho and South Africa have implemented country-specific policies to address the high levels of poverty. For South Africa, these policies include the RDP, BEE, and social grants. For Lesotho, to help address the issue of poverty the government adopted policies such as the Poverty Reduction Strategy and the EIF. The EIF was introduced later, in 2009, and aimed to use agriculture to address issues associated with poverty. On the same breath, the rise of

international trade is of utmost importance to both countries as members of the world's oldest customs union.

Nevertheless, available literature on the relationship between trade openness and poverty is mixed. While some studies, such as Hassan and Siddiqi (2010) and Nessa and Imai (2023), conclude that there is a positive and statistically significant relationship between trade and poverty, while some studies have found a negative and statistically significant relationship (Maluleke and Vacu-Ngqila, 2024, Guillaumont-Jeanneney and Kpofar, 2011 and Tariq, 2011). Some studies have found there to be no evidence of a relationship between trade openness and poverty (Singh and Haung, 2015) and some have found there to be a mixed relationship between trade openness and poverty (Sattar, Karim and Munir (2022).

On the same breath, globalisation has accelerated especially over the past three decades due to various factors such as technology, institutions, political and legal developments. During the process of globalisation, many countries, including South Africa and Lesotho, have implemented trade openness policies that either reduce or completely remove barriers on trade of goods, services and capital, and as a result the volume of trade has increased over time. Therefore, trade openness policies have given rise to some social and economic implications for different economies.

While these studies have examined the relationship between trade openness and poverty, most studies have used only one measure of trade openness, being the sum of trade as a share of GDP. This poses a limitation on the robustness of the study and a further limitation of not examining the individual effects of exports and imports on poverty.

It is against this background that this study is focused on estimating the relationship between trade openness (using three proxies) and poverty in South Africa and Lesotho so that its findings can inform future studies and provide implications for policy and development strategy.

1.3 Research question, objectives, and hypothesis of the study

1.3.1 Research Question

This study addresses a central research question that will enable the understanding of the economic impact of trade openness on poverty. The underlying research question is, therefore, *does the government's effort to promote trade openness lead to a corresponding decrease in poverty?*

The secondary research questions are:

- What is the effect of trade openness on poverty for each of the trade openness proxies employed by the study?
- Does the effect of trade openness on poverty differ in the long run versus the short run.

1.3.2 Objectives of the study

The main objective of this study is to examine the impact of trade openness on poverty in South Africa and Lesotho during 1980-2019.

Specific objectives of this study are to:

- estimate the long run and short run impact of trade openness on poverty in Lesotho and South Africa investigate if the impact of trade openness on poverty in Lesotho and South Africa depends on the proxy used to measure trade openness.
- estimate the long run and short run impact of the control variables; inflation, economic growth, and education on poverty in Lesotho and South Africa
- investigate the impact of the structural break associated with retrenchments of Lesotho nationals from South African mines; and
- Investigate the trends in poverty and trade-related indices in South Africa and Lesotho, and provide conclusions and recommendations based on study findings.

1.3.3 Hypotheses of the study

In fulfilling the main and specific objectives of the study, the following hypotheses are tested:

- Trade openness, proxied by exports plus imports/GDP, has a positive effect on poverty in the long run and short run.
  H_0 : there is no relationship between trade openness (exports plus imports/GDP) and poverty in the long run and short run.
  H_1 : there is a positive relationship between trade openness (exports plus imports/GDP) and poverty in the long run and short run.

- Trade openness, proxied by exports/GDP, has a positive effect on poverty in the long run and short run.
  H_0 : there is no relationship between trade openness (exports/GDP) and poverty in the long run and short run.
  H_1 : there is a positive relationship between trade openness (exports/GDP) and poverty in the long run and short run.

- Trade openness, proxied by imports/GDP, has a positive effect on poverty in the long run and short run.
  H_0 : there is no relationship between trade openness (imports/GDP) and poverty in the long run and short run.
  H_1 : there is a positive relationship between trade openness (imports/GDP) and poverty in the long run and short run.

- Inflation, proxied by changes in the Consumer Price Index, has a negative effect on poverty in the long run and short run.
  H_0 : there is no relationship between inflation and poverty in the long run and short run.
  H_1 : there is a negative relationship between inflation and poverty in the long run and short run.

- Economic growth, proxied by GDP, has a positive effect on poverty in the long run and short run during.
  H_0 : there is no relationship between economic growth and poverty in the long run and short run.
  H_1 : there is a positive relationship between economic growth and poverty in the long run and short run.

- Education, proxied by government expenditure on education as a share of GDP, has a positive effect on poverty in the long run and short run.
  H_0 : there is no relationship between education and poverty in the long run and short run.
  H_1 : there is a positive relationship between education and poverty in the long run and short run.

- The dummy variable measuring the effect of the structural break has a negative effect on poverty reduction in Lesotho in the long run and short run.
  H_0 : the structural break, represented by the dummy variable, does not have an effect on poverty in the long run and short run.
  H_1 : the structural break, represented by the dummy variable, has a negative effect on poverty in the long run and short run.

1.4 Significance of the study and motivation for selected countries

The main goal of the study is to contribute towards the investigation of the extent to which trade openness impacts poverty within the two selected SACU member countries. For a robustness check, the study employs three proxies of trade openness to determine if the results will change under different proxies. The study also includes a dummy variable for Lesotho to determine how the 1990 structural break caused by retrenchments of Lesotho nationals from South African mines affected poverty in Lesotho. Moreover, the study also reviews policies that are related to international trade and poverty reduction for the two selected SACU member countries.

The reason for reviewing such policies is to enhance the understanding of how the evolution of different policies impacts poverty alleviation. This study is different because most of the previous studies that focus on the relationship between trade openness and poverty are mainly based in Asia and other relatively developed regions. There are relatively few studies that analyse the effect of trade openness on poverty in Africa and the Southern African region. In addition to this, previous studies have focused on trade openness as measured by exports and imports as a share of GDP, while this study has included the individual effects of exports and imports on trade openness.

To date, on publicly accessible platforms, no study has focused specifically on trade openness and poverty in the two selected SACU countries in the way it is done in the present study. The comparison of South Africa and Lesotho is an important and relevant one in that the economies, although in the same continent and belong to the same regional group, differ in terms of political and economic landscape. At the same time, Lesotho's heavy reliance on South Africa makes it an interesting case study to examine side-by-side with South Africa to unpack how effects of trade openness on poverty reduction in Lesotho versus the same for South Africa.

Specifically, looking at previous studies conducted on SACU countries, and based on what is available in the public domain, to the best of my knowledge this study is one of its own in as it examines the relationship between international trade and poverty in SACU using a comparative analysis of South Africa and Lesotho. Other previous studies that assess the role of international trade in SACU countries have mostly focused on the role of international trade on economic growth as opposed to its role on poverty reduction. Furthermore, this study is different in that it includes the impact of decisions taken in South Africa on Lesotho, hence the inclusion of a dummy variable.

1.5 Justification for selected countries

Dating as far back as 1889, as the Customs Union Convention between the British Colony of the Cape of Good Hope and the Orange Free State Boer Republic, SACU was reborn in 1910 under a new agreement. SACU is particularly unique in the context of international trade in that it is the oldest trade union in the world and its primary objective is to achieve economic development because of regional trade. The selected countries are also particularly unique in that they vary in economic growth rates, poverty rates and political structure.

There are four main reasons for the selection of the two SACU countries:

- Firstly, the selection for the two SACU member states is because the countries have quite different market sizes, in addition to their different levels of economic growth and political structure. South Africa falls under the upper-middle-income country category, while Lesotho is classified as a lower-middle-income country (World Bank, 2021a).
- Secondly, from a political point of view, South Africa is a democratic country, governed by a democratically selected political party for a fixed term after which the public, through their votes, elect to keep the current governing party or choose a different one. Lesotho is a constitutional monarchy, whereby the nation is governed by a King as leader of the state, and the Prime Minister as leader of government (World Bank, 2021a).
- Thirdly, apart from levels of development and market size differences, the two selected countries also differ from a geographical point of view when considering that Lesotho is entirely landlocked by South Africa. This poses a critical constraint on the competitiveness of Lesotho's exports to overseas markets particularly affecting the textile and garment export industry. Findings from Mpata, Giersing and Kaombwe (2005) show that when breaking down Lesotho's export costs, the land component of the transport and logistics cost is considerable when compared to the cost of transporting via sea.
- Fourthly, due to Lesotho's dependence on South Africa, the political decisions taken in South Africa impact Lesotho.
- Lastly, the selected SACU countries differ in relation to their ability to manoeuvre policies that have been introduced to encourage international trade. Lesotho's trade policy is primarily influenced by its SACU membership and through this membership Lesotho is party to other regional trade agreements such as the Southern African Development Community (SADC) and the African Continental Free Trade Agreement (AfCFTA). However, although Lesotho as a small developing economy focusing on increasing exports may propose changes to the Common External Tariff, this may not

be feasible in the short term as South Africa's stance is that reforming the Common External Tariff may have a negative impact on employment opportunities (Kingdom of Lesotho, 2021).

The contribution of this study from this perspective would be to review how these policies have evolved. Considering all these differences, this means that the selected countries experience different benefits from trade openness due to them having different GDP sizes, levels of economic development, different political structures, and different geography. It, therefore, becomes especially critical to investigate empirically how international trade will impact each country's poverty levels.

Organisation of the study

The study is broken down into seven chapters. Chapter 1 of the study provides an introduction and background to the study. Chapter 2 outlines the country-based literature from South Africa, Chapter 3 outlines the country-based literature from Lesotho. Chapter 4 provides a review of the literature, while Chapter 5 unpacks the methodological framework which describes the data and estimation techniques. Chapter 6 presents the results and study findings. The last chapter of the study, Chapter 7, provides concluding remarks and policy recommendations.

CHAPTER 2
OVERVIEW OF TRADE AND POVERTY IN SOUTH AFRICA

2.1 Introduction

This chapter reviews the country-based literature for South Africa with emphasis on trade and poverty during the period 1980–2022. The discussion is divided into two sections, in which the first section examines trade-related developments and interventions, while the second section reviews the poverty-related literature.

2.2 An overview of South Africa's trade flows

2.2.1 Background

South Africa is an open economy with a relatively small population compared to other emerging market economies, especially of those in Brazil, Russia, India, China, and South Africa bloc. Due to the structure of its economies, South Africa countries tends to be more reliant on international trade; however, its contribution to the global economy is relatively small. For instance, based on the 2017 data, South Africa accounts for about 0.6% of world GDP (Stern and Ramkolowan, 2021; Organisation for Economic Cooperation and Development, 2022). In contrast, other emerging economies like India account for 6.7% of world GDP (Organisation for Economic Cooperation and Development, 2022).

The importance of trade in South Africa's economy is evidenced by the share of the country's exports in GDP, which has been increasing over time. The main export products for South Africa over the past two decades comprise natural or cultured pearls, ores, vehicles, mineral fuels and machinery.

2.2.2 Trends in exports in South Africa

Figure 1 illustrates the trend of exports of goods and services as a percentage of GDP in South Africa between 1980 and 2022. It can be inferred from Figure 1 that South Africa has not made much progress with exports between 1980 and 2022, exports as a share of GDP were at 31.87% in 1980 and have only grown to 33.53% in 2022, which is the highest that it has ever been in the 42 years.

Figure 1 shows that there was a spike in exports in 1980 and a decline thereafter from 1981to 1985. Exports picked up again from 1986, boosted by growth in manufacturing exports, which was underpinned by increased exports of non-ferrous metals, iron and steel, and food products. There was a gradual decline again after 1986 until exports started to rise

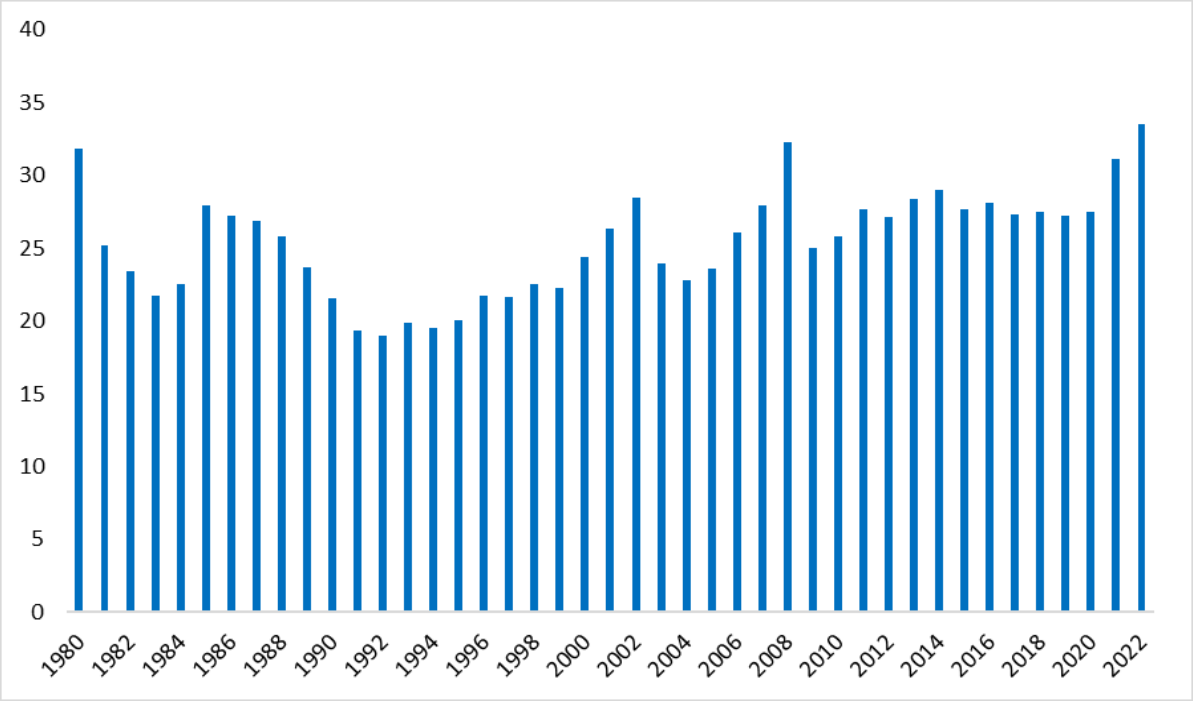
in the 1990s. This improvement was due to improved performance of exports of iron and steel, chemicals, machinery, motor vehicle parts and accessories, non-ferrous metals and food products (Trade and Policy Industrial Strategies (TIPS), 2002). In addition to improvement of exports of these specific commodities, the 1990s was characterised by the removal of trade sanctions at the end of Apartheid, which may have accounted for some of the sudden increase in trade experienced during the mid-1990s (TIPS, 2002).

Figure 1 shows a spike in exports around 2008, which although it a period of economic downturn globally, saw a surprising boost in exports for South Africa. According to the National Treasury (2004), South Africa's export prices rose faster than import prices, which resulted in an improvement in the balance of payments in the last quarter of 2008 and second quarter of 2009. This was mainly supported by commodity intensive growth in large emerging countries such as China and India as well as the reputation of gold as a solid store of value. The data reveals that exports as a share of GDP were at 32.25% in 2008, down to 24.94% in 2009 and thereafter the data shows a steady recovery in exports.

Comparing South Africa's export growth against that of other countries in SACU, exports as a share of GDP were 21% in 1980 and 47.22% in 2022 in South Africa, while the figures were 53.05% and 43.54% in Botswana, 70.38% and 40.34% in Namibia, 74.6% and 43.83% in Eswatini, and 1.75% and 44.99% in Lesotho in 1980 and 2022 respectively. When comparing with another emerging economy, India's exports as a share of GDP were 6.13% in 1980 and 23.20% in 2022. While South Africa's export performance when measured as a share of GDP may be relatively better compared to India, South Africa still lags behind its own SACU counterparts. Comparing the average growth of imports as a share of GDP in 1980-2022, the statistics show an average of 25.41% in South Africa, 52.13% in Botswana, 44.22% in Namibia, 58.63% in Eswatini and 25.49% in Lesotho. When comparing South Africa to India, the average growth rate of imports as a share of GDP in India was 14.32% during the same period (World Bank, 2024c).

There are various factors that have led to the observed trend in South Africa's exports over the past two decades most of which relate to structural impediments that are inherent in the South African economy. Among other factors, Hausmann and Klinger (2006) are of the view that the unsatisfactory exports performance points to the country's lagging structural transformation that has caused an overreliance on commodities to achieve export growth. Consequently, due to the country's heavy reliance on commodities, some of which are dependent on global conditions, and so South Africa has been experiencing a declining export growth following the global recession of 2008 and the recent COVID-19 global pandemic.

Figure 1: Exports of goods and services (% of GDP) in South Africa (1980-2022)

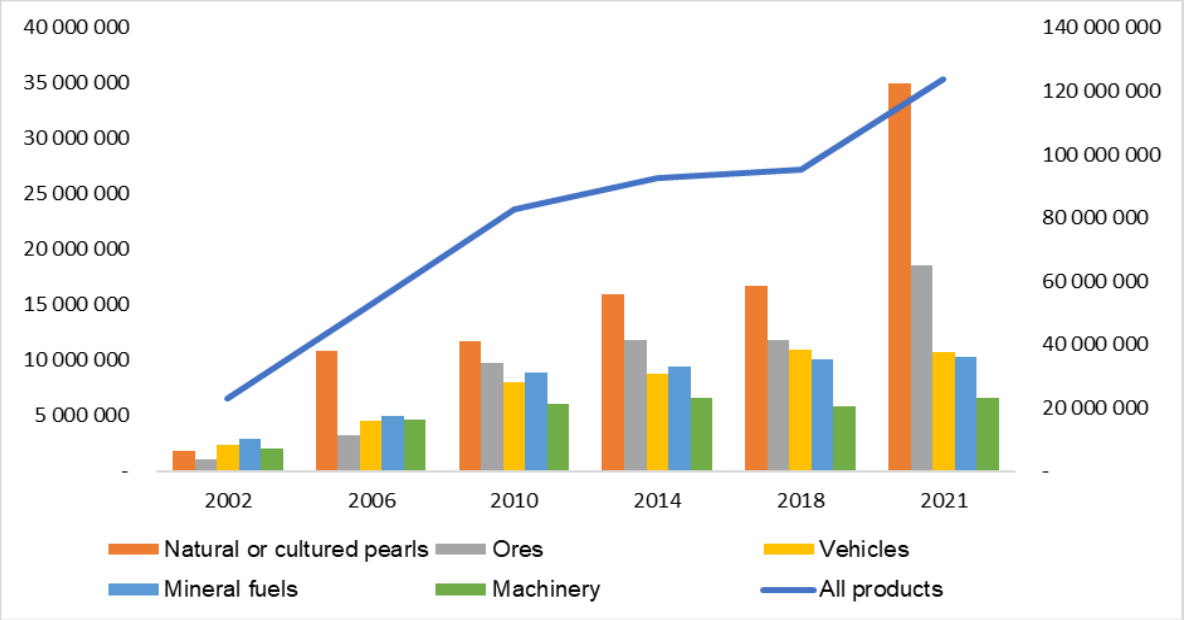


Source: Own compilation from the World Bank (2024c)

Figure 2 illustrates South Africa's main export products between 2002 and 2021. Figure 2 shows that between 2002 and 2021, the top five export products from South Africa were dominated by mining products and machinery. Considering the trend in South Africa's exports, it can be deduced form Figure 2 that the exports of raw materials have been increasing during the reviewed period 2002–2021. This is seen from the steady increase in the exports of natural or cultured pearls and the export of ores, whose value peaked up to around US$35 billion in 2021. Generally, the increase in the export of raw materials can be attributed to South Africa's export basket being predominantly made up of raw materials from the country's natural resources, and the import basket being predominantly made up of capital goods, which are used as inputs in the production process in the major industrial sectors.

Nevertheless, while South Africa's exports show an upward trend in the period under review, it is important to note that South Africa's export growth rate has more than halved between 2010 and 2019. In addition, when looking at South Africa's relative export performance in the decade before 2002, Stern and Ramkolowan (2021) note that in 1990, exports from South Africa were increasing at a lower rate when compared to the rest of the world. Exports from South Africa contributed approximately 0.6% to world exports and 0.5% to world imports. an improvement in the past decade, over the previous decade, South Africa's relative export performance shows a decline.

Figure 2: Top five export products in South Africa (Nominal terms - US$ Thousands)[1]



Source: Own compilation from the International Trade Centre (2022)

Apart from the heavy dependence on commodities, the other key contributing factor to the changes in South Africa's export trend is the lack of diversification in the country's export basket (Mlambo, Mukarumbwa and Megbowon, 2019). Unprocessed products make up the bulk of exports, whereas manufacturing related products lag behind. Mlambo et al. (2019) highlight that there is a positive correlation between processed products (also referred to as products in the secondary sector of the economy) and economic growth, and a negative correlation between unprocessed products (also referred to as products in the secondary sector of the economy) and economic growth. In the context of South Africa, it is evident from World Bank (2022a, b) data that the contribution of manufacturing (secondary sector) to GDP is higher at 12% in 2020, compared to the contribution of agriculture to GDP, which stood at 2.5% in the same year.

To be able to meet customer demand, South Africa is heavily reliant on imports to bridge the gap between what can be produced domestically and the needs of the consumers. On the other hand, exports are critical in that they support the country to develop and sustain a manufacturing base as well as provide jobs. It is also important to note that although South Africa is an open economy, the size of the country has become smaller, thereby further exposing it to the international economy.

[1] Data is not available pre-2002

2.2.3 Trends in imports in South Africa

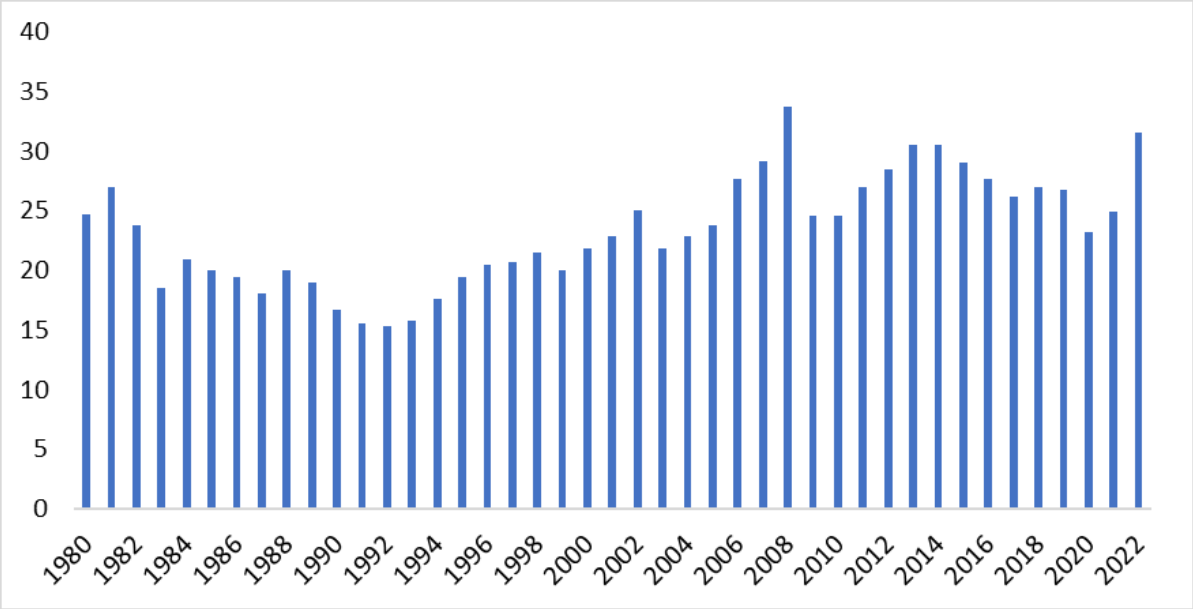
Figure 3 illustrates the trend of imports as a share of GDP in South Africa between 1980-2022. Figure 3 shows a downward trend in imports from 1980 to 1992 where imports started rising until 2008 when there was a global economic downturn. Imports started improving again after 2009 and thereafter declined again until after COVID-19 pandemic. Imports started to improve after 2020, boosted by the end of trading restrictions due to global shutdown caused by the COVID-19 pandemic.

Comparing South Africa's growth of imports as a share of GDP against that of other countries in SACU, imports as a share of GDP was 66.44% and 42.06% in Botswana, while the figures were 56.72% and 58.76% in Namibia, 114.04% and 47.59% in Eswatini, and 6.95% and 98.51% in Lesotho in 1980 and 2022 respectively. When comparing with another emerging economy, India's imports as a share of GDP were 9.24% in 1980 and 26.76% in 2022. This is compared to South Africa's statistics which show that imports as a share of GDP was at 24.63% in 1980 and 31.52% in 2022. The average growth of imports between 1980 and 2022 was 48.51% in Botswana, 52.04% in Namibia, 69.92% in Eswatini and 57.93% in Lesotho. When compared to India, the average imports as a share of GDP was 16.63%. This is compared to South Africa with average imports over 1980-2022 at 23.37% (World Bank, 2024d).

The imports results are consistent with the findings from exports data which in that South Africa lags behind its SACU counterparts with both imports and exports. Like exports, South Africa's imports as a share of GDP are higher than that of India, which is also an emerging economy. Figure 3 shows that imports in South Africa were on a decline in the 1980s after a massive depreciation of the real exchange rate from 1984 (Edwards, 2021). In addition, as noted by Edwards (2021), this period was also characterised by a decline in import volumes which was driven by weak economic growth and the consistent implementation of surcharges on imports to resolve the balance of payments crisis.

Figure 3 shows an upward trend in imports in the 1990s. According to Rangasamy and Harmse (2003), the improvement in imports in the 1990s is attributable to the fact that during this period the average import weighted tariffs since the GATT offer, had been significantly reduced from 28% in 1990 to 10% in 1998. This trend is seen throughout the 2000s until the global recession in 2008, when, according to the World Bank (2024d), imports as a share of GDP were at their highest at 33.71% and dropped drastically the following year in 2009 to 24.60% as a result of the global recession in 2008.

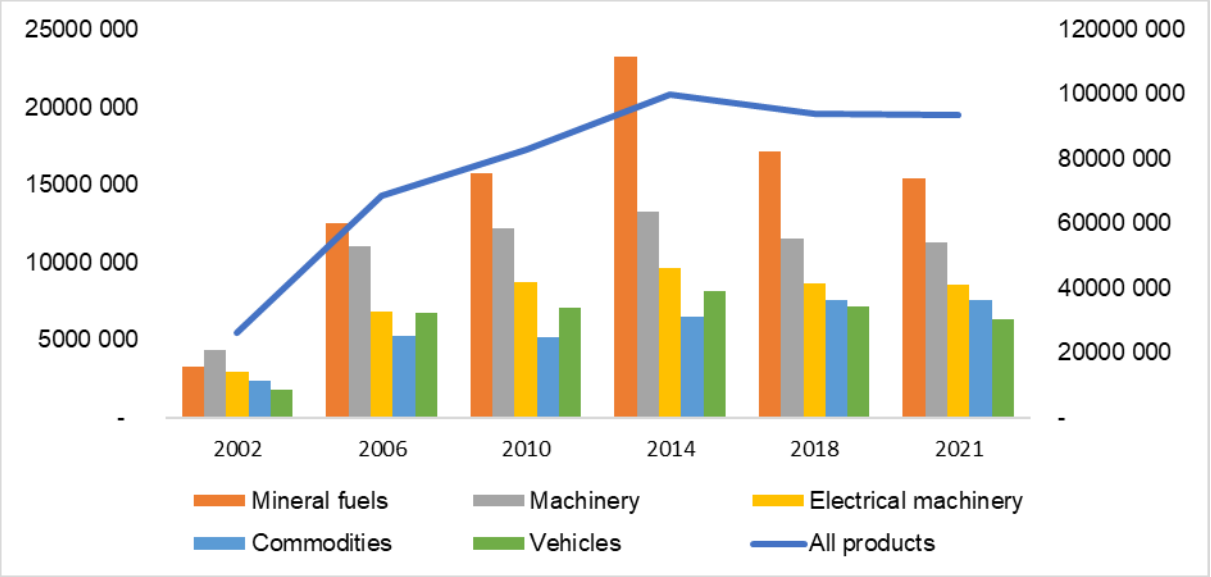
Figure 3: Imports of goods and services (% of GDP) in South Africa (1980-2022)



Source: Own compilation from the World Bank (2024d)

It can be inferred from Figure 4 that South Africa predominantly imports mineral fuels, machinery and electrical machinery. It can be inferred from Figure 4 that South Africa predominantly imports mineral fuels, machinery and electrical machinery. From 2006 to 2021, it is evident that mineral fuels are the dominant import in South Africa. South Africa imports more goods that will contribute towards production such as machinery and other production related good, which is in concord with the argument by the World Bank (1987). In a similar argument, Gumede (2000) maintains that for small and open economies such as South Africa, the share of capital goods imports to total imports tends to be generally higher than the share of raw material imports. This has been witnessed in the case of South Africa whereby apart from mineral fuels, there is a general dominance of imports of machinery and electrical machinery over that of commodities (see Figure 4).

Figure 4: Top five import products in South Africa (Nominal terms - US$ Thousand)



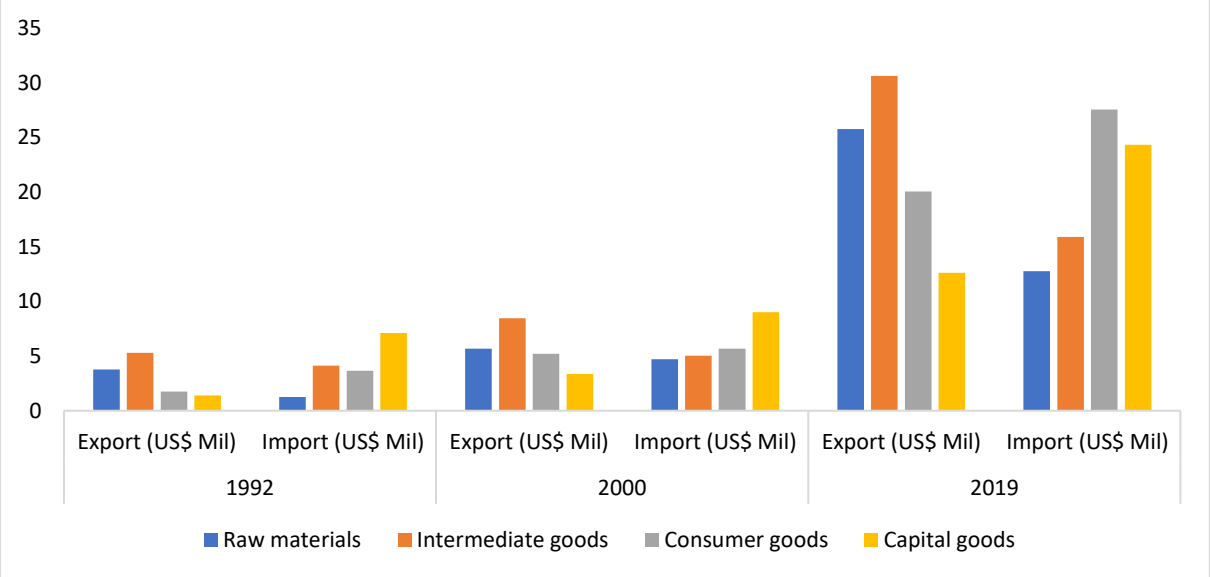
Source: Own compilation from the International Trade Centre (2022)[2]

Figure 5 provides an overview of South Africa's exports and imports composition between intervals 1992, 2000 and 2019. From an export point of view, Figure 5 shows that South Africa's export basket is predominantly made up of raw material, especially from 2000. When comparing the export of raw materials to the import of raw materials, shows that South Africa is exports more raw materials than it does with the imports of raw material, which is not surprising because the country is relatively more endowed in raw materials, namely, ores and agricultural products.

In the case of capital goods and consumer goods, Figure 5 shows that there has been a surge in import volumes in the past decade, compared to the previous two decades. By 2019, consumer imports had increased 15.8-fold from their 1992 value, which signals a surge in consumer demand in South Africa. Likewise, the imports of capital goods and intermediate goods have more than tripled in value over the past two decades, following the increase in demand for motor vehicle, parts and accessories (see, for example, Statistics South Africa, 2022).

[2] Data is not available for periods pre-2002

Figure 5: South Africa's trade composition (Nominal terms - 1992, 2000 and 2019)



Source: Own compilation from the World Bank (2022c)

2.2.4 Trends in Poverty and Trade openness in South Africa

Figure 6 depicts South Africa's poverty data (consumption expenditure per capita) and trade openness (sum of trade/GDP) from 1980-2022. It can be deduced from Figure 6 that there is a relationship between poverty and trade openness due to the pattern of the line graph. The two variables seem to track each other in that as trade openness increases, so does poverty and likewise as trade openness decreases so does poverty. During the period 1980–1990, there is an evident decline in trade openness, which corresponded with a decline in consumption expenditure (increase in poverty) in the same period. Edwards and Lawrence (2008) attribute this decline in trade to the economic stagflation that occurred in the 1980s. Second to this, during this period, South Africa's share in global commodity exports declined, thereby reducing their contribution to GDP. The sum of trade as a share of GDP follows a similar pattern to that of exports and imports when compared separately.

The improvement in trade openness can be attributed to the strong export performance, especially non-gold related exports in the 1990s. This upward trend can be attributed to the export boom which can be associated with strong performance in sectors such as chemicals, metals (iron and steel, non-ferrous metals), metal products, and machinery (Lewis, 2001). Similarly, from 2000 to 2010, there was an increase in trade openness and a resultant increase in GDP growth. This increase can be attributed to an increase in the volume of exports and imports as a percentage of GDP specifically among resource-rich countries (Calderón, Cantú and Zeufack, 2020). Another factor that led to an improvement in trade openness and

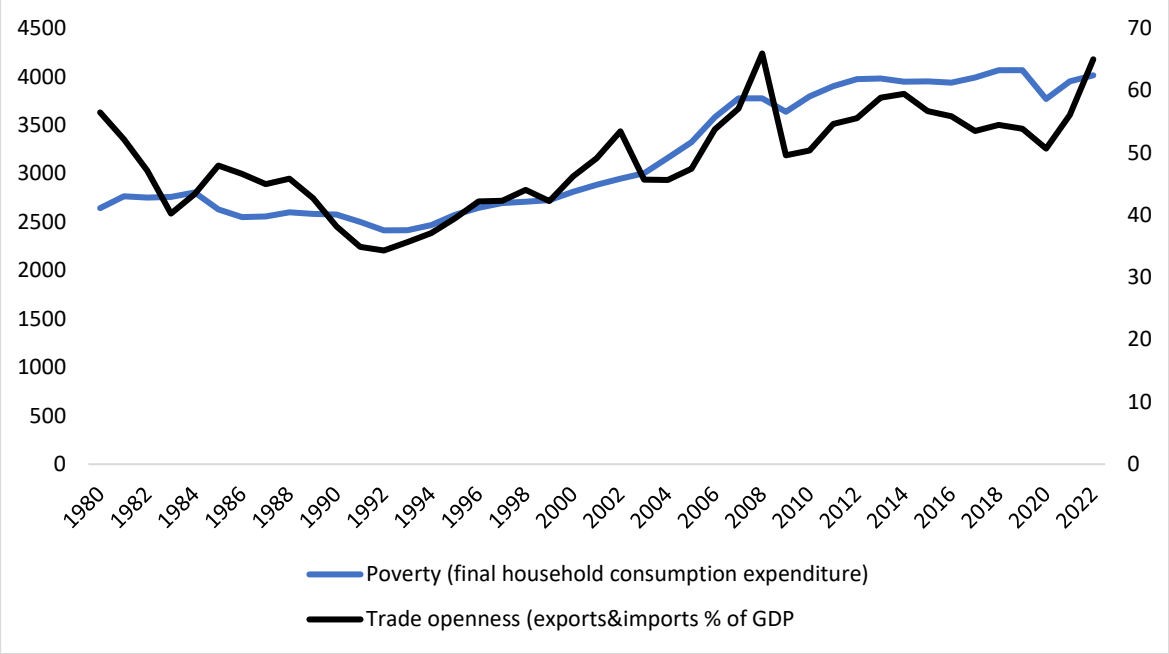
subsequent increase in consumption expenditure is the growth in import volumes between 2000 and 2005, which averaged 7.6% per year in that period (Calderón et al., 2020).

