

An investigation of the formulation of a regional tourism competitiveness index

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DECLARATION

I declare that:

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Signature:

Tanya van der Schyff

November 2018

Vanderbijlpark

DEDICATION

To my parents, René and Jan, my brother, Bernard and my person, Charl without your continuous words of encouragement, prayers and love I would not have been able to finish my dissertation and pursue my dreams.

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ABSTRACT

The aim of this study was to investigate the determinants of tourism destination competitiveness in order to develop an index that could empirically measure tourism competitiveness in a region where the tourism sector has many resources that could contribute to the economic and social welfare of South Africa. This country experiences exceptionally high unemployment rates and its key sectors (manufacturing and mining) are underperforming, causing a poorly performing economy. Since competitiveness is essential to fuel economic growth and economic development to ensure the success of a region, South Africa should identify a viable sector in which investment could encourage competitiveness and in turn, economic prosperity. The tourism sector is known for its easy market entry, various and multiple employment opportunities and export contribution, and furthermore, because South Africa is characterised as a country with diverse cultures, beautiful scenery and abundant fauna and flora, the correct management and branding could attract tourism arrivals.

While the importance of tourism destination competitiveness and national tourism competitiveness have been investigated through various studies, most of these have focussed on factors influencing the tourism destination competitiveness of a nation. This study therefore set out to fill a gap in the body of knowledge by focussing on the said determinants of tourism destination competitiveness to develop a method of empirically measuring the competitiveness of a region. To achieve these, it focussed on a Regional Tourism Destination Competitiveness Index which was formulated as an empirical measure of tourism competitiveness for which determinants were identified and selected through a literature review of theories and models relating to the competitiveness of tourism destinations.

Subsequently, a Regional Tourism Destination Competitiveness questionnaire was formulated and given to selected respondents with knowledge of tourism and development research and who are active in the tourism sector. In addition, a statistical time-series analysis was conducted by use of Panel Pooled Mean Group–Autoregressive Distributes Lag models. The models analysed the relationship between tourism and economic variables (Model 1) and tourism and social variables (Model 2) for all nine provinces of South Africa from 2001 to 2017. This method investigated the correlation and long- and short-run relation between these variables.

Firstly, the results indicated that the most crucial determinants required for achieving tourism destination competitiveness are: natural environmental resources, safety and security, transportation facilities, accommodation facilities as well as food and drink. Those with the least significant impact on tourism destination competitiveness are: private–public partnerships,

education facilities, labour force and health facilities. Secondly, results from the econometric analysis revealed that a long–run relationship exists between tourism and the economic variables: $Ltrade_gdp$, $Lgdp$, $Lunemp$, $Leap$ and $Linc$ and between tourism and social variables: $Lhdi$, $Lcrim$, $Linfra$, $Lgini$, $Lpov$ and $Lpop$. In the short–run, it was found that a relationship exists between tourism and economic variables as well as tourism and social variables.

It is recommended that collaboration between the private and public sector should increase in their participation in the activities of the tourism industry as well as tourism research. Creating a positive tourism destination brand and, relaxing tourism regulation will encourage tourist arrivals. Future research could investigate the perceptions of the three types of participants in tourism namely, tourist, businesses and government on the importance and level of success of specific determinants.

Key words: Competitiveness, determinants, destinations, Tourism Destination Competitiveness Index, regions, South Africa.

TABLE OF CONTENTS

DECLARATION	II
DEDICATION.....	III
ACKNOWLEDGEMENTS	IV
ABSTRACT	V
LIST OF ABBREVIATIONS AND ACRONYMS	XV
CHAPTER 1: INTRODUCTION AND BACKGROUND	1
1.1 INTRODUCTION	1
1.2 PROBLEM STATEMENT	4
1.3 OBJECTIVES OF THE STUDY	5
1.3.1 Primary objective	5
1.3.2 Theoretical objectives	5
1.3.3 Empirical objectives	5
1.4 RESEARCH DESIGN.....	5
1.4.1 Literature review	6
1.4.2 Empirical study	6
1.4.2.1 Sample frame and size	6
1.4.2.2 Data collection and analysis	6
1.4.2.3 Sample frame, size and period	7
1.4.2.4 Data collection and statistical analysis	7
1.5 SIGNIFICANCE OF THE STUDY	7
1.6 ETHICAL CONSIDERATIONS.....	8
1.7 CHAPTER CLASSIFICATION	8

CHAPTER 2: LITERATURE REVIEW AND EMPIRICAL EVIDENCE	10
2.1 INTRODUCTION	10
2.2 DEFINITIONS, CONCEPTS AND APPROACHES.....	10
2.2.1 Tourism	10
2.2.2 Competitiveness	13
2.2.3 Indices	17
2.3 THEORIES RELATING TO CONCEPTS.....	21
2.3.1 Tourism	21
2.3.1.1 Tourism–Led growth hypothesis	21
2.3.1.2 Export–Led growth hypothesis.....	23
2.3.1.3 Okun’s law	23
2.3.1.4 Butler’s tourism life cycle	23
2.3.2 Competitiveness	24
2.3.2.1 Theories relating to tourism destination competitiveness	26
2.4 EMPIRICAL EVIDENCE ON DETERMINANTS	30
2.4.1 The effect of resources on tourism destination success.....	32
2.4.1.1 Natural, cultural and historical resources	32
2.4.1.2 Technology and innovation	33
2.4.1.3 Labour and entrepreneurship.....	34
2.4.2 The effect of infrastructure on tourism destination success.....	34
2.4.2.1 Health and education.....	35
2.4.2.2 Communication, accommodation, food and beverages.....	35
2.4.2.3 Transportation	36

2.4.3	The effect of economic impacts on tourism destination success	36
2.4.3.1	Productivity	36
2.4.3.2	Goods and services	36
2.4.4	The effect of an enabling environment and authorities on tourism destination success	37
2.4.4.1	Authorities	37
2.4.4.2	Safety and security	38
2.4.4.3	Investments	38
2.4.4.4	Marketing.....	38
2.4.4.5	Tourism policy and destination marketing.....	39
2.4.4.6	Red tape.....	40
2.5	SYNOPSIS	41
CHAPTER 3: TOURISM TREND ANALYSIS		43
3.1	INTRODUCTION	43
3.2	INTERNATIONAL TOURIST ARRIVALS.....	44
3.3	CONTRIBUTION OF TOURISM TO GDP	46
3.4	JOBS CREATED THROUGH THE TOURISM SECTOR.....	48
3.5	GOVERNMENT EXPENDITURE ON TOURISM	50
3.6	SOUTH AFRICAN PROVINCIAL ANALYSIS	51
3.7	SOUTH AFRICA'S TRAVEL AND TOURISM COMPETITVENESS RANKING.....	53
3.8	SYNOPSIS	58
CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN.....		60
4.1	INTRODUCTION	60

4.2	RESEARCH METHODOLOGY	62
4.3	RESEARCH DESIGN.....	62
4.3.1	Literature review and document analysis	62
4.3.2	Empirical study	63
4.4	REGIONAL TOURISM DESTINATION COMPETITIVENESS INDEX STUDY	65
4.4.1	Determinant selection	65
4.4.2	Specialist feedback on proposed regional tourism destination competitiveness index (pre–test)	66
4.4.3	Finalise weighting scale of determinants.....	66
4.4.4	Final regional tourism destination competitiveness index questionnaire design.....	68
4.4.5	Sample frame and size	68
4.4.6	Data collection	69
4.4.7	Descriptive analysis	70
4.5	TIME–SERIES ECONOMETRIC ANALYSIS.....	70
4.5.1	Sample frame, size and period	70
4.5.2	Data collection and variable description.....	70
4.5.3	Correlation	71
4.5.4	Unit root test	71
4.5.5	Panel	73
4.5.6	Normality test.....	75
4.6	SYNOPSIS	75
CHAPTER 5: RESULTS AND DISCUSSIONS		76

5.1	INTRODUCTION	76
5.2	REGIONAL TOURISM DESTINATION COMPETITIVENESS INDEX RESULTS.....	77
5.2.1	Sub-groups	77
5.2.2	Individuals determinants	79
5.2.2.1	Highly important determinants in ensuring regional tourism destination competitiveness.....	80
5.2.2.2	Significantly important determinants in ensuring tourism destination competitiveness.....	82
5.2.3	Policy statement on the implementation of the RTDCI	85
5.3	TIME-SERIES ECONOMETRIC ANALYSIS RESULTS	85
5.3.1	Model 1: Tourism and economic variables.....	85
5.3.1.1	Correlation analysis	86
5.3.1.2	Unit root test	87
5.3.1.3	Long and short-run relationship	88
5.3.1.4	Normality test.....	92
5.3.2	Model 2: Tourism and social variables	92
5.3.2.1	Correlation Analysis.....	93
5.3.2.2	Unit root test: Model 1.....	94
5.3.2.3	Long and short-run relationship	95
5.3.2.4	Normality test.....	99
5.4	SYNOPSIS	99
	CHAPTER 6: CONCLUSION AND RECOMMENDATIONS	101
6.1	INTRODUCTION	101

6.2	ACHIEVEMENTS OF STUDY OBJECTIVES	101
6.3	SUMMARY	103
6.4	CONTRIBUTION	106
6.5	STUDY LIMITATIONS.....	107
6.6	FUTURE RESEARCH	107
6.7	RECOMMENDATIONS	107
6.8	SYNOPSIS	111
	BIBLIOGRAPHY	113
	ANNEXURE A: QUESTIONNAIRE	130
	ANNEXURE B: LANGUAGE EDIT CERTIFICATE	133

LIST OF TABLES

Table 3–1:	Provincial tourism analysis from 2002 to 2017	51
Table 5–1:	Regional Tourism Destination Competitiveness Index.....	84
Table 5–2:	Unit root test: Model 1	87
Table 5–3:	Correlation matrix: Model 1	86
Table 5–4:	Long–run relationship: Model 1	88
Table 5–5:	Short–run relationship: Model 1.....	89
Table 5–6:	Provincial short–run relationship: Model 1	90
Table 5–7:	Unit root test: Model 2	94
Table 5–8:	Correlation matrix: Model 2	93
Table 5–9:	Long–run relationship: Model 2	95
Table 5–10:	Short–run relationship: Model 2.....	96
Table 5–11:	Provincial short–run relationship: Model 2.....	97
Table 6–1:	Primary objective	101
Table 6–2:	Theoretical objectives	102
Table 6–3:	Empirical objectives	102

LIST OF FIGURES

Figure 2–1:	Travel and Tourism Competitiveness Index Framework.....	20
Figure 2–2:	The determinants of national advantages: The diamond model	25
Figure 2–3:	Smart tourism destination competitiveness model.....	30
Figure 3–1:	International tourist arrivals	44
Figure 3–2:	The tourism sector’s contribution to GDP	47
Figure 3–3:	Jobs created in the tourism sector.....	49
Figure 3–4:	Government expenditure on tourism	50
Figure 3–5:	South Africa’s Travel and Tourism Competitiveness ranking for 2017	53
Figure 5–1:	Questionnaire results for sub–group	78
Figure 5–2:	Questionnaire results for selected determinants.....	79
Figure 5–3:	Normality test: Model 1	92
Figure 5–4:	Normality test: Model 2	99

LIST OF ABBREVIATIONS AND ACRONYMS

ADF	:	Augmented Dickey–Fuller
AIDS	:	Almost Ideal Demand System
ATM	:	Automated Teller Machine
ARDL	:	Autoregressive Distributed Lag
CBBE	:	Customer–Based Brand Equity
CKA	:	Comparative Keyword Analysis
ELGH	:	Export–Led Growth Hypothesis
E–mail	:	Electronic Mail
EOTF	:	Ease Of Travelling for Foreigners
FDI	:	Foreign Direct Investments
FFC	:	Five Forces of Competitiveness
FTA	:	Free Trade Agreement
GDP	:	Gross Domestic Product
GLTH	:	Growth–Led Tourism Hypothesis
HIV	:	Human Immunodeficiency Virus
H ₀	:	Null hypothesis
H ₁	:	Alternative hypothesis
Km	:	Kilometers
LLC	:	Levin, Lin and Chu
MG	:	Mean Group
NDT	:	National Department of Tourism
OECD	:	Organization of Economic Co–operation and Development
IATA	:	International Air Transport Association
ICC	:	International Cricket Council
ICCA	:	International Congress and Convention Association
ICT	:	Information and Communications Technology

ILO	:	International Labour Organisation
IoT	:	Internet of Things
IO	:	Input–Output
IPS	:	Im, Pesaran and Shin
IT	:	Information Technology
PCA	:	Principal Component Analysis
PLC	:	Product Life Cycle
PP	:	Phillips–Perron
PPP	:	Public Private Partnerships
PMG	:	Pooled Mean Group
RTDCI	:	Regional Tourism Destination Competitiveness index
SAA	:	South African Airlines
SEM	:	Structural Equation Modelling
SMARTPLS	:	Structural Equation Modelling with Partial Least of Squares
SOE	:	State–Owned Enterprise
Stats SA	:	Statistics South Africa
SWOT	:	Strengths, weaknesses, opportunity and threats
TALC	:	Tourism Area Life Cycle
TDCA	:	Trade Development and Cooperation Agreement
TDC	:	Tourism Destination Competitiveness
TTCI	:	Travel and Tourism Competitiveness Index
TLGH	:	Tourism–Led Growth Hypothetic
UK	:	United Kingdom
UNESCO	:	United Nations Educational, Scientific and Cultural Organisation
UNWTO	:	United Nations World Tourism Organization
USA	:	United States of America
VECM	:	Vector Error Correction Model
VoA	:	Visa on Arrivals

WEF	:	World Economic Forum
Wi-Fi	:	Wireless internet
WTO	:	World Tourism Organisation
WTTC	:	World Travel and Tourism Council

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Competitiveness within the tourism industry can be used to evaluate performance in terms of productivity, which is also a driver of economic growth and development (Webster & Ivanov, 2013:137; World Economic Forum (WEF), 2016). Many South Africans are continuously confronted with social, political and economic challenges (Mbele, 2014; Roberts, 2015:1). These challenges include unemployment, inequality, poverty and exposure to criminality, to name just a few (Mobius, 2017; Edigheji, 2010:vii). Fortunately, South Africa is a country of opportunity and has great potential to overcome these challenges (Goddard, 2017). However, the country desperately needs to effectively utilise and distribute resources to maximise returns and ensure successful outcomes. In order to potentially reduce these challenges, regions in which the public and private sector can invest in should be identified (Quintal, 2017). South Africa's primary opportunity lies within the tourism sector where these diverse challenges can be overcome through investments.

Promoting tourism should be considered a priority for South Africa as it produces numerous benefits to the population and to the economy, which could spill over into interlinked sectors in ensuring an overall productive economy through tourism-related benefits. These benefits include: labour-intensity, which is one of the most valued benefits of the tourism industry (Bennet, 2000:358); limited barriers of market entry (Department of Tourism, 2012:1) facilitation of entrepreneurship (Meyer & Meyer, 2015:199) and infrastructure development (Shahzad, Shahbaz, Ferrer & Kumar, 2017:223). All these benefits work in unison to potentially improve the economic and social outlook of a country.

The theoretical significance of tourism is explained in theories, such as the Tourism-Led Growth Hypothesis (TLGH) which states that long term economic growth is produced by tourism development (Samimi, Saadegi & Sadeghi, 2011:28). Globally, tourism is responsible for the employment of approximately 716 500 individuals, which represented 4.6 percent of total employment in 2016 (World Travel and Tourism Council (WTTC), 2017a:4). Thus, the benefit of job creation relates to the theory of Okun's law. Okun's law argues that an increase in employment will contribute to an increase in economic growth (Altig, Fitzgerald, Rupert & Rabin, 2002:135).

The tourism industry can be classified as an elastic industry as it shows signs of positive growth despite economic difficulties (De Vita & Kyaw, 2017:423). Furthermore, tourism is an element of the export sector. The United Nations World Tourism Organisation (UNWTO) (2015:5) stated that

being the third largest exporter, tourism accumulated US\$ 1.5 trillion which contributed 7 percent to aggregate exports, globally. Tourism contributed 3.9 percent to gross domestic product (GDP) growth in 2016 (UNWTO, 2017a). The WEF (2017a:3) indicated that the global tourism sector contributed 10.2 percent to the global GDP in 2016. Tourism is not classified as an official economic industry; however, it is clearly one of the fastest expanding sectors.

Since South Africa opened up its economic markets to the global economy in 1994, tourism has become a viable solution to various socio-economic challenges (Du Plessis, Saayman & Van der Merwe, 2015:2). South Africa experienced a decline of 6.8 percent in its global tourism market share during 2015 (Lombard, 2016). The Department of Tourism (2016:29) stated that strict immigration laws, social and political uncertainties and the global weak economic performance contributed to this decline. Statistics South Africa (Stats SA) (2017) noted that the top five foreign arrival countries to South Africa are Germany, Netherland, United States of America, United Kingdom and France. Since 2015, arrivals from these destinations have however, decreased.

The Travel and Tourism Competitiveness report of 2017 indicates government expenditure in terms of travel and tourism compared to other countries. South Africa received a ranking of 130th out of 133 countries (WEF, 2017a:14). Although government advocates the importance of tourism in overcoming socio-economic challenges, it does not take this into consideration when the national budget allocations are formulated, as it is not a formal sector. The index rates the Dominican Republic first followed by Jamaica and it is no surprise that Mauritius is third in terms of government expenditure on tourism and travel as a percentage of GDP (WEF, 2017a:15). The government's role in tourism is also seen in the formulation of travel regulations. According to Wakefield (2015), the strict visa regulations implemented by the South African government had a reducing impact on the number of international tourist arrivals. This could be a plausible explanation for the poor overall tourism and travel global ranking of South Africa.

When deciding where investment should take place, South Africa needs to evaluate its market dynamics. According to the WTTC (2017a:6), in 2016 approximately 33.8 percent of tourism expenditure relates to business spending and 66.2 percent to leisure spending. Furthermore, tourism's spending contribution to GDP is divided into 46.1 percent by foreign tourists and 53.9 percent by domestic tourists. Government and policymakers should be clear on their objectives regarding the development of the tourism and travel industry and decide whether investments should be directed to attract foreign visitors, domestic visitors or both. Continuous investments and improvements are the backbone of a destinations' progress. Enright and Newton (2004:777) stated that the success of a tourism destination is dependent on its relative competitiveness.

Delgado, Ketels, Porter and Stern (2012:6) defined national competitiveness as the potential to succeed in certain circumstances and produce high living standards and economic growth. When taking national competitiveness as the true definition, regional competitiveness can be defined as the capability of a certain region to deliver successful outcomes. De Ayala (2012) stipulated that the global competitiveness ranking provides countries with a measure of strengths and weaknesses which provides understanding of their status quo. This insight allows for improvements on strengths and limitation of weaknesses. In addition, it also serves as an indicator for investment and yield potential on an international level. Determinants of destination competitiveness are traditionally influenced by image or attractiveness. This includes factors such as accommodation, climate and the scenery (Enright & Newton, 2004:777). This is one of many determinants stated by the WEF (2017a:12) as infrastructure development, government investments in the travel and tourism industry as well as health and safety also significantly impact countries' tourism competitiveness.

This is applicable to smaller regions too, such as provinces and districts. Du Plessis *et al.* (2015:2) state that a destination is categorised as competitive when it has the capability to boost tourism spending, continuously attract more tourists and produce gratifying tourism related services, while still preserving the destination for the future. Bitner and Sierak (2017:5) explain that government expenditure into a region will contribute greatly to its competitiveness. According to De Ayala (2012), even though a small number of economic hubs will not contribute significantly to national competitiveness, these growth centres are needed to ensure expansion. Crouch and Ritchie (1999) constructed a conceptual model indicating the determinants influencing competitiveness. According to Fernando and Long (2012:78) to improve its competitiveness, destinations should implement marketing strategies that focus on the destination's strengths in particular.

In light of the aforementioned, the objective of this study was to construct a Regional Tourism Destination Competitiveness Index (RTDCI). This index includes various determinants which influence competitiveness of a tourism destination. This can be used to determine where these regions are lagging and leading in terms of its different competition factors. The index could possibly be used to assist in establishing where and how additional resources should be allocated, that is, to which regions in order to ensure a more successful tourism outcome. Thus, identifying the weaknesses and strengths of the regions to formulate an adequate strategy and policy recommendations to potentially solve challenges faced by regions. Therefore, this research adopted a functionalist approach as it aimed to identify and solve the tourism competitiveness challenge that South Africa is currently facing.

1.2 PROBLEM STATEMENT

Ideally, a nation should not only be able to participate in the global economy but also be competitive. Policies and procedures should be aimed towards improving competitiveness within all sectors of the economy as this will result in various social and economic benefits (WEF, 2016). Andrades–Caldito, Sanchez–Rivero and Pulido–Fernandez (2014:426) stated that competitiveness of a tourism industry is crucial to ensure its continuous progress and durability of an economy. South Africa however, is struggling to achieve international competitiveness. This can possibly be attributed to the tourism sector that has not kept up with internationally competitive countries. Technology advances, changes in consumer requirements and globalisation add to the sophistication of the ever–changing global tourism industry. The significant increase in international tourism has contributed to the increase in competition between destinations (Du Plessis *et al.*, 2015:2).

In the current global economy, competitiveness is a requirement for progress, economic growth and development. South Africa is not utilising tourism as a tool to achieve economic objectives. Regarding the Travel and Tourism Competitiveness Index (TTCI), South Africa is currently ranked 53rd out of 137 countries (WEF, 2017a:304). This is a troublesome ranking as South Africa has moved five rankings down since 2015. This shows that South Africa is losing its competitive advantage in the global market. Even though South Africa is ranked 2nd among the Sub–Sahara African countries, this ranking is still not sufficient to be globally competitive. Surprisingly, South Africa underperforms against countries such as Qatar (which is ranked 47th) and India (which is ranked 40th).

The determinants of the competitiveness of regions need an in–depth investigation in order to improve the tourism competitiveness of a country. This can be done by first identifying the determinants of competitiveness in terms of regional tourism. Secondly, the determinants of a region should be rated in terms of successes and failures. This will inform researchers and policymakers of the strengths and weaknesses of each region. In doing so, a comprehensive plan can be formulated to address these determinants individually. When the index is applied it could possibly assist the South African tourism industry by indicating the extent and placement of resources in order to improve the efficiency and performance and subsequently, the competitiveness of a specific region's tourism. Studies have shown that the development of the tourism sector could lead to an improved economic outlook in terms of economic growth and economic development, especially in the long–run (Tassiopoulos, 2011:6; Gwenhure & Odhiambo, 2017:34).

The purpose of this study was therefore to identify the determinants of tourism competitiveness on a regional level and consequently, a Regional Tourism Destination Competitiveness Index was formulated. Most indexes and specifically that of the WEF, focus just on a national measure of tourism competitiveness. In recent years, the focus has been on a regional tourism competitiveness measure in developed countries such as the United States of America and China. This gap in the literature therefore, afforded this researcher the opportunity to compose a regional tourism destination competitiveness index that could be applied to regions within a developing country such as South Africa.

1.3 OBJECTIVES OF THE STUDY

1.3.1 Primary objective

The primary objective of this study was to formulate a regional tourism destination competitiveness index to evaluate tourism competitiveness.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Discussion of definitions, concepts and theories on tourism and regional competitiveness
- Review the literature on the determinants and the importance of tourism competitiveness
- Review the literature on the construction and importance of indexes
- Identify and define the contributors of tourism competitiveness in an economy.

1.3.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Identify the determinants of tourist destination competitiveness.
- Allocation of the weight of each determinant according to its importance in ensuring tourism destination competitiveness
- Formulation of a final index and policy statement on the use of the index.

1.4 RESEARCH DESIGN

This study consisted of a literature review and an empirical analysis. To successfully execute a quantitative method study, (i) primary data relating to subjective opinions of respondents were

collected in the form of a tourism destination competitiveness questionnaire and (ii) secondary data was collected from the global insight.

1.4.1 Literature review

The literature and theoretical background consists of an in-depth review of existing indexes, books, journal articles, dissertations and other relevant sources to provide an in-depth understanding of tourism destination competitiveness and to determine which determinants best explain 'tourism destination competitiveness' within a region.

1.4.2 Empirical study

The empirical section of this study consists of the following two sections and methodological dimensions:

The first section of the empirical study entails the construction of a tourism–destination competitiveness questionnaire.

1.4.2.1 Sample frame and size

This study is based on a regional level in South Africa to investigate the determinants of regional tourism competitiveness. The study formulated a regional tourist competitiveness index to be applied to regions. A purposive sampling method was employed to complete the proposed index regarding the determinants of regional tourism competitiveness. Participants selected were from the tourism industry, the tourism research field as well as from the field of economic development research. The criteria for the selected respondents was based on their expert knowledge on the workings of the tourism sector and development economics. Forty two (42) respondents were selected for the sample.

1.4.2.2 Data collection and analysis

This study followed a quantitative approach. The determinants for regional tourism competitiveness were identified and investigated in the literature review. Thereafter, an index which was subjective to the opinions of the respondents, was constructed. The index focused on the various determinants of regional competitiveness in the South African tourism industry. In terms of primary data, participants were required to complete a proposed index distributed electronically via electronic mail (email). This was to gather data on the determinants of tourism competitiveness. Respondents were required to allocate a weight to each determinant as well as a sub-category to indicate the importance of achieving competitiveness within a tourism destination.

The determinants listed were given a certain weight by the respondent which identified those determinants carrying the most significance in ensuring competitiveness of a tourism region. The weight ranged from 0 to 4, indicating:

- 0 – determinant has no importance
- 1 – determinant has limited importance
- 2 – determinant has average importance
- 3 – determinant has significant importance
- 4 – determinant has very high importance.

A Regional Tourism Destination competitiveness Index was produced using the above weighing scale; it could potentially assist regions in identifying its tourism competitiveness ranking. The data was analysed by calculating the average weighting given by respondents where after a final weight was allocated to each determinant.

The second section entailed the analysis of time–series econometric data.

1.4.2.3 Sample frame, size and period

The study further analysed the relationship between tourism and the various social and economic variables of all nine provincial regions in South Africa. The data gathered for the nine provinces was from 2001 to 2017, these seventeen time periods were selected based on the availability of information in the period after the first democratic election. This time–period was also selected as the first democratic election encouraged more national as well as international tourist arrivals. The analysis encompassed 153 observations as an attempt to analyse the relationship between the tourism, economic and social variables. An ARDL panel analysis was done to investigate the relationship between these variables.