Comparing South Africa's poverty data to the rest of SACU, the World Bank (2024e) provides data on household consumption expenditure per capita estimated at $911 and $2892 in Botswana, $1628 and $3695 in Namibia, $1518 and $ 2343 in Eswatini and $38 and $792 in Lesotho in 980 and 2022 respectively. When comparing with India, which is also an emerging economy like South Africa, India's household consumption data was at $310 and $1279 in 1980 and 2022 respectively. South Africa's sum of trade as a share of GDP was $2644 and $4015 in 1980 and 2022 respectively. The average household consumption per capita between 1980-2020 was $1713, $2241, $1699, $446 and $606 in Botswana, Namibia, Eswatini, Lesotho and India respectively. This is compared to South Africa with an average of $3178. The results show that household consumption per capita in South Africa is higher when compared to its SACU counterparts and to India (World Bank, 2024e).

Comparing South Africa's sum of trade as a share of GDP against that of other countries in SACU, sum of trade as a share of GDP, as per World Bank (2024f) was 119.50 and 85.60% in Botswana, while the figures were 126.66% and 99.10% in Namibia, 188.64% and 91.42% in Eswatini and 131.09% and 145.74% in Lesotho in 1980 and 2022 respectively. When comparing with another emerging economy, India's sum of trade as a share of GDP were 15.38% in 1980 and 49.96% in 2022. This is compared to South Africa's stats which show that sum of trade as a share of GDP was at 56.50% and 65.06% in 1980 and 2022 respectively (World Bank, 2024e).

The average growth of the sum of trade as a share of GDP was between 1980-2022 was 100.64% in Botswana, 96.26% in Namibia, 128.55% in Eswatini and 143.59% in Lesotho. When compared to India, the average sum of trade as a share of GDP was 30.95%. This is compared to South Africa with average imports over 1980-2022 at 48.78% (World Bank 2024,f). Similar to the results for exports and imports, South Africa lags behind its SACU counterparts when comparing figures for sum of trade as a share of GDP between 1980-2022. Against India as an emerging country just like South Africa, South Africa's sum of trade as a share of GDP is higher.

Figure 6: Poverty and Trade Openness in South Africa (1980–2022)



Source: Own compilation from the World Bank (2024e & 2024f)

2.3 Trade policy developments in South Africa (1980–2021)

The South African government has adopted several initiatives to better position South Africa in the global economy. These efforts were made in the times leading up to after 1990. These efforts include various reforms to domestic trade administration processes, trade agreements with other trade blocs and with other countries. The pertinent trade policy developments adopted by the South African government are unpacked in this section of the study. This section of the study will unpack trade policy developments from the 1980s to the 2000s, as well as highlight some major trade agreements of which South Africa is part.

2.3.1 Coordinated attempts at liberalisation from the 1980s

In 1980, incentives were introduced to counteract the impact of import substitution by compensating exporters for half of the tariff due on inputs. This was regardless of whether the inputs were imported or not. In addition to this, different types of incentives were introduced – these were calculated on the value added of the inputs, and exporters would be reimbursed for the costs of non-intermediate inputs rising because of the import substitution strategy. Moreover, exporters also benefited from different incentives and tax concessions to be in a position to be able to market their products on an international platform (Jenkins, 2001).

In 1983, the government started to replace quantitative restrictions on imports with import tariffs. This move was done to further liberalise trade. However, these incentives did not come without challenges and uncertainty. In 1985, the government implemented import surcharges

in response to tighter economic sanctions, which in turn significantly increased effective protection rates (Industrial Development Corporation, 1990; Holden, 1992). In other countries, these additional charges on imported products were in turn used to offset the effects of the elimination of quantitative restrictions on imports (Industrial Development Corporation, 1990). Towards the latter part of the 1980s, the Board of Trade and Industry, which had previously been sensitive to private-sector petitions for tariff relief, began to take a proactive approach to revising industrial policy. Since 1987, the Board has been less receptive to tariff protection applications. The Board of Trade and Industry endorse 66% tariffs in 1987, which further improved to 66% in 1987, 38% in 1988, and 20% in 1989 (Jenkins, Bleaney and Holden, 1995).

2.3.2 Recent developments: trade policy reform from 1990

Following the more concerted efforts at trade liberalisation in the 1980s, the General Export Incentive Scheme (GEIS) was introduced in 1990, with the primary objective of encouraging the export of manufactured goods. Unfortunately, the GEIS proved to be unsuccessful. The contributing factors include the following: the GEIS brought about rent seeking, heightened levels of corruption, lobbying and threats of countervailing duties. In addition, the GEIS had very high bureaucratic costs (Gouws, 1997; Parliamentary Monitoring Group, 2014).

In April 1994, South Africa became a signatory to the Marrakesh Agreement, after signing the Final Act of the Uruguay Round of Multilateral Trade Negotiations. The critical characteristics of the agreement include reducing imports and the elimination of non-tariff measures, strengthening of international trade laws such as those relating to anti-dumping policies and placing a strong focus on new agreements on trade related to services, intellectual property and investment measures otherwise not covered under the GATT (Jenkins, 2001).

The Marrakesh Agreement came into effect after an 8-year-long Uruguay Round and it set the basis for the establishment of the World Trade Organisation, which came into effect officially on 1 January 1995. It had 112 members by December of 1995. The WTO has five main tasks:

- Facilitating the implementation of the Uruguay Round's outcomes;
- Providing a forum for multilateral trade negotiations and a framework for implementing their outcomes;
- Administering the dispute settlement procedures;
- Administering the Trade Policy Review Mechanism; and
- Cooperating with the International Monetary Fund (IMF) and the World Bank to achieve greater coherence in global economic policymaking (Jenkins, 2001).

In 1995, South Africa launched a five-year tariff reduction and rationalisation programme. The tariff lines were divided into two categories; one group of products were to liberalise over a 5-year period and the second group referred to excluded products that would liberalise over a longer period which was eight years. Clothing, textiles and assembled motor vehicles formed part of the second group that was allowed eight years to afford the group transition time and offer some protection. During this 5-year period applicable to the first group, the number of tariff lines applicable to tariff rates would be reduced from over 100 to 6, ranging from 0% to 30% (Edwards and Lawrence, 2008).

2.3.3 Trade agreements

South Africa became part of SADC in 1994, making it the 12th member state. The 12 members of SADC at the time signed a trade pact in 1996, and afterwards began talks on phasing out customs tariffs and other similar measures as part of the process of forming a free trade area. In September of 2000, implementation of SADC protocol was initiated. Even though the draft protocol contained the same conditions to all members, South Africa's offer contained a provision that it may decrease its trade barriers with SADC states who are not already members of SACU (Jenkins, Leape and Thomas, 2000).

As per Moyo (2023), the minority members within SADC had to negotiate and agree on a period of phasing down tariffs. Outward investment, particularly from South Africa was expected to stimulate the development of industrial capacity in neighbouring nations throughout this time, while some protection exists. This was expected to boost trade between the member states. The appeal of this idea for South Africa is the twin benefit of increasing neighbouring demand for South African goods, while also creating jobs in the region, which would lessen the flow of cross-border job seekers to South Africa in the long run. Even before the SADC Trade Negotiating Forum agreed on a tariff phase-down schedule, South Africa went ahead and implemented their offer unilaterally, submitting it to parliament for approval in November 1999 and planned to be officially introduced a year later in 2000.

According to Ngalawa (2014), the SACU agreement was renegotiated in December 1994. The main challenges that the SACU trade bloc suffered were the revenue-sharing formula and the envisaged Secretariat's institutional structure, as well as tariff policy control. At the same time, the member states had been in negotiations with the European Union (EU), SADC and Zambia (Parliamentary Monitoring Group, 2008). The major obstacle was the differences in trade policies that were adopted by the countries in question. Also, the main policy disparity between the countries was the revenue-sharing formula. However, the 2002 SACU agreement, which replaced the former SACU Agreement, ensured that there would be equal sharing of revenue

generated from income collected from duties levied by the member states. Other benefits included increased investment, competition, and movement of goods (Parliamentary Monitoring Group, 2015).

In 1995, the trade negotiations between South Africa and the EU began. At this stage, South Africa had been negotiating for Lomé status, which was denied. Instead, the two trade partners agreed on a free trade agreement in exchange for phased exposure to European exporters. The trade negotiations proved to be difficult because of the level of complexity that was associated with the political differences between the two members (Gibb, 2000). One of the major reasons for the complexity in the trade negotiations was the EU's insistence that certain agricultural products be excluded from the trade discussion. With agriculture being a dominant part of South Africa's economy, especially at the time of the discussions, this limited South Africa's negotiating power (Jenkins, 2001).

In addition to the above-mentioned challenge, South African manufacturers were hesitant about the process because they were concerned about increased exposure to international competition before the WTO commitments were fully fulfilled. Finally, smaller SACU/SADC countries put pressure on South Africa, fearing that a free trade agreement between South Africa and the EU would expose their economies to European competition. After difficult discussions and negotiations about agricultural products specifics (such as nomenclature of fortified wines and the status of canned fruit exports), a trade, development, and cooperation agreement (TDCA) were finally completed at the end of 1999 (Jenkins, 2001).

The TDCA aimed at a gradual decline in tariffs over a period not longer than six years. This maximum period of six years excluded certain agricultural and fisheries products. At the same time, the agreement was also for South Africa to eliminate duties on most of the tariff lines of imports that originate from the EU (Kalaba, Sandrey and van Seventer, 2005). The TDCA came into effect in 1999, after it was negotiated for five years. This agreement formed he legal basis for trade between South Africa and the EU. The agreement came into effect officially in 2004.

In 1999, South Africa concluded a 12-year bilateral agreement with the EU that included tariff liberalisation, while the United States of America (USA) gave free access to a variety of manufactured items under the African Growth and Opportunity Act (AGOA) the next year. South Africa's combined external trade as a share of GDP had increased considerably in the previous 10 years after the agreement came into effect because of trade liberalisation (Nowak and Ricci, 2006). Another trade agreement was one negotiated and signed between European Free Trade Association states and SACU in Iceland in 2006. The agreement came into effect

officially in May 2008. The agreement covered certain trade in goods, and later negotiated other aspects such as intellectual property, investment, and procurement.

According to International Trade Administration (2024), in 2008, the USA and SACU signed a Trade, Investment and Development Cooperative Agreement (TIDCA). The key focus of TIDCA is the facilitation of consultative discussions, encourages cooperation and facilitates discussions and agreements around customs, barriers to trade and investment promotion. In 2008, member states from the Common Market for Eastern and Southern Africa, the East African Community and SADC entered into a binding agreement to negotiate a Tripartite Free Trade Agreement. The Memorandum of Understanding governing the Tripartite Free Trade Agreement covers the legal and institutional framework. In 2008, the Common Market of the South (MERCOSUR) and SACU signed a trade agreement (COMESA, 2024).

Since the United Kingdom's (UK) exit from the EU in January 2020, South Africa has signed a new agreement with the UK along with other member of the SADC-EU Economic Partnership Agreement (EPA). The EPA between the UK and the SACU member states, and Mozambique (SACUM) was signed by all parties in October 2019. The SADC-EU EPA's terms have been mainly included into the new SACUM-UK EPA. Except for South Africa, the UK has agreed to offer immediate duty-free, quota-free access to products exported from SACUM states under this EPA. In exchange, SACUM members agree to gradually liberalise tariffs on commodities imported from the UK (Jenkins, 2001; Department of Trade and Industry, 2019).

The other agreement that is relevant to South Africa's trade is the African Continental Free Trade Agreement (AfCFTA), under which free trading officially commenced on 1 January 2021. The AfCFTA is a first of its kind trade agreement in that it aims to create a free trade area between the 54 countries (this includes South Africa) in Africa. The concept of the AfCFTA was approved in 2012 during the 18th Ordinary Session of Assembly of Heads of States and Government that was held in Ethiopia. The decision was taken at this sitting to establish a Continental Free Trade Area (AfCFTA, 2022).

The main objective that governs the existence of the AfCFTA is to boost intra-African trade thereby positioning Africa as a competitor in the global trading environment. As of April 2022, 41 countries out of the total 54 countries have deposited their instruments of AfCFTA ratification, which means that 76% of the signatories have committed to joining the AfCFTA(TRALAC, 2022 and; AfCFTA, 2022). The key objectives of the AfCFTA include to create a single market for the trade and movement of goods, services and people, to facilitate investment in Africa, to promote social and economic development, enhance the competitiveness of African countries and positioning Africa to be able to compete on a global

scale, to promote diversification and well as to resolve the issues associated with multiple and overlapping memberships (African Union, 2024).

Table 1: Trade-related interventions in South Africa (1980–2021)

Year	Intervention	Description
1980	Start of trade liberalisation	Introduction of incentives to encourage import substitution.
1985	Introduction of import surcharges	Implementation of import surcharges to further encourage import substitution.
1990	GEIS is introduced	Export incentives introduced to help exporters compete in the international market.
1992	SADC Treaty is signed	The signing of the SADC treaty comes after the abolishment of the SADCC in 1992. The objective of the SADC treaty was to promote economic integration within SADC following the independence of the members.
1994	South Africa becomes a member of SADC	The objective was to promote development, reduce poverty and promote economic growth through regional integration.
1994	Marrakech agreement is signed	The Marrakech agreement was signed 15 April 1994 by 123 countries, including South Africa.
1995	South Africa becomes a member of the WTO	institutional and legal foundation for the new multilateral trading system that came into being on 1 January 1995
1995	Tariff reduction programme is launched	South Africa launched a tariff reduction programme.
1999	SA – EU negotiations finalised	South Africa concluded a 12 year bilateral trade agreement with the EU with the objectives of increasing trade and reducing tariffs.
2002	2002 SACU agreement is signed	The 2002 SACU agreement came after the 1910 initial agreement and the revised agreement in 1969. The 2002 agreement encompassed change points in areas such as joint decision-making processes, new revenue sharing formula and the treatment of trade with non-SACU member shares.
2006	EU-SACU agreement is signed	The trade agreement was signed in Iceland and established the framework governing trade in goods.
2008	EU-SACU agreement is extended.	The trade agreement was extended to cover aspects such as intellectual property and investment.
2008	USA-SACU TIDCA is signed	The key focus of TIDCA is the facilitation of consultative discussions, encourages cooperation and facilitates discussions and agreements around customs, barriers to trade and investment promotion.
2008	COMESA, EAC and SADC agreement is in effect	The tripartite agreement between the three trade blocs is signed in 2008.

Year	Intervention	Description
2008	MERCOSUR and SACU trade agreement is signed	The trade agreement was signed with the objective to formalise a free trade area.
2012	SADC Free Trade Area comes into force and is fully implemented	The main objective is to deepen regional integration.
2019	SACUM-UK EPA is signed by all parties in October 2019	The agreement includes the UK providing duty-free and quota-free access to goods originating from SACU and Mozambique, except South Africa. T
2021	Ratification of the AfCFTA	The main objective is to substantially increase trade within Africa, particularly trade in value-added goods and services across the different sectors of the economy.

Source: Nyiri (1993), Jenkins (2001), Southern African Development Community (2003), European Commission (2009), International Monetary Fund (2022), Odhiambo and Malefane (2016), TRALAC (2018), African Union (2023), European Council (2023), International Trade Administration (2023), Office of the United States Trade Representative (2023), World Trade Organisation (2023)

2.4 An overview of poverty trends and poverty reduction strategies in South Africa

2.4.1 Overview of poverty outlook in South Africa

Before unpacking the poverty trends and poverty reduction strategies in South Africa, it is important to consider South Africa's history in the context of poverty. South Africa is a special case in that it faced several decades of apartheid system and legislation which was founded on the presiding system of colonialism. Hence, there are various aspects of South Africa's history that could be associated with the country's poverty. These aspects are outlined by Hunter, Hyman, Krige, Olivier, Dekker, Khandlhela and May (2003) as follows:

- The impact that the previous apartheid system had on the assets of the marginalised, which includes land, unequal economic markets and distorted social institutions.
- The lack of access to basic needs by the marginalised, such as access to healthcare, education, water and sanitation.
- The lack of accountability by all levels of the administration, which leads to a state that is incapable of providing for its people.

On the back of this, the South African government has implemented four policies aimed at poverty reduction between 1994 and 2011: the Reconstruction and Development Programme (launched in 1994), Growth, Employment and Redistribution (1996), the Accelerated and Shared Growth Initiative of South Africa (2006), and the National Development Plan (2011).

Judging from the consumption expenditure trend between 1980-2019, the stats show that there has been a gradual increase in consumption expenditure in South Africa. This means that poverty has been gradually declining over time. However, using a different measure of poverty, the poverty headcount ratio at national poverty lines (% of population), shows that there has not been much progress in reducing the number of people living in poverty in South Africa.

Table 2 provides a snapshot of the poverty trends in South Africa from 1980 to 2019. Due to data availability, there is limited data on poverty trends pre-1994. However, there is sufficient data post 1994 which marks the period during which some of the major poverty-reducing interventions were introduced by the new government. 50% of the population was living in poverty in 1980, and in 2019 50% of the population is living in poverty (Naidu, 2023).

Even though South Africa advanced in reducing poverty since 1994, between 2011 and 2015, the trend of poverty reduction took another down13.8 turn, gradually threatening some of the benefits witnessed since 1994. For instance, a total of 55.5% of the population (30.3 million people) lives in poverty at the national upper poverty line (estimated at R992), whereas 13.8 million people (which is equivalent to 25%) live in food poverty. Similarly, poverty as assessed by the international poverty standards of $1.90 and $3.20 per person per day (2011 PPP) is estimated to be 18.9% and 37.6% in 2014 and 2015, respectively. This is an increase from previous years where poverty standards were at 16.6% of the total population in 2010 and 35.6% in 2011 (World Bank, 2020).

Even though South Africa battles the problem of poverty, the country has proven more effective at combating poverty, which is suggested by the decrease in the number of people living in poverty from pre-1994 levels to post-1994 levels. The statistics show that from 25.5% in 2006 to 18.8% in 2015, the proportion of South Africans living below the international poverty level of $1.90 per day decreased (Statistics South Africa, 2018), and the trend shows a drop over a 10-year period. Moreover, the findings from the World Bank (2018) reveal that an estimated number of 2.3 million South Africans managed to escape poverty between 2006 and 2015. This is when using R758 per person per month quoted in 2017 prices, which is referred to as the national lower-bound poverty limit (Statistics South Africa, 2019). The main cause of this change, as identified by Finn and Leibbrandt (2017), is that the changes in household composition, which were cited as the reason why some people would exit poverty, and some would enter poverty.

Looking at South Africa’s poverty trends over the years, in 2015, more than one out of every five individuals (25.2%) lived below the food poverty level, while a third (33.8%) lived below the lower-bound poverty line and around two-fifths (40%) lived below the upper-bound poverty

line (Statistics South Africa, 2017). Various factors including gender, race, and locality are some of the determinants of poverty in South Africa. Gender, race, and locality were determined by Kehler (2001) as the contributing factors towards poverty. Kehler (2001) notes that South Africa is still grappling with the inequalities caused by apartheid and colonialism system and as a result there remains a huge gap between male and female, whites and blacks as well as people residing in urban areas versus rural areas. As a case in point, Kehler (2001) refers to the limitations experienced by black women in accessing resources, education and other growth enhancing opportunities. The study cites that black women who live in the rural areas are often faced with a heightened lack of access to resources and are therefore subjected to live under immense poverty.

Table 2: Poverty indicators in South Africa (1980–2019)

Poverty indicators[3]	1980	1993	2000	2005	2008	2010	2014	2019
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)	No data	31.5%	34.8%	25.7%	16.7%	16.2%	18.7%	No data
Poverty headcount ratio at national poverty lines (% of population)	50.0%	No data	No data	66.6%	62.1%	53.2%	55.5%	50.0%
Poverty gap at $1.90 a day (2011 PPP) (% of population)	No data	10.8%	13.0%	8.2%	4.7%	4.8%	6.1%	No data
Poverty gap at $3.20 a day (2011 PPP) (% of population)	No data	23.3%	25.9%	20.4%	13.8%	13.6%	15.1%	No data
Poverty gap at $5.50 a day (2011 PPP) (% of population)	No data	38.4%	41.3%	36.9%	28.3%	27.5%	29.0%	No data
Households and Non-Profit Institutions Serving Households (NPISHs) Final consumption expenditure per capita (constant 2015 US$)	2 342	2 225	2 512	2 921	3 295	3 242	3 414	3 423

Source: Own compilation from the World Bank (2022e, f, g, h, i, j); Lachman and Bercuson (1992); Naidu (2023)

It can be inferred from Table 2 that, on average, poverty rates are falling per year. Where the data is available such as in the case of household consumption expenditure, it can be inferred that poverty rates declined from 1980 to 2019. This can be seen by the upward trend in the consumption expenditure per capita which can be interpreted a reduction in poverty.

[3] There are gaps in data between the years 1980-2019 depending on the measure of poverty.

2.4.2 Poverty reduction strategies in South Africa (1990–2019)[4]

2.4.2.1 Background

To alleviate poverty and inequality in South Africa, the country's post-apartheid administration implemented a variety of poverty reduction programmes. South Africa is dealing with the triple threat of poverty, unemployment and inequality, and to address these economic problems, the following poverty-reduction strategies were adopted:

- The Reconstruction and Development Programme;
- Growth, Employment and Redistribution;
- The Accelerated and Shared Growth Initiative of South Africa; and
- The National Development Plan.

Furthermore, in response to high levels of poverty, the National Planning Commission was set up by the President of South Africa in May 2010, with the aim of drafting the country's National Development Plan (National Planning Commission, 2011b; Zarenda, 2013). Since the fall of apartheid in 1994, this report has highlighted both South Africa's failures and accomplishments. The failure to implement government initiatives, as well as the lack of vast partnerships, were identified to be some of the primary causes for the country's poor progress (National Planning Commission, 2011b). The National Development Plan and its initiatives to reduce poverty are dealt with in more detail below.

2.4.2.2 Reconstruction and Development Programme

The Reconstruction and Development Programme (RDP) was launched in 1994 as the very first post-apartheid policy developed with the primary goal of poverty reduction. The premise of the RDP seeks to redress the social and economic imbalances that were brought upon by the apartheid and the negative impact it had such as issues of sexism, colonialism, inequality and repressive labour policies (Republic of South Africa, 1994).

The RDP was based on the belief that dealing first with poverty reduction was an important step towards improving social and economic status of minority group of people in South Africa. The RDP policy document explains five broad programmes of the RDP. The first programme of the RDP was focused on meeting basic needs. This includes improving access to education, healthcare, jobs, water, and land. The second programme focused on the development of the country's human resources. The emphasis of the second priority was that education and

[4] Available literature covers policy reduction strategies from 1990. Pre-1990, available literature discusses the policies that governed the Apartheid system in South Africa.

training opportunities should be made available to all and that education and training initiatives should improve especially the lives of women and young people (Republic of South Africa, 1994).

The third programme focused on building the economy. This included improving critical sectors of the economy such as trade and commerce, developing industry, improving infrastructure, building, protecting the rights of workers and sustaining inter country relations especially within southern Africa. The fourth programme focused on democracy While the fifth was the actual implementation of the RDP. This aspect of the RDP addressed key questions such as how the RDP will be funded and who will bear the costs of implementing the programmes.

Having outlined the poverty eradication programmes under the RDP, the policy was condemned for placing huge investment towards infrastructure instead of towards economic growth (Aliber, 2003). As a result of this diversion in RDP policy implementation, job creation was negatively impacted, and the policy had very little impact on poverty reduction. Consequently, the RDP was disbanded at the beginning of 1996.

2.4.2.3 Growth, Employment and Redistribution

Growth, Employment and Redistribution (GEAR) was launched in 1996, with the goal of stimulating the country's economic growth. Consequently, GEAR's main goal was to use economic growth to combat unemployment (Hirsch, 2005). Primarily, , GEAR can be defined as an economic reform programme that is aimed at creating adequate jobs for all people looking for employment opportunities (Department of Finance, 2014). Thus, GEAR aims to contribute positively towards redistribution of income, creating a society that is safe and has productive workplaces and creating health and education systems that are capable of meeting the demand of the citizens.

The GEAR policy is built upon the following key principles: first is fiscal discipline, which aims at reducing inflation and the associated budget deficit as a percentage of GDP. The second principle highlights trade and industrial policy reforms, with the objective of reducing import tariffs, and to encourage supply side incentives to boost competitiveness. Thirdly, GEAR is built upon is export, investment, and the development of small and medium-sized enterprises. Fourthly, the GEAR policy includes the restructuring of the ownership and management of public assets from state ownership and management towards privatisation. The fifth principle of the GEAR policy places emphasis on increased flexibility and its importance in collective bargaining. This in turn supports competitive production and plays a role in wage determination which is all important for the development of effective policy coordination which is essential for achieving the GEAR objectives (Department of Finance, 2014).

The GEAR policy aimed to bring down the fiscal gap as a percentage of GDP from 5% in 1996 to 3% in 2000. The second target of the GEAR policy was to increase economic growth as measured by real GDP from 3.5% in 1996 to 3.8% in 1998 and to a further 6% in 2000 (Department of Finance, 2014). Having outlined the key objectives of GEAR, Table 3 highlights the quantitative objectives of GEAR versus what GEAR achieved.

Table 3: Projected and actual results of key economic indicators based on GEAR (1996–2000)

Variables		1996	1997	1998	1999	2000	Average
Real GDP growth	Projection	3.5	2.9	3.8	4.9	6.1	4.2
	Actual	4.2	2.5	0.8	2.1	3.4	2.6
Consumer Price Index	Projection	8.0	9.7	8.1	7.7	7.6	8.2
	Actual	7.4	8.6	6.9	5.2	5.3	6.7
Fiscal deficit	Projection	-5.1	-4.0	-3.5	-3.0	-3.0	-3.7
	Actual	-4.6	-3.8	-2.3	-2.0	-2.0	-2.9
Employment growth	Projection	1.3	3.0	2.7	3.5	4.3	2.9
	Actual	-0.6	-1.7	-3.4	-2.0	-2.7	-2.1
Private sector investment growth	Projection	9.3	9.1	9.3	13.9	17.0	11.7
	Actual	7.7	4.8	-1.8	-3.3	6.4	2.76

Source: Department of Finance (1996); Streak (2004).

Table 3 outlines the performance of GEAR from 1996 to 2000 against key variables, such as real GDP growth, fiscal deficit, inflation measured by the Consumer Price Index proxy, employment growth and private sector investment growth. Real GDP growth, employment growth and private sector investment growth performed poorly in the 1990s when compared to the projections outlined in the GEAR policy. Real GDP growth was projected to grow at an average of 4.3% between 1996 and 2000; however, the actual growth of real GDP was lower at 2.6%. Employment growth proved to be the worst performer, with a projection of 2.9% average growth between 1996 and 2000, against an actual average growth rate of negative 2.1%. Private sector growth was projected at 11.7% on average between 1996 and 2000; however, the actual results show that private sector investment growth was below the target at 2.76%.

Although the GEAR policy did not clearly outline specific targets aimed at poverty and inequality reduction, it was clear that the objective was to decrease both poverty and inequality

rates. Some of the studies that investigated poverty and inequality reduction during the period in which GEAR was implemented show very minimal to no impact of GEAR policy on poverty and inequality reduction. A poverty study by Woolard (2001) found that there was an increase in the rate of poverty in children aged between zero and seventeen years. The increase in the rate of poverty amongst this age group was from 58.8% to 59.2% between 1995 and 1999.

On the other hand, when evaluating the poverty in children from ages zero to six years, the poverty rate decreased by a very small margin from 59.7% to 59.3% between 1995 and 1999 (Cassiem and Streak, 2001). A study conducted by Statistics South Africa revealed that there was an increase in the number of households that were headed by unemployed people (Ministry for Social Development, 2002). These households increased from 32% to 38% between 1995 and 1999.

Further to this, a study by Seekings and Nattrass (2001) that focused on democracy and income distribution in South Africa between 1994 and 2000 reveals that between these years, the inequality rate did not reduce in South Africa. The study notes that the Gini coefficient, which is used as a proxy to measure inequality, has remained high during the 1990s and that even though data on income distribution in the 1990s is limited, there was indeed very minimal to no improvement to income distribution.

Notwithstanding its focus on employment and poverty, the GEAR policy did not achieve many of the objectives it had set out (Adelzadeh, Alvillar and Mather, 1998). The policy was mainly unsuccessful, and according to sceptics, the GEAR policy did not manage to reduce the unemployment rates. Although formal sector employment was supposed to expand to 1.3 million over a 5-year period, the numbers produced unsatisfactory results showing net job loss of more than 800 000 people throughout the GEAR 1996–2000 era (Adelzadeh et al., 1998).

2.4.2.4 Accelerated and Shared Growth Initiative of South Africa

In 2006, the South African government introduced a new economic policy – the Accelerated and Shared Growth Initiative of South Africa (ASGISA). ASGISA was introduced as a result of the country's need to accelerate economic growth and address social and economic challenges. ASGISA aimed to reduce poverty and unemployment by half between 2004 and 2014.

To achieve the above-mentioned objectives of the ASGISA programme, the programme identified six critical bottlenecks to economic growth. These included the currency's relative instability, the effectiveness and capability of the domestic logistics infrastructure, the negative impact of apartheid on geographical disparities resulting in shortage of appropriately skilled

labour, the anti-competitive behaviour resulting from barriers to entry, limited new investment opportunities and the cost factor (The Presidency, 2006). The other binding constraints were environment regulations and the burden on small and medium enterprises and the lack of capacity and leadership in state organisation (The Presidency, 2006). To tackle the above-mentioned impediments, the ASGISA put in place several strategies such as infrastructure development programmes, skills and education building programmes, investment generation initiatives and capacitating small, medium and micro enterprises (The Presidency, 2006).

Considering ASGISA's brief existence as a government programme, it is difficult to assess whether it encountered any obstacles or whether it would have struggled to achieve its goals by 2014. Notwithstanding some little success, poverty and unemployment levels remained alarmingly high. The South African government admitted that there were inherent issues that hindered the efficiency and efficacy of all ASGISA programmes. There are three issues that were highlighted that contributed towards the failure of ASGISA programmes. The first issue that was highlighted was that the funding allocated for ASIGA programmes was dependent on current government funds, which resulted in a backlog and delay in implementing programmes. The second issue that was highlighted was that even though ASGISA programmes were coordinated through a public and private partnership, the actual coordination and practical implementation of ASGISA still proved to be difficult.

The third issue was that there was considerable inconsistency between the strategies and interventions. Consequently, the lack of no collaboration between the programmes and finally, reporting and monitoring systems, became insufficient (The Presidency, 2007). Overall, the ASGISA programme's future remained uncertain because the government gave no formal word on the outlook of the policy, owing to the new political leadership that came into power in 2009, after President Thabo Mbeki was overthrown in ANC leadership elections (Masters, 2019).

2.4.2.5 National Development Plan

The National Development Plan (NDP) is South Africa's current poverty-reduction strategy introduced in 2011. The United Nations Organisation (2021) states that both the NDP and the Millennium Development Goals have a common objective which is to reduce the number of people living below the poverty line by 2030. South Africa's development policy and blueprint is the NDP: Vision 2030 – 'Our future – make it work,' which was enacted in 2012. It preceded both the African Union Plan 2063 and the United Nations 2030 Agenda for Sustainable Development's post-2015 development agenda. By 2030, the NDP has a 74% alignment with the SDGs, and places emphasis on job creation, eradication of poverty, inequality reduction, and an inclusive economy (Statistics South Africa, 2019).

Up to the most recent National Development Plan 2030, the overarching national developmental objectives – eradicating poverty, creating jobs, and reducing inequality – remained unchanged. The SDGs provide South Africa with an ambitious outlook for addressing and ultimately resolving its most crucial societal challenges. It is widely acknowledged that persistent poverty and significant levels of inequality rank among the most urgent of these issues. South Africa had a Gini coefficient of 0.64 in 2015, making it one of the most unequal countries in the world, according to latest data on global inequality. The Gini coefficient for per capita income reflects the extent of inequalities in accessing income from wages, salaries, and social benefits, while the Gini coefficient for per capita spending is derived from consumption patterns.

Overall, South Africa's NDP seeks to create 5 million new jobs between 2010 and 2020, as well as reduce unemployment and poverty to low levels by 2030 (World Bank, 2015). The NDP also aims to create additional employment by creating an environment which encourages economic growth, while also increasing labour absorption. The NDP outlines a long-term strategy to enhance work opportunities and boost employment through a range of channels, including public education programmes, access to health and dietary information, public employment programmes, job training, work experience, and transportation (National Planning Commission, 2011a).

Accordingly, the proposed interventions of the NDP ought to be implemented over a lengthy period to enable them to have a significant impact on poverty. The NDP also suggests that by 2030, the economy should be capable of generating sufficient resources to finance investments in both physical and human capital, and that it should be nearing full employment (National Planning Commission, 2011a). These envisaged benefits from the NDP could alleviate poverty in South Africa, provided there are no significant distortions affecting the implementation of the interventions.

2.5 Conclusion

This chapter has discussed the developments in the trade sector in South Africa from 1980 to 2020, as well as the poverty landscape in the country. The discussion on the trade sector looked at the interventions in as far as policies and trade agreements are concerned and explained the trends in various trade flows. This chapter also looked at poverty trends and the various poverty reduction policies that have been implemented by the South African government since 1994.

In as far as investigating trade developments in South Africa, the study concludes that the South African government has adopted several policies to position the economy as a global

player and a competitor in the global trade environment. Some of the initiatives that South Africa has taken over the years include it becoming a member of the WTO, gradually reducing tariffs to open the economy to more trade and becoming an active member in multiple trade blocs.