1.4.2.4 Data collection and statistical analysis

To achieve the set objectives, an econometric time–series statistical analysis was undertaken. A panel method was applied to a total of nine provinces for a period of 17 years each. The relationships were evaluated by testing the long– and short–run relationship as well as co–integration.

1.5 SIGNIFICANCE OF THE STUDY

Competitiveness is a global requirement, especially in recent times where the global economy is open and integrated in terms of trade, communication and other economic and social activities.

However, investment downgrades, an increase in political and social unrest, investors retreating and corruption reducing the capability of government to invest in the country, South Africa's economic growth and development is under pressure (Omrajee, 2017). Government and policy makers can successfully identify challenges but do not seem to have the much-needed solutions. One of the biggest problems South Africa faces is efficient resource distribution and allocation. The outcome of this study could possibly assist government and policymakers in identifying certain determinants within regions where investments need to be made in order to improve the tourism industry's competitiveness. Furthermore, by evaluating South Africa's regional tourism competitiveness in terms of the proposed competitiveness index constructed, this research will assist in indicating which regions should be focused on in South Africa. According to Kothari (2004:6) this is one of the significant reasons for research, as it aims to solve problems in sectors and companies.

1.6 ETHICAL CONSIDERATIONS

The proposed index was conditional on the University's ethical requirements to ensure compliance of ethical responsibilities. Before the questionnaire portion of the study where embarked on, ethical clearance where obtained from the Ethical Committee at the North-West University. This research was done in a respectful matter towards respondents. Information and data will not be altered or constructed to fit a certain hypothesis. Adequate recognition given to sources of literature and other relevant information.

1.7 CHAPTER CLASSIFICATION

This study is made up of the following chapters:

Chapter 1: Introduction and background of this study:

Chapter 1 provided an introduction to and background of the study by explaining South Africa's status quo regarding the various challenges faced by nationals and the economy, as well as tourism competitiveness. The chapter also introduced the problem statement which has provided the premise for this study, its significance and its objectives.

Chapter 2: Literature review:

In Chapter 2, the theoretical determinants of tourism competitiveness are identified and evaluated in depth, focussing on a regional level. Furthermore, theories, definitions and concepts pertaining to competitiveness and tourism are investigated.

Chapter 3: Trends in tourism:

This chapter focuses on the trends within the tourism industry. These are determined by first, briefly examining the international tourism industry. Second, the trends within six selected countries that consist of two developed, two developing and 2 South African neighbouring countries are investigated. Third, insight into the county's tourism performance is gained through focusing on South Africa as well as on selected regions in South Africa.

Chapter 4: Research design and methodology:

This chapter provides the methodological framework and design of the study, including the study area, sample size and the methods followed. The study followed a quantitative method, collecting both primary and secondary data. The Regional Tourism Destination Competitiveness Index is introduced by presenting the selected determinates.

Chapter 5: Results and discussions:

Chapter 5 addresses the results and findings of the study. The weighting for each determinant's importance in terms of its tourism competitiveness is discussed. The results of the formulation of the tourism destination competitiveness index are provided. This chapter also describes the plausible reasons for the findings by investigating the possible reasons for the importance or unimportance of determinants.

Chapter 6: Conclusion and recommendations:

The final chapter gives the key concluding remarks on the research. Chapter 6 also provides recommendations derived from the literature review and empirical study. This involved indicating which determinants, within regions, government should focus investments on in general as the index under discussion has not yet been applied to a specific region. In addition, this chapter gives an all encompassing summary of the research that indicates the link between the problem statement and the objectives listed. Possible future research is also mentioned.

CHAPTER 2: LITERATURE REVIEW AND EMPIRICAL EVIDENCE

2.1 INTRODUCTION

Tourism is a vital component and contributor to the progress of developed and developing economies, the latter even more so (Cárdenas–García, Sánchez–Rivero & Pulido–Fernández, 2015:208). Therefore, the success of tourism destinations should be a priority, not just for research but also for private and public organisations. The first chapter generated understanding of the importance of this study by articulating the problem statement, the objectives that required realisation and the manner in which the study was conducted. Chapter 2 provides a theoretical and empirical section for comprehension and background to the research question. Theorising is useful to better comprehend a problem and accordingly formulate a solution (Bailey, 1982:39).

As explained in Chapter 1, the success of tourism destinations is dependent on various determinants. Due to the sophistication and diversification of this sector, a holistic approach needs to be considered when investigating the impact of determinants on tourism destination. To address this, theoretical and empirical evidence on the effect of a range of determinants is given. First, definitions, concepts and approaches used throughout this study are explained. This section also indicates the difficulty encountered in reaching consensus on the definitions and measurement of tourism and competitiveness in particular. In addition, various theories relating to tourism and destination competitiveness are discussed to offer clarity on the operations of the tourism industry. The evolution of tourism destination models is provided. Furthermore, determinants of tourism destination competitiveness are analysed to measure the importance and validity of certain determinants in an index. Subsequently, empirical evidence of the effects of determinants selected from the literature review are put forward. Themes discussed include tourism, competitiveness, destination competitiveness and clusters.

2.2 DEFINITIONS, CONCEPTS AND APPROACHES

2.2.1 Tourism

One of the earliest documented definitions of tourism was made by Guyer–Feuler in 1905 (Karalkova, 2016:2). The definition states that tourism is an occurrence where individuals desire to appreciate environments (local and foreign) and the circumstances under which they will be satisfied, made possible through the progress in trade, communication and transportation networks (Karalkova, 2016:2). Mathieson and Wall (1982:10) summarised tourism as the activities undergone by individuals travelling to a certain destination on a non–permanent basis and the establishments designed to accommodate their needs as tourists. Subsequently,

McIntosh and Goeldner (1986:20) defined tourism as the number of connections formed from the participants within the industry both on the supply and demand side. Since then, a widely accepted definition of tourism was adopted by the United Nations World Tourism Organisation (UNWTO), the Organization of Economic Co-operation and Development (OECD) and the Commission of European Communities (2001:1) as “...*the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited*”. Activities pertaining to tourism, amongst others, include: catering, accommodation, transport, festivals and sport events, which are aimed to satisfy the business and leisure needs of both national and international tourists.

Tourism can be further divided into two categories, specifically, inbound and outbound tourism. Lawson and Roychoudhury (2016:820) on the one hand identified inbound tourism as the quantity of visitors to a certain tourism destination who do not reside in the host country. On the other hand, outbound tourism is the quantity of visitors traveling to a tourism destination who reside within the host country (UNWTO, OECD & Commission of European Communities, 2001:29). Both of these definitions include the assumption that tourism and travel do not exceed a one-year time period and that the visitation purpose is for a certain activity within a country. Even though the phrase “travel and tourism” are typically used together, these concepts are defined differently. The World Travel and Tourism Council (WTTC) (2016:4) defines travelling as the activities which only amounts to the arrivals of tourist as well as the number of nights’ accommodation paid for. The conceptualisation of this concept simplifies data collection as data can easily be obtained from ports and accommodation facilities. It does however not cover all the components of tourism such as the activities’ component which, *inter alia*, includes festivals, park visitations and historical site seeing. In other words, tourism is a broader concept, whereas traveling is merely a component of tourism. The benefits of tourism are the main basis upon which its importance is based.

Sustainable tourism development is defined by Amir, Ghapar, Jamal and Ahmed (2015:118) as the improvement of the social, economic and environmental aspects of a region through tourism activities. Telfer (2015:14) argues that tourism is a crucial aid to ensure regional development as it is a contributor of both economic growth and social progress. Various authors (Webster & Ivanov, 2014; Meyer & Meyer, 2015; De Vita & Kyaw, 2017) have highlighted numerous benefits achieved through the progress of tourism. The tourism sector is a labour-intensive sector (World Tourism Organization (WTO) & International Labour Organization (ILO), 2014:16) which offers various job opportunities in multiple areas. These areas are identified as backward linkages such as transportation, accommodation and entertainment (Sharpley, 2015:13). South Africa’s

Department of Tourism (2012:1) suggests that few entry barriers within this sector could simplify entry of new entrepreneurs. In addition, Sharpely (2015:12) indicates that there are no barriers in terms of international tourism trade which takes form of tariffs and quotas. Meyer and Meyer (2015:199) stated that the tourism sector as such facilitates the creation of employment; therefore, tourism is a plausible solution to the high unemployment figures faced by the South African economy.

In addition to job creation, development of infrastructure is a valuable benefit of tourism development as it could increase the productivity and living standards in a region (Yoshino & Nakahigashi, 2018:101). Infrastructure development is a significant determinant of a tourism destination's success and plays a significant and crucial role in the performance of an economy as well as ensuring efficient performance (Nkosi, 2017). The expansion and improvement of infrastructure is said by Shahzad, Shahbaz, Ferrer and Kumar (2017:223) to be a crucial component of development in the tourism sector. Breidenbach and Mitze (2016:390) state that infrastructure determines the performance and efficiency of a destination and leads to regional economic development within certain regions. A study conducted regarding the interaction between economic development and port logistics in the Jiangsu province in China concluded that port logistic development leads to an elevation of regional development (Khan, Qianli, Songbo, Zaman, & Zhang, 2017:126). Nonetheless, while investments are required to ensure sectorial improvements and benefit procurement, South Africa has a poor reputation regarding maintenance of infrastructure. Jackson (2015) states that South Africa's poor infrastructure inhibits its ability to achieve economic growth and development. The tourism industry of South Africa, having easy entry, can be discouraged by insufficient infrastructure; for example, the poor condition of South Africa's roads, railways and air travel infrastructure. Johnson (2017) explained that due to the mismanagement of South African Airways (SAA) travel costs are continuously rising without leading to any sort of financial gains. This will most probably not only reduce the frequency of flights but also the trust in South Africa as a reliable and affordable destination for both national and international tourists.

Another benefit of tourism is its potential to generate income on an international level. The tourism industry receives income locally, and also internationally, which makes tourism a component of the export industry (Samimi, Sadeghi & Sadeghi, 2013:59). Sharpley (2015:7) argued that the income generated from foreign exchange is a valuable benefit from the activities within the tourism industry and is a significant source of income for developing countries. In particular, tourism facilitates capital flow from developed economies to developing economies. Sharpley (2015:12) points out that wealth distribution from developed to developing economies is made possible from the expenditure on tourism products. In addition, the tourism sector can be categorised as elastic

due to the reality that positive growth can be accounted for in an economic downturn (De Vita & Kyaw, 2017:423). Culiuc (2014:5) states that the elasticity between GDP and tourism is very sizable in the tourist destination in terms of the components' bilateral relationship. These benefits of tourism justify the allocation of resources to this sector to increase competitiveness, which enhances the sector's ability to attract tourists to a specific destination.

Notwithstanding, negative consequences could arise from tourism development through tourism-related activities that may cause social, economic and environmental issues (Almeida-García, Peláez-Fernández, Balbuena-Vázquez & Cortés-Macias, 2016:259). Webster and Ivanov (2014:138) recognise that leakages exist within the tourism sector through foreign workers' income that is locally generated, but which is returned to their homeland and shareowner's profits and that these leakages could possibly lead to the decrease in financial advantages for both residents and visitors. Furthermore, seasonality gives rise to certain issues in a tourist destination where particular occupations are merely temporary, outdoor parks are dependent on seasonal changes such as rain seasons and snow (Connell, Page & Meyer, 2015:285). The most pressing repercussion of tourism expansion is the influence on the environment. Dependency on a specific region could lead to the exhaustion of natural resources in an environment (Junaid & d'Hauterres, 2017:281). However, effective management and definite sustainability objectives can be used to counter these consequences.

2.2.2 Competitiveness

Competitiveness is a hotly debated topic by various researchers such as Porter (1990), Ritchie and Crouch (1999), Dwyer and Kim (2003), Besley (2005) and Camagni (2017). These authors aimed to define, identify, analyse and quantify this concept and its influential determinants within their respected study fields, which include tourism, economics, politics and management sciences. Competitiveness has various definitions depending on the organisation type, author and study field. The term competitiveness is characterised as complex and broad (Li, Song, Coa & Wu, 2013:247; Santos, Ferreira & Costa, 2014:73). This, according to Crouch and Ritchie (1999:140) is the main reason why there is difficulty in theorising about competitiveness in such a way that it is in accordance with all authors even though this concept is very common and popular amongst scholars and economies. Santos *et al.* (2014:73) identified the two main conceptualisation outlooks of competitiveness as: relatively, which aims to analyse a destination's competitiveness against another and a multidimensional manner through which competitiveness models are created to analyse the different influential determinants.

In their investigation of defining competitiveness, Feurer and Chaharbaghi (1999:58) concluded that competitiveness is more relative than absolute. Meaning that competitiveness is dependent

on various external and internal determinants that are not free of or independent from the direct and indirect effects of these determinants. The leading author on competitiveness, Michael Eugene Porter (1990:75) stated that competitiveness is greatly connected to productivity. Therefore, when a country's capital and labour are utilised efficiently, it could lead to an increase in standards of living. Although Porter formulated his theory on competitiveness as far back as the 1990's, his view remains valid today. From this, productivity is defined as the value of outputs produced by means of inputs, capital and human resource allocations. Furthermore, productivity dictates wages of employees as well as the returns of stakeholders. In addition, Feurer and Chaharbaghi's (1999:49) definition stated that competitiveness is reliant on the worth of clients and investors as well as on financial performance. All these determinants shape an organisation as well as its staff's capacity or promise of technological use to execute strategies and policies, but also responding capability in fiercely competitive conditions. Crouch and Ritchie (1999:140) state that competitiveness is rather determined by strategies than the availability of resources and its ability to perform well in certain conditions while delivering positive economic growth and standards of living. When taking national competitiveness as the true definition, regional competitiveness can be defined as the potential of a region to produce successful outcomes. Charles and Zegarra (2014:5371) wrote that competitiveness is the calculation of how competitive an organisation is in relation to another based on the unit price. Within sectors, various markets exist that function as determinants of the entire sector's performance.

A market is identified by Pindyck and Rubinfeld (2013:9) as the collective interactions between the supplier and purchaser that influences the price of certain goods and services. Tourism therefore also has markets as it consists of potential buyers, i.e. the visitors – and suppliers i.e. the tourist destination, who interact with one another to determine the price of tourism related products. A market can either be perfectly competitive or monopolistic (imperfect). In perfect competition the market consists of multiple sellers and buyers where their interactions have no influence on the price of certain goods and services. On the other hand, a monopolistic market (imperfect competition) consists of a single supplier and multiple buyers and the monopolist has power of price determination (Nikaido, 2015:3). These competitive tourism markets are found within each tourism destination specific to the region.

The idea of competition is also applicable on a regional level (Malecki, 2004:1102). A region is identified as a geographic area which is not always limited to physical borders (Ketels, 2013:270). Thus, a region could be (i) an area that is limited to partition such as municipal districts or (ii) an area that stretches over borders (provincial and national) such as a national park that stretches over more than one district. Notwithstanding the massive quantity of existing literature on tourism and the competitiveness determinants of destinations, there remain uncertainty and scarce

agreement regarding the definition of a competitive destination (Knežević Cvelbar, Dwyer, Koman & Mijalić, 2016:1041) together with the fact that destinations are a multiplex network of attractive activities and residents (Koo, Shin, Gretzel, Hunter & Chung, 2016:566) which introduces difficulty in defining a competitive destination.

Leading researchers in destination competitiveness, Crouch and Ritchie (1999:144) identified destination competitiveness as the capability of a destination to deliver encounters in terms of image and ethics that are equivalent to or surpassing that of other destinations. Destination competitiveness is described by d’Hauteserre (2000:23) to be a destination’s ability to constantly manage and better the destination’s market share. A destination is therefore considered competitive when it has the ability to secure and meet tourist arrivals and needs (Enright & Newton, 2004:339). Ritchie and Crouch (2003:24) define a tourism destination’s competitiveness as its competence to encourage visits through the provision of outstanding and pleasurable encounters to boost spending, increasing the life standards of locals but also safeguarding natural resources for decedents (Knežević Cvelbar *et al.*, 2016:1041). The WTTC (2017b) identified tourism sustainability as one of the most important objectives of a tourism destination. Goffi (2013:123) stated that in order for a tourism destination to be competitive, it must strive to be not only economical sustainable but must also strive for sustainability in terms of political, social, cultural and the eco systems. Du Plessis, Saayman and Van der Merwe (2015:2) stated that a destination is categorised as competitive when it has the capability to boost tourism spending, continuously attract more tourists and produce gratifying tourism related services while preserving the destination for coming times. In addition, Koo *et al.* (2016:563) assert that a destination is competitive if travellers receive more than sufficient encounters when travelling needs are satisfied, which is determined by the manner of tourism resource allocation and distribution. Mira, Moura and Breda (2016:94) wrote that a destination is successfully competitive when it ensures satisfactory encounters while also attending to the living standards of host residents.

In investigating the various definitions of destination competitiveness, it is clear that “*ability*” is a recurrent concept. The “*ability*” term is used in the sense that it portrays superiority (Abreu–Novais, Ruhanen & Arcodia, 2016:493). Knežević Cvelbar *et al.* (2016:1041) indicated that most of these definitions describing the competitiveness of a tourism destination involve a quantitative measure such as spending and cost discrepancies, but continuously include subjective (qualitative) measures such as the attractiveness that includes the climate and scenery. The definitions of a competitive destination therefore comprise the attraction component increases expenditure and in return, a higher GDP (gross domestic product) contribution, and finally– an increase in economic development (Webster & Ivanov, 2014:137).

Even though competitiveness is an objective of a tourism destination, scholars (Crouch & Ritchie, 1999; Sokhanvar, Aghaei & Aker, 2018:46) have highlighted the prosperity of the economy and residents as the most important objective of destination competitiveness. Crouch and Ritchie (1999:137) state that economic prosperity is generated through the accumulation of sound and stable wages and employment which ensures economic security. Thus, the term prosperity explains the economic situation where an economy can produce a sufficient and stable level of income and employment which will result in the development of residents financially and socially. The definition also covers concepts such as social, culture and environments (Crouch & Ritchie, 1999:138). Knežević Cvelbar *et al.* (2016:1041) state that prosperity, in terms of the environment and local people, is the main focus of tourism strategies, which are aimed to ensure the competitiveness of destinations.

Within these destination clusters could be found as a concentration of specific tourism-related activities. Fernando and Long (2012:78) stated that clusters within regions can also explain the degree of destination competitiveness. Charles and Zegarra (2014:5372) pointed out that sectorial clusters of networks are formed through the spill-over effect that competition has on main and assisting sectors. Clusters are defined as the concentration of interlinked firms, institutions and industries in a certain geographical area (Fernando & Long, 2012:78). The focus thus remains on the interaction between buyers and sellers, joint marketing efforts, skills development and training initiatives. A fitting example is Silicon Valley, California in the United States of America where innovation and idea sharing have led to stellar economic performance (Delgado, Porter & Stern, 2014:1787). Tourism clusters are thus a collection of attractions, goods and services relating to tourism that contribute to the competitiveness of a region. Delgado *et al.* (2014:1788) furthermore identified three determinants of cluster success: innovation and knowledge spill overs, labour market pooling and lastly, input-output linkages. Therefore, innovation, research, skills management and the workforce are important. Eisingerich, Bell and Tracey (2010:240) argue that innovation from industrial clusters will spill over into the country's overall economic performance. Fernando and Long (2012:79) noted that even though clusters exist naturally, investments within the cluster will assist the achievement of its full potential. Investment in a tourism cluster can include joint marketing strategies, infrastructure improvement and workshops by the public and private sector. Mira *et al.* (2016:91) believe that tourism clusters emerge as value added policy as they support the link between stakeholders in a specific geographical region.

2.2.3 Indices

The OECD (2008:13) identified indicators as helpful instruments which assist with comparing of the performance of nations. Maddala and Volo (2017:541) write that indicators assist in the evaluation of adjustments and tendencies which provide valuable information regarding deliverables and potential. Mazziotta and Pareto (2013:71) mention that no globally accepted procedure or system on the formulation of a composite index exists. Determinates of destination competitiveness can either be computed in a subjective or objectives approach (Goffi, 2013:124). Maddala and Volo (2017: 543) identify two types of indicators: firstly, sole indicators that are established through one variable and secondly, composite indicators that are established through two or more variables. Foa (2014:6) stipulates that during the selection of indicators, a choice should be made in considering the use of a few determinants to consider a more comprehensive approach by using various determinants. Selecting merely a few determinants could simplify understanding of the construction of an index (Foa, 2014:6). However, this could be problematic if the determinate chosen to explain the phenomenon is not relevant. On the other hand, when choosing the said various determinants, this could increase the validity of the index. Foa (2014:7) advises that the number of determinants used should be based on the strength of determinants in explaining the phenomenon. Therefore, when determinants do not definitely, accurately and significantly explain the phenomenon, a larger number of determinants need to be used. Mazziotta and Pareto (2013:69) identified the compensatory approach of formulating an index as the method where weights are not allocated to the determinants who enjoy equal significance. The OECD (2008:13) stated that the determinants used in a composite index can either be of a quantitative or qualitative nature when showing trends.

Mazziotta and Pareto (2013:71) assert that using several indicators as a tool is useful and much easier to formulate and explain than trying to find a single indicator to explain an occurrence or phenomena. Foa (2014:5) stipulates that the creation of composite indexes fires the conceptualisation and discussion concerning a phenomenon provide greater understanding. Mira *et al.* (2016:94) highlight the benefits of an instrument used to measure performance to supply information on the determinants that influence a traveller's decision to select a tourism destination. In addition, indexes can be used to certify the Strengths, Weaknesses, Opportunity and Threats (SWOT) of a certain tourist destination (Mira *et al.*, 2016:94). De Ayala (2012) argues that the global competitiveness ranking provides countries with a measure of strengths and weaknesses that affords an understanding to their status quo, which allows for improvement of strengths and limitations of weaknesses. In addition, it also serves as an indicator for investment and yields potential on an international level. Charles and Zegarra (2014:5372) stated that an index is an advantageous comparison tool for the competitiveness of regions thereby avoiding focusing

solely on national competitiveness as regions are likewise influenced by the forces of competitiveness.

The OECD (2008:14) summarised the advantages and disadvantages of composite indicators as:

Advantages; (i) easily outlines very complicated and compounded topics, (ii) simplifies explanations, (iii) assists in monitoring economies performance, (iv) lessens the noticeable number of determinants used without removing the determinants from the list, (v) highlights the core achievement matters of an area, (vi) stimulates responsibility and better communication between the private and public sector and (vii) allow elaborate dimensions to be compared. Notwithstanding the above advantages, there are disadvantages too: (i) a faulty and imperfectly formulated index sometimes conveys inaccurate policy ideas, which (ii) could lead to facile strategy conclusions; (iii) political determinants could have an influence on the personal classification of determinants; (iv) if not transparent, composite indicators could be misapplied as the tool is not statistically stale; and (v) could cause the formulation of inadequate and ill-suited strategies if a dimension's progress is not clear.

In addition, Foa (2014:5) points out that the construction of a composite index may promote various pitfalls. These pitfalls include the accessibility of data, the decision and construction of fitting indicators (Mazziotta & Pareto, 2013:67). Mazziotta and Pareto (2013:69) stated that compounded indices resulting in a single value for a specific area is sometimes rejected, especially when using a dashboard approach where different influential determinants can be selected to explain the occurrence of a single phenomenon. Foa (2014:6) indicated that determinants are questioned in terms of their reliability and how well they represent the phenomenon.

The OECD (2008:20) identified 11 steps that are required to be followed in order to formulate a composite index.

1. Conceptualisation: The reasoning behind the formulation of a theoretical framework is to supply an in-depth comprehension regarding the determinants chosen through the process of identification, defining and analysing.
2. Selecting data or indicators: Analysing the strengths and weaknesses of the determinants in terms of standards, reportage and applicability.
3. Here the strengths and weaknesses of each factor are analysed. Foa (2014:6) states that the selection of indicators is a crucial part in the process of developing an index.
4. Assign absent data: When data is incomplete, the missing values can be approximated. In addition, data outliers must be presented and analysed.

5. Multivariate investigation (of two or more variables): Examine data construction, distinguish between the different categories for the determinants listed which can be categorised together as they are statistically alike. Lastly, link the statistically established framework to the theoretical framework and include discussion on the dissimilarity.
6. Normalisation: The objective of this step is to provide variables which can easily be compared by identifying and applying acceptable normalisation methods and if required to produce scale modifications as well as alteration of extremely skewed variables.
7. Assign weights and complete summarisation of determinants: The weighting and summarisation of variables should be guided by theoretical structures. This should be done after the connection between determinants has been analysed.
8. Unreliability and responsiveness analysis: The robustness of determinants should be tested. This is done by reducing or increasing the number of indicators utilised, ensuring the selecting of weights and rankings and the summarisation of determinants are done.
9. Look at the data again: When applying an index, the trends of data will clearly indicate the performance of a factor in a certain region. This provides an indication as to the performance of a factor as excellent or poor. In addition, causality and correlation tests could be applied to further support the findings.
10. Connect determinants: The different determinants need to be linked to one another which will indicate the correlation between the selected determinants.
11. Presentation of results: The precise and simple interpretation of the results is crucial to ensure better understanding of the index.