From the perspective of poverty, the poverty indicators that have been assessed in this chapter show that on average the poverty rates are declining. However, South Africa remains a poverty-stricken country with high levels of inequality. In addition to this, the study concludes that even though South Africa has implemented four poverty reduction policies from 1994 to date, there is no evidence that supports that these policies have resulted in a significant reduction in poverty rates. Instead, during the period in which the GEAR policy was in place, the performance of key economic indicators worsened when compared to the projected growth as outlined in the GEAR policy.

CHAPTER 3
OVERVIEW OF TRADE AND POVERTY IN LESOTHO

3.1 Introduction

This chapter reviews the country-based literature for Lesotho with emphasis on trade and poverty during the period 1980–2021. The discussion is divided into two main sections: the first section examines trade-related developments and interventions, while the second section reviews the poverty-related literature.

3.2 An overview of Lesotho's trade flows

3.2.1 Background

Lesotho is a small landlocked country that is a member of the Southern African Customs Union (SACU) and is also a member of other trade agreements outside SACU. Lesotho gained independence from colonialism in 1966 and has since pursued external trade dealings through the adoption of various strategic policies coordinated using development planning. Through SACU membership, the participating countries in the trade agreement benefit from duty-free intra-SACU trade, while, on the other hand, extending a common external tariff against imports from the rest of the world.

As a member of SACU, Lesotho further benefits from the free trade agreements that SACU has with other countries or trade blocs. These include the Free Trade Agreement between the European Free Trade Association States and the SACU members, which was incepted in 2014, the Preferential Trade Agreement between MERCOSUR and SACU, which commenced in 2016, and the Economic Partnership Agreement between SACU members and Mozambique. There is also an agreement between SACU and the United Kingdom, which was introduced in 2021 (SACU, 2023).

Another way in which Lesotho benefits from trade within SACU is through the export of water to South Africa through the Lesotho Highlands Water Project. Evidence shows that subsequent earnings derived from exports, and remittances from migrant workers that are working in South Africa, have led to the much-needed income in the Lesotho economy, thus emphasising the importance of the country being integrated to South Africa (International Trade Administration, 2023). Moreover, with the Lesotho currency, the Loti, being pegged one-to-one to the South African Rand, this helps maintain stability in Lesotho.

Previous studies by Malefane (2022) and the International Monetary Fund (2022) highlight the benefits derived by Lesotho from it having strong ties with South Africa, which, apart from

migrant labour relations and monetary arrangement, are further underscored by the trade relations between the two economies. As alluded to by the IMF (2022), both South Africa and Lesotho enjoy the benefits of being under SACU as well as the advantage of being within proximity of each other from a geographic standpoint.

Considering trade, the economy of Lesotho is mostly dominated by exports as the country follows an export promoting trade strategy. Hence, at the core of Lesotho's trade strategy is the mandate to encourage export promotion and trade liberalisation. Overall, the main contributing sectors that underpin the economy of Lesotho are manufacturing, mining, agriculture, and services. From these sectors, Lesotho mainly exports diamonds, knit women's suits, non-knit men's suits, wool, and low-voltage protection equipment. These products are mainly exported to countries such as the USA, Belgium, South Africa and Switzerland (Observatory of Economic Complexity, 2023).

A plausible explanation for these countries being key destinations for Lesotho's exports is due to the following factors: first, the USA grants Lesotho's exports of textiles and clothing a duty-free market access under the AGOA initiative. Since the inception of AGOA in 2002, selected manufactured exports from Lesotho have been benefiting from a unilateral preferential access to the North American market. The second factor explaining Lesotho's key export destinations is that the European countries are covered under the European Free Trade Association with SACU, which also means that Lesotho benefits from trade with European countries under this preferential trade arrangement (European Commission, 2023; Office of the United States Trade Representative, 2023).

From an import perspective, Lesotho mainly imports refined petroleum, light rubberised knitted fabric, processed fish, packaged medicaments, and medical instruments. These products are mainly imported from countries such as South Africa, China, Taiwan, Italy, and India (Observatory of Economic Complexity, 2023). In comparison to other SACU countries, Lesotho's share of imports in the country's GDP exceeds that of its SACU counterparts, which further points to the country's strong dependence on imported goods, relative to the rest of its neighbouring trading partners. Historically, Lesotho has been a net importer, since imports have always accounted for a larger share in the country's GDP. More recently, the country's imports as a percentage of GDP stood at 88% in 2021, down from 107% in 2010 (World Bank, 2023a).

In addition, evidence from World Bank data points to a wide discrepancy between the flow of exports as a percentage of GDP and that of imports as a percentage of GDP. For instance, between 1960 and 1970, exports accounted for close to 20% in relation to GDP, whereas the share of imports in GDP imports was more than 40% (World Bank, 2024c, d). In recent years,

there has been a stronger growth in the share of exports in GDP, although it remains below that of imports. The surge in Lesotho's exports over the past two decades can be associated with the rising importance of the export industry in the country (Central Bank of Lesotho, 2010, 2015).

Looking at the evidence from the past two decades, it can be established that between 2010 and 2021, Lesotho's exports as a percentage of GDP averaged around 42%, with exports being at 41% in 2010 and 43% in 2021 (World Bank, 2023b). When comparing Lesotho's trade with the rest SACU countries, it emerges that Lesotho's exports as a percentage of GDP in 2010 were more than that of South Africa at 25% of GDP but was less than that of the other countries. By 2021, Lesotho's exports as a percentage of GDP were more than that of both South Africa and Namibia, which both stood at 31% (World Bank, 2023b).

3.2.2 Trends in exports in Lesotho

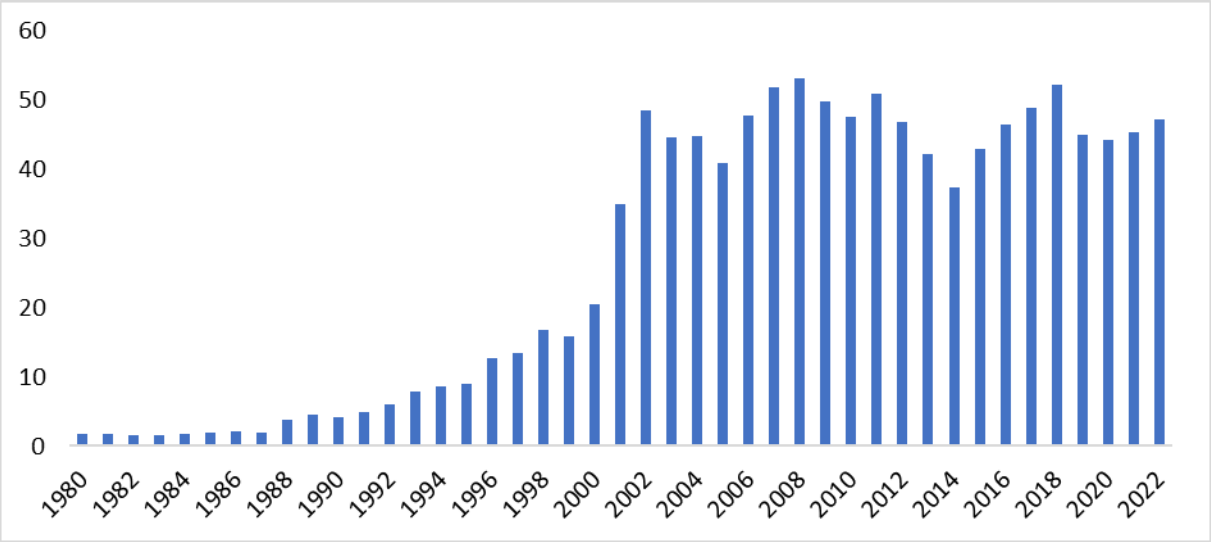
Figure 7 illustrates the trend of exports as a share of GDP in Lesotho between 1980-2022. It evident that exports in Lesotho have been on an upward trend during the period under review. Exports only started to decline after the global recession that took place in 2008. There was a notable increase in exports between 1980 and 2000, and a further increase between 2000 and 2010. This marked increase in exports can be attributed to the significant growth of the textile and apparel industry which grew remarkably in the 2000s providing more than of 50 000 jobs and becoming the largest private-sector employer in Lesotho (World Bank, 2019a). This growth in exports can be mostly linked to the introduction of AGOA in 2000.

One strong piece of evidence supporting the role of AGOA in Lesotho is the fact that Lesotho was counted among the USA's largest suppliers of goods imports in 2019. In the same year, the value of exports from Lesotho to the USA equated to US$325 million. Although there was a decrease of 22.8% from 2018 to 2019, overall exports from Lesotho to the USA increased by 7% from 2009 (Office of the United States Trade Representative, 2023). As a by-product of AGOA and increase in exports, Lesotho witnessed a surge in foreign direct investment, which boosted the country's competitiveness and led to the development of infrastructure and capacity (Central Bank of Lesotho, 2006).

Comparing Lesotho's export growth against that of other countries in SACU, exports as a share of GDP was 21% in 1980 and, while the figures were 53.05% and 43.54% in Botswana, 70.38% and 40.34% in Namibia, 74.60% and 43.83% in Eswatini and 21% and 47.22% in South Africa in 1980 and 2022 respectively. This is compared to 1.75% and 44.99% in Lesotho in 1980 and 2022 respectively. While Lesotho's export performance when

measures as a share pf GDP may be relatively less compared to its SACU counterparts, Lesotho's growth rate in exports from 1980 to 2022 has been drastic. Comparing the average growth of imports as a share of GDP in 1980-2022, the statistics show an average of 25.41% in South Africa, 52.13% in Botswana, 44.22% in Namibia, 58.63% in Eswatini and 25.49% in Lesotho (World Bank, 2024c).

Figure 7: Exports of goods and services (% of GDP) in Lesotho (1980-2022)

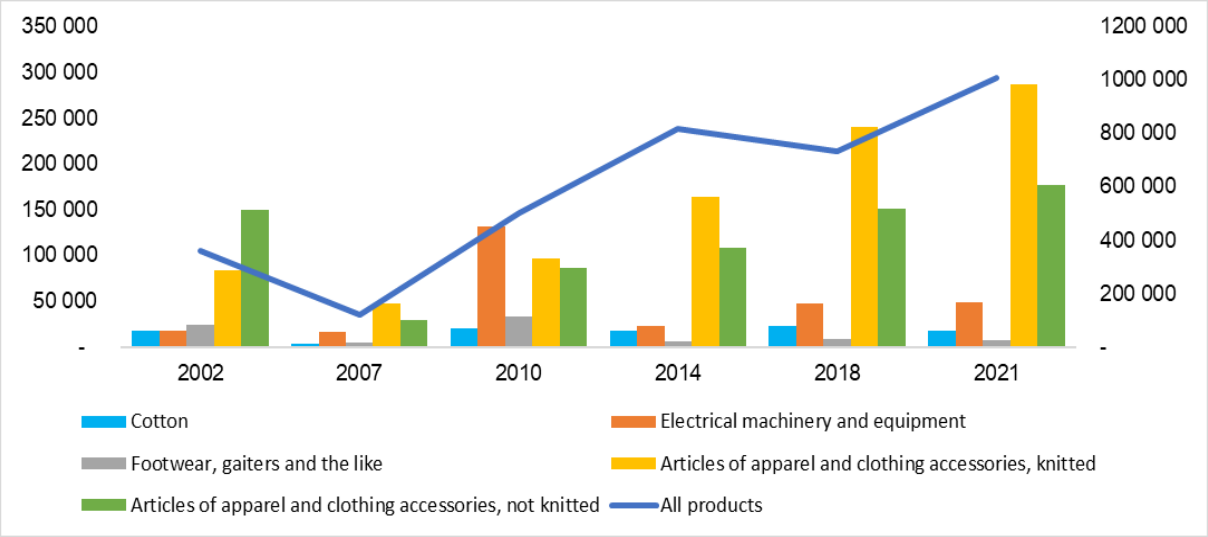


Source: Own compilation from the World Bank (2024c)

Figure 8 illustrates Lesotho's main export products between 2002 and 2021. The trends depicted in Figure 8 show that between 2002 and 2021, the top export products from Lesotho included cotton, electrical machinery and equipment footwear, gaiters and the like, articles of apparel and clothing accessories (knitted), as well as articles of apparel and clothing accessories not knitted. From the figure, it can be inferred that the economy of Lesotho is heavily dependent on the export of clothing and garments relative to other products.

In terms of the export basket, the top exports from Lesotho to the USA include knit apparel at $219 million, woven apparel at $84 million, and precious metal and stone at $19 million (Kategekwa, 2023). In addition, the USA's total exports to Lesotho totalled $1.2 million in 2019, which predominantly comprised the export of capital goods (World Integrated Trade Solution, 2023). Furthermore, evidence suggests that exports, particularly of manufactured items, have accounted for a higher share of Lesotho's economy since the implementation of trade advantages and concessions on textiles under AGOA in 2000 (Mokhethi and Vögel, 2015).

Figure 8: Top five export products in Lesotho (thousand US$)



Source: Own compilation from the International Trade Centre (2022)[5]

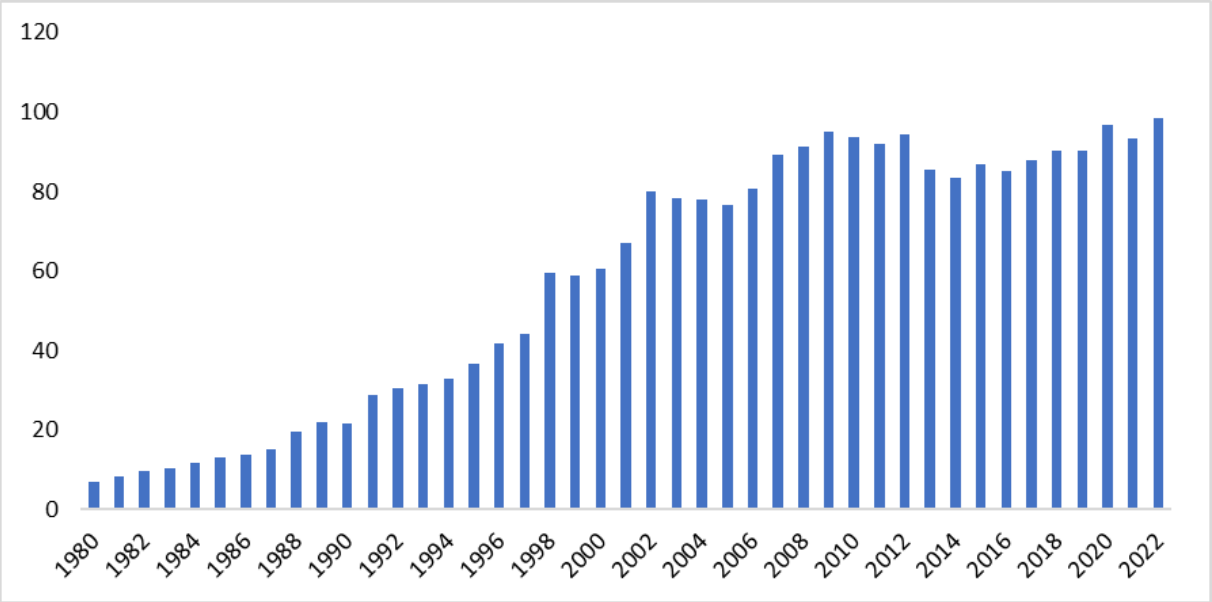
3.2.3 Trends in imports in Lesotho

Figure 9 illustrates the trend in imports in Lesotho between 1980-2022. Similar to the trend in exports, it is evident from Figure 9 that imports in Lesotho have been on a steady incline since 1980. The reason for the consistent increase in imports can be attributed to the benefits of AGOA membership, which Lesotho importing large amount of apparel to be used an intermediate input in Lesotho textiles and clothing subsector. The other factor that could have caused the recent surge in Lesotho imports is the construction of the Phase II of the Lesotho Highlands Water Project, which commenced in 2022 and is expected to be completed in 2027 (African Development Bank, 2023).

Comparing Lesotho's growth of imports as a share of GDP against that of other countries in SACU, imports as a share of GDP was 66.44% in 1980 and 42.06% in Botswana, while the figures were 56.72% and 58.76% in Namibia, 114.04% and 47.59% in Eswatini and 24.63% and 31.52% in South Africa in 1980 and 2022 respectively. This is compared to Lesotho's stats which show that imports as a share of GDP were at 6.95% and 98.51% in Lesotho in 1980 and 2022 respectively. The average growth of imports between 1980-2022 were 48.51%, 52.04%, 69.92% and 57.93% for Botswana, Namibia, Eswatini and South Africa respectively (World Bank, 2024d). This is compared to Lesotho with an average growth of imports between 1980-2022 at 23.37% (World Bank, 2024d).

[5] Data is not available for periods pre-2002

Figure 9: Imports of goods and serviced (% of GDP) in Lesotho (1980-2022)

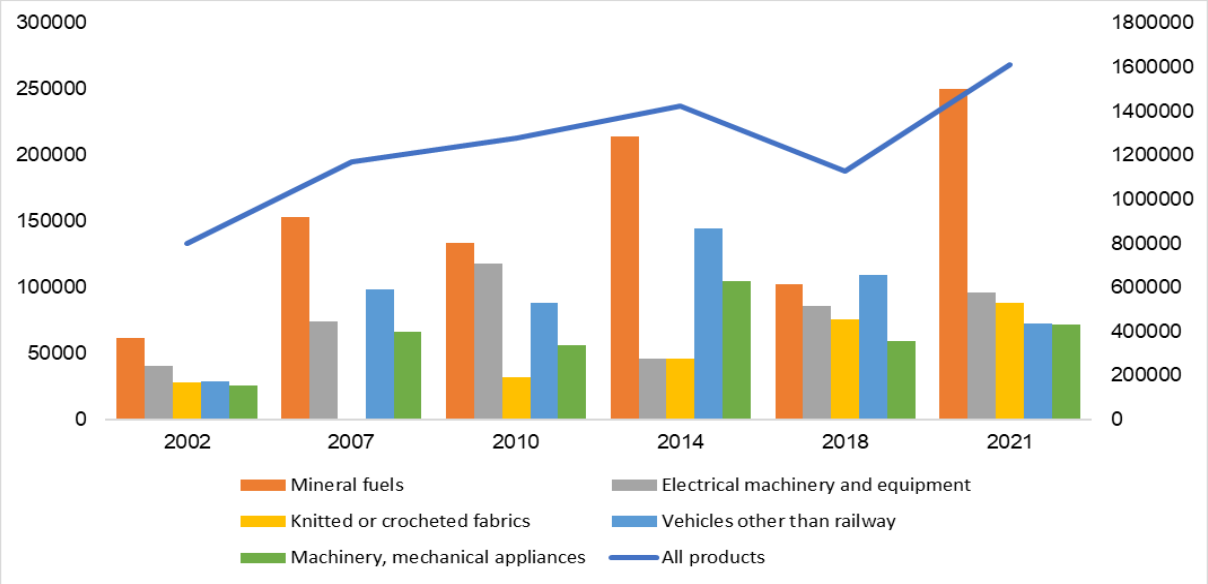


Source: Own compilation from the World Bank (2024d)

Figure 10 illustrates Lesotho's import basket and shows the main import products between 2002 and 2021. Trends depicted in Figure 10 show that the top import products during the reviewed period include mineral fuels, knitted or crotched fabrics, machinery and mechanical appliances, electrical machinery, and equipment, as well as vehicles other than railway. It can further be inferred that Lesotho predominantly imports mineral fuels, electrical machinery, and equipment as well as vehicles. These import products reflect the country's advancement in industrialisation processes.

Lesotho's imports are peculiar in a sense that they mainly are sourced from one country, South Africa, which to date, remains as the major sources of Lesotho's imports. Evidence shows that Lesotho imports about 85% of the goods it consumes from South Africa, including large quantities of agricultural inputs (International Monetary Fund, 2022). However, Lesotho also sources some of its intermediate goods, especially fabrics, from China and Taiwan.

Figure 10: Top five import products in Lesotho (thousand US$)



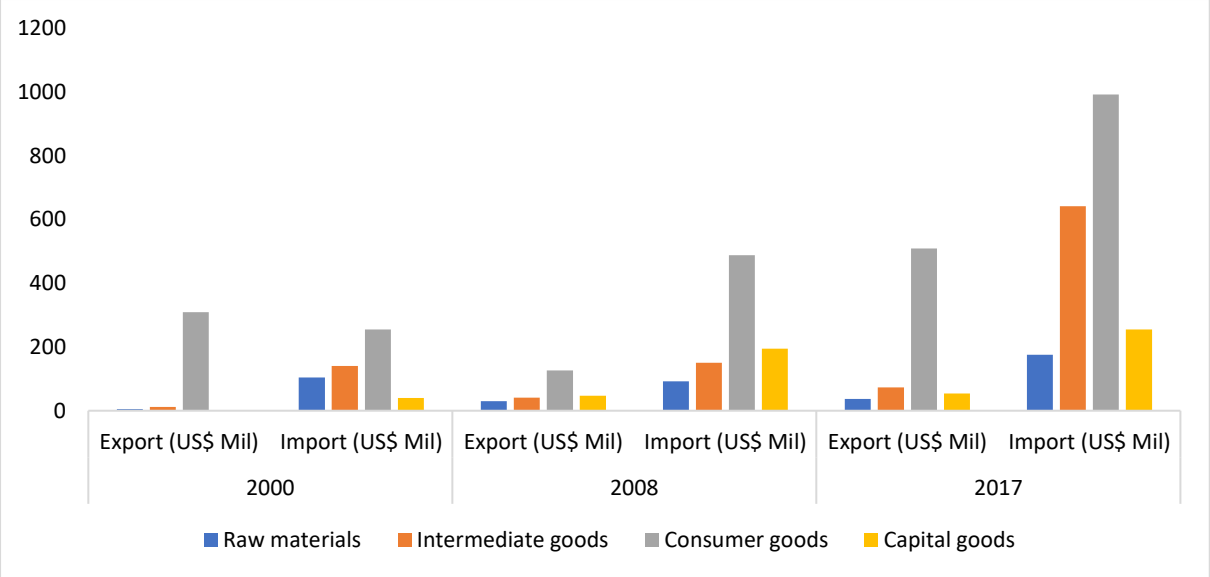
Source: Own complication from the International Trade Centre (2022)[6]

Figure 11 provides an overview of Lesotho's export and import composition between the intervals 2000, 2008 and 2017. From an export point of view, the figure shows that Lesotho's export basket is predominantly made up of raw materials goods, while the import basket is predominantly made up of consumer goods and capital goods. The import of raw materials refers to predominantly agricultural products which are sourced from South Africa. Fabrics, which are grouped under intermediate products, are mainly sourced from China and Taiwan (International Monetary Fund, 2022).

The economy is mainly dependent on the textiles and clothing sector in that the apparel industry contributes more than 60% of the export basket (Ayoki, 2016). Nevertheless, Lesotho's trade openness started declining from 2012, which, according to the Organisation for Economic Cooperation and Development (2013), was during a period when Lesotho experienced a downturn in the economy because of drought, which subsequently reduced agricultural production by an estimated 70%.

[6] Data is not available for periods pre-2002

Figure 11: Lesotho's trade composition (2000, 2008 and 2017)



Source: Own compilation from the World Bank (2022c)

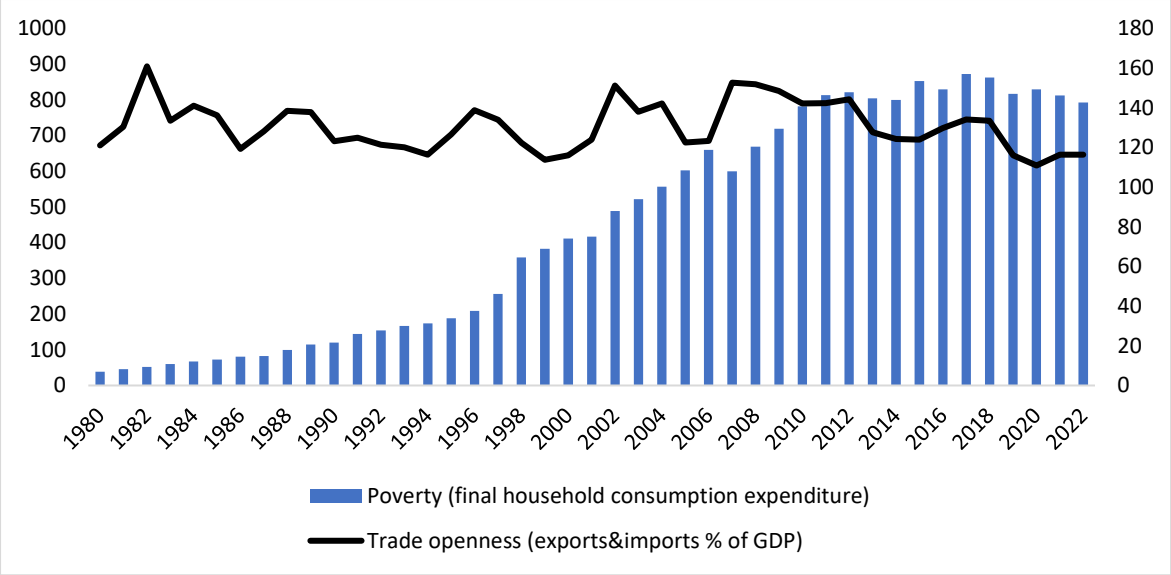
3.2.4 Trends in Trade Openness and Poverty in Lesotho

From an overall trade openness point of view, Figure 12 depicts Lesotho's trade openness and poverty (consumption expenditure per capita) from 1980 to 2021. It can be deduced from the trends shown in Figure 12 that there is a correlation between trade openness and poverty in Lesotho. Between 2000 and 2005, an increase in trade openness can be seen from Figure 12. This increase could be attributed to Lesotho's trade relationship with the USA through AGOA. Lesotho became eligible for AGOA in 2000 and started to experience growth in exports and also attracted investment in the clothing and apparel sector.

Comparing Lesotho's sum of trade as a share of GDP against that of other countries in SACU, sum of trade as a share of GDP, as per World Bank (2024f) was 119.50 and 85.60% in Botswana, while the figures were 126.66% and 99.10% in Namibia, 188.64% and 91.42% in Eswatini and 56.50% and 65.06% in South Africa in 1980 and 2022 respectively. This is compared to Lesotho's stats which show that sum of trade as a share of GDP was 131.09% and 145.74% in 1980 and 2022 respectively.

The average growth of the sum of trade as a share of GDP was between 1980 and 2022 was 100.64% in Botswana, 96.26% in Namibia, 128.55% in Eswatini and 48.78% in South Africa. When compared to India, the average sum of trade as a share of GDP was 30.95%. This is compared to Lesotho with average imports of 143.59% over 1980-2022 (World Bank, 2024f).

Figure 12: Trade openness and Poverty in Lesotho (1980–2022)



Source: Own compilation from Feenstra, Inklaar and Timmer (2015) and the World Bank (2024e and 2024f)

Trade policy developments in Lesotho (1980–2021)

Focusing on the trade-related interventions that took place in Lesotho after 1980, there are several trade developments that were introduced, as shown in Table 4. Some of these trade developments include the introduction of the Lesotho currency in 1980, as well as the establishment of structural adjustment programme and the introduction of the export finance scheme in the late 1980s. One of the significant interventions that took place in the Lesotho economy is that in 1988, the IMF implemented the Structural Adjustment Programmes with the aim to limit the extent of government interference in the economy, encourage private sector intervention and promote that income from exports should exceed import costs and be able to pay for debt servicing (Setai, 1991).

Structural adjustment measures are broadly implemented when a country has a disproportionate balance of payments, with more imports compared to exports, and increasing debt coupled with inflation and unemployment. Citing challenges such as high civil servant budget, high imports and budget deficit, the government of Lesotho took part in the Structural Adjustment Programmes for three years from 1988 to 1991 with the World Bank and the IMF.

Since the mid-1990s, Lesotho has implemented measures to facilitate trade and open up its economy. These efforts are reflected in the liberalisation of key sectors, expansion of export markets, and the establishment of conditions conducive to private sector investment (Mabugu and Chitiga 2007). Consequently, during the 1990s and 2000s, Lesotho signed several trade agreements as shown in Table 4, with the intent to move towards trade integration. During that

time, Lesotho concluded different trade agreements with countries in sub-Saharan Africa, Europe, and North America.

To further highlight the importance of regional trade in the economy of Lesotho, in 1996, the country adopted the Sixth National Development Plan. The plan emphasised the importance of deepening regional economic integration, expanding markets, and creating an environment that fosters access to capital markets (International Monetary Fund, 2022). In 2000, Lesotho formulated National Vision 2020, which outlines the objectives for the country by 2020. National Vision 2020 was formulated through a collaborative effort with other countries and focused on topics related to trade, investment, economic growth and economic diversification (Government of Lesotho, 2022). In 2003, National Vision 2020 was officially launched. The Plan focused on three elements: proximity to a large and sophisticated economy, the need for a diversified economy and building strong export markets in neighbouring countries.

Furthermore, in 2002, the SACU members addressed outstanding issues with the previous 1969 Agreement and introduced the 2002 SACU Agreement. The 2002 SACU Agreement addresses the joint decision-making process in that the members created institutions that would be responsible for ensuring equal representation and participation of members in decision-making processes. The agreement included a revision of the revenue sharing formula by including a customs excise and development element. The agreement also included addressing questions related to trading between SACU members and external parties (South African Revenue Service, 2023).

Apart from SACU membership, Lesotho is also a member of SADC since its original inception in 1980, when it was still referred to as the Southern African Development Coordination Conference (SADCC). The core objectives of SADC are to attain economic development, economic growth, maintain peace and security, while eradicating poverty and improving the standard of life of the people of southern Africa (see, for example, Jenkins, 2001; Southern African Development Community, 2020). These objectives of the SADC agreement hinge on increased regional integration that is built on democratic principles and development that is sustainable and equitable (Jenkins, 2001).

In addition to the trade agreements within southern Africa, Lesotho has other trade agreements that allow preferential market access to the EU and the USA. Both the EU and the USA are key destinations of Lesotho’s exports with the USA serving as a dominant destination for the Lesotho’s garment exports. Therefore, the trade relationship between Lesotho and the EU, and the one between Lesotho and the USA are critical to Lesotho’s foreign investment flows into the garment sector.

Generally, there are notably four trade agreements that are important to Lesotho's trade in clothing and textile, and these include AGOA, the Cotonou Agreement, the SACU and the SADC agreement (International Monetary Fund, 2004). Lesotho became a member of AGOA in 2000 and the major advantage of this trade agreement is the access to the USA market for textiles and clothing (TRALAC, 2023). In addition, Lesotho has since signed a new agreement with the UK along with other members of the SADC-EU EPA.

The SACUM-UK EPA was signed by all parties in October 2019. The SADC-EU EPA's terms have been mainly included into the new SACUM-UK EPA. With the exclusion of South Africa, the UK has agreed to offer immediate duty-free, quota-free access to products exported from SACU member states and Mozambique under this EPA. In exchange, SACU member states and Mozambique agree to gradually liberalise tariffs on commodities imported from the United Kingdom (South African Revenue Service, 2021).

On 1 January 2021, free trading officially commenced within the African Union countries under the auspices of the AfCFTA. The AfCFTA is a first of its kind trade agreement in that it aims to create a free trade area between the 54 countries (this includes Lesotho) in Africa. The concept of the AfCFTA was approved in 2012 during the 18th Ordinary Session of Assembly of Heads of States and Government that was held in Ethiopia. The decision was taken at this sitting to establish a Continental Free Trade Area (TRALAC, 2022).

Table 4: Trade-related interventions in Lesotho (1980–2021)

Year	Intervention	Description
1980	Introduction of the Loti as the Lesotho currency	The Loti, which is Lesotho's currency, was issued by the Central Bank of Lesotho in 1980 with the aim of establishing financial independence from South Africa.
1980	SADCC is formed	Lesotho was the founding member of SADCC, which was formed in Zambia in April of 1980. In 1992, SADCC transformed into SADC.
1988	Introduction of the Export Finance Scheme	The establishment of the Export Finance Scheme with the objective to assist exporters with diversifying and expanding their export base by providing short term funding and insurance for exports from Lesotho.
1988	Lesotho becomes a member of GATT	Lesotho is a member of GATT which is later abolished and the WTO is formed.
1988	Implementation of Structural Adjustment Programmes, supported by the IMF	The Structural Adjustment Programmes were implemented in an effort to ensure a healthy balance of payments by promoting that income from exports should exceed import costs.
1992	SADC Treaty is signed	The signing of the SADC treaty comes after the abolishment of the SADCC in 1992. The objective of the SADC treaty was to promote economic integration within SADC following the independence of the members.
1995	Lesotho becomes a member of the WTO	Lesotho benefits from the WTO membership through participation in the Doha Development Agenda negotiations and other elements of the WTO. Through the WTO, Lesotho is a member of the informal least developed country consultative group and the African, Caribbean and Pacific Group of Countries (ACP).
1996	Liberalisation of the agriculture sector in Lesotho	In 1996, the agricultural sector was liberalised and price, fixing and the quantitative restrictions on the importation of maize and wheat were removed.
1996	Independence from Britain	Lesotho became a fully sovereign state named the Kingdom of Lesotho, gaining full independence from Britain.
2000	Establishment of Vision 2020	The objective was to accelerate sustainable economic growth and poverty alleviation over the next 20 years.
2000	Introduction of the interim Poverty Reduction Strategy Paper (PRSP)	The Interim Poverty Reduction Strategy Paper was produced by the Technical Working Group and laid the foundation for a full PRSP. An integral element of the interim PRSP was the adoption of export promotion.
2000	Cotonou Agreement is established	The agreement was adopted in 2000 after the abolishment of the Lomé Convention that was established in 1975. It provides the basis for the agreement between EU and ACP. The aim

Year	Intervention	Description
		was to eliminate poverty and ensure an effective integration of the ACP countries into the world economy.
2000	Lesotho becomes part of AGOA	Lesotho became part of AGOA which grants market access to the USA. In 2001, Lesotho's textile sector started the enjoy the benefits that came with AGOA. Lesotho mainly exports apparel to the USA under AGOA.
2001	Launch of the New Export Finance and Insurance Scheme	The objective is to boost exports of the country by providing finance that is specific to export related investments.
2002	2002 SACU agreement is signed	The 2002 SACU agreement came after the 1910 initial agreement and the revised agreement in 1969. The 2002 agreement encompassed change points in areas such as joint decision-making processes, new revenue sharing formula and the treatment of trade with non-SACU member shares.
2004	PRSP is adopted in Lesotho	The dissemination and official adoption of the PRSP took place in 2004.
2008	USA and SACU sign a TIDCA	The key focus of TIDCA is the facilitation of consultative discussions, encourages cooperation and facilitates discussions and agreements around customs, barriers to trade and investment promotion.
2009	Interim EU-SADC EPA is agreed	Botswana, Lesotho, Swaziland, Mozambique, and Namibia agreed an Interim region-to-region EPA with the EU.
2012	SADC Free Trade Area comes into force and is fully implemented	The main objective is to deepen regional integration.
2019	SACUM-UK EPA is signed by all parties in October 2019	The agreement includes the UK providing duty-free and quota-free access to goods originating from SACU and Mozambique, except South Africa. T
2021	Ratification of the AfCFTA	The main objective is to substantially increase trade within Africa, particularly trade in value-added goods and services across the different sectors of the economy.

Source: Nyiri (1993), Jenkins (2001), Southern African Development Community (2003), European Commission (2009), International Monetary Fund (2022), Odhiambo and Malefane (2016), TRALAC (2018), African Union (2023), European Council (2023), International Trade Administration (2023), Office of the United States Trade Representative (2023), World Trade Organisation (2023)

3.3 An overview of poverty trends and poverty reduction strategies in Lesotho

3.3.1 Overview of poverty outlook in Lesotho

Poverty trends in Lesotho are triggered by different factors some of which are structural, while others emanate from natural causes. The major factors that contribute to poverty in Lesotho include, to some extent, the impact of natural disasters like droughts and floods, and to a

larger extent the inadequate macroeconomic administration and political crisis (Sechaba Consultants, 1994). In addition to these factors, the migration of Lesotho nationals to South Africa in search of work at the mines together with the migration of the educated Lesotho nationals in search of a better standard of life in South Africa, have also contributed to the extent of poverty in Lesotho (Sechaba Consultants, 1994; Kingdom of Lesotho, 1996; United Nations Development Programme, 2000). In recent years, poverty trends in Lesotho are more related with global crisis and rising food insecurity. These aspects are discussed in the latter part of the current discussion.

In addition to these factors, political factors have also contributed towards economic stagnation in Lesotho and further increases in the country's poverty margins. One of the major events that resulted in the loss of economic activity in some sectors of the Lesotho economy was the political crisis that took place between August and September 1998 (Kingdom of Lesotho, 1998). The political instability during the two months in 1998 had a negative impact on investor confidence and led to work stoppages, reduced working hours and inconsistent production and delivery of goods. Consequently, there was a rise in unemployment due to several companies that had to close. The number of establishments that closed operations are estimated at 246, while the number of jobs lost are estimated between 292 and 3 771 (Mhlanga, 2019).

During the past decade, Lesotho has witnessed some improvement in poverty rates, even though the overall poverty remained high. Between 2002 and 2017, the rate of poverty in the country decreased from 56.6% in 2002 to 49.7% of the population in 2017 (Sulla, Zikhali, and Mahler, 2019). When applying the national poverty line to measure poverty rates in Lesotho, using the Lesotho Maloti, poverty was measured at 759.20 using 2002 prices and reduced to 648.88 using 2017 prices (Sulla et al., 2019). This reduction in poverty translated to 57 000 people who managed to escape poverty between 2002 and 2017 (Sulla et al., 2019).

In comparison to national levels, when applying the international poverty line based on US$1.90 per day, in 2017, 27.3% of people in Lesotho were living in poverty. Although this is lower relative to other countries in sub-Saharan Africa, it is still ranking high when comparing to lower middle-income countries such as those that are in the SACU region. When comparing to the rest of the SACU members in the same period between 2002 and 2017, poverty rates for South Africa, Botswana and Namibia were 18.9%, 16.1%, and 13.4%, respectively (World Bank, 2022e).

Table 5 provides a snapshot of the poverty trends in Lesotho in 1980, 1990, 1994, 2002, 2017 and 2019. Where there is data, all the poverty indicators show a decline in poverty between the years. For example, between 1980 and 2019, the poverty levels in Lesotho have been on

the decline, this is evident by the upward trend in household consumption expenditure. Similarly, between 1994 and 2017, the poverty headcount ratio declined from 50.5 in 1994 to 27.3 in 2017. The data is consistent across the other measures of poverty that have been tabled. It is however important to note that there was an increase in poverty in 2002. The reason for this outlier could be that although household consumption increased for households in urban areas, it declined for households in rural areas and this could be attributed to the Niño drought, which along with other difficulties, led to crop losses and severe food insecurity, especially in rural regions where subsistence farming is the primary means of sustenance (World Bank, 2021b).

Table 5: Poverty indicators in Lesotho (1994–2017)

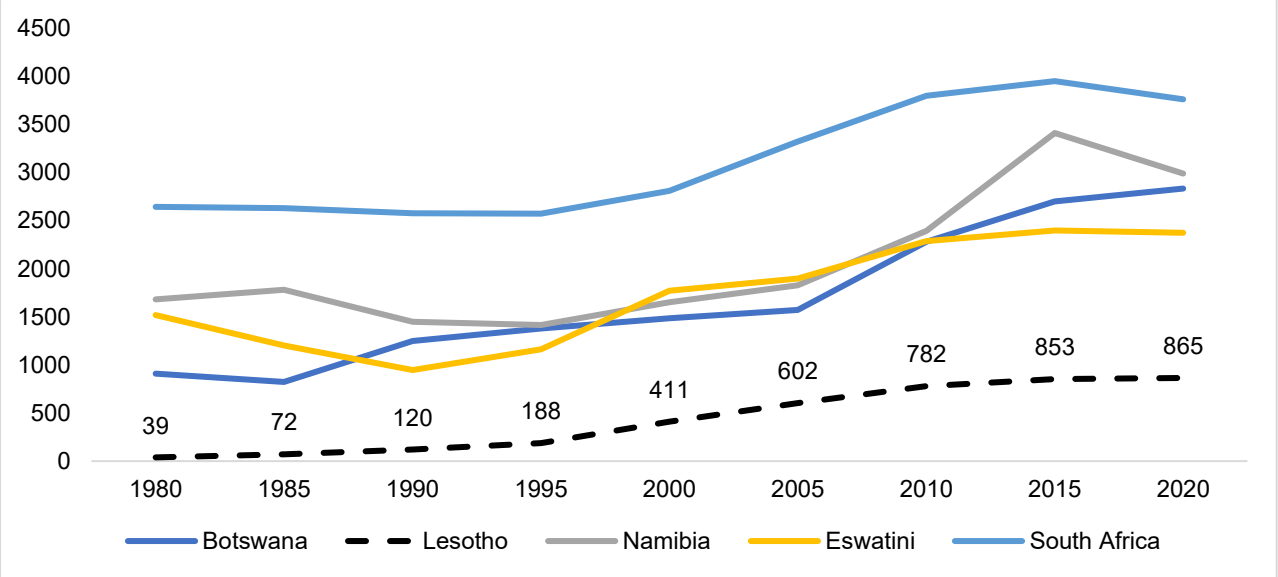
Poverty indicators[7]	1980	1990	1994	2002	2017	2019
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)	No data	No data	50.5	61.9	27.3	No data
Poverty headcount ratio at national poverty lines (% of population)	No data	68	No data	56.6	49.7	59.5
Poverty gap at $1.90 a day (2011 PPP) (% of population)	No data	No data	28.6	32.5	9.4	No data
Poverty gap at $3.20 a day (2011 PPP) (% of population)	No data	No data	40.6	48.7	21.6	No data
Poverty gap at $5.50 a day (2011 PPP) (% of population)	No data	No data	53.9	65	38.6	No data
Households and NPISHs Final consumption expenditure per capita (constant 2015 US$)	40.77	127.09	178	481	905	830.85

Source: Own compilation from the World Bank (2022e, f, g, h, i, j), Wason and Hall (2004) and Roux (2024)

Considering the household and final consumption expenditure as the measure of poverty, Figure 13 shows the trend of final household consumption expenditure per capita from 1980 to 2020. This means that when household final consumption expenditure increases, the poverty rate decreases. Although the household final consumption expenditure per capita in Lesotho has been increasing over time from 1980 to 2020, Lesotho lags behind its counterparts in the SACU area.

[7] Data on poverty is limited for Lesotho. The table shows only the data that could be found from public sources.

Figure 13: Household consumption expenditure per capita in SACU-US$ (1980–2020)



Source: Own compilation from the World Bank (2022j)

3.3.2 Poverty reduction strategies in Lesotho (1980–2019)[8]

Poverty reduction has been a challenge that the Lesotho government has been struggling with since its independence in 1966. Since the country's independence, the Lesotho government has put together policies and plans that are aimed at poverty reduction both at a sectoral level and at a national level. These strategies include Government Induced Social Protection Measures, Community Development and Lesotho Fund for Community Development, Foreign Direct Investment and the Poverty Reduction Strategy Paper. The Lesotho government adopted the Poverty Reduction Strategy Paper with the aim to improve economic growth and address structural challenges such as poverty.

3.3.2.1 Government Induced Social Protection Measures

Since 1980, when the government adopted a policy of food self-sufficiency, it has sought to shield farmers from high agricultural input costs by providing subsidized seeds and fertilizers. The goal has been to help farmers access improved inputs, achieve greater yields, and attain household and national food security (Mphale, Rwambali, and Sechaba Consultants, 2003).

3.3.2.2 Community Development and Lesotho Fund for Community Development

The Lesotho Fund for Community Development was founded in 1999 with the aim of reducing poverty among the poorest people in Lesotho. The fund was set up to reduce poverty through implementing various programmes that could impact on social, environmental, and economic

[8] There is limited information on poverty reduction strategies in Lesotho pre-1990.

aspects within communities. Apart from social and environmental projects, the fund was also established to set up an education programme with the objective of providing quality education to disadvantaged children in communities. The fund also provides support for orphans and vulnerable community members (Government of Lesotho, 2001).

The community development programmes are aimed at ensuring that communities benefit from the support that is offered by the programmes. The programmes are established to reduce poverty rates within communities and to improve the quality of life. It is believed that Lesotho was well-positioned to successfully implement community development programmes because the country had effective District Councils who would be responsible for ensuring that the programmes are carried out successfully (Government of Lesotho, 2001). The District Councils were established in 1948 by the colonial government as statutory bodies that were designed to facilitate the participation of the people. They were also tasked with advising the National Council on matters related to local issues. These bodies were granted significant authority to enact legislation, oversee finances and fulfil a range of other duties (Government of Lesotho, 2001).

An area in which the District Councils were particularly effective in was when they rallied big crowds to participate in local diamond mining. This resulted in many Lesotho natives that had settled in South Africa having to return to Lesotho to participate in the diamond mine economy. Local diamond mining expanded quickly from the late 1960s to the early 1970s and developed into a sustainable economic activity that employed 3 600 people (Government of Lesotho, 2001).

3.3.2.3 Foreign Direct Investment

A year after gaining independence, the Lesotho government established the Lesotho National Development Corporation in 1967, which was a key tool for attracting foreign direct investment (FDI) in the commercial, industrial, mining, and tourism sectors. The Lesotho National Development Corporation concentrated on promoting foreign-owned businesses, while letting its partner Basotho Enterprise Development Corporation (BEDCO) handle promoting local businesses. Because the government supports and pays close attention to international firms, this resulted in significant differences between incentives given to domestic business and international business (Mashinini, 2000).

Among the advantages that international investors receive for investing in Lesotho are tax cuts, training incentives, and purpose-built infrastructure. On the other hand, local companies in Lesotho do not receive the same advantages as foreign investors in that local businesses continue to deal with high rates of taxes and restrictive trade regulations. These differences

between local and international businesses have a detrimental effect on efforts to reduce poverty, create jobs, and overall economic growth because of their restrictive nature on local enterprises (United Nations Conference on Trade and Development, 2002).

Despite the above-mentioned bottlenecks faced by foreign investors in Lesotho, one of the developments witnessed in the country's FDI subsector is that by 2004, 49 clothing manufacturers had opened in four industrial zones mainly for the purposes of export processing, which are the Thetsane and Maseru industrial zones areas in the Maseru district, and the Maputsoe and Ha Nyenye industrial zones in the Leribe district. Lesotho was also utilising the Agreement on Textiles and Clothing, which the WTO established in 1994 and which calls for the gradual removal of all quotas in the sector within 10 years, to further its expansion of the textile industry. at that time, several developing nations, including Lesotho, saw the removal of sector-specific limitations as an opportunity to boost trade by maximising textile and apparel exports. As a result, the manufacturing industry in Lesotho started to expand more quickly than other economic sectors (Bennet, 2006).

The manufacturing industry in Lesotho reached its peak in 1996, when employment reached 56 000 people and a growth rate of 14% was recorded, making the manufacturing subsector the country's biggest employer. AGOA, which was introduced by the USA with the goal of promoting the establishment of market-driven economic policies, political diversity, and the removal of barriers to USA trade and investment, further stimulated growth in the textile industry (Mutume, 2006).

Selected African goods, notably textiles, were given duty- and quota-free access to the US market under AGOA. Consequently, Lesotho was selected by various foreign investors as an ideal location to conduct business because of the flexible labour rules and the nation's privileged access to the US market under AGOA. Due to the Multi-Fibre Arrangement's (MFA) rigorous quota restrictions on the markets of the EU and the USA, this resulted in an influx of Asian investors into Lesotho. The MFA was a quota system put in place by industrialised nations in 1974 to safeguard their domestic textile and apparel industry and preserve jobs in the sector. However, the MFA system has been phased out, which has affected the international demand for textiles, including those produced in Lesotho (Grogan, 2023).

Overall, from an FDI point of view, it may be inferred that the textile industry's contribution to Lesotho's economic growth and subsequently to the elimination of poverty has been declining. This is because although there is a 10% reduction in company tax and a 0% tax on revenue for selected enterprises that operate in Lesotho, China's persistent dominance in the textile and apparel sector has created competition for Lesotho, which is causing a redirection of foreign investment (Makhetha and Rantaoleng, 2016). This factor, coupled with the declining

international demand for textiles following the phasing out of the MFA, are new challenges to Lesotho's FDI, which is traditionally dominated by the clothing and textiles subsector.

3.3.2.4 Poverty Reduction Strategy Paper

The PRSP, which was introduced in Lesotho in 2000 and adopted in 2004, came because of deliberations to alleviate Lesotho nationals from persistent poverty levels in the country. Alongside the long-term vision of the country, his Majesty King Letsie III, who is the Monarch of Lesotho, urged the citizens to work together to create a long-term Vision 2020 that would direct economic development in the next 20 years to accelerate sustainable growth and the reduction of poverty (Kingdom of Lesotho, 2006).

The implementation of the Vision 2020 was built on the foundation of the Poverty Reduction Strategy (PRS) which was the first step towards the Vision 2020 (International Monetary Fund, 2022). These two publications are a result of protracted consultation and participation procedures that included local communities, the National Assembly, government ministries, the private sector, civil society organisations, academia, and development partners. When the government of Lesotho was preparing the PRS, it consulted more than 200 people in different villages and communities across the country (Kingdom of Lesotho, 2006). The contributions of the masses were incorporated in the Vision 2020 and PRS.

Lesotho's PRSP presents a deliberate approach to achieving rapid and long-term equity-based economic growth. It comprises plans and intermediate goals to address the country's core problems. Some of the core issues that are outlined in the PRS include HIV/AIDS, employment, food security and infrastructure (International Monetary Fund, 2006). In terms of structure, there are three interrelated approaches upon which Lesotho's poverty reduction strategy is built:

1) The creation of employment through the providing an operating environment that is favourable and promotes investment in the public sector;
2) The distribution of programmes that are aimed at poverty reduction and that seek to empower poor people by providing them with income generating opportunities; and
3) Providing a guarantee that policies are favourable and will be implemented fully against priorities, and that red tape is removed, and productivity is restored.

To end hunger, food insecurity and malnutrition, the government of Lesotho has utilised the poverty reduction strategy to drive change in the following areas: the quality of and access to healthcare, the provision of food packages to the poor, and the provision of services in the country (Kingdom of Lesotho, 2006).

As a key element addressed in the poverty reduction strategy, the reduction of rural poverty included the following elements:

- To develop and encourage early childhood schooling;
- The promotion of culture to unite the communities and develop tourism industry as a means to generate income;
- The assessment of legislation is biased to one gender and discriminates the other gender and thereafter the introduction of policy reforms that are in accordance with international standards and aligned to those of which Lesotho is a signatory; and
- The proactive prevention of the disregarding of the vulnerable through a fair and effective justice system and the improvement of facilities used by people with disabilities (Kingdom of Lesotho, 2006).

Through the consultative process, eight key national priorities were identified and can be summarised as follows:

- The people place employment and income generating opportunities as high priority. This employment can be in the form of formal employment of informal employment that is generating a source of income.
- People want to be in a position where they can provide food for their families. This can either be food that they grow themselves through subsistence farming or food that they purchase using their income.
- People want access to infrastructure in a way that will lead to the creation of more factory sites and increase the chances of job creation (Central Bank of Lesotho, 2006).
- Moreover, they want to live in an environment that is peaceful and secured and that is governed in a democratic, just and transparent manner.
- People want access to healthcare services in all areas of the country and for the services to be delivered efficiently to all people.
- There is an emphasis on ensuring that all people have access to education, especially education that is relevant and productive.
- People want a guarantee that the environment is preserved for future generations to live on.
- Lastly, people want to be able to access important public services such as passports and to be able to easily access these services in places that are accessible to them (Central Bank of Lesotho, 2006).

The main strengths associated with Lesotho's PRSP include the extent of community involvement and consultation in identifying the critical needs of the community is as far as

poverty is concerned. Also, the commitment towards addressing sensitive issues affecting the community such as HIV/AIDS, gender equality and the protection of youth and children. And, lastly, its in-depth analysis of each issue that is identified under each priority area and followed through with specific approached of addressing each issue (International Monetary Fund, 2006).

Looking at the developments in the country's poverty status, it can be maintained that although the poverty rate in Lesotho is currently lower than it was 20 years ago, the overall levels of inequality and poverty in the country remain relatively high. Evidence from the World Bank study focusing on poverty in Lesotho (Sulla et al., 2019), reveals that during the time of the implementation of the PRSP, the poverty rate in Lesotho fell from 56.6% in 2002 to 49.7% in 2017. This decline in poverty, measured by Poverty headcount ratio at national poverty lines, can be attributed to the impact of the country's social protection programmes that were introduced during the past decade, which somehow helped to augment income received by the poor households. However, even with the decline in poverty during the past decades, overall, the incidence of poverty persists in significant magnitudes in Lesotho with over 75% of the population being categorised as either extremely poor or susceptible to poverty (Sulla et al., 2019).

CHAPTER 4
THEORETICAL AND EMPIRICAL LITERATURE REVIEW

4.1 Introduction

This chapter aims to provide theoretical and empirical foundations of the relationship between international trade, economic growth and poverty. The first part of the chapter discusses the main theoretical frameworks that underpin the linkages between international trade, economic growth and poverty, mainly: the Heckscher-Ohlin trade theory and the Stolper-Samuelson theorem. Generally, the Heckscher-Ohlin theory of trade is built on the premise that if a country exports the goods that use its most abundant factors intensively, this can lead to economic growth, and wealth is distributed to the owners of the factors of production (in the case of poor countries that use labour more abundantly, wealth is distributed to the poor). The Stolper-Samuelson theorem concludes that as the price of goods that are produced by low-skilled labour increases, the wealth of the poor increases.

4.2 Theoretical linkages between trade and poverty

4.2.1 Heckscher-Ohlin trade theory

One of the predominant trade theories that is commonly used to analyse the effects of international trade is the Heckscher-Ohlin model, designed by Heckscher (1919) and further refined by Ohlin (1933). The model focuses on two nations, two commodities and two factors of production. It shows that each nation can export the goods that use their most abundant factor intensively and import the goods that uses intensively the scarce factor. For the welfare of countries to be maximised, the partner countries should export the goods in which uses their abundant factor most intensively and import the goods in which uses the scarce factor.

Since the comparative advantage of developing countries lies in their abundant labour, the main beneficiaries of export-led expansion would be labour, and since the owners of labour in most countries appear to be much poorer than the owners of capital, opening up to trade should favour the poor more than it would favour the rich (Samuelson 1948; Dornbusch, Fischer and Samuelson, 1980).

The effects of international trade on a household's welfare can be analysed through two primary channels: consumption and income. The first channel examines the impact on household expenditure, as trade influences the prices of consumption items, either increasing or decreasing the overall cost of living for households. The second channel evaluates the impact on earnings, as international trade may affect the wage incomes of individuals based

on their industry affiliation or skill level. Even if wage losses occur, households may still experience overall welfare gains if consumer prices decline in a way that benefits households. Therefore, it is crucial to consider the combined impact on a household's budget when analysing the effects of international trade. Income elasticity is another channel through which international trade can affect welfare. For instance, if the intensive good has a high-income elasticity of demand, that is, the price of the good is likely to increase (Bergstrand, 1990).

Having stated the above, it is also important to note that there are cases whereby poor countries or poor households will be negatively impacted by trade liberalisation. This occurs in cases where the unskilled are predominantly employed in nontraded sectors (these are sectors that are rendered by the locals and may include services such as health, retail and construction), whereas exports are heavily dependent on semi-skilled labour in the short to medium term (Stewart, 1991). Even though the export market will readjust in the long-term, poor households are most positioned to suffer temporary adverse shocks, most specifically in the form of unemployment (Metcalfe and Steedman, 1981).

In conclusion, when evaluating the impact of international trade through the Heckscher-Ohlin model, it is paramount to note that the model hinges on two views: the first view being of the increased welfare to poor households who produce and sell labour intensive goods, as well as relatively less poor households who produce and sell capital intensive goods; the second view is the cautionary view that states that the poor households may be at a disadvantage of temporary shocks in the form of unemployment in periods where the export market is demanding goods that are produced by semi-skilled labour.

4.2.2 Stolper-Samuelson theorem

Another element of trade theory, the Stolper-Samuelson theorem, becomes important in investigating the theoretical linkages between trade, economic growth and poverty. The Stolper-Samuelson theorem states that rising the price of a labour-intensive good increases real labour incomes, while decreasing returns to capital, which is why developing countries are often urged to increase labour-intensive non-traditional exports. Lower prices for capital goods or increased competition following trade liberalisation could motivate firms to import machines and increase their demand for skilled labour (Harrison and Hanson, 1999; Behrman, Birdsall and Szekely, 2000; Acemoglu, 2003).

However, it is also important to note that to benefit the poor in the form of increased incomes, the poor need to be flexible enough to be able to move in-between sectors depending on the economic cycle at that particular. This means that for the poor to benefit from comparative advantage, they need to switch from contracting sectors and into expanding sectors at any

given time (Harrison, 1996). Another point similar to that of Harrison (1996) is the one raised by Attanasio, Goldberg and Pavcnik (2004), which suggests that in the real world, the mobility of labour may be limited. Attanasio et al. (2004) continue that the reason for limited mobility of labour is because of barriers to entry and exit for firms, as well as because of barriers to entry and exit for the actual workers.

Another argument that is brought against the Stolper-Samuelson theorem is from Winters (2000), who contends that the theorem falls short of addressing real-world questions about trade and poverty, since it is less effective in multi-commodity multi-factor models and that the function and personal income distributions are only closely connected.

4.2.3 Alternative approach: Winters (2000)

In response to the arguments against the basic assumption governing the Stolper-Samuelson theorem, Winters (2000) provides the theoretical structure for explaining the connection between trade reforms and poverty across three groups of institutions, namely households and markets, wages and employment, and the government revenue and spending. These are explained in the discussion below.

4.2.3.1 Household and markets

Since majority of the poor in most countries mainly rely on self-employment as a means of generating income, the best way to think about poor households is by means of a household engaged in farming activities which produces products or services, sells its labour and is also a consumer (Singh, Squire and Strauss, 1986). The real income of the household improves when there is a rise in the price of the good or service in which they are the net seller of (this includes labour, products, and services).

Conversely, the real income of the household reduces when there is a decrease in the price of the good or service in which they are the net seller of (this includes labour, products, and services). Having explained that although the direct impact of trade openness on poverty is through price changes of the product that the poor workers are the net seller of. It is also important to note that apart from wages earned during production, poor households generally have several income sources, including transfers and remittances from absent members of the family and income in kind.

The capacity of a household to react to a trade shock influences the size of the impact it experiences, but this does not necessarily prevent the shock itself. In addition, the impact of international trade on government revenue is also dependent on how households adjust their spending when there are price increases. For example, when international trade leads to the

increase in the price of agricultural goods and services, there may be spillover effects on the local economy and hence the poor households. For example, when the direct beneficiaries of the increase in the price of agricultural products adjust their spending patterns, they are most likely going to spend their extra income on goods and services that are produced locally by the poor. These goods and services include building, personal services as well as basic manufacturing services.

The common concern is that opening up the economy would expose it and its component households to increased risk. They would undoubtedly be exposed to new threats, but the net effect could be to minimise overall risk, because global markets are often possess more stability when compared to domestic ones. Conversely, trade liberalisation will increase the risk either by weakening existing stabilisation mechanisms (which could either be autonomous or policy-based) or by actively transitioning to a portfolio that provides higher average rewards but greater uncertainty.

4.2.3.2 Wages and employment

Most of poor people rely on job markets for most of their earnings. Job markets or labour markets are also a significant route out of poverty (when a person secures employment) or into poverty (when a person is no longer employed). The effects of international trade on wages and jobs are therefore significant, particularly with regards to unskilled labour. If international trade boosts demand for labour-intensive goods, it boosts demand for labour, and either wages or jobs (or both) will rise.

However, if the poor are, for the most part, in fully unskilled households, while semi-skilled labour receives a boost, poverty would be unaffected or, potentially, intensified. If poverty is calculated by including people below the poverty line, it is also relevant where the different wage rates are relative to the poverty line. If incomes are moved from the poverty line to higher levels, or if the expanding markets give wages above the poverty line, the poverty line will decrease. If, on the other hand, incomes do not exceed vital levels, poverty reported may not be affected despite improvements in welfare.

4.2.3.3 Government revenue and spending

One of the concerns about the effect of international trade on poverty is that it can decrease government revenue, thereby having a negative impact on poor households that are dependent on government income. Engagement in international trading and opening up the economy could potentially reduce revenues that are earned in the form of import taxes. For

low-income countries, this could result in unbalanced and compromised government budget (Shrestha, Kotani , Kakinaka, 2021).

Winters, McCulloch and McKay (2004) note that neither theory nor evidence indicates a clear connection between trade liberalisation and income. Milner, Morrissey and Rudaheranwa (2001) explain that in the case of tariffs, government revenue would rise with international trade only if the initial tariff level reaches its maximum level of revenue. According to McCulloch, Winters and Cirera (2001), the magnitude of the reduction in government revenue would be minimised if trade volumes and collection rates rise as tariffs decrease. This means that when government revenue falls (as a result of reduced tariffs, even reaching levels of zero), it is not a guarantee that the poor will be negatively impacted (McCulloch et al., 2001). It is then up to the governments and policymakers how the economy makes up for the deficit from other sources of income, such as taxes and a decrease in government spending.

4.2.4 Institutional approach

One channel through which international trade can be connected to economic growth and poverty alleviation is through strong social and economic institutions (Pietrucha, Żelazny, Kozłowska and Sojka, 2018). If this is not the case, then the poverty rates in a country are likely to not be affected by trade openness. Looking at the evolution of institutions in recent decades, it can be noted that in the 1990s, there was a revival of institutional economics which has focused its responsiveness to the part of institutional factors in probing the effect of modifications in levels of quotas and tariffs on economic growth (Le Goff and Singh, 2014).

In the opinion of New Institutional Economics, trade restructuring is institutional change and the adjustments in tariffs and quotas usually create only a minor part of a considerably bigger and more intricate process. In this case, international trade is associated with changes in the relationships that government maintains with the private sector and the world at large. International trade therefore gives birth to new expectations and adjusted rules in as far as policies are written and ultimately executed.

As North (1990) explains, institutions governing the economy of a country can vary from unspoken customs, taboos and old traditions that exist in traditional communities, to more documented and formalised bodies and laws that govern economic and social conduct in an advanced society. Clearly stipulated, unambiguous and secure property rights and neutral implementation of contracts amongst parties are the foundation for a market economy. If these circumstances do not hold, market movement might be infeasible or extremely sub-optimum. Individuals will be unwilling to finance fixed assets and will also be reluctant to take part in long standing contracts.

4.3. Controversies on trade policy orientation and its implications for poverty reduction

The controversies around free trade and trade policies have culminated in developed countries adopting trade plans, growth strategies and investment strategies. Although several developed countries depended on trade barriers to introduce so-called import-substituting industrialisation during the thirty years since World War II, many of them have since undergone trade reform to different degrees, and we have witnessed a significant change from import-substituting industrialisation to export-oriented industrialisation. At that time, protectionism remained the dominant policy of foreign trade for many decades, while import substitution industrialisation was followed by many developed countries (Singer, 1950).

Rodrik (1995) uses Latin America as an example of a region that has reversed the protectionist policies that have been in place for decades and have implemented trade liberalisation programmes. Another study by Musa (1998) revealed that industrialised countries started to move away from protectionist policies in the 1960s and 1970s and increasingly adopted trade liberalisation policies. This was supported by the framework provided by the GATT, which outlined a more coordinated trade liberalisation.

The claims in favour of import-substituting industrialisation are based on two key premises. Firstly, it was argued that there is an observable secular decline in the international relative prices of the chief exports of developed countries, primary capital. Second, the manufacturing industry needs pension assistance in the form of subsidies before the ‘infant factories’ become grown-up and can cope with their counterparts in the industrialised economies.

In recent years, however, export-oriented industrialisation is at the centre of international trade (Atesoglu, 1994). With export-oriented industrialisation, developing countries predominantly have a competitive advantage in labour-intensive manufacturing and consume capital-intensive products and services. However, higher prices for investment goods mean less gross investment over time, a lower rate of investment expansion, and a lower level of consumption (North, 1994), which could counteract the effect of international trade on poverty reduction.

4.4 Empirical studies on international trade and poverty

This section provides an overview of the studies that have been conducted on trade openness and poverty over the past 12 years (2010–2024). The review provides a mixture of country studies as well as panel studies. From the reviewed studies (Table 6), there is no consensus, and evidence is not unanimous. There have been four outcomes, namely positive, negative, no impact and inconclusive or mixed. The empirical evidence indicates that the effect of trade openness on poverty differs from developed to developing countries. The study has found that

most previous literature have used only one measure of trade openness, being the sum of trade as a share of GDP. This fact further contributes to the justification of this current study since it has employed three measures of trade openness to examine the effect of trade openness on poverty.

Starting with evidence that suggests that there is a positive relationship between trade openness and poverty, Hassan and Siddiqi (2010) investigate the relationship between trade openness and poverty in Pakistan using the Johansen cointegration technique for the period 1973–2007, the study revealed that trade openness has a weak but positive and significant relationship with poverty in the short run and the long run. This suggests that an increase in trade openness results in a decrease in poverty in Pakistan for the sampled period. Furthermore, the study also investigates the significance of agriculture sector in Pakistan. It shows that due to the increase in the share of agriculture to GDP, poverty decreases but insignificantly both in short run and long run period of times.

Similarly, in a study that analysed the relationship between trade and poverty in Africa, Le Goff and Singh (2014) show that trade openness tends to reduce poverty in countries that have well-developed financial sectors, provide quality education at high standards, and have well-developed institutions. The study covered the period 1981–2010 and employed the System Generalised Method-of-Moment (GMM) estimator. Huazhong, Huazhong and Huazhong (2017) estimate the connection between international trade and poverty in 31 emerging countries for the period 1994–2014. The findings of the study reveal that on a general level, the magnitude of the ability of exports to reduce poverty is greater than that of imports. Furthermore, the study adds that specifically exports in the service sector play a bigger role towards poverty reduction. On the other hand, the agricultural sector imports play a big role towards poverty reduction.

In comparison, Anetor, Ebes Esho and Verhoef's (2020) examine the impact of trade on poverty alleviation across 29 countries in sub-Saharan Africa for the period 1990–2017 used the Feasible Generalised Least Squares FGLS technique. The results of their study reveal that trade openness has a positive and significant impact on poverty alleviation. Yameogo and Omojolaibi (2021) investigated the relationship between trade openness, economic growth and poverty level from 1990 to 2017 in 40 countries in sub-Saharan Africa using the Panel ARDL and the System of GMM Technique. The findings from the study revealed that trade openness has a negative impact on poverty in the short run while it has a positive effect in the long run.

Adegboyo, Efuntade, Olugbamiye, and Efuntade (2021) use the ARDL estimation technique to estimate the relationship between trade openness and poverty in Nigeria between 1985-

2020. The study uses the KOF globalization index as a proxy for trade openness and working poverty rates as a proxy for poverty and found that an increase in trade openness leads to a reduction in poverty. Sunge, Kumbula and Makamba (2021) used the GMM estimation technique to estimate the relationship between trade openness and poverty between 2003-2017 in the Sub-Saharan African region. The study found there to be a positive relationship between trade openness and poverty during this period.

Agu, Fasina and Oshodi (2022) used the ARDL estimation technique and estimated the relationship between trade openness in Nigeria between 1986-2019 and found there to be a positive relationship between trade openness and poverty. Fauzel (2022) studied the relationship between trade openness and poverty in Mauritius between 1990-2017 using the VECM technique. The study found there to be a positive relationship between trade openness and poverty in the long run while there is a negative relationship between trade openness and poverty in the short run.

Gonese et al.,(2023) investigates the relationship between trade openness and poverty in SADC between 1980-2019 using the panel ARDL estimation technique. The study uses the human capital index as a non-income measure of poverty and finds there to be a positive relationship between trade openness and poverty in the long run. Furthermore, the study finds that trade openness leads to a reduction in poverty in the presence of high economic growth and human capital development. Nessa and Imai (2023) use the GMM to estimate the relationship between trade openness and poverty for 98 developing countries between 2000-2016. The study uses three subsamples which are low income, lower-middle income and upper-middle income developing countries and finds that trade openness reduces poverty significantly and that this relationship is further boosted by the upper-middle income developing countries.

In their study, Chhabra, Giri and Kumar (2023) estimate the relationship between trade openness and poverty for Brazil, Russia, India, China and South Africa (BRICS) between 1991-2019 using the GMM and DCCE estimation technique, found there to be a positive relationship between trade openness and poverty reduction. The study found that although trade openness leads to a reduction in poverty through an increase in income, the negative effects of governance on poverty reduction dilute these benefits through a weakened trickle-down effect. This coupled with rising inequality dilute the positive impact of trade openness on poverty reduction in the BRICS trade bloc.

Focusing on South Africa, Maluleke and Vacu-Ngqila (2024) employed the ARDL approach to cointegration and found a positive relationship between trade openness and poverty reduction

only in the long run. These findings led to the conclusion that in the long run, trade openness leads to a reduction in poverty in South Africa.

Using a sample of developing and emerging countries, Pradhan and Mahesh (2014) investigate the role of international trade in eradicating poverty in 25 countries over the period 2000–2010. Their study employs the Johansen cointegration method. The findings of the study suggest that poverty has a negative association with total trade, exports, imports, as well as merchandise trade. This suggests that an increase in trade openness, results in increased poverty for the selected developing countries when considering the sampled period. Similarly, a study by Guillaumont-Jeanneney and Kpodar (2011) investigates the relationship between trade openness and poverty for a sample of developing countries during 1966–2000 using the General Method of Moments (GMM) estimation method. The results of the study reveal that there is a negative relationship between trade openness and poverty.