In addition, Mazziotta and Pareto (2013:70) identified four steps for the formulation of a composite index;

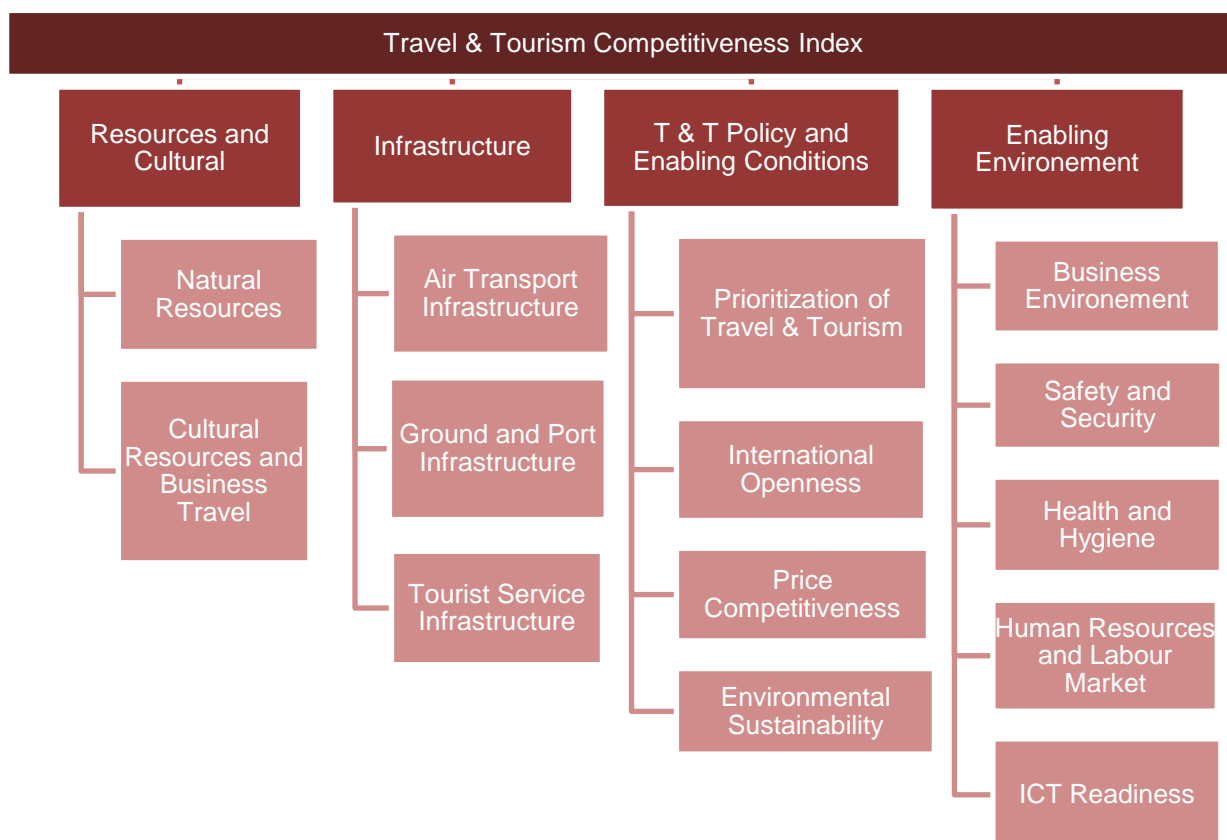
1. Providing theoretical background on the occurrence measured: By providing a theoretical background through explaining definitions and concepts, a deeper insight and understanding is developed. This will allow for accurate contrasting of an index and selection of influential determinants.
2. Identify the various determinants used: Determinants could either be categorised in groups or identified individually. These determinants should be selected based on their applicability, obtainability, statistical importance to name a few. This process involves analysing the connection of determinants and removing the facts with low connection to the research problem from the indicators list.
3. Standardise determinants: Determinants used need to be standardised to simplify the process of comparison before any statistical method is applied. This is done by converting different measuring units of determinants to a single unit. One of the most important reasons

for standardisation is that diverse determinants will influence the occurrence differently. In terms of tourism destination competitiveness, increased infrastructure development has a positive connection (Shahzad *et al.*, 2017:223) whereas poor, basic infrastructure has a negative connection to the success of a destination. Methods of standardisation include the designation of a specific ranking unit and using the minimum–maximum modification approach.

4. Summation of normalised determinants: Finally merging the determinants to complete the formulation on a composite index, which is done by combining the weights and rankings of each factor.

The World Economic Forum (WEF), creator of the Travel and Tourism Competitiveness Index (TTCI) explained that the index serves as a quantification for components and strategies which influence the tourism industry's development as sustainable or not, resulting in the level of progress and competitiveness of a nation. Figure 2–1 represents the indicators used in the TTCI of the WEF, the main instrument currently used to investigate the competitiveness of a nation in terms of its tourism.

Figure 2–1: Travel and Tourism Competitiveness Index Framework



Source: WEF (2017a:XIV)

The four pillars used in the TTCI are (i) enabling environment; (ii) travel and tourism policy and enabling conditions; (iii) infrastructure and; (iv) natural and cultural resources (Maravic, Gracan & Zadel, 2015:120; Mira *et al.*, 2016:93). The 14 determining factors of a country's tourism competitiveness are categorised within these four pillars resulting in 90 singular indicators. The WEF (2017a:XIV) stated that the performance of each individual factor is analysed for 136 countries. Thus, this index includes a comprehensive analysis on the competitiveness of a tourism destination on a national level. The competitiveness of a tourism destination is dependent on the level of management in these areas (Acha–Anyi, 2014:26). Very limited research exists on the development of a Regional Tourism Destination Competitiveness Index and does not exist for South African regions. Therefore, the formulation of a regional competitiveness index could provide empirical understanding into the current workings of tourism destination. The UNWTO (2017a:18) constructed a tourism confidence index which evaluates the confidence of private and public organisations in the tourism industry. This survey produces quarterly results for the perceived performance and prospects of tourism in certain regions and sectors.

2.3 THEORIES RELATING TO CONCEPTS

2.3.1 Tourism

2.3.1.1 Tourism–Led growth hypothesis

Theoretically, the importance of the tourism sector is rationalised in theories such as the Tourism–Led Growth Hypothesis (TLGH), Okun's law and Butler's Life Cycle theory. There are four views on the relationship between development in the tourism industry and the economic growth of a country. The first view is explained by Shahzad *et al.* (2017:224) as the TLGH which highlights tourism as a significant contributor of overall economic growth in the long–run. Jaafar, Rasoolimannes & Lonik (2015:17) state that this tourism tool is used to encourage economic activity within both developed and developing regions. Therefore, countries have a responsibility to determine the empirical validity of the TLGH to assist in the effective allocation and redistribution of resources to ensure the ongoing development of tourism (Shahzad *et al.*, 2017:224). Hye and Khan (2013) applied a rolling bound test to Pakistan from 1971 to 2008 and found that the tourism spending Ganger causes economic growth over the long term. In Malaysia, from 1975 to 2011, Tang and Tan (2015) studied the relationship between tourism and economic growth and concluded that the TLGH is valid. De Vita and Kyaw (2016) investigated the link between economic growth and tourism development for 129 countries by means of a panel system generalised method–of–moments and concluded that tourism development has a positive impact on economic growth. Narayan, Sharma and Banningidadmath (2013) studied the TLGH

for the Pacific Island countries over the period 1985 to 2015 by making use of a regression method. The study found that tourism development causes economic growth.

In the second view, the Growth–Led Tourism Hypothesis (GLTH) suggests that sustainable economic growth promotes progress in the tourism industry (Shahzad *et al.*, 2017:224). Suresh and Senthilnathan (2014:15) analysed the relationship between tourism expansion and economic growth for Sri Lanka from 1977 until 2013 by means of a Ganger causality test and concluded that economic growth has a larger impact on tourism development than vice versa.

A third view on the relationship between economic growth and tourism is the bidirectional relationship between them. Gwenhure and Odhiambo (2017:34) explained that this phenomenon occurs when both tourism development and economic growth has a positive effect on one another. Seghir, Mostefa, Abbes and Zakarya (2015) explored the relationship between economic growth and tourism’s progress for 49 countries by implementing the Granger causality testing method. From its findings, this study concluded that a bidirectional relationship exists between tourism progress and economic growth. By implementing a panel Granger–causality method, a study by Chou (2013:230) on the correlation between tourism development and economic growth for 10 transition countries from 1988 to 2011, found that for the Czech Republic, Poland, Estonia and Hungary a bidirectional relationship exists between the variables tourism and economic growth.

Fourth, neutrality is the condition where economic growth and tourism development have no influence on each other. Palamalai and Kalaivani (2016) applied the Granger causality test to analyse the relationship between economic growth and tourism development in India over the period 1995 to 2017. Moreover, Palamalai and Kalaivani (2016:44) found that over the short–term, tourism development and economic growth in the case of India were not linked to each other and that neither the TLGH nor the GLTH can be validated for India. Brida, Monterubbianesi and Zapata–Aquirre (2011) who studied the interaction between economic growth and tourism progress in Brazil from 1965 until 2007 by utilising a time series analysis, found no interaction between the variables. The end result indicated that no relation could be validated between variables. Despite tourism mostly being advocated as having a positive effect on an economy, some studies found this not to be true. Deng, Ma and Cao (2014) found that tourism resource development had a negative impact on the economic growth of China as it led to crowding–out of commercial production and human capital as well as causing the existence of poor institutions. The explanation regarding the decline in the quality of institutions is that the government invest in directly link tourism institutions leaving other such as health in a poor condition. The results were gathered by using panel data for 30 provinces in China for the time period 1987 to 2010.

2.3.1.2 *Export–Led growth hypothesis*

In a similar manner, the TLGH, the Export–Led Growth Hypothesis (ELGH) explains the link between a certain component – exports – in the economy and the performance of the economy in terms of GDP contribution. The ELGH stipulates that exports of an economy will contribute to the increase in the economic growth of the economy through the various spill–over effects (Othman, Ismail & Ghani, 2017:34; Brown, 2015:3). Brown (2015) tested the validity of the ELGH for Jamaica over the period March 1997 to December 2014 by implementing an Autoregressive Distributed Lag (ARDL) bounds testing method. The results indicated that in the case of Jamaica, a one percent elevation in exports will translate into 0.9 percent increase in economic activity in the long–run. This demonstrates that a significant and positive relationship exists between the variables GDP and exports for Jamaica. Akinboade and Braimoh (2010:154) indicated that the export–led growth hypothesis links to tourism and economic growth in the sense that an increase in GDP is explained through trade and exports, which also relates to tourism activities.

2.3.1.3 *Okun’s law*

The well–known theory of Okun’s law is used to explain the direction and link between the economic growth and unemployment. Okun’s law explains that economic growth would be supported by an increase in employment (Altig, Fitzgerald, Rupert & Rabin, 2002:135). The WTTC (2017a:4) stated that during 2016 the global tourism sector was responsible for the employment of 716 000 people reflecting to a total employments of 4.6 percent. During 2016, the tourism sector of South Africa contributed nine percent to this country’s GDP (Stats SA, 2016). This relates to Okun’s law with regard to the benefits of employment and economic growth in the South African tourism sector.

2.3.1.4 *Butler’s tourism life cycle*

The Product Life Cycle (PLC) model was first utilised by Levitt in 1965 and explains that just as in the case of an individuals, a product holds a life cycle that moves through different stages (i) marketplace expansion, (ii) growth, (iii) maturity and (iv) decreasing (Ho & McKercher, 2015:145). After the formulation of the PLC model, another model was introduced to explain the life cycle of a tourism destination. The Tourism Area Life Cycle (TALF) model formulated is connected to and derived from the PLC model (Baum, 1998:167). The TALC model of Butler (1980, 1990, 2006, 2009) originated from the view that holiday retreats are products which will mirror the same development trend as other products possessing a PLC (Ho & McKercher, 2015:149). Thus, the model assumes that destinations are continuously changing (Brandão, 2014:51). Butler (1980:6) states that the TALC model is linked to the PLC model in the sense that a product will at first

experience slow-paced sales, moving towards fast sale rates then enter a period of stabilisation and later, the decline stage. In terms of tourism, at first this may be a destination with very limited local understanding and facilities, while later, through improved destination brand marketing, arrivals will increase (Butler, 1980:6). Therefore, for a tourism destination to be competitive, it needs to develop, but is limited to fixed capacity levels to ensure the competitiveness and attractiveness of a destination. The assumption that an increase in the number of travellers visiting a destination over the maximum volume levels will result in the decrease of the standard and of how appealing the destination is, is included in this model (Ho & McKercher, 2015:149). This model was applied by Hovinen in 1982 and it established that in the case of Pennsylvania, tourism progress corresponds with these three stages of Butler's model (Santos *et al.*, 2014:74).