In comparison, Tariq (2011) employed the GMM to estimate the relationship between trade openness and poverty in Pakistan over the period 1970–2006 and found there to be a negative relationship between trade openness and poverty. This suggests that in this case, an increase in trade openness, accentuates poverty and does not alleviate poverty. Instead, the study revealed that human capital plays a critical in poverty reduction as opposed to trade openness.

A study by Onakoya et al. (2019) examines the relationship between trade openness, poverty, and economic growth for 21 African countries over the period 2005–2014. The study employed the Johansen cointegration method of estimation. The results of the study reveal that international trade has a negative relationship with poverty, which suggests that for the 21 countries under study, as trade increases, the poverty rate increases. In this instance, trade openness does not lead to poverty alleviation, but results in increased poverty.

On the other hand, literature also reveals there to be no relationship between trade openness and poverty. A study that investigated the relationship between trade openness and poverty in 43 countries in Africa over the period 1980–2011, Anyanwu (2013) used the two-step (IV) efficient GMM estimation method, and the findings reveal that there is a positive but statistically insignificant relationship between trade openness and poverty. Similarly, looking at studies in sub-Saharan Africa, a study by Singh and Huang (2015) analysed the relationship between trade openness and poverty for the period 1992–2006 using the Feasible Generalised Least Squares method. Their study finds that there is no statistically significant relationship between trade openness and poverty.

Agusalim (2017) studied the dynamic effect of trade openness on poverty in Indonesians between 1978 to 2015 using VECM technique. The study revealed that trade liberalisation insignificantly impacted poverty in the short run while in the long run, it was found to lead to a

reduction in poverty. Sattar, Karim and Munir (2022) use 45 developing countries from Asia and Africa to investigate the relationship between trade and openness between 1995-2020 using the GMM estimation technique. The study found there to be an unclear relationship between trade openness and poverty reduction. However, the study did find there to be an indirect link between trade openness and poverty reduction through economic growth and financial development. The study found that trade openness coupled with increased economic growth and improved financial development has a positive impact on poverty reduction through a decrease in inequality, balanced income distribution and therefore a reduction in poverty.

Table 6: List of empirical studies

Author	Country	Period	Methodology	Impact of trade openness on poverty alleviation
Hassan and Siddiqi (2010)	Pakistan	1937–2001	Johansen cointegration	Positive
Anyanwu (2013)	43 African countries	1980–2011	Two-step (IV) efficient GMM	Positive
Le Goff and Singh (2014)	African countries	1981–2010	GMM	Positive
Huazhong et al. (2017)	31 emerging countries	1994–2014	GMM	Positive
Agusalim (2017)	Indonesia	1978-2015	VECM	Positive
Anetor et al. (2020)	29 countries in Sub-Saharan Africa	1990–2017	FGLS	Positive
Yameogo and Omojolaibi (2021)	Sub-Sahan African countries	1990-2017	Panel ARDL and GMM	Positive
Adegboyo, Efuntade, Olugbamiye, and Efuntade (2021)	Nigeria	1985-2020	ARDL	Positive
Sunge, Kumbula and Makamba (2021)	Sub-Sahan African countries	2003-2017	GMM	Positive
Mbah, Agu, Fasina and Oshodi (2022)	Nigeria	1986Q1-2019Q4	ARDL	Positive
Fauzel (2022)	Mauritius	1990-2017	VECM	Positive
Gonese, Tsegaye, Khumalo and Kapingura (2023)	SADC	1980-2019	Panel ARDL	Positive
Nessa and Imai (2023)	98 developing countries	2000-2016	GMM	Positive
Chhabra, Giri and Kumar (2023)	Brazil, Russia, India, China and South Africa (BRICS)	1991-2019	GMM and DCCE	Positive

Guillaumont-Jeanneney and Kpodar (2011)	Developing countries	1966–2000	GMM	Negative
Tariq (2011)	Pakistan	1970–2006	GMM	Negative
Pradhan and Mahesh (2014)	25 developing countries	2000, 2005, 2010	Johansen cointegration	Negative
Maluleke and Vacu-Ngqila (2024)	South Africa	1990-2021	ARDL	Negative
Onakoya et al. (2019)	21 countries in Africa	2005–2014	Johansen cointegration	Mixed
Sattar, Karim and Munir (2022)	45 developing countries	1995-2020	GMM	Mixed
Singh and Huang (2015)	37 countries in sub-Saharan Africa	1992–2006	FGLS	None

CHAPTER 5
METHODOLOGY

5.1 Introduction

This chapter outlines the methodological aspects of the current research. The chapter is divided into three main sections, which are explained as follows: In the first section, the discussion focuses on the empirical model, followed by a full description of the variables. Thereafter, the discussion elaborates on the analytical framework that will be adopted in this study. This study is based on time series data from 1980 to 2019 for South Africa and Lesotho, with poverty data represented by final household consumption expenditure, per capita represented in US$, and trade data represented by exports and imports as a percentage of GDP.

In addition to the trade openness variable which is proxied by exports and imports as a share of GDP, exports as a share of GDP and imports as a share of GDP. Therefore, this study includes three proxies of trade in which to measure the effect of trade openness on poverty. The inclusion of exports of goods and services as a percentage of GDP and imports of goods and services as a percentage of GDP is used to ensure the study is robust as well as to examine the individual effects of exports and imports on poverty. The data is obtained from the World Bank and Penn World Tables (Feenstra et al., 2015), which are deemed reputable sources of data. The control variables included in the study are inflation rate proxied by CPI, economic growth proxied by GDP per capita and human capital proxied by Governments expenditure on education as a share of GDP.

5.2 Empirical model and definition of variables

The study investigates the impact of trade openness, inflation, economic growth and education on poverty using the theoretical model of Maluleke and Vacu-Ngqila (2024), Le Goff and Singh (2014) and Berg and Krueger (2003) and. In the initial study, Le Goff and Singh (2014) estimate the relationship between trade and poverty using pooled cross-country and time-series data from 1981 to 2010 for 30 African countries. The control variables used in this study include GDP per capita as a measure of economic development, education as a measure of human capital, private credit as a share of GDP as a measure for financial deepening and Consumer Price Index as a measure of inflation.

5.2.1 Empirical model

The current study adopts, with modifications, the model of Le Goff and Singh (2014) and Vacu-Ngqila (2024). The first modification is that the current study uses the Le Goff and Singh model in a time-series context and not in a cross-sectional context. The second modification is that this study employs final household consumption expenditure per capita as a measure of poverty, whereas Le Goff and Singh (2014) use the headcount ratio. The reason for using final household consumption expenditure in the present study is because of the gaps in data for headcount ratio. According to Žižmond (2015), final household consumption expenditure per capita is favourable because it is in line with the World Bank's (1990) definition of poverty, which is defined as not being able to attain the minimum standard of living that is measured in terms of basic consumption needs. Furthermore, according to Statistics South Africa (2024), there is global consensus that household consumption expenditure is an important measuring tool that offers policymakers unique insights into living standards, specifically around poverty and inequality. The third modification is that the Le Goff and Singh (2014) study includes bureaucracy quality as a measure of institutional quality, whereas this study does not include this variable due to gaps in data.

The general specification for the empirical model for the current study can be described as follows:

Model 1: Trade openness (exports plus imports as a share of GDP)

$$Poverty = f(trade\ openness, economic\ growth, macroeconomic\ instability, education) \quad ..(1)$$

The specification in (1) can be presented in equation form as follows:

$$POV_{\mathrm{t}} = \beta_0 + \beta_1 TOP_t + \beta_2 INF_t + \beta_3 GRO_t + \beta_4 EDU_t + \varepsilon_t \quad .....(2)$$

Model 1 (augmented with dummy variable): Trade openness (exports plus imports as a share of GDP, with dummy variable)

$$Poverty = f(trade\ openness, economic\ growth, macroeconomic\ instability, education, dummyy\ variable) \quad .....(3)$$

The specification in (3) can be presented in equation form as follows:

$$POV_{\mathrm{t}} = \beta_0 + \beta_1 TOP_t + \beta_2 INF_t + \beta_3 GRO_t + \beta_4 EDU_t + \beta_5 DUM_t + \varepsilon_t \quad .....(4)$$

Model 2: Trade openness (exports as a share of GDP)

$$Poverty = f(exports, economic\ growth, macroeconomic\ instability, education) \quad .....(5)$$

The specification in (5) can be presented in equation form as follows:

$$POV_{\mathrm{t}} = \beta_0 + \beta_1 EXP_t + \beta_2 INF_t + \beta_3 GRO_t + \beta_4 EDU_t + \varepsilon_t \quad \text{.....(6)}$$

Model 2 (augmented with dummy variable): Trade openness (exports as a share of GDP, with dummy variable)

$$Poverty = f(exports, economic\ growth, macroeconomic\ instability, education, dummy) \text{..(7)}$$

The specification in (7) can be presented in equation form as follows:

$$POV_{\mathrm{t}} = \beta_0 + \beta_1 EXP_t + \beta_2 INF_t + \beta_3 GRO_t + \beta_4 EDU_t + \beta_5 DUM_t + \varepsilon_t \quad \text{.....(8)}$$

Model 3: Trade openness (imports as a share of GDP)

$$Poverty = f(exports, economic\ growth, macroeconomic\ instability, education) \quad \text{.....(9)}$$

The specification in (9) can be presented in equation form as follows:

$$POV_{\mathrm{t}} = \beta_0 + \beta_1 IMP_t + \beta_2 INF_t + \beta_3 GRO_t + \beta_4 EDU_t + \varepsilon_t \quad \text{.....(10)}$$

Model 3.1 (augmented with dummy variable): Trade openness (imports as a share of GDP, with dummy variable)

$$Poverty = f(exports, economic\ growth, macroeconomic\ instability, education) \quad \text{.....(11)}$$

The specification in (11) can be presented in equation form as follows:

$$POV_{\mathrm{t}} = \beta_0 + \beta_1 IMP_t + \beta_2 INF_t + \beta_3 GRO_t + \beta_4 EDU_t + \beta_5 DUM_t + \varepsilon_t \quad \text{.....(12)}$$

Where *POV* is the dependent variable representing Poverty measured as household consumption expenditure per capita; *TOP, EXP, IMP, INF, GRO, EDU and DUM* are the regressors representing trade openness, exports, imports, inflation, economic growth, education and the dummy variable respectively. Trade openness, exports and inflation represent trade openness proxies in Model 1, 2 and 3 respectively. The dummy variable is included under the augmented versions of Model 1, 2 and 3 to account for structural breaks in Lesotho occurring from 1990 as a result of the retrenchments of Lesotho nationals from South African mines.

The subscript t represents time while β_0 and β_{i} (where I = 1,2…,5) represent the intercept and parameters to be estimated; while ε_t represents the error term.

5.2.2 Theoretical and Empirical Underpinnings of the Model

5.2.2.1 Poverty (dependent variable)

The phenomenon of poverty, as explained by Calderón, Loayza and Schmidt-Hebbel (2005), is complex. It manifests itself in different ways and in different situations across places and across people. In most cases, poverty is defined as a situation of not having adequate resources. Poverty can also be associated with a lack of opportunity or poor education and may therefore be linked to insecurity for the future. When defining the extremes of poverty, one can say that poverty is being unable to meet basic human needs such as food, water, housing and healthcare services.

Generally, the literature distinguishes between five indicators of poverty: final household consumption expenditure per capita, the headcount ratio, the poverty gap, the Gini coefficient, and the income of the poorest quintile. This study will adopt final household consumption expenditure per capita.

Final household consumption expenditure per capita is defined as Households and Non-Profit Institutions Serving Households (NPISHs) final consumption expenditure per capita (constant 2015 US$). According to Žižmond (2015), because of unavailability of full datasets in most of the developing countries, there are several poverty proxies that have been developed over the years.

Some studies have used poverty indicators based on the income inequality data developed by Deininger and Squire (1996) and Lundberge and Squire (1998). These datasets include income, headcount ratio and the Gini coefficient as proxies for poverty. Another poverty proxy that has been used to measure poverty in developing countries is annual income per capita. However, according to Odhiambo (2009, 2011), the annual per capita income is not a reliable measure of poverty, and for this reason Ravallion (1992) proposes the final household income expenditure per capita as a reliable measure of poverty. Studies that have used the consumption-based model include Maluleke and Vacu-Ngqila (2024) and Maluleke (2018). Ravallion (1992) and Žižmond (2015) assume that the higher the final household consumption expenditure per capita, the lower the poverty rate.

5.2.2.2 Trade openness

Trade openness can be categorised into two categories, which are incidence-based measures of trade openness and outcome-based measures of trade openness (Spilimbergo, Londoño and Székely, 1999). The incidence-based measures of trade openness are based on international trade policy and on data on tariffs. On the other hand, the outcome-based

measures of trade openness are based on trade data. Because the current study aims to estimate the relationship between actual trade openness on poverty, and not the impact of trade liberalisation policies on poverty, the measure of trade openness that is used is the one that relies on trade data. Thus, this study adopts the outcome-based measures of trade openness.

The study adopts three measures of trade openness, the first one being the sum of exports and imports as a share of GDP, the second one being exports as a share of GDP and the third one being imports as a share of GDP. The reason that the study includes exports and imports separately in addition to the sum of exports and imports is to determine whether exports and imports as single factors would have a significant impact on poverty levels in South Africa and Lesotho between 1980-2019.

According to the World Bank (2023c), the benefit of the outcomes-based measure of trade openness is that it considers the importance of exports and imports of goods and services in an economy, thereby providing a reasonable indication of the reliance of domestic producers on international demand and of domestic consumers on international supply.

The sum of exports and imports as a percentage of GDP is regarded as a conventional measure of trade openness and has been used in similar previous empirical studies based on developing countries, including those by Anyanwu (2013) and Singh and Huang (2015). For instance, Anyanwu (2013) estimates the relationship between poverty and economic growth in 43 African countries and employs trade openness variable which was measured by the ratio between exports and imports as percentage of GDP.

In another study, Onakoya et al. (2019) estimate the relationship between trade, poverty, and economic growth for 21 African countries and also employ the conventional measure of trade openness. Similarly, Anetor et al. (2020) use the conventional measure of trade to estimate the relationship between trade, poverty and economic growth for 21 African countries. More recently, Hassan and Siddiqi (2010) used the conventional measure of trade openness to assess the impact of foreign direct investment on trade and poverty.

Similarly, Silajdzic and Mehic (2018) use exports as a share of GDP and imports as a share of GDP individually to determine the impact of trade openness on economic growth. The study also uses exports and imports as a share of GDP as a proxy for trade openness. A study by Maluleke and Vacu-Ngqila (2024) in their study on the relationship between trade openness and poverty in South Africa uses two proxies of trade openness. The study uses the sum of exports and imports as a share of GDP and uses exports as a share of GDP. In a study to examine the impact of trade openness on economic growth, Malefane and Odhiambo (2018)

employ three proxies of trade openness. The first proxy is the sum of exports and imports as a share of GDP, the second one is exports as a share of GDP and the third one is imports as a share of GDP.

Based on previous studies, this study expects that the coefficient for the three proxies for trade openness (sum of exports and imports/GDP, exports/GDP and imports/GDP) will be positive. This will indicate that as trade increases, this will lead to an increase in household consumption expenditure, which will therefore result in a corresponding decrease in poverty.

5.2.2.3 Control variables

In line with Maluleke and Vacu-Ngqila (2024) and Le Goff and Singh (2014), this study includes a set of control variables that are widely used as variables determining poverty, as can be seen in Table 7. The selected control variables are economic growth, measured by the GDP per capita, macroeconomic instability, which is represented by the inflation rate and human capital which is measured by government expenditure on education. Berg and Krueger (2003), Grossman and Helpman (1991) and Lucas (1988) explain that the justification for including GDP per capita as a measure of economic growth can be attributed to the common understanding that economic growth is key to sustained poverty alleviation and trade liberalisation is argued to lead to the needed increases in productivity to sustain growth. Based on previous studies, this study expects that the coefficient of the economic growth will be positive, indicating that as economic increases, this will lead to an increase in household consumption expenditure, which will therefore result in a corresponding decline in poverty.

Macroeconomic instability is an important variable in that inflation is a critical issue for policymakers and causes uncertain and unstable economies, hence the inclusion of the inflation rate in the empirical analysis of the current study. In addition, Munir and Kiani (2011) maintain that an increase in the inflation rates negatively impacts on the poor and the consumption basket of the poor reduces significantly. The study expects inflation to have a negative coefficient, which means that an increase in the inflation rate will lead to a decline in household consumption expenditure, which will lead to increased poverty.

The inclusion of education as a control variable in this study is important because according to Hajebi, Billing and Hajebi (2023) government expenditure on education is considered an effective mechanism to motivate individuals to improve their level of educated. In addition, Le Goff and Singh (2014) explain that as the population is education, people can be able to acquire new skills needed to support growing sectors and respond promptly to the new requirements of the labour market (Le Goff and Singh, 2014). Since an improvement in the level of education points to an increase in the human capital of the country, increased

government expenditure on education is expected to have a positive impact on economic growth and consequently inequality reductio which would lead to a decrease in poverty (Hajebi et al., 2023).

Table 7: Data sources and variable description

Variable	Description	Source
Poverty (POV)	Households and NPISHs final consumption expenditure per capita (constant 2015 US$)[9]	World Bank Data
Trade openness (TOP)	Sum of exports and imports as a share of GDP	World Bank Data
Exports (EXP)	Exports of goods and services as a share of GDP	World Bank Data
Imports (IMP)	Imports of goods and services as a share of GDP	World Bank Data
Macroeconomic instability (INF)	Inflation measured as annual percentage change in consumer prices	World Bank Data
Economic growth (GRO)	GDP per capita measured as Nominal GDP divided by population size	Penn World Tables (Feenstra et al., 2015)
Education (EDU)	Government expenditure on education as a percentage of GDP	World Bank Data

5.3. Estimation techniques

5.3.1 Stationarity tests

The autoregressive distributed lag (ARDL) works on the assumption that all variables should be stationery in levels meaning that they are integrated of order zero, i.e. I(0), or are integrated of order one, i.e. I(1). Therefore, it is necessary that prior to the ARDL estimation technique, unit root tests are carried out to determine the stationarity property of the data. Three types of stationarity tests are employed in the current study: these are the Augmented Dickey-Fuller (ADF) unit root test, the Phillips-Perron (PP) unit root test, and the Perron (1989) test, which tests for unit roots in the presence of structural breaks.

The idea that a time series known to possess statistical properties that remain constant over time is referred to as the assumption of stationary data. A stationary time series, more particularly, is one in which the mean, variance, and autocorrelation structure do not change over time. This is an essential assumption since numerous time series analytic methods, such as those employed in forecasting, are founded on the notion that the underlying patterns and relationships in the data are constant across time. The most common type of statistical test to determine whether a time series is stationary or not is the ADF Test (Rudebusch, 1992). This

[9] Poverty data is in constant terms while the other variables are in nominal terms. This is due to a gap in data for Lesotho.

study will first apply the ADF and the PP test to the natural logarithm of the series to determine stationarity.

Another important factor that needs to be accounted for when dealing with time series data is testing for stationarity in the presence of structural breaks. Structural breaks refer to large, uncommon shocks (both exogenous and those induced by policy) that impact the level or the rate of growth of the series and cause regime transitions (Startz, 1998). For the purposes of testing for unit roots in the presence of structural breaks, this study employs the Perron (1989) test.

5.3.2 Cointegration test

This study employs the ARDL method to evaluate the long run and short run effects of trade openness on poverty in South Africa and Lesotho. The ARDL model was initially developed by Pesaran and Shin (1999) and later refined by Pesaran, Shin and Smith (2001). The step that follows post the estimation of the level of integration of the variables is to find the short run and long run dynamic relationship between the variables of interest. The study applies the bound test approach to cointegration within the framework of the ARDL approach to uncover the presence of cointegration among the variables. Consequently, the purpose of a bounds test is to investigate the presence of a long-term association between poverty and the explanatory factors.

According to Pesaran et al. (2001), the advantages of the ARDL model include the following:

- The ARDL technique is free of residual correlation which means that the technique does not face problems associated with endogeneity.
- The ARDL model is best suited for studies with a small sample size, whereas the conventional cointegration techniques such as Johansen cointegration is better suited for studies with a large sample size.
- The ARDL technique does not require the variables to be classified into I(0) or I(1) which implies that the ARDL approach does not face the pre-testing problems related with standard cointegration, which necessitates that the variables are already classified into I(1) or I(0).

The bounds test's determination of cointegration is accomplished by examining the F-test, which is utilised to assess the existence of the long-term relationship (Pesaran et al., 2001). In the process of applying the ARDL bounds test, the estimation approach requires the two steps. The first step of the analysis is where the F statistic determines the existence of any long-term relationship between the variables. The second step of the analysis involves the

estimation of the coefficients of the long run relationship and determination of their values, followed by the approximate calculation of the short run elasticity of the parameters with the error correction representation of the ARDL technique.

The ARDL model for the current study can be specified as:

$$\triangle lnPOV = \alpha_0 + \sum_{i=1}^{n} \beta_{1i} \triangle lnPOV_{t-i} + \sum_{it=0}^{n} \beta_{2i} \triangle lnTOP_{t-i} + \sum_{it=0}^{n} \beta_{3i} \triangle lnINF_{t-i} + \sum_{it=0}^{n} \beta_{4i} \triangle lnGRO_{t-i} + \sum_{it=0}^{n} \beta_{5i} \triangle lnEDU_{t-i} + \emptyset_1 lnPOV_{t-1} + \emptyset_2 lnTOP_{t-1} + \emptyset_3 \triangle lnINF_{t-1} + \emptyset_4 lnGRO_{t-1} + \emptyset_5 lnEDU_{t-1} + \varepsilon_t \quad \text{..... (13)}$$

where ln represents the log of the variables, TOP, INF, GRO and EDU, which have been defined previously as the control variables representing trade openness, macroeconomic stability, economic growth and education, respectively; α_0 is the constant term; β_1 to β_5 represent the short run coefficients; $\emptyset_1$ to $\emptyset_5$ represent the long run coefficients; and ε_t represents the error term.

To establish whether there exists a long run relationship between the variables, the cointegration test is performed using the following equations, which indicate both the null and alternative hypotheses underlying the test:

$$H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$$

$$H_1 : \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$$

where H_0 represents the null hypothesis and H_1 represents the alternative hypothesis.

To establish the validity of the null hypothesis, the following conditions are checked:

- If the calculated F statistic is higher than the upper bounds F statistic, the conclusion is that there is cointegration, thus, the null hypothesis if no cointegration is rejected.
- However, if the calculated F statistic is lower than the lower bounds F statistic, the null hypothesis cannot be rejected, thus, the conclusion is that there is no cointegration.
- Lastly, if the calculated F statistic lies between the upper bounds and lower bounds, the result the cointegration test is inconclusive.

5.3.3 Error correction model

Following the cointegration test, the estimation of the Error Correction Model associated with the ARDL is determined. The specification of the ARDL-based Error Correction Model for the current study is specified as follows:

$$\triangle lnPOV = \alpha_0 + \sum_{i=1}^{n} \alpha_{1i} \triangle lnPOV_{t-i} + \sum_{it=0}^{n} \alpha_{2i} \triangle lnTOP_{t-i} + \sum_{it=0}^{n} \alpha_{3i} \triangle lnINF_{t-i} + \sum_{it=0}^{n} \alpha_{4i} \triangle lnGRO_{t-i} + \sum_{it=0}^{n} \alpha_{5i} \triangle lnEDU_{t-i} + \varphi \mathrm{ECT}_t + \varepsilon_t \quad \text{..... (14)}$$

where ϕ represents the coefficient of the error correction term, illustrating the long run dynamics; ECT is the error correction term; and ε_t is the residual error term.

According to Malefane and Odhiambo (2021), for the long run relationship between the variables to exist, the coefficient of the error correction term ϕ is expected to be less than 1, negative and statistically significant. The error correction term is a used to analyse the short-term dynamics and long-term relationship between variables. It measures the speed at which the variables return to their long run equilibrium following a short-term shock.

The methodology applied addresses the hypotheses that has been outlined in the beginning of the study. The ARDL model is applied to evaluate the long run and short run effects of trade openness on poverty. This is done by first confirming, through the bounds test, the presence of cointegrating relation between the variables. This addresses the hypothesis that trade openness has a positive effect on poverty in the long run and short run.

CHAPTER 6
DISCUSSION OF EMPIRICAL FINDINGS

6.1 Introduction

This chapter provides an analysis of the results of the estimation techniques explained in Chapter 5. The chapter is divided into five sections including the introductory remarks. Following this introduction, the second section presents the results of the unit root test, which are obtained from the Augmented Dickey-Fuller (ADF) test and the Phillips-Perron (PP) test. Thereafter, the discussion focuses on the results of the F-bounds cointegration test, followed by the results of the long run estimations. The last section presents the results of the error correction model, which are accompanied by stability diagnostics.

6.2 Descriptive Statistics

Descriptive analysis was carried out before the variables were transformed into logs. The variables used are POV (Poverty ((Household consumption expenditure per capita)); TOP (Trade openness (Exports and imports)/GDP)); EXP (Exports (Exports/GDP)); IMP (Imports (Imports/GDP); INF (Inflation (Consumer Price Index)); GRO (Economic growth (Real GDP per capita)) and EDU (Education (Government expenditure on education)). The study adopts annual data, spanning over the period 1980 to 2019. Table 8 and 9 presents the mean, median, maximum and minimum values, standard deviation, skewness and kurtosis for the variables in this study for South Africa and Lesotho respectively.

For South Africa, the results show that POV has a mean of 2757.041, maximum of 3439.975 and minimum of 2225.081. TOP has a mean of 42.581 with a maximum value of 57.04 and a minimum value of 29.381. EXP has a mean of 25.012 with a maximum of 32.254 and a minimum of 18.9552. IMP has a mean of 22.13 with a maximum of 33.719 and a minimum of 15.366. INF has a mean of 8.771 with a maximum of 18.654 and a minimum of -0.692. GRO has a mean of 11187.575 with a maximum of 12918.651 and a minimum of 9396.513. EDU has a mean of 5.381 with a maximum of 6.6 and a minimum of 4.6. All variables are positively skewed except EXP. Regarding kurtosis, all the variables are less than 3, implying that the observations are fat or short-tailed in distribution.

For Lesotho, the results show that POV has a mean of 424.479, maximum of 905.26 and minimum of 40.771. TOP has a mean of 131.875 with a maximum value of 160.861 and a minimum value of 113.719. EXP has a mean of 25.493 with a maximum of 53.226 and a minimum of 1.518. IMP has a mean of 55.075 with a maximum of 94.878 and a minimum of

6.957. INF has a mean of 10.151 with a maximum of 33.812 and a minimum of 3.218. GRO has a mean of 1822.443 with a maximum of 3098.559 and a minimum of 984.523. EDU has a mean of 6.381 with a maximum of 9.73 and a minimum of 3.014. All variables are positively skewed. Regarding kurtosis, all the variables are less than 3, implying that the observations are fat or short-tailed in distribution.

Table 8: Descriptive Statistics for South Africa

	POV	TOP	EXP	IMP	INF	GRO	EDU
Mean	2757.0414	42.581	25.012	23.13	8.771	11187.575	5.381
Median	2496.066	41.58	25.493	22.85	7.284	10946.266	5.23
Maximum	3439.957	57.704	32.254	33.719	18.654	12918.651	6.6
Minimum	2225.081	29.381	18.955	15.366	-0.692	9396.513	4.6
Std. Dev.	462.229	7.758	3.36	4.61	4.652	1201.092	0.519
Skewness	0.471	0.22	-0.007	0.191	0.331	0.124	0.702
Kurtosis	1.467	2.035	2.313	2.232	2.144	1.542	2.524

Table 9: Descriptive Statistics for Lesotho

	POV	TOP	EXP	IMP	INF	GRO	EDU
Mean	424.479	131.875	25.493	55.075	10.151	1822.443	6.318
Median	390.985	130.019	18.692	59.987	9.754	1605.725	6.553
Maximum	905.26	160.861	53.226	94.878	33.812	3098.559	9.73
Minimum	40.771	113.719	1.518	6.957	3.218	984.523	3.014
Std. Dev.	310.776	11.678	20.618	32.291	5.73	702.34	2.138
Skewness	0.223	0.509	0.064	-0.193	1.811	0.603	-0.149
Kurtosis	1.458	2.475	1.206	1.388	8.303	1.942	1.725

6.3 Results of unit root tests

Table 10: Results of unit root test for South Africa

Variable	Model	ADF		PP		Order of integration
		Levels	1st difference	Levels	1st difference	
LPOV	Constant	-0.1806	-3.9590***	0.0812	-3.7430***	I(1)
	Constant & Trend	-2.6591	-3.9725**	-1.6633	-3.8683**	I(1)
	Without Constant & Trend	1.5654	-	2.2900	-	
LTOP	Constant	-1.4773	-6.3816***	-1.4023	-6.4341***	I(1)
	Constant & Trend	-2.7178	-6.4573***	-2.5705	-6.5470***	I(1)
	Without Constant & Trend	0.0333	-	0.0766	-	
LINF	Constant	-2.6836*	-5.1924***	-2.6798*	-7.6575***	I(0)
	Constant & Trend	-4.8277***	-5.1103***	-4.8483***	-7.7733***	I(0)
	Without Constant & Trend	-	-	-	-	
LGRO	Constant	-0.9603	-3.7412***	-0.7315	-3.7885***	I(1)
	Constant & Trend	-2.7305	-4.0568**	-1.8512	-4.1369**	I(1)
	Without Constant & Trend	0.1282	-	0.3991	-	
LEDU	Constant	-2.5381	-7.8165***	-2.5415	-7.8165***	I(1)
	Constant & Trend	-2.7169	-7.7054***	-2.7555	-7.7054***	I(1)
	Without Constant & Trend	0.1804	-	0.1804	-	
LEXP	Constant	-2.5976*	-6.0709***	-2.7265*	-6.9828***	I(0)
	Constant & Trend	-3.5231*	-5.9507***	-3.5231*	-7.0830***	I(0)
	Without Constant & Trend	-	-	-	-	
LIMP	Constant	-1.4773	-6.3816***	-1.4023	-6.4341***	I(1)
	Constant & Trend	-2.7178	-6.4573***	-2.5705	-6.5470***	I(1)
	Without Constant & Trend	0.0333	-	0.0766	-6.5334***	

Levels of significance denoted by *** for 1%; ** for 5%; and * for 10%

For South Africa, LPOV is stationary at I(1) using both the ADF and PP tests when constant and constant and trend are included. These results are consistent throughout the three proxies of trade openness represented by LTOP, LEXP and LIMP. On the other hand, the results are mixed across the other control variables, namely LINF, LGRO and LEDU. LINF is stationary at levels when constant and constant and trend are included when using both ADF and PP test. LGRO is stationary at first difference when constant and constant and trend are included when using both the ADF and PP test. LEDU is stationary at first difference when constant and constant and trend are included when using both the ADF and PP test.

For Lesotho, LPOV is stationary at I(1) using both the ADF and PP tests when constant and constant and trend are included. LTOP and LIMP are stationary at levels and at first difference. LEXP is stationary at first difference when constant and constant and trend are included using both the ADF and PP test. The order of integration for the other control variables is mixed. LINF is stationary at levels when constant and constant and trend are included when using both the ADF and PP tests. LGRO and LEDU are stationary at first difference when constant and constant and trend are included using both the ADF and PP tests.

Table 11: Results of unit root test for Lesotho

Variable	Model	ADF		PP		Order of integration
		Levels	1st difference	Levels	1st difference	
LPOV	Constant	-3.5734	-4.6273***	-3.4770**	-4.5872***	I(1)
	Constant & Trend	0.3520	-5.9667***	1.0149	-6.0050***	I(1)
	Without Constant & Trend	5.0801	-	-	-	
LTOP	Constant	-3.7647***	-6.5395***	-3.6508***	-12.0533***	I(0)
	Constant & Trend	-3.6371**	-5.7317***	-3.5437**	-13.2228***	I(1)
	Without Constant & Trend	-	-	-	-	
LINF	Constant	-2.9252*	-8.3864***	-2.7940*	-18.1967***	I(0)
	Constant & Trend	-4.9915***	-8.2711***	-4.9610***	-18.4908***	I(0)
	Without Constant & Trend	-	-	-	-	
LGRO	Constant	0.5557	-5.0517***	0.4422	-5.0517***	I(1)
	Constant & Trend	-3.2079*	-5.0251***	-3.2022*	-5.0251***	I(1)
	Without Constant & Trend	-	-	-	-	
LEDU	Constant	-1.2609	-3.2102**	-1.6805	-7.8040***	I(1)
	Constant & Trend	-0.1434	-8.2462***	-0.6262	-8.2923***	I(1)
	Without Constant & Trend	0.5008	-	0.5087	-	
LEXP	Constant	-1.4697	-4.9163***	-1.4279	-4.8805***	I(1)
	Constant & Trend	-0.2414	-5.1638***	-0.3473	-5.0780***	I(1)
	Without Constant & Trend	1.1314	-	1.4674	-	
LIMP	Constant	-4.0072***	-5.2674***	-4.0072***	-5.4149***	I(0)
	Constant & Trend	-0.5811	-7.2511***	-0.3418	-7.6014***	I(1)
	Without Constant & Trend	3.5691	-	2.3785	-4.0418***	I(1)

Levels of significance denoted by *** for 1%; ** for 5%; and * for 10%

In South Africa and Lesotho, there is evidence of a cointegrating relationship among the variables. This can be seen by the F statistic for each equation which is greater than the asymptotic critical values either at 1%, 5% or 10% level of significance. In South Africa, when the ratio of total trade to GDP is used as an indicator of trade openness (i.e. Model 1), the results reveal that the F statistic is 5.089 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables. For Model 2, the F statistic is 6.654 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables. For Model 3, the F statistic is 4.579 and is greater than the critical values at 5% and 10%, which means that there is a cointegrating relationship among the variables.

For Lesotho, when the ratio of total trade to GDP is used as an indicator of trade openness (i.e. Model 1), the results reveal that the results reveal that the F statistic is 5.267 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables. Under the augmented version of Model 1, when the dummy variable is included, the F statistic is 6.132 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables. When imports to GDP is used as an indicator of trade openness (i.e. Model 2), results reveal that the F statistic is 4.839 and is greater than the critical values at 5% and 10%, which means that there is a cointegrating relationship among the variables.

Under the augmented version of Model 2, when the dummy variable is included, the results reveal that the F statistic is 10.984 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables. When exports to GDP are used as an indicator of trade openness (i.e. Model 3), the results reveal that the F statistic is 16.855 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables. Under the augmented version of Model 1, when the dummy variable is included, the results reveal that the F statistic is 14.841 and is greater than the critical values at 1%, 5% and 10%, which means that there is a cointegrating relationship among the variables.