2.3.2 Competitiveness

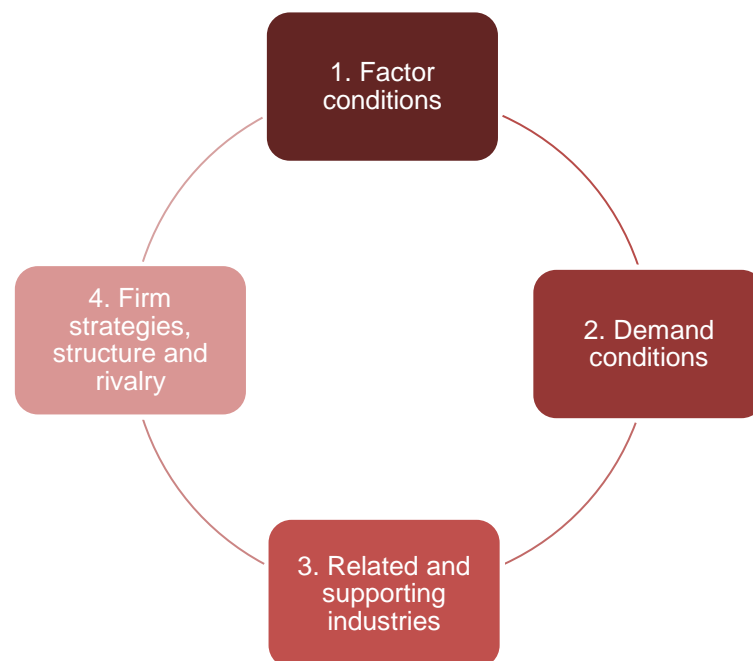
The two concepts relating to destination competitiveness are competitive and comparative advantage. The comparative advantage concerns the availability of the resources of a destination, while competitive advantage refers to the capability of a destination to efficiently utilise certain resources. The Comparative Advantage Theory of Ricardo (1817) explains that a comparative advantage concerns resource obtainability (Koo *et al.*, 2016:563). Gerber and Weder (2017:45) explain the Ricardo's Comparative Advantage Theory, which states that a nation that has the lowest production cost in a certain good or service should specialise in the production of that specific good or service. Porter (1990) expanding on this includes (i) capital, (ii) physical resources, (iii) knowledge, (iv) human resources, (v) historical and cultural resources and (vi) infrastructure as the groups which describes a determinant's endowment in a destination which can either be natural or man-made. Furthermore, these resources can be grouped as exhaustible and inexhaustible resources (Porter, 1990:77). Mira *et al.* (2016:92) write that a destination's attractiveness is greatly influenced by its comparative advantage. Therefore, a comparative advantage is believed to be gained through the accumulation and deployment of resources. While the comparative advantage theory considers resource availability, the utilisation of these accessible resources is connected to the Competitive Advantage Theory. Chiu and Yeh (2017:627) proposed that a country could possibly have competitive advantage in tourism if its net revenues from tourism are positive and a comparative disadvantage when net revenues are negative.

Second, Porter's (1990:75) Competitive Advantage Theory states that innovation through advanced methods and technology is an important determinant of competitive advantage as it can generate fresh segments and possibilities in the market. Koo *et al.* (2016:563) suggest that even though certain tourist destinations do not have a comparative advantage in terms of organic

resources, having a competitive advantage, by utilising the minor available resources will effectively lead to the highly competitive nature of a destination. For example, the measurement of certain areas against one another. In conclusion, the comparative advantage theory examines accessibility of resources while the competitive advantage theory addresses the utilisation of these resources. Furthermore, Porter (1990:75) stated that firms can only be sustainable through innovation when innovation is continuously bettered, which is steered by clustering.

The Five Forces of Competition (FFC) Model formulated by Porter (1980) explained the core forces that are the source of a company's competitiveness. These micro level forces are identified as (i) substitutes, (ii) entrants, (iii) suppliers, (iv) buyers and (v) rivals. Subsequently, Porter (1990) constructed the Diamond Model of Competitiveness, which identified certain determinants for an organisation's competitiveness. (Acha–Anyi, 2014:24). Crouch and Ritchie (1999:140) explain that for companies within a nation's tourism sector, the FFC model and when considering the competitiveness between international tourist industries, the Diamond Model of Competitiveness could be best suited for the application. Although, the diamond model was designed to be utilised as a tool to compare the level of competitiveness of countries, it could also be applied on a regional or provincial level. Figure 2–2 schematically represents the diamond model constructed by Porter (1990) which highlights the four “attributes” for national competitive advantage.

Figure 2–2: The determinants of national advantages: The diamond model



Source: Porter (1990:78)

Figure 2–2 references the four attributes which are explained by Porter (1990:75) as follows. Firstly, factor conditions are the skills and knowledge of labour (human resources), infrastructure and production factors. Secondly, demand conditions consist of the demand from local markets regarding a certain product. Thirdly, related and supporting sectors are evaluated in their emergence or absence and whether they are globally competitive and fourthly, strategy, structure and domestic rivalry of a firm.

In the publication of *“The competitive advantage of nations”*, Porter (1990:73) explains that a nation’s competitiveness is determined by its sectors’ ability to be continuously advancing and be innovative. In terms of tourism, competitiveness can be defined as a destination’s ability to be internationally competitive. To remain competitive, destinations need to adjust to the sophisticated tourism industry by continuously advancing. Michael Porter’s popular “diamond of national competitiveness” framework argues that international competitiveness is influenced by the strength of an economy in terms of competitiveness drivers influenced by demand and factor conditions, linked and supporting sectors as well as a company’s structure, rivalry and strategy (Enright & Newton, 2004:778). According to (Knežević Cvelbar, Dwyer, Koman & Mikalić, 2016:1042) there is a clear link between the terms productivity and competitiveness as these terms explain each other. Porter’s (1980; 1990) model of competitiveness was the benchmark of various destination competitiveness models (Bulatović & Rajović, 2015:24).

2.3.2.1 *Theories relating to tourism destination competitiveness*

The theoretical and practical significance of Tourism Destination Competitiveness (TDC) has been validated by various researchers (Richie & Crouch, 1999, Dwyer & Kim, 2003) who conceptualised the concepts, while other researchers (Enright & Newton, 2004; d’Hauteserre, 2000) focused on the empirical validation of the model. A diverse number of theoretical approaches and viewpoints exist on the concept of destination competitiveness. However, the work of Ritchie and Crouch is still regarded as the most extensive.

Crouch and Ritchie (1999:143) argue that a destination with limited resources, but which are effectively used, will be more successful than a destination that has a significant amount of resources but which are barely used. In the paper *“Tourism, competitiveness and societal prosperity”*, Crouch and Ritchie (1999) constructed a conceptual model based on Porter’s (1980) model of five forces of competitiveness, which explains a destination’s competitiveness.

The conceptual model mentioned above, which was developed by Ritchie and Crouch (2002, 2003) is currently one of the best-known models to measure the competitiveness of a tourism destination. This model identifies the 36 features that translate into five central determinants in

terms of competitiveness (Goffi, 2013:123). In a tourist destination that achieves a “*mature*” stage of development, primary infrastructure is sometimes not attended to and therefore falls behind the required level, eventually causing difficulty in competing (Santos *et al.*, 2014:74). Ritchie and Crouch (2003) wrote that a destination’s infrastructure plays an important role in the decision-making process of choosing a tourism destination. Mira *et al.* (2016:95) stated that the actual influencing determinants of destination competitiveness represented by the competitiveness model of Ritchie and Crouch (2010) are rivalry, environment, planning strategies, tourism ventures and resources. These models, however, have limitations since they are entirely illustrative. These models does not provide empirical values in the form of weight allocation which indicates the significance of a factor and the data collection (Santos *et al.*, 2014:74). Despite such models being very complex, they do not deliver evidence and descriptions on observables. Crouch and Ritchie (1999:146) and Ritchie and Crouch (2010:1052) explained the six determinants in the conceptual model of destination competitiveness as follows:

- Micro environment

The competitive micro environment of a destination consists of various components of the tourism industry which includes the tourism region, coordinators and shareholders (monetary and media organisations, residents in the area and the authorities), tourism goods and services market, travel agents and operator’s suppliers. These components form the direct environment of the industry. Wong and Teoh (2015:206) indicated that Crouch’s and Ritchie’s (1999) model categorises Porter’s (1980) five forces (newcomers, buyers, suppliers’ competition and substitutes) as the micro environment determinants, which can be used to determine the competitiveness of a firm within a specific industry. Firm policy, demand, supporting or promoting industries can be used as tools to determine the competitiveness of an industry such as the tourism industry.

- Macro environment

The tourism industry is also greatly affected by international influences. These include the various determinants in the international economy, such as interest and exchange rates, political, environmental and social events that are deliberate and/ or sudden. According to Porter (1990) random phenomena and authorities are identified as follows; (i) random events can be political (terrorist attacks), environmental (hurricanes) or economical (sudden depreciation in currency) and authorities can influence an industry’s national advantage (Crouch & Ritchie, 1999:141).

- Qualifying determinants

The model identifies (i) locality, (ii) dependencies, (iii) security and (iv) value cost as qualifying determinants. Therefore, the location of a destination could be relevant as its position determines

the obtainability of certain resources and the security is mainly an important determining factor as visitors will only visit a destination when their safety and security is ensured.

- Management of a destination

Management of a destination requires not only time and money but also knowledge regarding the destinations components (i) marketing is a tool used to improve the attractiveness and knowledge regarding a destination's resources, (ii) information, (iii) organisation and (iv) resource stewardship. This will assist a destination in its implementation of strategies.

- Core resources and attractions

When considering a destination, the appeal of the destination plays an important role in the decision-making process. Even though the key attraction and resources do not yield returns directly, these remain the underlying reason why tourists choose a certain destination. These resources are identified as: (i) physiography, identifying the destination's natural environment such as the weather and scenery, (ii) history and culture, (iii) market connections, (iv) unique events and (v) tourism superstructure, which is the infrastructure required to ensure satisfaction of tourism needs in terms of accommodation, food and tourism activities and therefore include parks and restaurants (Koo *et al.*, 2016:564).

- Supporting elements and resources

In order to be successful and competitive, the tourism sector requires a basis on which it could be formed. This foundation is a collection of (i) infrastructures, (ii) facilitating resources, (iii) enterprises and, (iv) accessibility. However, Crouch and Ritchie's (1999) model did not include Information and Communication Technology (ICT) as a determinant of destination competitiveness as it was not as applicable then as it is in current times, where technology is a requirement to survive in the current technological competitive market of tourism.

A study by Bulatović and Rajović (2015:31) ranked these sub-groups in terms of their importance in north-eastern Montenegro as first: destination management (3.28 out of five); second: qualifying determinants (3.07 out of five); third: destination policy, planning and development (2.64 out of five); fourth: basic resources and attraction (2.58 out of five) and lastly: supporting factors (2.44 out of five). This indicates the order of the sub-groups, arranged from highest to lowest, carrying most significance in determining competitiveness in north-eastern Montenegro.

Taking these limitations into consideration, Dwyer and Kim (2003) built a substitute model on the concept of Ritchie and Crouch (2003) by adding tourism demand as an influential factor and also

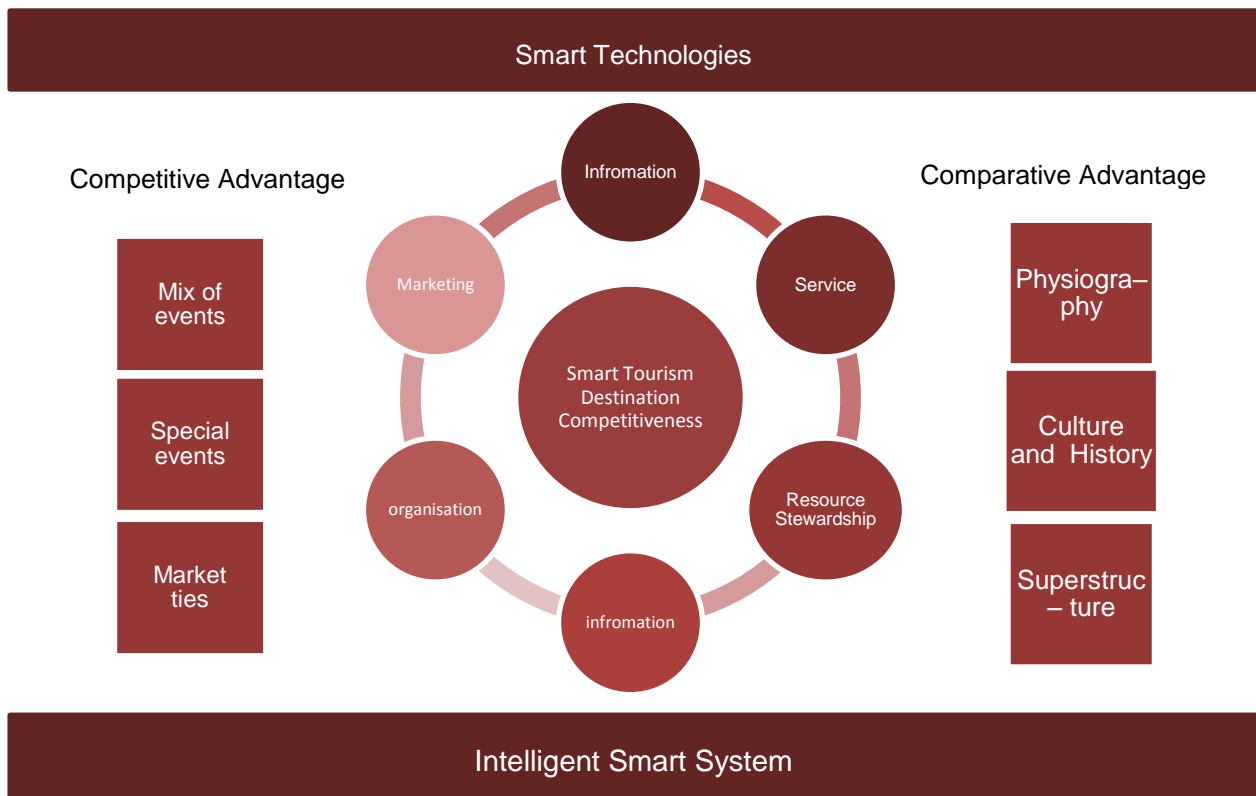
arguing that competitiveness is an intermediary goal, not the ultimate one. Mira *et al.* (2016:92) indicated the important determinants of the Dwyer and Kim (2003) model to be the accessibility of resources, giving direction to a destination and global demand. The end goal of tourism is described in this model as ensuring prosperity in terms of social and economics, which can be quantified through travellers and living standards of citizens (Mira *et al.*, 2016:94).