After confirming that there is cointegration among the variables, the study uses the AIC to determine the optimal lag length (3,0,2,3,0), (1,1,1,1,0) and (1,0,2,1,0) for South Africa under Model 1 (where the ratio of total trade to GDP is used as a proxy for trade openness), Model 2 (where the exports to GDP is used as a proxy for trade openness) and Model 3 (where imports to GDP is used as a proxy of trade openness) respectively. The optimal lag length for Lesotho is determined as(3,3,1,4,3), (1,0,0,2,0), (3,2,0,3,4), (3,0,0,4,0), (1,0,0,2,0) and (3,0,0,1,0) under Model 1, augmented version of Model 1 which includes the dummy

variable, Model 2, augmented version of Model 2 which includes the dummy variable Model 3, and augmented version of Model 3 which includes the dummy variable respectively.

Panel A

Country	Model	Function	F statistic	Cointegration status
South Africa	Model 1 (case 2)	F(LPOV|LTOP, LINF, LGRO, LEDU)	5.089***	Cointegrated
Lesotho	Model 1 (case 2)	F(LPOV|LTOP, LINF, LGRO, LEDU)	5.267***	Cointegrated
Lesotho	Model 1(*dummy*) (case 2)	F(LPOV|LTOP, LINF, LGRO, LEDU, DUM)	6.132***	Cointegrated
South Africa	Model 2 (case 2)	F(LPOV1|LEXP, LINF, LGRO, LEDU)	6.654***	Cointegrated
Lesotho	Model 2 (case 2)	F(LPOV1|LEXP, LINF, LGRO, LEDU)	4.839**	Cointegrated
Lesotho	Model 2 (*dummy*) (case 2)	F(LPOV1|LEXP, LINF, LGRO, LEDU, DUM)	10.984***	Cointegrated
South Africa	Model 3 (case 2)	F(LPOV2|LIMP, LINF, LGRO, LEDU)	4.579**	Cointegrated
Lesotho	Model 3 (case 2)	F(LPOV2|LIMP, LINF, LGRO, LEDU)	16.855***	Cointegrated
Lesotho	Model 3 (*dummy*) (case 2)	F(LPOV2|LIMP, LINF, LGRO, DUM)	14.841***	Cointegrated

Asymptotic critical values						
Pesaran et al. (2001): 300, table CI(ii), case 2	1%		5%		10%	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
	4.13	5.00	1.52	2.02	0.69	0.96

Levels of significance denoted by *** for 1%; ** for 5%; and * for 10%

6.4 Long run estimation and discussion of the results

For South Africa, when the ratio of total trade to GDP is used as an indicator of trade openness (i.e. Model 1), the long run results reveal that the coefficient of total trade to GDP (LTOP) is negative and statistically significant. From the estimated results, this can be interpreted as a 1% increase in trade openness leads to a 0.173% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. The results are not in line with theory and the hypothesis of the study, which is that there is a positive relationship between trade openness and poverty. However, the results can be explained by Harrison and Hanson (1999), Behrman et al. (2000) and Acemoglu (2003), who found that trade liberalisation could result in firms increasing their demand for skilled labour and eventually unskilled labour may not be in demand, further pushing them into poverty.

In contrast, for Lesotho, when the ratio of total trade to GDP is used as an indicator for trade openness (i.e. Model 1), the long run results reveal that the coefficient of the ratio of total trade to GDP (LTOP) has no significant impact on poverty in the country. This result is not in line with theory and with the hypothesis of the study which is that there is a positive relationship between trade openness and poverty. Under the augmented version of Model 1, where the dummy variable is included, the long run results reveal that the coefficient of the ratio of total trade to GDP (LTOP) is insignificant. This result is not in line with theory and the hypothesis of the study, which is that the coefficient of the dummy variable is negative and statistically significant. The dummy variable is statistically insignificant. This result is not in line with theory and the hypothesis of the study which expects the dummy variable to be negative and statistically significant representing a negative relationship between trade openness and poverty.

The insignificant result for the ratio of total trade to GDP (LTOP) could be related to the fact that Lesotho is an LDC, which according to Malefane and Odhiambo (2018), LDCs tend to experience dynamic losses from trade with respect to technical progress and economic growth. Furthermore, this result is consistent with Singh's and Huang's (2015) study, who found that there is no association between trade openness and poverty in sub-Saharan Africa.

In addition, Anyanwu (2013) found no significant relationship between trade openness and poverty in a study that focused on 43 countries in Africa. To explain these results, the current study recalls the findings of the United Nations Conference on Trade and Development (2004), which examined international trade and poverty reduction in LDCs. The study found that in the case of LDCs, the extent to which international trade has an impact on poverty reduction is dependent on several factors including the development of manufacturing sector, services sector, or the exploitation of mineral resources. In some cases, therefore, an increase in international trade is not accompanied by an increase in private consumption per capita, which could lead to no significant relationship between trade and poverty.

In terms of the other control variables, for South Africa, where the ratio of total trade to GDP is used as an indicator for trade openness (i.e. Model 1), the long run results reveal that the coefficient for inflation (LINF) is negative and statistically significant. These results are in line with theory and the hypothesis of the study which is that there is a negative relationship between inflation and poverty. For inflation (LINF), the results can be interpreted as a 1% increase in the inflation rate leads to a 0.105% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. In contrast, for Lesotho, the long run results reveal that the coefficient of inflation (LINF) is statistically insignificant. The results for inflation in Lesotho can be explained by a study by Blank and Blinder (1985) which found

that although there are several studies that confirm a significant relationship between poverty and inflation, there is still no evidence to prove that this relationship indeed exists.

For South Africa, the long run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant. The results for South Africa can be interpreted as a 1% increase in the economic growth leads to a 1.345% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. These results are in line with theory and the hypothesis of the study which is that there is a positive relationship between economic growth and poverty. In contrast, for Lesotho, the long run results reveal that the coefficient for economic growth (LGRO) is statistically insignificant. The results for economic growth in Lesotho are consistent with the findings of Oloyede, Osabuohien and Ejemeyovwi (2021), who found an insignificant relationship between poverty and economic growth for the Economic Community of West African States and SADC. The result for education is consistent with other studies, for example, that by Thapa (2013), who found that an increase in education results in a decrease in poverty.

For South Africa, the long run results reveal that the coefficient for education (LEDU) is positive and statistically significant. The results can be interpreted as a 1% increase in Government expenditure on education leads to a 0.223% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of the study which is that there is a positive relationship between education and poverty. Likewise, for Lesotho, the long run results reveal that the coefficient of education (LEDU) is positive and statistically significant. The result for education (LEDU) can be interpreted as a 1% increase in Government expenditure on education leads to a 1.627% increase in household consumption expenditure, thereby a decrease in poverty, ceteris paribus. The results for education are consistent with theory and are in line with the hypothesis of the study.

Similarly, under the augmented version of Model 2, when a dummy variable is included, the long run results reveal that all the control variables are statistically insignificant. These results are in line with Model 1, where all the variables, except for education (LEDU), are statistically insignificant in Lesotho. These results are not in line with theory and the hypothesis of the study. This means that the inclusion of a dummy variable does not help to explain the impact of inflation, economic growth and education on poverty. The hypothesis of the study expects the dummy variable to be negative and statistically significant.

For South Africa, when exports to GDP is used as an indicator of trade openness (i.e. Model 2), the long run results reveal that the coefficient of exports to GDP (LEXP) is not statistically significant. These results are not in line with theory and the hypothesis of the study which is

that there is a positive relationship between trade openness and poverty. The results for exports to GDP (LEXP) are consistent with the findings from Rodríguez-Castelán, Vazquez and Winkler (2020) who found there to be no evidence a relationship between poverty and household incomes. This is because, while growth in exports leads to higher labour income, it can also raise the supply of labour through inflows of migrants, particularly unskilled ones. Internal and external migration flows therefore offset the positive impacts of exports for the average person. In turn, remittances also tend to decline in response to rising exports (Lopez, Molina and Bussolo,2007).

In contrast, in the case of Lesotho, the long run results reveal that the coefficient of exports to GDP (LEXP) is positive and statistically significant. The results can be interpreted as a 1% increase in exports leads to a 0.461% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. These results are consistent with theory and the hypothesis of the study which is that there is a positive relationship between trade openness and poverty. Similarly, under the augmented version of Model 2, when a dummy variable is included, the long run results reveal that the coefficient of exports to GDP (LEXP) is positive and statistically significant. The results can be interpreted as suggesting that a 1% increase in exports leads to a 0.452% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus.*

In terms of the other control variables for South Africa, the results reveal that the coefficient for inflation (LINF) is negative and statistically significant. The results for LINF can be interpreted as a 1% increase in the inflation rate leads to a 0.156% decrease in household consumption expenditure, thereby an increase in poverty, ceteris paribus. This result is in line with theory and with the hypothesis of the study that there is a negative relationship between inflation and poverty. In contrast, for Lesotho, the results reveal that the coefficient for inflation (LINF) is statistically insignificant. Similarly, for Lesotho, under the augmented version of Model 2, when the dummy variable is included, the results reveal that the coefficient for inflation (LINF) is statistically insignificant.

For South Africa, the long run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant. The results can be interpreted as a 1% increase in economic growth to a 1.208% increase in household consumption expenditure, thereby a decrease in poverty, ceteris paribus. This result is in line with theory and the hypothesis of the study which is that there is a positive relationship between economic growth and poverty. Similarly, for Lesotho, the long run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant. This can be interpreted as a 1% increase in economic growth leads to a 0.762% increase in household consumption expenditure, thereby

a decrease in poverty, *ceteris paribus*. The results for economic growth are in line with theory and the hypothesis of the study which is that there is a positive relationship between economic growth and poverty.

Similarly, for Lesotho, under the augmented version of Model 2, the long run results reveal that the coefficient of economic growth is positive and statistically significant. This can be interpreted as a 1% increase in economic growth leads to a 0.387% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. For South Africa, the results reveal that the coefficient for education (LEDU) is statistically insignificant. Likewise, for Lesotho, the results reveal that the coefficient for education (LEDU) is statistically insignificant. These results are not in line with theory and with the hypothesis that of the study which is that there is a positive relationship between education and poverty.

Furthermore, for South Africa, in Model 3, when the ratio of imports to GDP is used as an indicator of trade openness, the long run results reveal that the coefficient of imports to GDP (LIMP) is negative and statistically significant. This result can be interpreted as a 1% increase in imports leads to a 0.238% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. This result is not in line with theory and the hypothesis of the study which is that there is a negative relationship between inflation and poverty. Brooks (2003) explains that the impact of imports on poverty depends on the extent that lower priced imports or higher priced exports disproportionately involve the poor. In addition, Marchand (2017) found that welfare gains through consumption are expected to benefit the poor only if cheaper imported goods are relatively more important in poor households' budgets.

In contrast, in the case of Lesotho, when imports to GDP is used as an indicator of trade openness, the long run results reveal that the coefficient of imports to GDP (LIMP) is positive and statistically significant, which can be interpreted as a 1% increase in imports as a share of GDP leads to a 0.837% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and with the hypothesis of the study which is that there is a positive relationship between trade openness and poverty. A study by Akmal, Ahmad, Ahmad and Butt (2007) found that by imports may lead to increased availability of goods at cheaper prices, improved efficiency, skills, competition and technological ability which all enables the people to access a variety of goods at a cheaper price. Similarly, for Lesotho, under the augmented version of Model 3, where a dummy variable is included, the coefficient of LIMP is positive and statistically significant. This can be interpreted as a 1% increase in imports leads to a 0.934% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*.

In terms of the other control variables, for South Africa, under Model 3, the long run results reveal that the coefficient for LINF is negative and statistically significant. The results for LINF can be interpreted as a 1% increase in the inflation rate leads to a 0.157% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. In contrast, for Lesotho, the results reveal that the coefficient for inflation (LINF) is statistically insignificant. For South Africa, the coefficient for economic growth (LGRO) is positive and statistically significant. The results for LGRO can be interpreted as a 1% increase in the inflation rate leads to a 1.381% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*.

Similarly, for Lesotho, the long run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant. The results for economic growth (LGRO) can be interpreted as a 1% increase in economic growth leads to a 0.449% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. In comparison, for Lesotho, under the augmented version of Model 3, where the dummy variable is included, the results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant. The results can be interpreted as a 1% increase in economic growth leads to a 0.688% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*.

For South Africa, the long run results reveal that the coefficient for education (LEDU) is positive and statistically significant. The results for LEDU can be interpreted as a 1% increase in the inflation rate leads to a 0.169% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. These results are in line with theory and the hypothesis of the study which is that there is a positive relationship between education and poverty. In contrast, for Lesotho, the results reveal that the coefficient for education (LEDU) is statistically insignificant.

Table 12: Results of the long run estimation for South Africa and Lesotho (Model 1-3)

South Africa								
Model 1			**Model 2**			**Model 3**		
Regressor	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**
LTOP	-0.1730* (-1.799)	0.0824	LEXP(-1)	-0.2166 (-1.319)	0.1963	LIMP	-0.2387** (-2.077)	0.0465
LINF(-1)	-0.1057*** (-4.026)	0.0004	LINF(-1)	-0.1562*** (-4.834)	0.0000	LINF(-1)	-0.1573*** (-5.248)	0.0000
LGRO(-1)	1.3458*** (9.295)	0.0000	LGRO(-1)	1.2084*** (6.899)	0.0000	LGRO(-1)	1.3814*** (8.587)	0.0000
LEDU	0.2237*** (3.004)	0.0054	LEDU	0.0296 (0.240)	0.8115	LEDU	0.1693* (1.929)	0.0632
C	-4.1113*** (-3.678)	0.0009	C	-2.3482* (-1.792)	0.0825	C	-4.1527*** (-3.250)	0.0028
Lesotho								
Model 1			**Model 2**			**Model 3**		
Regressor	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**
LTOP(-1)	-1.1554 (-0.964)	0.3424	LEXP(-1)	0.4612*** (6.633)	0.0000	LIMP	0.8376*** (7.829)	0.0000
LINF(-1)	-0.4084 (-1.4373)	0.1606	LINF	0.0287 (0.535)	0.5963	LINF	-0.0645 (-1.120)	0.2706
LGRO(-1)	-0.5532 (-0.5435)	0.5907	LGRO(-1)	0.7621*** (4.781)	0.0000	LGRO(-1)	0.4490** (2.511)	0.0171
LEDU(-1)	1.6275*** (4.351)	0.0001	LEDU(-1)	0.0956 (0.542)	0.5912	LEDU(-1)	0.1828 (1.151)	0.2579
C	13.7935 (1,266)	0.2148	C	-1.4146 (-1.174)	0.2490	C	-0.8694 (-0.708)	0.4833
Lesotho – (augmented with dummy variable)								
Model 1			**Model 2**			**Model 3**		
Regressor	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**
LTOP	1.1415 (0.413)	0.6822	LEXP(-1)	0.4520*** (7.609)	0.0000	LIMP	0.9347*** (11.417)	0.0000
LINF	0.0755 (0.1525)	0.8798	LINF	0.0475 (0.968)	0.3402	LINF	-0.0454 (-1.285)	0.2079
LGRO(-1)	-0.2359 (-0.108)	0.9144	LGRO(-1)	0.3877** (2.198)	0.0355	LGRO(-1)	0.6886*** (5.446)	0.0000
LEDU	1.5544 (1.410)	0.1677	LEDU	-0.0137 (-0.081)	0.9353	LEDU	0.1417 (1.461)	0.1537
C	-0.0934 (-0.0074)	0.9941	C	-5.8773*** (-6.959)	0.0000	C	-2.8821*** (-3.415)	0.0018

6.5 Short run estimation and discussion of the results

Tables 13-15 present the short run results for South Africa and Lesotho. In the case of Lesotho, when total trade to GDP is used as a proxy for trade openness, the short run results reveal that the coefficient of total trade to GDP (LTOP) is positive and statistically significant in the short run. The results can be interpreted as a 1% increase in trade openness results in a 0.571% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of this study which is that there is a positive relationship between trade openness and poverty in the short run. For Lesotho, considering the augmented version of Model 1 in Table 13, the dummy variable is statistically insignificant, which suggests that the structural break resulting from mining retrenchments in South Africa that occurred from 1990, did not have a significant impact on poverty in the short run.

The short run results of the control variables for South Africa indicate that the coefficient for inflation (LINF) is negative and statistically significant at zero lag length. The short run results can be interpreted as a 1% increase in inflation in the current period leads to a 0.015% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of the study, which is that inflation has a negative effect on poverty. In the case Lesotho, the results reveal that the coefficient for inflation (LINF) is statistically insignificant. Blank and Blinder (1985) found there to be no relationship between poverty and inflation. LGRO is statistically significant at a lag length of one but is negative and statistically insignificant at zero lag length.

For South Africa, the short run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant in the short run at zero lag length. The results can be interpreted as a 1% increase in economic growth in the current period leads to a 0.918% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus.* This result is in line with theory and with the hypothesis of the study, which is that economic growth has a positive effect on poverty. Similarly, For Lesotho, the short run results can be interpreted as a 1% increase in economic growth leads to a 1.349% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. Brooks (2003) found that trade expansion has a positive effect on income and employment of the poor.

For Lesotho, the short run results reveal that the coefficient for economic growth (LGRO) is negative and statistically significant at zero lag length. The short run results of LGRO can be interpreted as a 1% increase in past economic growth leads to a 0.437% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. This result is not in line with theory and the hypothesis of the study, which is that economic growth

has a positive effect on poverty in the short run. For Lesotho, under the augmented version of Model 1, where the dummy variable is included, the short run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant. The results can be interpreted as a 1% increase in economic growth results in a 0.497% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of the study which is that there is a positive relationship between economic growth and poverty.

For South Africa, when exports to GDP is used as a proxy for trade openness (i.e. Model 2), the short run results reveal that exports to GDP (LEXP) are statistically insignificant. This result is not in line with theory and with the hypothesis of the study which is that there is a positive relationship between trade openness and poverty. This finding is consistent with Rodríguez-Castelán et al., (2020) who found there to be no evidence of a relationship between exports and poverty. In comparison, for Lesotho, the short run results reveal that the coefficient of exports (LEXP) is negative and statistically significant. The short run results can be interpreted as a 1% increase in exports leads to a 0.171% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of the study. This result is consistent with the findings from Brook (2003).

For South Africa, in terms of the other control variables, the short run results reveal that the coefficient for inflation (LINF) at one lag length is positive and statistically significant. The results can be interpreted as a 1% increase in inflation leads to a 0.016% increase in household consumption expenditure thereby a decrease in poverty, *ceteris paribus*. This result is not in line with theory and with the hypothesis of the study which is that there is a negative relationship between inflation and poverty. This result is in line with the findings from Cutler and Katz (1991) who found there to be a negative relationship between inflation and poverty.

For South Africa, the results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant at zero lag length. The short run results can be interpreted as a 1% increase in economic growth leads to a 1.119% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of the study which is that there is a positive relationship between economic growth and poverty. For Lesotho, the short run results reveal that the coefficient for economic growth (LGRO) is positive and statistically significant in the short run at one lag. The short run results can be interpreted as suggesting that a 1% increase in economic growth leads to a 0.527% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and with the hypothesis of the study which is that there is a positive relationship between economic growth and poverty. This result is

consistent with the findings from Garrett (2010) who found there to be a positive relationship between economic growth and poverty.

For Lesotho, under the augmented version of Model 2, where the dummy variable is included, the results reveal that the coefficient for economic growth (LGRO) is negative and statistically significant at one lag length. The result can be interpreted as a 1% increase in economic growth leads to a -0.226% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus.* The short run result is not in line with theory and the hypothesis of the study.

For Lesotho, the short run results reveal that the coefficient for education (LEDU) is negative and statistically significant. The results can be interpreted as a 1% increase in government expenditure on education results in a 0.286% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is not in line with theory and with the hypothesis of the study which is that there is a positive relationship between education and poverty. Under the augmented version of Model 2, where the dummy variable is included, the short run results reveal that the coefficient for education (LEDU) is negative and statistically significant at zero lag length. The short run results can be interpreted as a 1% increase in government expenditure on education leads to a 0.165% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*.

This result is not in line with theory and with the hypothesis of the study which is that there is a positive relationship between education and poverty. A study by Ngepah, Makgalemele and Saba (2023) found there to be a negative and significant relationship between education and poverty. The study found that those whose future consumption lies below the food poverty line are relatively more vulnerable.

For South Africa, where imports to GDP is used as a proxy for trade openness (i.e. Model 3), the short run results reveal that the coefficient for LIMP at one lag length is negative and statistically significant. The short run results can be interpreted as a 1% increase in imports leads to a 0.079% decrease in household consumption expenditure, thereby an increase in poverty, *ceteris paribus*. This result is not in line with theory and the hypothesis of the study which is that there is a positive relationship between trade openness and poverty. Comparatively, for Lesotho, the short run results reveal that the coefficient for imports to GDP (LIMP) is statistically insignificant. This result is not in line with theory and the hypothesis of the study. This finding can be backed up by Chau (2022) who finds there to be a low, positive yet insignificant relationship between trade and poverty.

In terms of the other control variables, for South Africa, the short run results reveal that the coefficient for inflation (LINF) at one lag length is positive and statistically significant These

can be interpreted as an indication that a 1% increase in inflation leads to a 0.023% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is not in line with theory and the hypothesis of the study which is that there is a negative relationship between inflation and poverty. In Lesotho, the coefficient for inflation (LINF) is statistically insignificant. The results are not in line with theory and the hypothesis of the study.

For South Africa, the coefficient for economic growth (LGRO) is positively and statistically significant at zero lag length. These results can be interpreted a 1% increase in economic growth in the current period leads to a 1.131% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. This result is in line with theory and the hypothesis of the study, which is that there is a positive relationship between economic growth and poverty. For Lesotho, the coefficient for economic growth (LGRO) at one lag length is positive and statistically significant which aligns with the results from the long run analysis. The short run results can be interpreted as a 1% increase in economic growth leads to a 0.370% increase in household consumption expenditure, thereby a decrease in poverty, *ceteris paribus*. The results are in line with theory and the hypothesis of the study. For Lesotho, the results reveal that the coefficient for education (LEDU) is positive and statistically significant at zero lag length. This result is in line with theory and the hypothesis of the study which is that there is a positive relationship between education and poverty.

Under the augmented version of Model 3, when the dummy variable is included, the short run results reveal that the coefficient for the dummy variable is negative and statistically significant. This means that the structural break that occurred in Lesotho from 1990 as a result of mine retrenchments in South Africa, had a negative impact on poverty reduction in Lesotho. This is consistent with the hypothesis of the study, which expects the dummy variable representing minor retrenchments in South Africa to have a negative and statistically significant coefficient.

The short run results are reported in Tables 13-15. For both South Africa and Lesotho, the coefficient of the error correction term is negative and statistically significant. This confirms the existence of a long run relationship between the dependent and the independent variables. For South Africa the coefficient of the error correction term is -0.318, -0.302 and -0.775 for Model 1 (Table 13), Model 2 (Table 14) and Model 3 (Table 15) respectively. This suggests that 31%, 30% and 77% of the adjustment back to long run equilibrium is corrected after one year. For Lesotho the coefficient of the error correction term is -0.195, -0.069, -0.585, -0.614, -0.438 and -0.616 for Model 1 (Table 13), augmented version of Model 1 (Table 13), Model 2 (Table 14), augmented version of Model 2 (Table 14), Model 3 (Table 15) and augmented version of Model 3 (Table 15) respectively. This suggests that 19%, 6%, 58%, 61%, 43% and 61% of the adjustment back to long run equilibrium is corrected after one year.

Table 13: Results of the error correction model (Model 1) for South Africa and Lesotho

South Africa			Lesotho					
Model 1			Model 1			Model 1 (augmented with dummy variable)		
Regressor	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**
COINTEQ	-0.3181***	0.0000	COINTEQ	-0.1955***	0.0000	COINTEQ	-0.0696	0.0000
D(LPOV(-1))	0.2449*	0.0641	D(LPOV(-1))	-0.2021	0.1571	D(LGRO)	-0.4069	0.1378
D(LPOV(-2))	-0.5538***	0.0001	D(LPOV(-2))	0.1812	0.1603	D(LGRO(-1)	0.4799*	0.0877
D(LINF)	-0.0158**	0.0157	D(LTOP)	-0.1692	0.2154	DUM	0.0035	0.8350
D(LINF(-1))	0.0102	0.1875	D(LTOP(-1))	0.5718***	0.0006			
D(LGRO)	0.9183***	0.0000	D(LTOP(-2))	0.2715**	0.0196			
D(LGRO(-1))	-0.0629	0.6314	D(LINF)	-0.0081	0.7132			
D(LGRO(-2))	0.6036***	0.0001	D(LGRO)	-1.3494***	0.0005			
			D(LGRO(-1))	0.4139	0.1066			
			D(LGRO(-2))	0.7737***	0.0067			
			D(LGRO(-3))	0.9913***	0.0016			
			D(LEDU)	-0.0592	0.5340			
			D(LEDU(-1))	-0.4270***	0.0002			
			D(LEDU(-2))	-0.2229**	0.0400			

Table 14: Results of Model 2 for South Africa and Lesotho

South Africa			Lesotho					
Model 2			Model 2			Model 2 (augmented with dummy variable)		
Regressor	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**
COINTEQ	-0.3024***	0.0000	COINTEQ	-0.5856***	0.0000	COINTEQ	-0.6145***	0.0000
D(LINF)	-0.0227***	0.0026	D(LPOV(-1))	0.3008**	0.0151	D(LPOV(-1))	0.3603***	0.0039
D(LINF(-1))	0.0166**	0.0427	D(LPOV(-2))	0.4209***	0.0005	D(LPOV(-2))	0.4192***	0.0003
D(LGRO)	1.1195***	0.0000	D(LEXP)	0.1592***	0.0064	D(LEXP)	0.1205**	0.0170
			D(LEXP(-1))	-0.1719***	0.0076	D(LEXP(-1))	-0.2267***	0.0007
			D(LGRO)	-0.4379*	0.0868	D(LGRO)	-0.4216*	0.0832
			D(LGRO(-1))	0.5270**	0.0272	D(LGRO(-1))	0.6949***	0.0031
			D(LGRO(-2))	0.5778**	0.0131	D(LGRO(-2))	0.6538***	0.0037
			D(LEDU)	-0.0987	0.2088	D(LEDU)	-0.1654**	0.0344
			D(LEDU(-1))	-0.2863***	0.0024	D(LEDU(-1))	-0.3315***	0.0005
			D(LEDU(-2))	-0.0508	0.5473	D(LEDU(-2))	-0.0832	0.3073
			D(LEDU(-3))	0.1721**	0.0267	D(LEDU(-3))	0.1842**	0.0130

Table 15: Results of Model 3 for South Africa and Lesotho

South Africa			Lesotho					
Model 3			Model 3			Model 3 (augmented with dummy variable)		
Regressor	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**	**Regressor**	**Coefficient**	**Probability**
COINTEQ	-0.775***	0.0000	COINTEQ	-0.4384***	0.0000	COINTEQ	-0.6160***	0.0000
D(LPOV(-1))	0.309***	0.0000	D(LGRO)	-0.4205**	0.0356	D(LPOV(-1))	0.0135	0.8757
D(LIMP)	-0.079***	0.0001	D(LGRO(-1))	0.3705*	0.0673	D(LPOV(-2))	0.2802***	0.0020
D(LIMP(-1))	-0.058***	0.0003	D(LEDU)	-0.0684	0.3319	D(LGRO)	-0.2037	0.2404
D(LINF)	-0.007	0.2700	D(LEDU(-1))	0.0717**	0.0163	DUM	-0.1572***	0.0000
D(LINF(-1))	0.023***	0.0003						
D(LGRO)	1.131***	0.0000						
C	-1.038***	0.0000						
@TREND	0.004	0.0000						

Table : Summary of test statistics for South Africa and Lesotho

Test statistic	South Africa			Lesotho					
	Model 1	Model 2	Model 3	Model 1	Model 1 (Augmented)	Model 2	Model 2 (Augmented)	Model 3	Model 3 (Augmented)
R-squared	0.927	0.854	0.816	0.768	0.419	0.785	0.8084	0.687	0.7688
Adjusted R-squared	0.896	0.841	0.798	0.631	0.368	0.687	0.7205	0.649	0.7399
SE of regression	0.008	0.010	0.010	0.047	0.061	0.043	0.4140	0.046	0.0399
F statistic	29.850 [0.000]	0.003 [0.000]	0.003 [0.000]	5.609 [0.000]	8.189 [0.000]	8.008 [0.000]	9.2057 [0.000]	18.157 [0.000]	26.6072 [0.000]
DW	2.175	2.093	1.658	1.965	2.204	1.774	1.867	2.153	1.932
AIC	-6.446	-6.229	-6.199	-2.968	-2.628	-3.158	-3.269	-3.195	-3.478

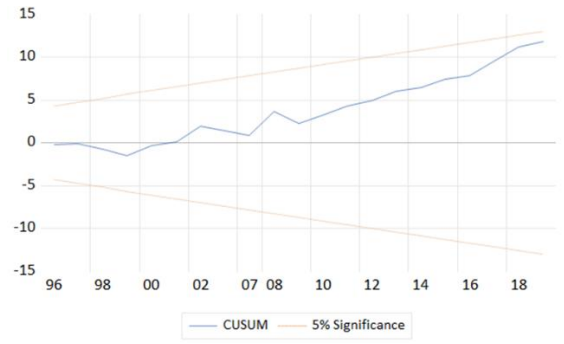
Levels of significance denoted by *** for 1%; ** for 5%; and* for 10%

After diagnostics checks, stability tests were conducted to ensure that the estimated models the coefficients are stable. Stability tests that were carried out include the plots of CUSUM and the plots of CUSUMQ. The results of these plots can be seen in Figures 14-16.