Enright and Newton (2004) built their model on the work of Crouch and Ritchie (1999). Wong and Teoh (2015:207) stated that this expansion includes a broad scope of company–related factors in the determinant namely supporting element and resources which are management and guidance of a destination and the permitting and intensifying of determining determinants. Seven determining determinants of destination competitiveness categorised by Goffi (2013:124) are: (i) main sources of appeal and resources, which is the collection of cultural resources, natural resources, occurrences and activities available within a certain destination such as historical appeals; (ii) tourism related services; (iii) primary infrastructure; (iv) required circumstances and assisting determinants; (v) progress, planning and strategies of tourism; (vi) management of destinations and (v) tourism demand. Thus, Enright and Newton (2004) focussed on the ability of a tourism destination to gratify tourists’ needs as an important determinant of competitiveness. Bulatović and Rajović (2015:24) suggest that this model focuses on tourism specific factors as determinants of a tourist destination’s competitiveness. In addition, Buhalis and Amaranggana (2013:557) identified the “six A’s” which determine a destination’s success:

1. Attractions being both natural (flora and fauna) and man–made sites (recreation parks and festivals)
2. Accessibility of a destination is determined by its transit network
3. Amenities are the various products offered to facilitate tourism activities including accommodation and food
4. Available packages or services directly to tourists by liaison
5. Activities which are the main reason why tourists choose a certain destination.
6. Ancillary services are the day to day services which are not primarily deliberate for the use of travellers but are required to ensure an acceptable experience such as the banking system and health care.

Koo *et al.* (2016) formulated a smart tourism destination conceptual model which is based on Crouch and Ritchie’s (1999) tourism destination competitiveness model, illustrated in Figure 2–3 below.

Figure 2–3: Smart tourism destination competitiveness model



Source: Koo *et al.* (2016:570)

Figure 2–3 explains the combination of certain determinants dictating the brilliance of a tourism destination. Within this model Koo *et al.* (2016:570) identify two categories of previously mentioned determinants: determinants consisting of competitive and comparative advantages. In addition, technology carries a significant weight in determining the allure of a tourism destination linking the success of a tourism destination to the availability and use of technology.

Charles and Zegarra (2014:5371) found a positive relationship between long–run economic growth and competitiveness. In addition, Webster and Ivanov (2014) studied the relationship between competitiveness and the contribution of tourism to economic growth for 131 countries by means of a cross–sectional analysis. Webster and Ivanov (2014:139) found that there exists a notable contrary relationship between the Travel and Tourism Competitiveness Index and tourism contribution to economic growth. Therefore, if a destination has highly competitive levels in terms of the tourism sector, the sector's contribution to economic growth will decline. This also includes the economy's magnitude, country's tourism GDP capacity and the wealth of citizens.

2.4 EMPIRICAL EVIDENCE ON DETERMINANTS

Determinants are the factors that will affect the end result or essence of something (OECD, 2008). Li *et al.* (2013:247) write that a destination should transform these potential beneficial

determinants into economic earnings to be regarded as competitive. Crouch and Ritchie (1999:142) asserted that given the fact that a visitor travels to a certain destination in search of encounters, one of the most significant determinants of appeal are a destination's factor conditions. Certain situations are required by Mira *et al.* (2016:90) to ensure that a destination is competitive; these situations include the organisation of the destination, recurrent conditions and resource obtainability. The competitiveness of the tourism industry forces tourism destination to market a distinctive identity, product and experience (Chen & Phou, 2013:269).

A study by Khin, Daengbuppha and Nonsiri (2014) investigated the different determinants of destination competitiveness for Bagan, Myanmar. This study used questionnaire data analysed by means of an importance–performance analysis for January 2014. The study indicated that the top three determinants are first, cultural and historical second, friendliness of residents and third, scenery. Notwithstanding, the least important and least competitiveness determinants are first: scope of goods; second: scope of nightlife entertainment and third: information technology (IT) used. With a focus on the importance of a determinant to achieve tourism destination success, the highest ranked determinants in order from most to least, are: (i) cultural and historical, (ii) friendliness of residents and (iii) scenery. However, Khin *et al.* (2014:57) also indicate the least important determinants in achieving competitiveness as, (from least important): (i) scope of shopping items, (ii) scope of nightlife entertainment and (iii) traditional crafts and arts.

Goffi (2013) expanded on the works of Ritchie and Crouch (2010) by empirically analysing the various indicators of a destination's competitiveness through a principle component analysis (PCA) for the "Italian destinations of excellence". This test will indicate the key determinants of destination competitiveness. The study of Goffi (2013:126) found that in the subsection "natural resources" the determinants carrying the highest PCA value of 9 is the historical and cultural resources followed by gastronomy with a PCA value of 8. Within the subsection of "natural resources" the least PCA value is 3 which is appointed for the following determinants; entertainment, shopping and holiday activities. Within the second subsection "general infrastructure" a PCA value of 2 was given for all of the determinants such as transportation and communication networks. The third subsection "tourism planning, policy and development" a PCA value of 13 was given to three determinants: clarity of policies for employment, community upliftment and the public's dedication to ensure that tourism effects on the economy is amplified. Within the subsection of "destination management" the determinant traveller's satisfaction through management was given the highest PCA value of 11 followed by market division and a destination locality. The fourth subsection "supporting and conditioning factors" the determinant; value for money carried the highest PCA value of 10 with the lowest PCA value of 2 appointed to

the distance between destinations. The fifth subsection “tourism services” provides a PCA value of 12 for the quality of tourism related services especially of accommodation.

Bulatović and Rajović (2015) investigated the different determinants of north–eastern Montenegro’s destination competitiveness from July 2012 to August 2013. The study found that the most important determinants of tourism destination competitiveness in north–eastern Montenegro as: (i) preserved nature, (ii) gastronomy, (iii) non–segregated cultural atmosphere, (iv) climate and (v) appeal of cultural heritage. This is not a surprising outcome as this region is extremely diverse in terms of ethnic structures. The importance ratings out of 5, were specifically (i) 4.96, (ii) 4.58, (iii) 4.44, (iv) 3.5 and (v) 2.58, confirming that the region is filled with various ethnic groups who have adopted and nurtured various beliefs, traditions and ways of life.

2.4.1 The effect of resources on tourism destination success

Lo, Mohamad, Chin, and Ramayah (2017:764) agreed to the definition of natural resources made by Ritchie and Crouch (1999) as the nature of key resources within a region. Resources found in a tourism destination include natural, cultural, technology, the labour force and entrepreneurship within the tourism destination. In their study, Bulatović and Rajović (2015:12) found that in the sub–section ‘qualifying and amplifying determinants’, the cleanliness of a tourist destination carries the greatest significance of all the determinants with a rating of 4.06 out of 5. This signifies the importance of the cleanliness and therefor attractiveness of resources in ensuring success in a tourism destination.

2.4.1.1 *Natural, cultural and historical resources*

Andrades and Dimanche (2017:363) contend that economies who have well–known and appealing resources will be able to sustain tourist inflows leading to financial growth in terms of income generated. This income can be distributed to other economic sectors (Andrades & Dimanche, 2017:363). Determinants of a destination’s competitiveness are traditionally influenced by image or attractiveness. This includes factors such as climate and the scenery (Enright & Newton, 2004:777). Lo *et al.* (2017:769) studied the relationship between a tourist destination’s competitiveness and the factors, cultural heritage, natural resources and special events, respectively, for the Sarawak River in Kuching, Malaysia, by means of PLS–SEM analysis and bootstrapping. The study concluded that a significant and positive relationship exists between: first, natural resources and TDC; second, cultural heritage and TDC; and third, special events and TCD. This is given through the empirical results from the path coefficient testing; which is first, the t–value of 6.158 and the probability below 0.01 (significant at 1 percent); second, the t–value of 2.066 and the probability below 0.05 (significant at 5 percent); and third, the t–value of

2.001 which has a probability below 0.05 (significant at 5 percent). This proves that a significant and positive relationship exists between each of these three variables and TCD.

Chin, Lo, Songan and Nair (2014) investigated the relationship between the dependent variable tourism destination competitiveness and the independent variables, natural resources, environmental conservations, infrastructure, environmental education and cultural heritage attraction for Ann Rais Longhouse Homestay in Sarawak, Malaysia. This study was undertaken by utilising a primary questionnaire source, analysed by means of a SMARTPLS (Structural Equation Modelling using Partial Least of Squares) (m3) through implementing bootstrapping and path modelling. In contrast, they found that there is no relationship between tourism infrastructure and the competitiveness of a tourism destination. A t-value of 0.574 shows that the probability of this is above a 10 percent significance level (Chin *et al.*, 2014:40). Therefore, the study summarised that tourism-related infrastructure does not contribute to the competitiveness of a tourist destination at a 10 percent significance level.

However, the abovementioned study by Chin *et al.* (2014) did not support the hypothesis that environmental education and environmental conservation have a significant impact on the competitiveness of a tourism destination. This is proven by the empirical result of the path coefficient and hypothesis testing which resulted in a t-value of 0.559 environmental education and 1.362 for environmental conservation. Cultural heritage includes traditions, living expressions and material manifestations (Lo *et al.*, 2017:765). Lawson and Roychoudhury (2016:822) found that the number of heritage sites as well as the economic freedom enjoyed by a country are positively interconnected or correlated to each other. In addition, Stetic, Simicevic, Pavlovic and Stanic (2014) established that, for the period January 2011 to March 2011, the second most highly ranked determinant for tourism-related business success was cultural and historical richness, with an average mean of 4.2936 out of five.

2.4.1.2 *Technology and innovation*

The Information and Communications Technology (ICT) sector has contributed to tourism by ensuring effective methods of tourism related firms (Buhalis & Amaranggana, 2013:554). Technology oriented destinations have been increasingly implemented to streamline tourism activities. Mira *et al.* (2016:93) wrote that the significance of the information and technologies system should not be disregarded as these systems are helpful to collect and analyse data and also assist in making choices. The ICT sector consists of three approaches namely the Internet of Things (IoT), end-user internet services and cloud services (Koo *et al.*, 2016:567). The IoT is responsible for the data gathering and investigation as well as network automation and cloud services are used to encouraged and simplification of data sharing between various

organisations. Finally, the services of end-user internet creates an environment where cloud services as well as the IoT operate through gadgets. Buhalis and Amaranggana (2013:554) alludes that ICT sector is an important contributor to the success of a destination as it assures the accessibility and pleasant experience of tourists and citizens.

A “smart tourism destination” is defined by Gretzel, Reino, Kopera and Koo (2015:41) as innovation creating infrastructure and technology which is top of the range and obtainable by everyone to ensure regional development to be sustainable. This will in turn better the interplay between and incorporation of tourist and a destination, its activities and facilities. A “*smart city*” is defined by Buhalis and Amaranggana (2013:554) as a region where technologies are embedded within the specific region. Instruments for the tourism sector has been provided through the development in ICT. Tourists can use their cellular devices to scout a tourism destination’s events, packaged deals and many other services provided by the tourism industry. Innovation is the ability to produce new, inventive ideas, methods and products (Charles & Zegarra, 2014:5375). A traveller’s encounters as well as the overall competitiveness of a tourist destination could be amplified through the implementation and application of technology (Buhalis & Amaranggana, 2013:554).

2.4.1.3 Labour and entrepreneurship

Even though Jaafar *et al.* (2015:18) assert that the possibility of establishing small business in the tourism industry is significant as these businesses can be founded with limited capital inputs and resources, some limitation factors are nevertheless present. Jaafar *et al.* (2015) investigated the limitations and features of rural tourism firms for the Kinabalu National Park, Malaysia. The study found that most of the limitations for small rural companies are: first, seasonal and climate adjustments; second, an absence of knowledge regarding tourism trends and opportunities; third, an absence of marketing skills with a mean of 3.68, 3.42 and 3.39 out of five respectively. This indicated that most of the respondents believed that these three determinants carry the most significance in causing limitations in the operation of small entrepreneurial firms.

2.4.2 The effect of infrastructure on tourism destination success

A study by Gül and Çagvatay (2015) analysed the effect of various shocks, such as the price of energy and tax rate on Turkey’s inbound tourism. The study utilises an IO-based (input–output) modelling structure which enables the diversification of direct and indirect effects. This is useful as the tourism sector consists of various sub-sectors. Gül and Çagvatay (2015:41) assumed that the decrease in energy prices would increase the prices in the tourism sector and therefore increase its demand. However, the study found that a 1 percent decrease in the price of energy

would cause a minor increase in the demand within the tourism, hotel and restaurants and transport sectors. In conclusion, the study states that price as a singular determinant is not a sufficient tool to encourage activity in tourism.

2.4.2.1 *Health and education*

The key determinant regarding individuals is their access and quality of health and education. This is one of many determinants stated by the WEF (2017a:12) as infrastructure development, government investments in the travel and tourism industry as well as health and safety also significantly impact countries' tourism competitiveness. This is also applicable to smaller regions such as provinces and districts. Charles and Zegarra (2014:5376) write that the determinant education, involves an individual's reading apprehension, mathematics accomplishments and the number of university graduates. Furthermore, the health factors to consider include the life expectancy, proportion associated with a health insurer as well as under-nutrition. Therefore, individuals play a key role in the performance of a destination as an increase in human capital to ensure high efficiency and innovation. Bulatović and Rajović (2015:28) stated that in terms of supporting factors for the north-eastern regions of Montenegro, that residents' hospitality is a crucial determinant of a destination's competitiveness as it was ranked first, with a rating of 4.2 out of five.