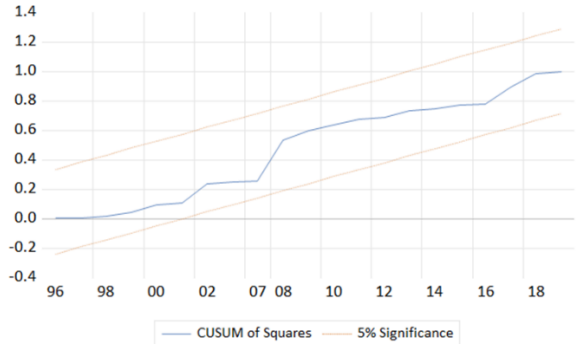
Figure 14: Plot of CUSUM and CUSUMQ for South Africa and Lesotho (Model 1)

South Africa

Model 1: Plot of Cumulative Sum of Recursive Residuals

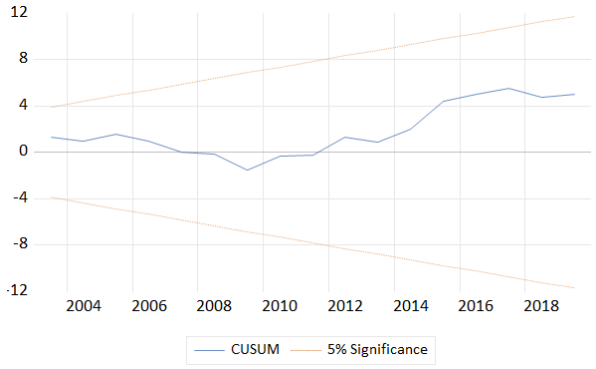


Model 1: Plot of Cumulative Sum of Squares of Recursive Residuals

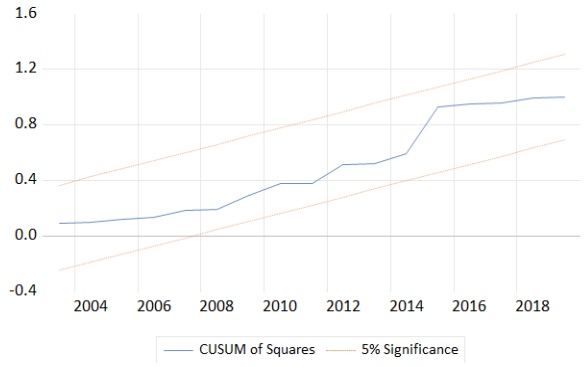


Lesotho

Model 1: Plot of Cumulative Sum of Recursive Residuals

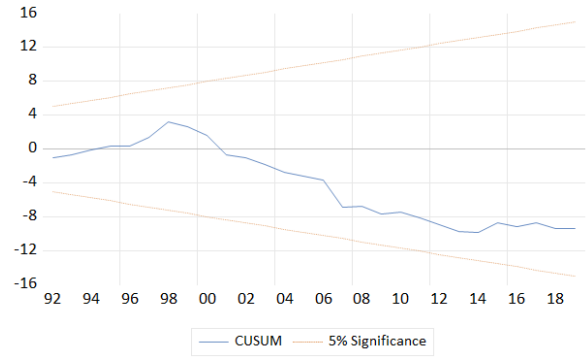


Model 1: Plot of Cumulative Sum of Squares of Recursive Residuals



Lesotho

Model 1.1: Plot of Cumulative Sum of Recursive Residuals



Model 1.1: Plot of Cumulative Sum of Squares of Recursive Residuals

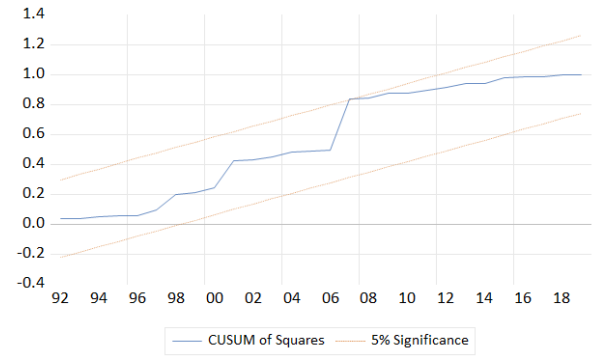
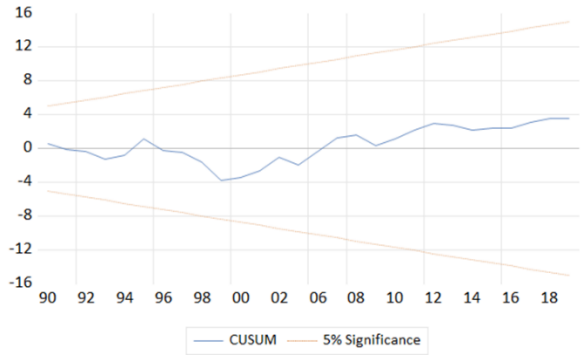


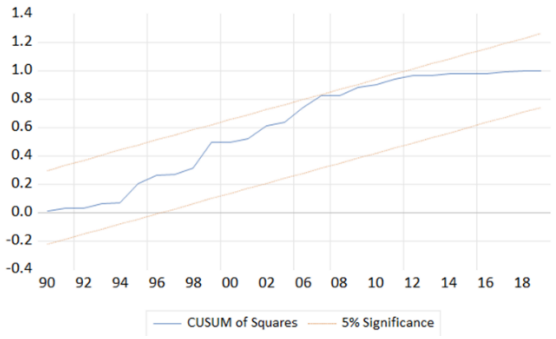
Figure 15: Plot of CUSUM and CUSUMQ for South Africa and Lesotho (Model 2)

South Africa

Model 2: Plot of Cumulative Sum of Recursive Residuals

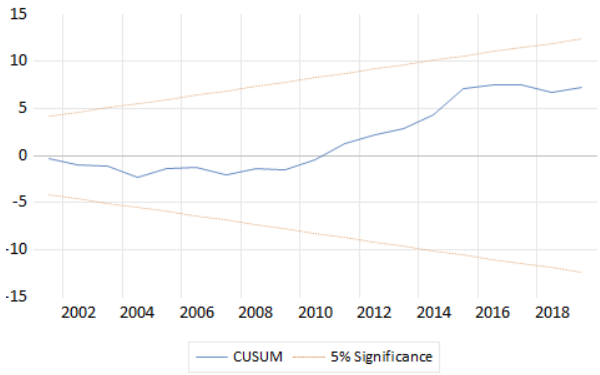


Model 2: Plot of Cumulative Sum of Squares of Recursive Residuals

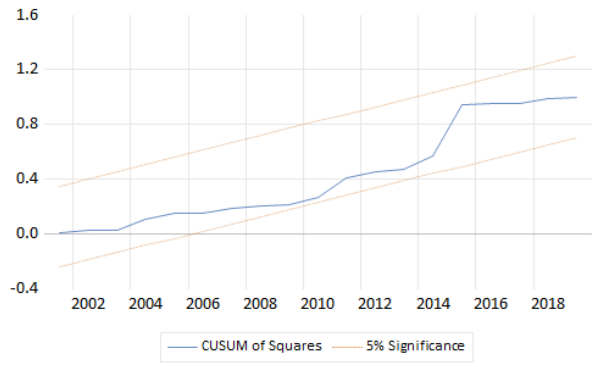


Lesotho

Model 2: Plot of Cumulative Sum of Recursive Residuals

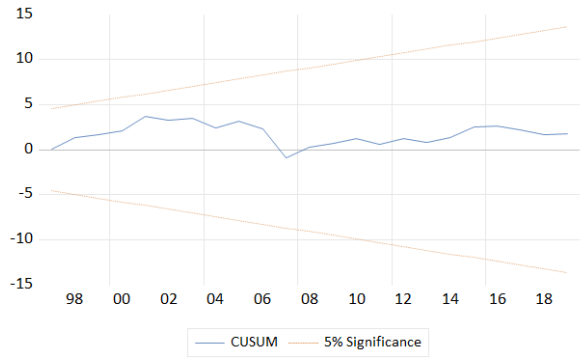


Model 2: Plot of Cumulative Sum of Squares of Recursive Residuals



Lesotho

Model 2 (augmented with dummy variable): Plot of Cumulative Sum of Recursive Residuals



Model 2 (augmented with dummy variable): Plot of Cumulative Sum of Squares of Recursive Residuals

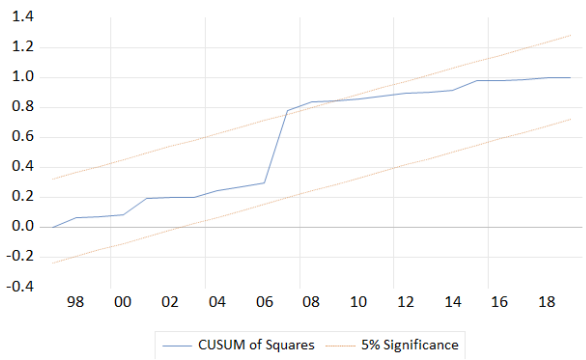
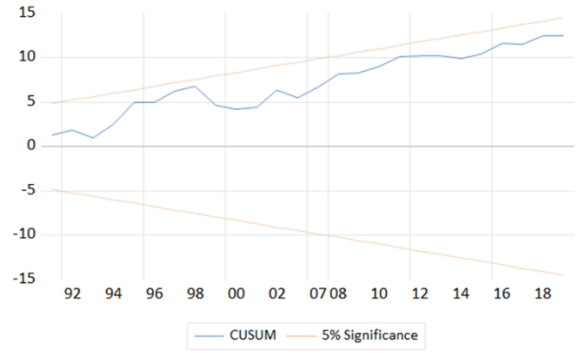
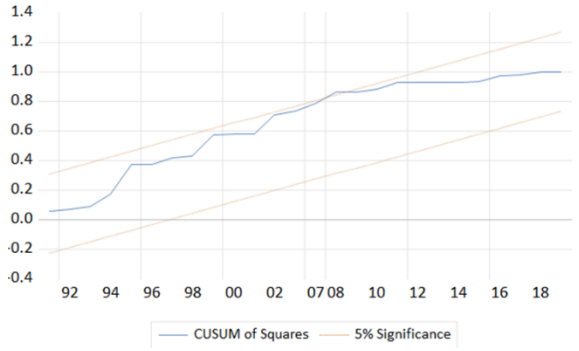
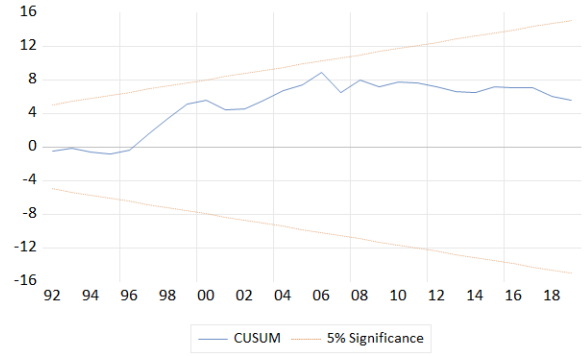
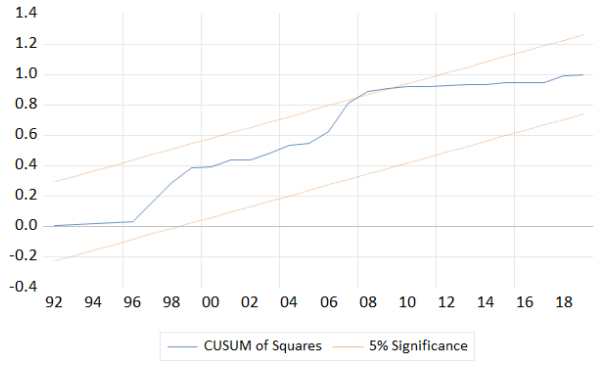
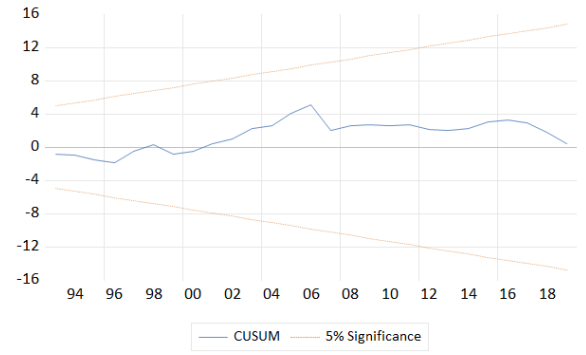
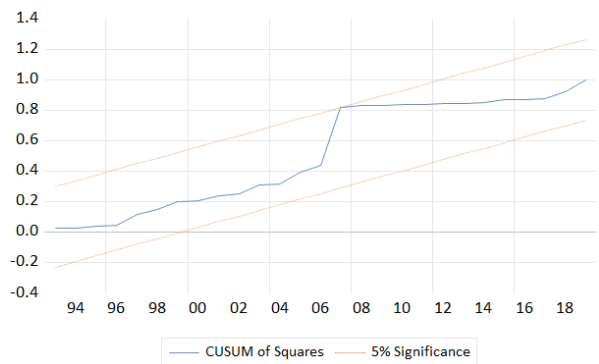


Figure 16: Plot of CUSUM and CUSUMQ for South Africa and Lesotho (Model 3)

South Africa	
Model 3: Plot of Cumulative Sum of Recursive Residuals	Model 3: Plot of Cumulative Sum of Squares of Recursive Residuals
	
Lesotho	
Model 3: Plot of Cumulative Sum of Recursive Residuals	Model 3: Plot of Cumulative Sum of Squares of Recursive Residuals
	
Lesotho	
Model 3 (augmented with dummy variable): Plot of Cumulative Sum of Recursive Residuals	Model 3 (augmented with dummy variable): Plot of Cumulative Sum of Squares of Recursive Residuals
	

It can be observed from Figures 14-16 that the CUSUM plot provides further evidence of the stability of the model. However, based on the CUSUMQ plot, the ARDL plot is stable for the reviewed period, except for 2008, where the plot slightly touches the boundary for both

investigated countries. The instability of the CUSUMQ plot around 2008 can be explained by the global financial crisis which took place in 2008.

Table 16: Summary of empirical findings

	Variables	South Africa		Lesotho	
		Long run	Short run	Long run	Short run
Model 1	LTOP	-			+
	LINF	+	+		
	LGRO	+	+		-
	LEDU	+		+	-
Model 1 (augmented with dummy variable)	LTOP	Only applicable for Lesotho			
	LINF				
	LGRO				+
	LEDU				
	DUM				
Model 2	LEXP			+	-
	LINF	+	+		
	LGRO	+	+	+	+
	LEDU				-
Model 2 (augmented with dummy variable)	LEXP	Only applicable for Lesotho		+	-
	LINF				+
	LGRO			+	
	LEDU				-
Model 3	LIMP	-	-	+	
	LINF	+	+		
	LGRO	+	+	+	-
	LEDU	+			+
Model 3 (augmented with dummy variable)	LIMP	Only applicable for Lesotho		+	
	LINF				
	LGRO			+	
	LEDU				
	DUM				-

(+) is positive determinant; (-) is negative determinant

CHAPTER 7
CONCLUSION

7.1 Introduction

This chapter provides concluding remarks based on the previous chapters of this dissertation. The discussion also incorporates further implications that are based on the empirical results from the preceding Chapter 6. The current chapter is organised into different sections. The first section following this introduction is the summary of the study, which succinctly unpacks the main findings of the study. Following this, the second section summarises the empirical findings. The last section of the chapter concludes with a discussion of the limitations of the study and recommendations for future studies.

7.2 Summary of the study

This study aims to investigate the impact of trade openness on poverty in Lesotho and South Africa. The study aims to answer the question, “Does the government’s effort to promote trade openness lead to a corresponding decrease in poverty?”

To answer this question, the study applies the autoregressive distributed lag (ARDL) approach to cointegration on the time series data covering the period 1980–2019. This study is mainly driven by the existing multidimensional disparities among these two countries despite their pursuing similar trade facilitation objectives under the auspices of the Southern African Customs Union (SACU), the inconclusive literature on the same topic resulting from the use of different models and the dependence of Lesotho on South Africa.

One fact is that among other SACU countries, Lesotho is the only small, landlocked economy that is surrounded entirely by South Africa, and is the only LDC among other SACU members. On the contrary, other SACU countries, namely, Botswana, Eswatini and Namibia, share a border with at least one other country apart from South Africa and have long surpassed the LDC status. It is, therefore, important to understand how structural changes in South Africa affect poverty in Lesotho. To account for this, the study included a dummy variable to account for structural changes associated with retrenchment in South Africa and their effects on poverty in Lesotho.

Prior to the empirical analysis, country-based literature review, exploring trade-related and poverty-related developments and interventions, was conducted in Chapters 2 and 3. From Chapter 2, it can be noted that South Africa continues to grapple with pervasive poverty and considerable inequality. Furthermore, the findings show that despite the implementation of four

poverty alleviation policies between 1994 and the present, there is still a lack of substantiating evidence indicating a substantial decrease in poverty rates. Notably, during the tenure of the GEAR policy, key economic markers performed poorly in contrast to the growth projections laid out in the policy.

From Chapter 3, the main findings from country-based literature for Lesotho are that despite a decrease in the poverty rate, overall inequality and poverty levels in the country remain relatively high in present times. The reduction in poverty between 1980-2019 is attributed to social protection programmes implemented in Lesotho in the past decade, which somewhat enhanced the household income. However, despite these efforts, over 75% of the population in Lesotho is still classified as either extremely poor or vulnerable to poverty.

Hinging on its intended objectives and hypotheses, the study employs the ARDL estimation technique to estimate the impact of each of the selected explanatory variables on poverty South Africa and Lesotho. The use of ARDL technique is advantageous in a sense that it allows the examination of the hypothesised relations in both the short run and long run. The study employs three measures of trade openness, namely total trade to GDP, exports to GDP and imports to GDP.

For South Africa, the long run results reveal that when the ratio of total trade to GDP (LTOP) is used as a proxy for trade openness, then, trade openness has a negative and statistically significant impact on poverty. This means that an increase in total trade to GDP leads to an increase in poverty, *ceteris paribus*. For Lesotho, the coefficient of the ratio of total trade to GDP (LTOP) is statistically insignificant in the long run. However, for South Africa, when exports to GDP (LEXP) is used as a proxy for trade openness, trade openness has an insignificant impact on poverty in South Africa in the long run but has a positive and statistically significant impact on poverty in Lesotho. This means that for Lesotho, in the long run, an increase in exports leads to a decrease in poverty, *ceteris paribus*. In comparison, for South Africa, when imports to GDP (LIMP) is used as a proxy for, trade openness has a significant negative impact on poverty in the long run and a significant positive impact on poverty in Lesotho. This means that, for South Africa, in the long run, an increase in imports leads to an increase in poverty, *ceteris paribus*. For Lesotho, in the long run, an increase in imports leads to a decrease in poverty, *ceteris paribus*.

Contrary to findings of some studies that the impact of trade openness on poverty tends to be insignificant in either the least developed or low-income countries but is likely to be significant in upper-middle-income countries, this study find that exports and imports in Lesotho are significant in reducing poverty. This result can be explained by the proposition that trade

openness that is accompanied by an increase in labour productivity and employment in low-income countries has a significant and positive impact on poverty reduction.

The long run results of the control variables is mixed between the two countries. For instance, for South Africa, inflation has a negative relationship with poverty when the ratio of total trade to GDP, exports to GDP and imports to GDP are used as proxies for trade openness (i.e. Models 1, Model 2 and Model 3 respectively) while the study finds no evidence of a relationship between inflation and poverty in Lesotho poverty when the ratio of total trade to GDP, exports to GDP and imports to GDP are used as proxies for trade openness (i.e. Models 1, Model 2 and Model 3 respectively). For South Africa, economic growth has a positive relationship with poverty while in the case of Lesotho economic growth does not have an impact on poverty when the ratio of total trade to GDP is used as a proxy for trade openness (i.e. Model 1) but a positive relationship when exports to GDP and imports GDP are used as a proxy for trade openness (i.e. Model 1 and Model 2 respectively).

For South Africa, in the long run, education has a positive relationship with poverty when the ratio of total trade to GDP and imports to GDP are used as a proxy for trade openness (i.e. Model 1 and Model. On the other hand, in the long run, for South Africa, education does not have an impact on poverty when imports to GDP is used as a proxy for trade openness. In comparison, in the case of Lesotho, in the long run, education has a positive impact on poverty only when the ratio of total trade to GDP is used as a proxy for trade openness (i.e. Model 1. On the other hand, in the long run, education is statistically insignificant where the ratio of total trade to GDP and exports to GDP are used as proxies for trade openness (i.e. Model 1 and Model 2 respectively).

In comparison, the results from the short run estimations indicate that, for Lesotho, when the ratio of total trade to GDP is used as a proxy for trade openness (i.e. Model 1), the coefficient of the ratio of total trade to GDP (LTOP) is positive, which means that LTOP has a positive impact on poverty. On the other hand, the coefficient of exports to GDP (LEXP) reveal that exports have a negative relationship with poverty. For South Africa, the results reveal that imports to GDP (LIMP) have a negative relationship with poverty.

For South Africa, in the short run, inflation has a negative impact on poverty reduction when the ratio of total trade to GDP and exports to GDP are used as a proxy for trade openness (i.e. Model 1 and Model 2) while the study found there to be no relationship between inflation and poverty when imports to GDP is used as a proxy for trade openness (Model 3). For Lesotho the study found there to be no relationship between inflation and poverty when the ratio of total trade to GDP is used as a proxy for trade openness (i.e. Model 1). For South Africa, economic growth has a positive impact on poverty when the ratio of total trade to GDP, exports

to GDP, and imports to GDP are used as a proxy for trade openness (i.e. Model 1, Model 2 and Model 3). In comparison, for Lesotho, economic growth has a positive impact on poverty only when the ratio of total trade to GDP is used as a proxy for trade openness (i.e. Model 1) while economic growth has a negative impact on poverty where exports to GDP and imports to GDP are used as a proxy for trade openness (Model 2 and Model 3). For Lesotho, education has a negative impact on poverty when the ratio of total trade to GDP is used as a proxy for trade openness (i.e. Model 1) while it has a positive impact when exports to GDP and imports to GDP are used as proxies for trade openness (i.e. Model 2 and Model 3). For Lesotho, under the augmented version of Model 2, where the dummy variable is included, the results reveal that the coefficient of the dummy variable is negative and statistically significant which suggests that the retrenchment of Lesotho nationals from South African mines from 1990 onwards had a negative impact on poverty reduction.

7.3 Summary of the empirical findings and policy recommendations

As previously mentioned, the empirical estimation was carried out to test the different hypotheses surrounding the impact of selected variables on poverty. Since the results show that in the case of South Africa, there is a negative and statistically significant relationship between trade openness and poverty in the long run while the relationship is insignificant in the short run. It can be concluded that during the reviewed period, an increase in trade openness, proxied by the ratio of trade to GDP, contributed negatively towards poverty reduction in that an increase in trade results in a decrease in household consumption expenditure in the long run. In line with these results, South Africa still faces relatively high levels of poverty compared to other middle-income countries such as Mauritius and Libya.

For Lesotho, the relationship between trade openness and poverty is found to be statistically insignificant in the long run and negative in the short run. In contrast, trade openness has positively impacted poverty reduction in the short run. The conclusion reached by the current study is that trade openness has not brought about meaningful reduction in poverty in the long run. The results for South Africa are inconsistent with other previous studies and are also inconsistent with the SACU mandate, which includes poverty reduction. Other previous studies have concluded that trade openness has a positive impact on poverty reduction by increasing the value of trade and investment thereby contributing towards job creation. In the case of Lesotho, the long run results are inconsistent with other previous studies.

The reason for the insignificant results in the long run could be attributed to the fact that Lesotho is LDC and some studies have found that for LDCs, trade openness does not contribute towards trade openness. This is because for trade openness to have a positive and

significant impact on poverty reduction, trade openness measures need to result in job creation and productive labour. In the case of LDCs, trade openness on its own does not have an impact on poverty reduction.

Exports are insignificant in South Africa in the long run and short run while imports have a negative relationship with poverty in the long run and short run. In Lesotho, exports have a positive relationship with poverty in the long run and a negative relationship with poverty in the short run. Imports have a positive relationship with poverty in the long run and no relationship with poverty in the short run. It is evident from the two proxies of trade openness, namely the sum of trade to GDP and the ratio of imports to GDP, that an increase in trade openness in South Africa was associated with worsened poverty between 1980 and 2019.

In Lesotho, exports and imports separately have a positive effect on poverty reduction between 1980 and2019 in the long run while the short run results are mixed. In the long run, trade openness, measured by the ratio of exports to GDP, has a positive effect on poverty in Lesotho. In contrast, trade openness, measured by the ratio of imports to GDP, have a negative and insignificant effect on poverty respectively. Compared to South Africa, it can be argued from the present results that in the long run, Lesotho enjoys poverty-reducing gains from trade openness through exports, but not through imports. The short run results can be further explained by the inclusion of the dummy variable to the equation in which imports to GDP are used as a proxy of trade openness. According to the results, the dummy variable has a negative coefficient indicating the negative impact of the retrenchments of Lesotho nationals on poverty.

In terms of the other independent variables, both the long run and short run, the results are mixed for South Africa and Lesotho. For South Africa, inflation has a positive effect on poverty reduction in the long run across Models 1-3. In contrast, inflation is insignificant to poverty in the long run and short run in Lesotho across Models 1-3. For South Africa, in the long run, education has a positive effect on poverty reduction under Model 1 and 2 while there is no relationship between education and poverty in the short run. For Lesotho, education is insignificant to poverty in the short run. In the long run, education has a negative effect on poverty under Model 1 and 2 while education has a positive effect on poverty under Model 3.

It is evident from the results that for Lesotho, exports and imports at their individual level play a huge role in the poverty dynamic in the country in the long run. In the short run the results are not favourable in that the coefficient of export to GDP (LEXP) is negative while that of LIMP is insignificant. It is therefore in line with this finding that this study proposes that policymakers in Lesotho review trade policies and poverty reduction policies in line with the dynamics of the country, while upholding the broader objectives of the common customs union

(SACU). In this way, policymakers in Lesotho could ensure that as part of short run interventions, they promote policies that benefit the poor directly and provide relief that will shield the poor from short term adjustment costs associated with costs incurred from balance of payments adjustment because of opening to trade. Such adjustment costs may have harsh consequences on the poor by exposing the poor to shocks in the economy.

For South Africa, there is a need for a review and possibly an overhaul of existing policies on trade openness. These policies need to carefully consider the country specific dynamics and evaluate how the policies practically impact on the poor. Policymakers in South Africa should therefore aim to guarantee the necessary conditions within institutions and incorporate policies that are pro-poor which will empower those in need to engage in available economic opportunities and subsequently benefit from the fruits of the pro-poor policies.

Furthermore, policymakers in South Africa should ought to review current policies to understand the extent in which the existing policies as well as the associated institutional frameworks enable poverty reduction. The review should consist of a critical analysis of the elements of the policies, including policies on government expenditure, fiscal policy and macroeconomic policy. Such a critical analysis could help identify the bottlenecks that are currently impeding the South Africa from fully benefiting from trade openness.

7.4 Limitations of the study and areas for future research

The present study is not free of limitations, but such limitations are not expected to affect the significance and/or validity of the results. The main limitation is that the study employed only one proxy for poverty, which is the household consumption expenditure. Future research can include other measure such as the headcount ratio and the poverty gap index, particularly to incorporate other robust measures of the intensity of poverty. The second limitation is that the period covers pre-Covid era. Future studies could include the period after Covid-19 and make future recommendations based on the period after Covid-19.

REFERENCES

Acemoglu, D. (2003), 'Patterns of Skill Premia', *Review of Economic Studies*, 70: 199–230.

Adegboyo, O.S., Efuntade. O.O., Olugbamiye, D.O. and Efuntade, A.O. (2021). 'Trade Openness and Poverty Reduction in Nigeria', *Euro Economica*, 2(40), 211-220.

Adelzadeh, A., Alvillar, C. and Mather, C. (1998), 'Poverty Elimination, Employment Creation and Sustainable Livelihoods in South Africa', NIEP Research Office, Article No. 12.

AfCFTA (2022), 'About AfCFTA', available online at https://au-afcfta.org/about/ [accessed: 10 March 2022].

African Development Bank Group (2021), 'South Africa Economic Outlook', available online at https://www.afdb.org/en/countries/southern-africa/south-africa/south-africa-economic-outlook [accessed 20 July 2022].

African Development Bank (2023), 'South Africa: Lesotho Highlands Water Project (LHWP), Phase II', available online at https://projectsportal.afdb.org/dataportal/VProject/show/P-ZA-EA0-004 [accessed 19 March 2023].

African Union (2023), 'Southern African Development Community (SADC)', available online at https://au.int/en/recs/sadc [accessed 7 March 2023].

African Union (2024), 'Agreement Establishing the African Continental Free Trade Area', available online at https://au.int/en/ti/cfta/about [accessed 14 February 2024].

Afxentiou, P.C. (1993), 'GNP Growth and Foreign Indebtedness in Middle-Income and Developing Countries', *International Economic Journal*, 7(3): 23–41.

Agusalim, L. (2017). 'The dynamic impact of trade openness on poverty: An empirical study of Indonesia's economy', *International Journal of Economics and Financial Issues*, 7(1), 566-574.

Aigbokhan, B.E. (2000), 'Poverty, Growth and Inequality in Nigeria: A Case Study', AERC Research Paper 102, Nairobi: African Economic Research Consortium.

Akmal M. S., Ahmad Q. M., Ahmad M. H., and Butt M. S. (2007). 'An empirical investigation of the relationship between trade liberalization and poverty reduction: A case for Pakistan', *The Lahore Journal of Economics*, 12(1), 99–118.

Aliber, M. (2003), 'Chronic Poverty in South Africa: Incidence, Causes and Policies', *World Development*, 31(3): 473–490.

Anetor, F.O., Ebes Esho and Verhoef, G. (2020), 'The Impact of Foreign Aid and Trade on Poverty Reduction: Evidence from Sub-Saharan African Countries', *Cogent Economics and Finance*, 8(1): 1737347. DOI: 10.1080/23322039.2020.1737347.

Anyanwu, J.C. (2013), 'Determining the Correlates of Poverty for Inclusive Growth in Africa', African Development Bank Working Paper Series 181.

Atesoglu, H.S. (1994), 'Exports, Capital Inflows, Relative Price and Economic Growth in Canada', *Journal of Post Keynesian Economics*, 16: 289–297.

Arenas, G.C., Engel, J., Kotschwar, B.R. and Maliszewska, M. (2018), 'Supporting Lesotho's Economic Diversification and Trade Integration: Structural Transformation Through Greater Export Competitiveness', Washington, DC: World Bank Group.

Attanasio, O., Goldberg, P. and Pavcnik, N. (2004), 'Trade Reforms and Wage Inequality in Colombia', *Journal of Development Economics*, 74: 331–366.

Ayoki, M. (2016), 'The Textile and Apparel Industry in Lesotho in the Wake of the Multi-Fibre Agreement Phase-out', MPRA Paper 88112, University Library of Munich, Germany.

Beck, T., Demirguc-Kunt, A. and Levine, R. (2007), 'Finance, Inequality and the Poor', *Journal of Economic Growth*, 12: 27–49.

Bayar, Y. and Sezgin, H. (2017), 'Trade Openness, Inequality and Poverty in Latin American Countries', *Ekonomika (Economics), Sciendo*, 96(1): 47–57.

Behrman, J., Birdsall, N. and Szekely, M. (2000), 'Economic Reform and Wage Differentials in Latin America', Working Paper, 435, Inter-American Development Bank.

Bennet, M. (2006), 'Lesotho's Export Textiles and Garment Industry', in: H. Jauch and R. Traub-Merz (eds), *The Future of the Textile and Clothing Industry in Sub-Saharan Africa*, Bonn: Friedrich-Ebert-Stiftung.

Berg, A. and Krueger, A. (2003), 'Trade, Growth and Poverty: A Selective Survey', IMF Working Paper 03/30, Washington, DC.

Bergstrand, J.H, (1990), 'The Heckscher-Ohlin-Samuelson Model, The Linder Hypothesis and the Determinants of Bilateral Intra-Industry Trade', *The Economic Journal* , 100 (403), 1216-1229

Blank, R.M. and Blinder, A.S. (1985), 'Macroeconomics, Income Distribution, and Poverty', NBER Working Paper, No. 1567, Cambridge, Massachusetts: National Bureau of Economic Research.

Brooks, D. H. (2003). ‘Trade and Poverty: What are the Connections?’, Asian Development Bank. Available online at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.adb.org/sites/default/files/publication/28079/pb021.pdf [Accessed 7 September 2024].

Calderon, C., Cantu, C. and Zeufack, A.G. (2020), ‘Trade Integration, Export Patterns and Growth in Sub-Saharan Africa’, Policy Research Working Paper, No. 9132, World Bank.

Calderón, C., Loayza, N. and Schmidt-Hebbel, K. (2005), ‘Does Openness Imply Greater Exposure?’, World Bank Policy Research Working Paper, No. 3733.

Cassiem, S. and Streak, J. (2001), ‘Budgeting for Child Socio-Economic Rights: Government Obligations and the Child’s Right to Social Security and Education’, Institute for Democracy in South Africa.

Central Bank of Lesotho (2010), ‘The Strengthening of the Loti Against Major Currencies: Implications for Growth and Employment in Lesotho’, Central Bank of Lesotho Economic Review.

Central Bank of Lesotho (2006), ‘The Government of Lesotho Holds the 9th Donor Round Table Conference on Sustainable Economic Growth and Poverty Reduction’, Central Bank of Lesotho Economic Review 75.

Central Bank of Lesotho (2015), ‘Quarterly Review’, Maseru: Central Bank of Lesotho.

Chau, A. (2022). ‘The Effect of Trade on Poverty Reduction’, Unpublished PhD Thesis. Jonkoping University, International Business School.

Chhabra, M., Giri, A.K. and Kumar, A. (2023). ‘Does good governance and trade openness contribute to poverty reduction in BRICS? An empirical analysis’, *Australian Economic Papers*, 62(4), 650-667.

COMESA, (2024), ‘COMESA-EAC-SADC Tripartite Free Trade Area Comes into Force’, available online at trade-area-to-come-into-force-on-25th-july-2024/#:~:text=July%2025%2C%202024%3A%20The%20COMESA,the%20three%20regional%20economic%20communities. [accessed 14 August 2024].

Cobbe, J. (2012). ‘Lesotho: From Labor Reserve to Depopulating Periphery?’, Migration Policy Institute. Available online at https://www.migrationpolicy.org/article/lesotho-labor-reserve-depopulating-periphery [Accessed 7 September 2024].

Coplan D. and Thoahlane T. (1995). ‘Motherless Households, Landless Farms: Employment Patterns Among Lesotho Migrants. In Crossing Boundaries: Mine Migrancy in a Democratic South Africa’, Edited by Crush J. and James W. IDASA.

Cutler, D.M. and Katz, L. (1991). ‘Macroeconomic Performance and the Disadvantaged’, Brookings Papers on Economic Activity, 2.

Dafermos, Y. and Papatheodorou, C. (2012), ‘What drives inequality and Poverty in the EU? Exploring the Impact of Macroeconomic and Institutional Factors’, *International Review of Applied Economics*, 27(1): 1–22.

Deininger, K. and Squire, L. (1996), ‘A New Data Set for Measuring Income Inequality’, *World Bank Economic Review*, 10: 565–591.

Deloitte (2022), ‘South Africa Betting on Foundational Changes for Higher Growth’, available online at https://www2.deloitte.com/za/en/insights/economy/emea/africa-economic-outlook.html [accessed 20 July 2022]

Department of Finance (1996), ‘Growth, Employment And Redistribution: A Macroeconomic Strategy (GEAR)’, Pretoria: Ministry of Finance.

Department of Finance (2014), ‘Growth, Employment and Redistribution: A Macroeconomic Strategy’, Pretoria: Ministry of Finance.

Department of Trade and Industry (2019), ‘Economic Partnership Agreement (EPA) between the Southern African Customs Union (SACU) and Mozambique (together SACUM) - United Kingdom (UK)’, available online at PowerPoint Presentation (thedtic.gov.za) [accessed 10 April 2023].

Dollar, D. and Kraay, A. (2001), ‘Trade, Growth and Poverty’, Development Research Group, Washington, DC: The World Bank.

Dornbusch, R., Fischer, S. and Samuelson, P. (1980), ‘Heckscher-Ohlin Trade Theory with a Continuum of Goods’, *Quarterly Journal of Economics*, 95(2): 203–224.

Easterly, W. (1997), ‘The Ghost of Financing Gap: How the Harrod-Domar Model Still Haunts Development Economics’, World Bank Working Paper 1870.

Edwards, L. and Lawrence, R. (2008), ‘South African Trade Policy Matters: Trade Performance and Trade Policy’, *Journal of Economics in Transition,* 16(4): 585–608.

Edwards, L. (2021) ‘South Africa’s International Trade’, PRISM Working Paper Series.

Enhanced Integrated Framework (2023), ‘Trade for LDC Development’, available online at https://www.enhancedif.org/en/country-profile/lesotho [accessed 22 January 2023].

European Commission (2009), ‘Fact Sheet on the Interim Economic Partnership Agreements: SADC Group’, Brussels: European Commission.

European Commission (2023), ‘EPA SADC – Southern African Development Community’, available online at https://trade.ec.europa.eu/access-to-markets/en/content/epa-sadc-southern-african-development-community [accessed 1 April 2023].

European Council (2023), ‘Cotonou Agreement’, available online at https://www.consilium.europa.eu/en/policies/cotonou-agreement/ [accessed 6 March 2023].

Fambeu, A.H. (2021), ‘Poverty Reduction in Sub-Saharan Africa: The Mixed Roles of Democracy and Trade Openness’, *The Journal of International Trade and Economic Development*, 30(8): 1244–1262.

Fauzel, S. (2022). ‘Investigating the impact of trade on poverty reduction in a small island economy’, *Forum for Social Economics*, 51(4), 433-452.

Feenstra, R.C., Inklaar, R. and Timmer, M.P. (2015), ‘The Next Generation of the Penn World Table’, *American Economic Review*, 105(10): 3150–3182, available online at www.ggdc.net/pwt [accessed 20 February 2024].

Finn, A. and Leibbrandt, M. (2017), ‘The Dynamics of Poverty in the First Four Waves of NIDS’, *SALDRU Working Paper Number 174/ NIDS Discussion Paper* 2016/1. Cape Town, South Africa: Southern Africa Labour and Development Research Unit (SALDRU), University of Cape Town.

Francis, D. and Webster, E. (2019), ‘Poverty and Inequality in South Africa: Critical Reflections‘, *Development Southern Africa,* 36(6): 788–802.

Garrett, G. (2010). ‘G2 in G20: China, the United States and the world after the global financial crisis’, *Global Policy*, 1(1), 29-39.

Ghattak, S. (1978), ‘Development Economics’, Suffolk: Longman.

Gibb, A. (2000), ‘SME Policy, Academic Research and the Growth of Ignorance, Mythical Concepts, Myths, Assumptions, Rituals and Confusions’, *International Small Business Journal,* 18(3): 13–35.

Gonese, D., Tsegaye, A., Khumalo, S.A., and Kapingura, F.M. (2023). ‘Trade openness and non-income poverty in Southern African Development Community (SADC) countries: A

panel Autoregressive Distributive Lag (ARDL) analysis', *Cogent Economics & Finance*, 11(2).

Gouws, A. (1997), 'An Analysis of Export Support Measures with Special Reference to South Africa; and the Impact of the General Export Incentive Scheme', unpublished Masters dissertation, University of Natal.

Government of Lesotho (2001), 'An Assessment of Poverty Reduction Programmes in Lesotho', Maseru, Lesotho.

Government of Lesotho (2022), 'The National Strategic Development Plan II 2018/19 to 2022/23', available online at https://www.gov.ls/wp-content/uploads/2021/06/National-Strategic-Development-Plan-II-2018-19-2022-23.pdf [accessed 8 February 2023].

Grogan, L. (2023), 'Manufacturing Employment and Women's Agency: Evidence From Lesotho 2004–2014', *Journal of Development Economics*, 160.

Grossman, G.M. and Helpman, E. (1991), 'Innovation and Growth in the Global Economy', Cambridge, MA, and London: MIT Press.

Guillaumont-Jeanneney, S.G. and Kpodar, K. (2011), 'Financial Development and Poverty Reduction: Can There Be a Benefit Without a Cost?', *Journal of Development Studies*, 47(1): 143–163.

Gumede, V. (2000), 'Import Performance and Import Demand Functions for South Africa', Department of Trade and Industry.

Harrison, A. (1996), 'A Time-Series, Cross-Country Analysis for Developing Countries', *Journal of Development Economics*, 48(2): 419–447.

Harrison, A. and Hanson, G. (1999), 'Who Gains From Trade Reform? Some Remaining Puzzles', *Journal of Development Economics*, 59: 125–154.

Hassan, M.S. and Siddiqi, M.W. (2010), 'Trade Poverty Nexus: An Empirical Investigation from Pakistan', *Interdisciplinary Journal of Contemporary Research in Business*, 2(6): 500–519.

Hausmann, R. and Klinger, B. (2006), 'South Africa's Export Predicament', CID Working Paper No. 129.

Hazoor, M.S. and Safdar, H.T. (2012), 'The Impact of Different Macroeconomic Variables on Poverty in Pakistan', *Interdisciplinary Journal of Contemporary Research in Business*, 3(10).

Heckscher, E. (1919), ‘The Effect of Foreign Trade on the Distribution of Income’, *Ekonomisk Tidskrift*, 21: 497–512.

Hirsch, A. (2005), ‘Season of Hope*:* Economic Reform under Mandela and Mbeki’, Scottsville and Ottawa: University of KwaZulu-Natal Press and International Development Research Centre.

Holden, M. (1992), ‘The structure and incidence of protection in South Africa’, in: P. Black and B. Dollery (eds), *Leading Issues in South African Microeconomics*, Johannesburg: Southern Book Publishers.

Huazhong, M.I., Huazhong, L.Z. and Huazhong, F.F. (2017), ‘The Effects of Trade on Poverty: Does Sectoral Composition of Trade Matter? Evidence From Emerging Economies’, *Journal of Economics and Economic Education Research*, 18(3).

Hunter, N., Hyman, I., Krige, D., Olivier, M., Dekker, A., Khandlhela, M. and May, J. (2003), ‘Draft South African Social Protection and Expenditure Review’, University of Natal, Durban, and Rand Afrikaans University.

Industrial Development Corporation (1990), ‘Investigation into the Tariff Protection Policy: Analysis of the Tariff Structure’, Sandton.

International Monetary Fund (2004), ‘Lesotho: Selected Issues and Statistical Appendix’, IMF Country Report No. 04/23.

International Monetary Fund (2006), ‘Kingdom of Lesotho: Poverty Reduction Strategy Paper, Prioritization, and Cost Matrix’, IMF Country Report No. 06/143.

International Monetary Fund (2022), ‘Kingdom of Lesotho: Selected Issues’, available online at https://www.elibrary.imf.org/view/journals/002/2022/162/article-A009-en.xml [accessed 19 January 2023].

International Trade Administration (2023), ‘Lesotho: Country Commercial Guide’, available online at https://www.trade.gov/country-commercial-guides/lesotho-market-overview#: ~: text=Lesotho%20gets%20most%20of%20its,mining%2C%20agriculture%2C%20and%20services [accessed 3 January 2023].

International Trade Centre (2022), ‘Trade Map’, available online at https://www.trademap.org/ [accessed 3 May 2022].

International Trade Administration (2024), ‘South Africa – Country Commercia Guide’, available online at https://www.trade.gov/knowledge-product/exporting-south-africa-market-overview [accessed: 14 August 2024].

Jenkins, C., Bleaney, M. and Holden, M. (1995), 'Trade Liberalisation in Sub-Saharan Africa: Case Study of South Africa', Centre for the Study of African Economies, University of Oxford, Working Paper No. WPS/96-6.

Jenkins, C. (1991). 'The Sanctions Legacy', *Indicator SA*, 8(4):25-30.

Jenkins, C., Leape, J. and Thomas, L. (2000), 'Gaining from Trade in Southern Africa. Complementary Policies to Underpin the SADC Free Trade Area', Palgrave Macmillan, London.

Jenkins, C. (2001), 'Integration and Co-operation in Southern Africa', OECD Development Centre, Working Paper No, 172.

Kalaba, M., Sandrey, R. and van Seventer, D.E. (2005), 'Analysis of Trade between South Africa and the EU and a Preliminary Attempt to Examine the Impact of the EU-SA FTA on Trade', Trade and Policy Industrial Strategies (TIPS).

Kategekwa, J. (2023), 'Recalibrating U.S. Economic Engagement with Africa in Light of the Implementation of the AfCFTA and the Final Days of the Current AGOA Authorization', The Brown Capital Management Africa Forum, Paper No. 11.

Kehler, J. (2001), 'Women and Poverty: The South African Experience', *Journal of International Women's Studies*, 3(1): 41–53.

Khatkate, D.R. (1967), 'Trade Promotion Through Debt Servicing', *Economic and Political Weekly*, 2: 3/5.

Kingdom of Lesotho (1996), 'Soil and Water Conservation and Agro Forestry Proposals', Office of Evaluation and Studies, International Fund for Agricultural Development.

Kingdom of Lesotho (1998), 'Post-Conflict Needs Assessment', Maseru: Government of Lesotho.

Kingdom of Lesotho (2006), 'Poverty Reduction Strategy 2004/2005–2006/2007', available online at https://faolex.fao.org/docs/pdf/les149712.pdf [accessed 8 February 2023].

Kingdom of Lesotho (2021), 'National Trade Policy Framework', available online at https://www.lesothotradeportal.org.ls/kcfinder/upload/files/Legal_1626769469.pdf [accessed 10 February 2024].

Kpodar, K. and Singh, R. (2011), 'Does Financial Structure Matter for Poverty? Evidence from Developing Countries', World Bank Policy Research Working Paper, WPS5915.

Le Goff, M. and Singh, R.J. (2014), ‘Does Trade Reduce Poverty? A View from Africa’, *Journal of African Trade*, 1: 5–14.

Lewis, J.D. (2001), ‘Reform and Opportunity: The Changing Role and Patterns of Trade in South Africa and SADC’, World Bank Research, Africa Region Working Paper Series No. 14.

Li, Z., Islam, M.M. and Fatema, F. (2017), ‘Trading for Sustainable Development Goals: Trade Policy, Inequality and Poverty in Emerging Economies’, *International Journal of Asian Social Science, 7*(10): 825–845.

Lopez, H., Molina, L., and Bussolo, M. (2007). ‘Remittances and the real exchange rate’, World Bank Policy Research Working Paper no. 4213.

Lucas, R.E. (1988), ‘The Mechanics of Economic Development’, *Journal of Monetary Economics*, 22: 3–42.

Lundberge, M. and Squire, L. (1998), ‘The Simultaneous Evolution of Growth and Inequality’, Washington, DC: World Bank.

Mabugu, R. and Chitiga, M. (2007), ‘South Africa Trade Liberalization and Poverty in a Dynamic Microsimulation CGE Model’, Department of Economics Working Paper Series, 2007(18).

Makhetha, L. and Rantaoleng, J. (2016), ‘Foreign Direct Investment, Trade Openness and Growth Nexus In Lesotho’, *Journal of Economic and Financial Sciences*, 10(1): 145–159.

Malefane, M.R. (2022), ‘Causality between foreign direct investment, exports and economic growth in Lesotho’, *International Journal of Sustainable Economy*, 14(1): 1.

Malefane, M.R. and Odhiambo, N.M. (2018), ‘Impact of Trade Openness on Economic Growth: Empirical Evidence from South Africa’, *International Economics*, 71: 387–416.

Malefane, M.R. and Odhiambo, N.M. (2021), ‘Trade Openness and Economic Growth: Empirical Evidence From Lesotho’, *Global Business Review*, 22(5): 1103–1119.

Maluleke, G. (2018). ‘The Determinants of Government Expenditure in South Africa’, Masters Dissertation. University of South Africa.

Maluleke, G. and Vacu-Ngqila, N.P. (2024), ‘Trade Openness and Poverty Reduction in South Africa’, *Acta Economica*, 22(40): 97–117.

Marchand, B.U. (2017). ‘How does international trade affect household welfare?’, (online) available at https://wol.iza.org/articles/how-does-international-trade-affect-household-welfare/long [Accessed 3 August 2024].

Mashinini, M. (2000), ‘Sustainable Development in Lesotho’, unpublished PhD Thesis, University of the Free State, South Africa.

Masters, D.M. (2019), ‘Policy-Oriented Learning and Policy Change in South Africa Between 1994-2006: An Assessment of South Africa’s Economic Policies (RDP, GEAR and ASGISA) (unpublished Master’s thesis) The University of the Witwatersrand.

Matube, J.M. (2005), ‘South African Poverty Intervention Strategies’, University of Pretoria, available online at https://repository.up.ac.za/bitstream/handle/2263/28024/04chapter4.pdf?sequence=5&isAllowed=y [accessed 9 February 2024].

Mbah, S.A., Agu, O.C., Fasina, O.T., & Oshodi, A.F. (2022). ‘Trade openness and poverty: An empirical study of Nigeria’s economy’ *African Journal of Business & Economic Research*, 17(1), 255-274.

McCulloch, N., Winters, L.A. and Cirera, X. (2001), ‘Trade Liberalization and Poverty*:* A Handbook’, London: Centre of Economics Policy Research.

Mensah, S.N-A and Naidoo, V. (2011). ‘Migration Shocks: Integrating Lesotho's Retrenched Migrant Miners’, *International Migration Review*, 45(4), 1017-1042.

Metcalfe, J.S. and Steedman, I. (1981), ‘On the Transformation of Theorems’, *Journal of International Economics*, 11(2): 267–271.

Mhlanga, E. (2019), ‘History of Conflict and Political Instability in Lesotho and its Impact on Development’, Political Economy of Southern Africa Editorial, available online at https://politicaleconomy.org.za/download/history-of-conflict-and-its-impact-on-basotho-development/?wpdmdl=6600&refresh=643d174f95b3f1681725263 [accessed 18 April 2023].

Milner, C., Morrissey, O. and Rudaheranwa, N. (2001), ‘Policy and Non-Policy Barriers to Trade and Implicit Taxation of Exports in Uganda’, *Journal of Development Studies*, 3(2): 67–90.

Moyo, B. (2023). ‘Impact of SADC Free Trade Area on Southern Africa’s Intra-Trade Performance: Implications for the African Continental Free Trade Area’, *Foreign Trade Review,* 59(1) 7-180.

Mu, Y. (2022). ‘Policy Coordination in Lesotho: Kingdom of Lesotho’, available online at https://www.elibrary.imf.org/view/journals/018/2022/003/article-A001-en.xml [accessed 15 August 2024].

Ngalawa, H.P.E. (2014). ‘Anatomy Of The Southern African Customs Union: Structure And Revenue Volatility’, *International Business & Economics Research Journal,* 13(1), 145-156.

Ngepah, N., Makgalemele, T. and Saba, C.S. (2023). ‘The relationship between education and vulnerability to poverty in South Africa’, available online at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9510347/ [accessed 6 August 2024].

Ministry for Social Development (2002), ‘Transforming the Present – Protecting the Future: Draft Consolidated Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa’, Pretoria: Government Printer.

Mlambo, C., Mukarumbwa, P. and Megbowon, E. (2019), ‘An Investigation of the Contribution of Processed and Unprocessed Agricultural Exports to Economic Growth in South Africa’, *Cogent Economics and Finance*, 7: 1.

Mokhethi, M.C. and Vögel, A.J. (2015), ‘Exports Constraints Facing Lesotho-based Manufacturing Enterprises’, *Acta Commercii*, 15(1): 1–8.

Mpata, S.B., Giersing, B. and Kaombwe, S. (2005), ‘Improving Land Transportation Logistics for International Trade Competitiveness of Lesotho’, South Africa Global Competitiveness Hub, available online at https://dec.usaid.gov/dec/GetDoc.axd?ctID=ODVhZjk4NWQtM2YyMi00YjRmLTkxNjktZTcxMjM2NDBmY2Uy&rID=MTU0NTY3&pID=NTYw&attchmnt=True&uSesDM=False&rIdx=MjUzODUz&rCFU= [accessed 14 February 2024].

Mphale, M.M., Rwambali, E.G. and Sechaba Consultants. (2003). ‘Lesotho Food Security Issues Paper’, available online at https://odi.org/en/publications/lesotho-food-security-issues-paper/ [accessed 15 August 2024].

Munir, S. and Kiani, A.K. (2011), ‘Relationship Between Trade Openness and Inflation: Empirical Evidences from Pakistan (1976–2010)’, *The Pakistan Development Review*, 2011(50): 4.

Musa, M. (1998), ‘Trade Liberalisation’, International Monetary Fund, available online at https://www.elibrary.imf.org/display/book/9781557757692/ch003.xml [accessed 14 February 2024].

Mutume, G. (2006), ‘African migration: from tensions to solutions’, *African Renewal,* 19(4): 15-17.

National Development Agency (2019), ‘Poverty, Inequality and Social Exclusion in South Africa’, available online at https://www.nda.org.za/assets/resources/CF824421-4FA0-41EE-AB69-4DB10CD0384A/NDA_Poverty_inequality_and_social_exclusion.pdf [accessed 14 February 2024].

National Planning Commission (2011a), ‘Diagnostics Overview’, Pretoria: NPC.

National Planning Commission (2011b), ‘National Development Plan’, RP270/2011.

National Treasury (2024), ‘Economic policy and outlook’, available online at https://www.treasury.gov.za/documents/mtbps/2009/mtbps/chapter%202.pdf [accessed 31 July 2024].

Nessa, H.-T. -, and Imai, K. S. (2023). ‘Trade openness and working poverty: empirical evidences from developing countries’, *International Trade, Politics and Development*, 7(2), 58–76.

Ngepah, N., Makgalemele, T. and Saba, C.S. (2023). ‘The relationship between education and vulnerability to poverty in South Africa’, available online at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9510347/ [accessed 6 August 2024].

North, D.C. (1990), ‘Institutions, Institutional Change, and Economic Development’, Cambridge: Cambridge University Press.

North, D.C. (1994), ‘Economic Performance through Time’, *American Economic Review*, 84(3): 359–368.

Nowak, M., and Ricci, L. (2006), ‘Liberalizing Trade and Capital Transactions: An Overview’, International Monetary Fund, online available at https://www.elibrary.imf.org/display/book/9781589064706/ch008.xml [accessed: 1 May 2023].

Nyiri, I. (1993), ‘An Innovative Approach to Export Financing’, *International Trade Forum*, Issue 4.

Observatory of Economic Complexity (2023), ‘Lesotho’, available online at https://oec.world/en/profile/country/lso [accessed 31 January 2023].

Odhiambo, N.M. (2009), ‘Finance-Growth-Poverty Nexus in South Africa: A Dynamic Causality Linkage’, *Journal of Socio-Economics*, 38: 320–5.

Odhiambo, N.M. (2011), ‘Growth, Employment and Poverty in South Africa: In Search of a Trickle-Down Effect’, *Journal of Income Distribution,* 20(1): 49–62.

Odhiambo, N.M. and Malefane, M.R. (2016), ‘The Role of International Trade in Lesotho’s Economic Growth’, *AUDŒ*, 12: 5, 211–226.

Office of the United States Trade Representative (2023), ‘Lesotho’, available online at https://ustr.gov/countries-regions/africa/southern-africa/lesotho [accessed 6 February 2023].

Office of the United States Trade Representative (2024), ‘Southern African Customs Union (SACU)’, available online at https://ustr.gov/countries-regions/africa/regional-economic-communities-rec/southern-african-customs-union-sacu [accessed 17 August 2024].

Ohlin, B. (1933), ‘Inter-Regional and International Trade’, Cambridge, MA: Harvard University Press, available online at https://www.scirp.org/reference/referencespapers?referenceid=3017613 [accessed 20 February 2023].

Oloyede, B.M., Osabuohien, E.S. and Ejemeyovwi, J.O. (2021), ‘Trade Openness and Economic Growth in Africa’s Regional Economic Communities: Empirical Evidence from ECOWAS and SADC’, available online at https://doi.org/10.1016/j.heliyon.2021.e06996 [accessed 17 September 2023].

Omole, D.A. (2003), ‘Poverty in Lesotho: a Case Study and Policy Option’, *Lesotho Social Science Review*, 9: 1–13.

Onakoya, A., Johnson, B. and Ogundajo, G. (2019), ‘Poverty and Trade Liberalization: Empirical Evidence From 21 African Countries’, *Economic Research*, 32(1): 635–656.

Organisation for Economic Cooperation and Development (2013), ‘Africa Economic Outlook 2013’, available online at https://www.oecd-ilibrary.org/development/african-economic-outlook-2013/lesotho_aeo-2013-34-en [accessed 14 February 2024].

Organisation for Economic Cooperation and Development (2022), ‘OECD Share in World GDP Stable at Around 50% in PPP Terms in 2017’, available online at https://www.oecd.org/sdd/prices-ppp/oecd-share-in-world-gdp-stable-at-around-50-per-cent-in-ppp-terms-in-2017.htm [accessed 14 February 2024].

Parliamentary Monitoring Group (2014), ‘Unauthorised expenditure by Departments of Trade and Industry, Home Affairs, & Presidency: National Treasury briefing’, available online at https://pmg.org.za/committee-meeting/17922/ [accessed 10 February 2023].

Parliamentary Monitoring Group (2008), ‘SADC EPA Group - EC Negotiations: Assessing the Emerging Outcome’, available online at https://static.pmg.org.za/docs/080227sadc.htm [accessed 14 August 2024].

Parliamentary Monitoring Group (2015), ‘Southern African Customs Union (SACU) & revenue sharing formula: status report’, available online at https://pmg.org.za/committee-meeting/21205/ [accessed 14 August 2024].

Perron, P. (1989). ‘The Great Crash, The Oil Price Shock, and The Unit Root Hypothesis’, *Econometrica,* 57(6): 1361–1401.

Pesaran, H.M. and Pesaran, B. (1997), ‘Microfit 4.0’, Oxford University Press.

Pesaran, M.H. and Shin, Y. (1999), ‘An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis’, in: S. Strom (ed.), *Econometrics and Economic Theory in the 20th Century*, Cambridge: Cambridge University Press, pp. 371–413.

Pesaran, M.H., Shin, Y. and Smith, R.J. (2001), ‘Bounds Testing Approaches to the Analysis of Level Relationships’, *Journal of Applied Econometrics*, 16(3): 289–326.

Pietrucha, J., Żelazny, R., Kozłowska, M. and Sojka, O. (2018), ‘Import and FDI as Channels of International TFP Spillovers’, *Quarterly Journal of Economics and Economic Policy*, 13(1): 55–72.

Pradhan, B.K. and Mahesh, M. (2014), ‘Impact of Trade Openness on Poverty: A Panel Data Analysis of a Set of Developing Countries’, *Economic Bulletin*, 34(4): 2208–2219.

Rangasamy, L. and Harmse, C. (2003). ‘The extent of trade liberalisation in the 1990s: Revisited’, available online at https://repository.up.ac.za/bitstream/handle/2263/4045/Rangasamy_Extent(2003).pdf?sequence=1 [accessed 8 August 2024].

Rantšo, T.A., and Ralitjeleng-Mahlelebe, M. (2023), ‘The Impact of Basotho Migrant Labourers’ Retrenchment from South African Mines on Rural Development in Lesotho: The Post-Mine Livelihood Strategies of Former Basotho Miners at Koro-Koro in the Maseru District’, African Journal of Development Studies, 3(12).

Ravallion, M. (1992), ‘Poverty Comparisons: A Guide to Concepts and Methods; Living Standards Measurement Study’, Working Paper 88, Washington, DC: World Bank.

Republic of South Africa (1994), ‘Parliament of the Republic of South Africa White Paper on Reconstruction and Development’, General Notice No. 1954 of 1994, 353(16085).

Rodrik, D. (1995), ‘Trade and Industrial Policy Reform in Latin America’, International Monetary Fund, available online at https://www.elibrary.imf.org/display/book/9781557755179/ch07.xml [accessed 14 February 2024].

Rodríguez-Castelán,C., Vazquez, E. and Winkler, H. (2020). ‘Tracing the Local Impacts of Exports on Poverty and Inequality: The Case of Mexico’, CEDLAS, Working Papers 0269.

Roux, A. (2024). ‘Lesotho – Geographic Features’, available online at https://futures.issafrica.org/geographic/countries/lesotho/ [accessed: 15 August 2024].

Rudebusch, G. (1992), ‘Trends and Random Walks in Macroeconomic Time Series: A Re-Examination’, *International Economic Review*, 33: 661–680.

Samuelson, P.A. (1948), 'International Trade and Equalisation of Factor Prices', Ec*onomic Journal*, 50(230): 163–84.

Sattar,R., Karim,Y. and Munir, F. (2022). 'Trade Openness and Poverty: Evidence from a Panel of Developing Countries', *Journal of Contemporary Macroeconomic Issues,* 3 (1), 30-41.

Sechaba Consultants (1994), 'Poverty in Lesotho: A Mapping Exercise', Government of Lesotho Working Document, Maseru.

Seekings, J. and Nattrass, N. (2001), 'Democracy and Distribution in Highly Unequal Economies: The Case of South Africa', *Journal of Modern African Studies*, 39(3): 471–96.

Setai, B. (1991), 'Structural Adjustment Program in Lesotho', *Africa Development,* 1: 5–22.

Shrestha, M.B. and Bhatta, G.R. (2017), 'Selecting Appropriate Methodological Framework for Time Series Data Analysis', *The Journal of Finance and Data Science,* 4(2): 71–89, available online at https://www.sciencedirect.com/science/article/pii/S2405918817300405?via%3Dihub [accessed 17 June 2023].

Shrestha S., Kotani K., and Kakinaka M. (2021). 'The relationship between trade openness and government resource revenue in resource-dependent countries', *Resources Policy*, 74, 102332.

Silajdzic, S. and Mehic, E. (2018). *'*Trade Openness and Economic Growth: Empirical Evidence from Transition Economies*',* Management International Conference.

Singer, H.W. (1950), 'The Distribution of Gains between Investing and Borrowing Countries', *American Economic Review*, 40: 473–485.

Singh, I., Squire, L. and Strauss, J. (1986), 'A Survey of Agricultural Household Models: Recent Findings and Policy Implications', *World Bank Economic Review*, 1(1): 149–179.

Singh, R. and Huang, Y. (2015), 'Financial Deepening, Property Rights and Poverty: Evidence from Sub-Saharan Africa', *Journal of Banking and Financial Economics*, 1(3): 130–151.

South African Revenue Service (2021), 'Customs and Excise Act 1964 Schedule No. 10 (No. 10/6).'

South African Revenue Service (2023), 'Southern African Customs Union (SACU) Agreement between the Governments of the Republic of Botswana, the Kingdom of Lesotho, the Republic of Namibia, the Republic of South Africa and the Kingdom of Swaziland (SACU)', available online at https://www.sars.gov.za/legal-counsel/international-treaties-agreements/trade-agreements/sacu/ [accessed 12 March 2023].

Southall, R. (1990). ‘Lesotho and the reintegration of South Africa’, *Africa Insight*, 20(4), 247-254.

Southern African Customs Union (2023), ‘Agreements’, available online at https://www.sacu.int/list.php?type=Agreements [accessed 19 March 2023].

Southern African Development Community (2003), ‘History and Treaty’, available online at https://www.sadc.int/pages/history-and-treaty [accessed 7 March 2023].

Southern African Development Community (2020), ‘SADC Objectives’, available online at SADC Objectives | SADC [accessed 3 February 2022].

Sparreboom, T. and Sparreboom-Burger, P. (1996). ‘Migrant Worker Remittances in Lesotho: A Review of the Deferred Pay Scheme’, International Labour Office Working Paper no. 16.

Spilimbergo, A., Londoño, J.L. and Székely, M. (1999), ‘Income Distribution, Factor Endowments, and Trade Openness’, *Journal of Development Economics*, 59 (1): 77–101.

Startz, R. (1998), ‘Growth States and Shocks’, *Journal of Economic Growth*, 3(3): 203–215.

Statistics South Africa (2017), ‘Poverty Trends in South Africa: An Examination of Absolute Poverty between 2006 and 2015’, available online at https://www.statssa.gov.za/publications/Report-03-10-06/Report-03-10-062015.pdf [accessed 20 July 2022].

Statistics South Africa (2018), ‘Overcoming Poverty and Inequality in South Africa. An Assessment of Drivers, Constraints and Opportunities’, available online at https://www.statssa.gov.za/wp-content/themes/umkhanyakude/documents/South_Africa_Poverty_and_Inequality_Assessment_Report_2018.pdf [accessed 21 July 2022].

Statistics South Africa (2019), ‘Sustainable Development Goals, Country Report 2019: South Africa’, available online at SDGs_Country_Report_2019_South_Africa.pdf (statssa.gov.za) [accessed 22 February 2024].

Statistics South Africa (2022), ‘After Two Years, GDP to Return to Pre-Pandemic Levels’, available online at https://www.statssa.gov.za/?p=15440 [accessed 19 July 2022].

Statistics South Africa (2024), ‘South Africa’s Income & Expenditure Survey Takes Off’, available online at https://www.statssa.gov.za/?p=15911 [accessed 30 July 2024].

Stern, M. and Ramkolowan, Y. (2021), ‘Understanding South Africa’s Trade Policy and Performance’, *South African Reserve Bank Working Paper Series* WP/20/17.

Stewart, F. (1991), ‘A Note on Strategic Trade Theory and the South’, *Journal of International Development,* 3(5): 467084.

Streak, J. (2004), ‘The GEAR Legacy: Did GEAR Fail or Move South Africa Forward in Development?’, *Development Southern Africa*, 21(2): 271–272.

Sulla, V., Zikhali, P. and Mahler, D.G. (2019), ‘Lesotho Poverty Assessment: Progress and Challenges in Reducing Poverty’, Washington, D.C.: World Bank Group, available online at http://documents.worldbank.org/curated/en/387071576240590486/Lesotho-Poverty-Assessment-Progress-and-Challenges-in-Reducing-Poverty [accessed 6 February 2022].

Sunge, R., Kumbula, N. B. and Makamba, B. S. (2021). ‘The Impact of Trade on Poverty in Sub-Saharan Africa: Do Sources Matter?’, *International Journal of Business, Economics and Management*, 8(3), 234–244.

Tariq, M.M. (2011), ‘Trade, Poverty and Employment: Empirical Evidence from Pakistan’, Munich Personal RePEc Archive (MRPA).

Thapa, S.B. (2013), ‘Relationship between Education and Poverty in Nepal’, *Economic Journal of Development Issues*, 15–16: 1–2.

The Presidency (2006), ‘Accelerated and Shared Growth Initiative for South Africa’, Annual Report, Pretoria, South Africa, available online at https://www.gov.za/documents/other/accelerated-and-shared-growth-initiative-south-africa-annual-report-2006-22-mar [accessed 14 February 2024].

The Presidency (2007), ‘Accelerated and Shared Growth Initiative for South Africa’, Annual Report, Pretoria, South Africa, available online at https://www.gov.za/sites/default/files/gcis_document/201409/asgisa-2007.pdf [accessed 14 February 2024].

TRALAC (2018), ‘Economic Partnership Agreement between the European Union and Southern African Development Community Group (SADC EPA)’, available online at https://www.tralac.org/documents/resources/faqs/2049-sadc-eu-epa-faqs-july-2018/file.html [accessed 7 March 2023].

TRALAC (2022), ‘Trade and Development’, available online at https://www.tralac.org/trade-and-development.html [accessed 12 May 2022].

TRALAC (2023), ‘About AGOA’, available online at https://agoa.info/about-agoa.html [accessed 6 March 2023].

United Nations Conference on Trade and Development (2002), ‘Investment Policy Review Lesotho’, UNCTAD/ITE/IPC/Misc.25.

United Nations Conference on Trade and Development (2004), 'The Least Developed Countries Report: Linking International Trade With Poverty Reduction', available online at https://unctad.org/publication/least-developed-countries-report-2004 [accessed 22 February 2024].

United Nations Development Programme (2000), 'Overcoming Human Poverty', available online at https://www.undp.org/nepal/publications/undp-poverty-report-2000-overcoming-human-poverty [accessed 15 February 2023].

United Nations Organisation (2021), 'Millennium Development Goals and Beyond 2015', available online at https://www.un.org/millenniumgoals/ [accessed 3 November 2021].

Wason, D, and Hall, D. (2004). 'Poverty in Lesotho 1993 to 2002. An overview of Household Economic Status and Government Policy', CPRC Working Paper No. 40

Winters, L.A. (2000), 'Trade and Poverty: Is There a Connection?', in: *Trade, Income Disparity and Poverty*, Special Study 5, Geneva: WTO.

Winters, L.A., McCulloch, N. and McKay, A. (2004), 'Trade Liberalization and Poverty: The Evidence So Far', *Journal of Economic Literature*, 42(1): 72- 115.

Woolard, I. (2001), 'Results of a Child Poverty Analysis of the October Household Survey 1999, Commissioned by Children's Budget Unit, Institute for Democracy in South Africa', Cape Town: Institute for Democracy in South Africa.

World Bank (1987), 'World Development Report', New York: Oxford University Press

World Bank (1990), 'World Development Report 1990', New York: Oxford University Press.

World Bank (2015), 'The South African Reserve Bank Annual Economic Report', available online at https://www.resbank.co.za/Publications/Reports/Pages/AnnualEconomic Reports.aspx [accessed 10 May 2022].

World Bank (2019), 'Poverty and Equity Brief: Africa Eastern & Southern Lesotho', available online at Global_POVEQ_LSO.pdf (worldbank.org) [accessed 2 February 2022].

World Bank (2020), 'Poverty and Equity Brief: Sub-Saharan Africa South Africa', available online at Global_POVEQ_ZAF.pdf (worldbank.org) [accessed 22 December 2023].

World Bank (2021a), 'The World Bank in Lesotho', available online at https://www.worldbankorg/en/country/lesotho/overview (accessed 28 September 2021).

World Bank (2021b), ‘Poverty and Equity Brief’, available online at https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/AM2020/Global_POVEQ_LSO.pdf [accessed 8 February 2023].

World Bank (2022a), ‘Manufacturing, Value Added (% of GDP)’, available online at https://data.worldbank.org/indicator/NV.IND.MANF.ZS [accessed 22 June 2022].

World Bank (2022b), ‘Agriculture, Forestry, and Fishing, Value Added (% of GDP)’, available online at https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS [accessed 22 June 2022].

World Bank (2022c), ‘World Integrated Trade Solution’, available online at https://wits.worldbank.org/Default.aspx?lang=en [accessed 24 June 2022].

World Bank (2022d), ‘Merchandise Trade (% of GDP)’, available online at https://data.worldbank.org/indicator/TG.VAL.TOTL.GD.ZS [accessed 21 June 2022].

World Bank (2022e), ‘Poverty Headcount Ratio at $1.90 a Day (2011 PPP) (% of Population)’, available online at https://data.worldbank.org/topic/poverty [accessed 24 June 2022].

World Bank (2022f), ‘Poverty Headcount Ratio at National Poverty Lines (% of Population)’, Available: https://data.worldbank.org/indicator/SI.POV.NAHC [accessed 24 June 2022].

World Bank (2022g), ‘Poverty Gap at $1.90 a Day (2011 PPP) (%)’, available online at https://data.worldbank.org/indicator/SI.POV.GAPS [accessed 24 June 2022].

World Bank (2022h), ‘Poverty Gap at $3.20 a Day (2011 PPP) (%)’, available online at https://data.worldbank.org/indicator/SI.POV.LMIC.GP [accessed 24 June 2022].

World Bank (2022i), ‘Poverty Gap at $5.50 a Day (2011 PPP) (%)’, available online at https://data.worldbank.org/indicator/SI.POV.UMIC.GP [accessed 24 June 2022].

World Bank (2022j), ‘Households and NPISHs Final Consumption Expenditure Per Capita (Constant 2015 US$)’, available online at https://data.worldbank.org/indicator/NE.CON.PRVT.PC.KD [accessed 24 June 2022].

World Bank (2023a), ‘Imports of goods and services (% of GDP)’, available online at https://data.worldbank.org/indicator/NE.IMP.GNFS.ZS [accessed 12 January 2024].

World Bank (2023b), ‘Exports of goods and services (% of GDP)’, available online at https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS [accessed 1 February 2023].

World Bank (2023c), ‘Orientation and Growth’, available online at http://wits.worldbank.org/WITS/WITS/TradeIndicatorsHelp/TradeOutcomes_Help.htm [accessed 15 June 2023]

World Bank (2024a), ‘The World Bank in South Africa’, available online at https://www.worldbank.org/en/country/southafrica/overview [accessed 14 February 2024]

World Bank (2024b), ‘The World Bank in Lesotho’, available online at https://www.worldbank.org/en/country/lesotho/overview [accessed 14 February 2024].

World Bank (2024c), ‘Exports of goods and services (% of GDP)’, available online at https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS [accessed 22 February 2024].

World Bank (2024d), ‘Imports of goods and services (% of GDP)’, available online at https://data.worldbank.org/indicator/NE.IMP.GNFS.ZS [accessed 22 February 2024].

World Bank (2024e), ‘Households and NPISHs Final Consumption Expenditure Per Capita (Constant 2015 US$)’, available online at https://data.worldbank.org/indicator/NE.CON.PRVT.PC.KD [accessed 9 July 2024].

World Bank (2024f), ‘Trade (% of GDP)’, available online at https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS [accessed: 9 July 2024].

World Integrated Trade Solution (2023), ‘United States Product Exports by Country and Region in US$ Thousand 2019’, available online at https://wits.worldbank.org/CountryProfile/en/Country/USA/Year/2019/TradeFlow/Export/Partner/LSO/Product/All-Groups [accessed 7 January 2023].

World Trade Organisation (2023), ‘Lesotho and the WTO’, available online at https://www.wto.org/english/thewto_e/countries_e/lesotho_e.htm#: ~: text=Lesotho%20has%20been%20a%20member,GATT%20since%208%20January%201988 [accessed 7 March 2023].

Yameogo, C.E.W., & Omojolaibi, J.A. (2021). ‘Trade liberalisation, economic growth and poverty level in Sub-Saharan Africa (SSA)’, Economic Research - Ekonomska Istraživanja, 34(1), 754-774.

Young, A. (1991), ‘Learning by doing and the dynamic effects of international trade’, *The Quarterly Journal of Economics,* 106: 369–405.

Zarenda, H. (2013), ‘South Africa’s National Development Plan and its implications for regional development’, available online at http://www.tralac.org/files/2013/07/D13WP012013-Zarenda-SouthAfricas-NDP-and-implications-for-regional-development-20130612-fin.pdf, Stellenbosch: TRALAC.

Žižmond, E. (2015), ‘Managing Global Transitions’, *International Research Journal,* 13(1): 1–93.