Short term activities draw tourists to undertake a temporary visit to a destination (Lo *et al.*, 2017:765). The study of Stetic *et al.* (2014) conducted an investigation into the competitiveness of Serbia's tourism business from January 2011 to March 2011. The determinants importance in ensuring competitiveness were analysed by means of ranking from one to five in a descriptive analysis. In their study Stetic *et al.* (2014) found that entertainment is the highest average ranking of 4.3119 out of five. In third place, gastronomy is ranked 4.2294 out of five.

2.4.2.2 *Communication, accommodation, food and beverages*

Stetic *et al.* (2014) allude that in terms of tourism specific firms' – such as accommodation facilities – success the key determinants are ranked as: first, the quality of services delivered in restaurants and accommodation as well as trade networks at a ranking average of 2.9725 out of five; second, the ability to host conferences and conventions at a ranking average of 2.9083 out of five; third, the quantity and condition of conferences and conventions at a ranking average of 2.8624 out of five; fourth, the condition of accommodation facilities at a ranking average of 2.7523 out of five; fifth, quality and obtainability of tourist organisations at a ranking average of 2.6422 out of five. UNWTO (2015:5) explains that tourist activities encourage spending on various facets of tourism, which includes gifts expenditure, accommodation and food and beverages to name a few.

2.4.2.3 *Transportation*

Even though a destination has resources available, these resources should be effectively managed and intelligently converted into tourism goods (Andrades & Dimanche, 2017:364). Charles and Zegarra (2014:5376) identified tourism, reporting (conveying of information between travellers and facilities or organisations through use of cellular devices and the internet), transit (quantity and density for land, air travel), roadway system (distance and density of national and regional roadways) and electricity (production and use of electricity) as the main infrastructural components within regions. Improvement of the transportation system could enhance efficiency and decrease travel cost for both organisations and tourist which could result in a better visitor experience and increased competition (Charles & Zegarra, 2014:5376). As such, infrastructure has a significantly active role in the performance of a region, especially in terms of tourism destinations through an increase in productivity.

2.4.3 **The effect of economic impacts on tourism destination success**

2.4.3.1 *Productivity*

Li *et al.* (2013:247) pointed out that including the economic features of tourism is crucial as it is the key to a destination's competitiveness. Despite some tourism literature excluding productivity as a significant contributor to a destination's competitiveness, productivity is a crucial component to ensuring the success of a tourism destination. Porter (1990) argues that productivity is the key to ensure state competitiveness on a state level (Knežević Cvelbar *et al.*, 2016:1041). Charles and Zegarra (2014:5375) included job creation as a secondary pillar of the structure of regional competitiveness, which includes the number of jobs available, salary fairness and job security as important factors in determining the success of job creation in a region. Karalkova (2016:12) is of the opinion that education plays an important role in providing satisfactory services, experience and proficiency, especially in rural tourism destinations.

2.4.3.2 *Goods and services*

Price elasticity of tourism demand is a useful indicator regarding tourists' willingness to pay more for a similar product (Seetaram, Forsyth & Dwyer, 2016:67). According to Seetaram *et al.* (2016:66) a distinction can be made between two forms of tourism costs: transport to and from product cost at a destination. Li *et al.* (2013) examined the price elasticity of Hong Kong as compared to its' rivals as a tourist destination by means of an AIDS (almost ideal demand system) model. The results indicated that South Korea has expenditure elasticities of between 1.017 to 1.763, which are classified as a luxury good, while Hong Kong's expenditure elasticities are

classified as a necessity for countries such as Taiwan, the USA (United States of America) and UK (United Kingdom) (Li *et al.*, 2013:251). Furthermore, the demand for tourism in Hong Kong and Macau is more cost sensitive than in South Korea and Singapore. Seetaram *et al.* (2016:67) stated that arrivals patterns provide assistance in the formulation of policies relating to tourism with regard to gathering information on the spending habits of tourists. The price of tourism goods and services influences the expenditure by tourists in certain tourist destinations. Li *et al.* (2013:247) point out that tourist spending is linked to the competitiveness of a destination. This statement is in agreement with Ritchie's and Crouch's (2003:2) definition of a competitive tourist destination, saying that a destination is competitive when it possesses the ability to increase tourism spending.

2.4.4 The effect of an enabling environment and authorities on tourism destination success

2.4.4.1 Authorities

South Africa's Constitution states that local government is obligated to ensure advancement and development of residents (Meyer & Meyer, 2015:201). Historically, governments made little effort to be active in the tourism industry. These days however, governments have taken an active part in the guidance of tourism destinations. However, two opinions on government's role in the development of tourism exist. First, some surmise that governments are unsuccessful in market intervention and policy execution and to ensure prosperity of the community and others consider government a crucial tool to ensure development within the tourism sector (Kubickova & Hengyun, 2017:223).

Tasks taken up by governments and organisations include planning, management, promotion and coordination to name just some of them. Bitner and Sierak (2017:5) explained that government expenditure in a region will contribute greatly to its competitiveness. According to De Ayala (2012), even though a small number of economic hubs will not contribute significantly to national competitiveness, these growth centres are needed to ensure expansion. Charles and Zegarra (2014:5375) suggest that governments are dependent on various determinants, such as security, justice, and sovereignty as well as spending. Their resources come from the budget revenue available to be applied in fiscal spending. The safety of a region is dependent on the quantity of criminal wrongdoings including also terrorist assaults. The justice system's success is summarised in the number of cases resolved by justices. Jaafar *et al.* (2015:18) recommend that government and decision-makers include tourism and especially rural tourism as an important component when policies and strategies are formulated to better the region.

Jaafar *et al.* (2015) investigated the limitations and features of rural tourism firms for the Kinabalu National Park, Malaysia. The study found that in terms of government support, most of the limitations for small rural companies are: first, the absence of skills development and training strategies implemented by the government with a mean of 3.03 out of five; second, absence of financial support by government for business start-ups with a mean of 3.01 out of five; third, the absence of government assistance in marketing with a mean of 2.94 out of five and lastly, an absence of tourism-related activities of government. This indicates that government involvement carries importance in the success of a tourism destination and that positive government involvement could lead to the improvement of tourism destination competitiveness in a region.

2.4.4.2 Safety and security

The level of security and the safety of a tourism destination influences how it is seen by the national and international tourist and therefore has a significant bearing on whether or not tourists will choose a specific destination (Andrades & Dimanche, 2017:363). In a study by Bulatović and Rajović (2015:12), second respondents ranked value for money important with a rating of 3.62 out of 5, followed by geographical location with a rating of 3.58 out of five and security and safety with a rating of 3.43 out of five. The empirical results showed the three most important factors when deciding which tourism destination will be selected.

2.4.4.3 Investments

Samimi *et al.* (2013) undertook an investigation into the relationship between tourism development and foreign direct investments (FDI) in developing countries. This study followed a panel Vector Error Correction Model (VECM) analysis method for the time period 1995 to 2008. The results from the Granger causality test indicated that short-run causality from foreign direct investment to development in tourism exists at a significance level of 5 percent. However, in the long-run, a strong positive bilateral relationship was found between foreign direct investments and tourism development. Therefore, the improvements in tourism related infrastructure through FDI could lead to an increase in tourist arrivals into a region. For the purpose of this study, the development in the tourism sector was measured by the changes in tourism arrivals.

2.4.4.4 Marketing

Chen and Phou (2013:269) write that the success of destination marketing and identity depends on the relationship between travellers' needs and a destination. According to Chen and Phou (2013:270) through identifying loyal travellers, tourism destination marketing could be successfully aimed towards these travellers. Chen and Phou (2013) studied the relationship

between the Angkor temple in Cambodia – a world heritage site by means of a questionnaire for July 2011. Regarding north–eastern Montenegro, Bulatović and Rajović (2015:29) found that in terms of a destination management sub–group, the factor carrying the most competitiveness is the obtainability of promotion material to travellers in foreign languages with a rating of 3.89 out of five, followed by access to information regarding organisations and companies in a destination, ranked 3.68 out of five. Marketing should be a priority for tourism destinations as it is the first experience a tourist will have with a destination.

The management and promotion of a tourist destination is a crucial component in analysing its competitiveness (Komppula, 2014:361). Branding of the destination involves the formulation of a destination image in terms of trade mark band, strengthening traveller–destination sentimental connection as well as setting travellers at ease whilst projecting promising unforgettable experiences (Wong & Teoh, 2015:207). Wong and Teoh (2015) investigated the relationship between functional determinants of a tourism destination’s customer–based brand equity (CBBE) and competitiveness by means of a path analysis undertaken using Structural Equation Modelling (SEM) from January 2013 until April 2013 (by means of a survey) and found that a positive relationship exists from CBBE to functional determinants of a destination’s competitiveness, such as *inter alia*, fauna and flora, ventures and amusement for travellers. While the majority of studies found that CBBE is required to increase a destination competitiveness, Wong and Teoh (2015:211) concluded that CBBE is influenced by competitiveness in terms of functional factors. Thus, destinations which are extremely competitive produce a very strong CBBE. According to Fernando and Long (2012:78) to improve its competitiveness, destinations should implement marketing strategies, which focusses especially on the destination’s strengths. The relation between firms and consumers and the loyalty within this relationship are crucial for organisations to succeed (Zhang, Fu, Cai & Lu, 2014:213). Camisón Puig–Denia, Forés, Fabra, Munoz and Martinez. (2016:344) formulated the hypothesis “*that the level of competitiveness of a tourism firm is positively affected by marketing efforts*”.

Stetic *et al.* (2014) found that the known symbol or brand of a tourism destination is the most important determinant of a destination’s success in the sub–group “tourism destination management” with an average ranking of 2.8991 out of five; followed by second, skills in terms of foreign language of employees at a ranking of 2.844 out of five. Ranking in third place, the promotion of business tourism follows at 2.844 out of five.

2.4.4.5 *Tourism policy and destination marketing*

The key objective of tourism planning is to encourage tourism rivalry and the safe guarding of natural, ethnic and social resources made possible through adequate information collection and

analysis (Mira *et al.*, 2016:94). In a study of a principal component analysis, Goffi (2013:138) found that out of seven determinants, direction of a destination and sustainable policies in tourism accounted for the highest variance of 35.94 percent. Therefore, these determinants carry great importance in ensuring the competitiveness of tourism destinations.

Valente, Dredge and Lohmann (2015:128) stated that leadership of tourism organisation in regions does not have clear structures and boundaries nor suitable order of management. Valente *et al.* (2015:128). Charles and Zegarra (2014:5375) identified the working environment as the companies, banking and finance system which inspires or discourages entrepreneurship. Buhalis and Amaranggana (2013:561) stress the importance of Private–Public Partnerships (PPP) as it enables a destination to prosper through inventiveness and effectiveness. Private companies bring forth knowledge and skills regarding operational expertise.

Management expertise is useful in ensuring the survival of an organisation though stressing its vision and mission and improving the quality of products (Charles & Zegarra, 2014:5375). Alonso–Alemeida, Bagur–Femenias, Llach, and Perramon (2018:1) state that a business or organisation should take sustainability as a significant objective. A study by Knežević Cvelbar *et al.* (2016:1044) regarding the determinants of 139 tourism destinations for the time period 2007–2011 stated that the business environment has both a momentous and positive influence on the competitiveness of a tourist destination with a coefficient of 0.09.

2.4.4.6 *Red tape*

Buhalis and Amaranggana (2013:651) stated that smart tourism destination will be more able to encourage FDI which enables a destination to improve its infrastructure. Bhoj, Bhoj and Barwer (2016:105) state that government implemented a strategy called the Visa on Arrival (VoA) in India, which is a programme implemented to mainly increase the flow of tourist arrivals in the country. This programme is valid for 18 different countries where travellers are permitted a 90–day visit.

Andrades and Dimanche (2017:364) stated that the openness of a country refers to both national and international tourists in terms of accessibility and assisting with travels and visa requirements. Reilly and Tekleselassie, (2018:61) identified the United States of America (Visa Waiver Program (VWP)) as a strategy which facilitates traveling to the United States of America for non–residents without the requirement of a visa, implemented to encourage tourism. Reilly and Tekleselassie, (2018:64) studied the effect of the VWP on inbound travel in the United States of America from the period between 2004 and 2012 by means of panel data through a standard difference–in–difference model. This study found that there was a 40 percent increase in tourism and traveling to the USA when compared to roadmap countries and the USA experienced a 36 percent increase

in tourism and travel in the USA when compared international to countries who do not implement the VWP.

The Ease of Travel for Foreigners (EOTF) index compiled and applied by Lawson and Lemke (2012) indicates a country's ease of travel for non-residents in terms of visa requirements by demonstrating a percentage figure representing the number of foreign countries not requiring a visa. This study indicates that the removal of travel visas increases travel movement threefold between nations. Lawson and Roychoudhury (2016:821) reveal that there could be a 35 percent increase in the number of inbound tourist if the EOTF index increases by one standard deviation and that the requirement of travel visas reduces travel in a county by approximately 70 percent.. By applying the EOTF index Lawson and Roychoudhury (2016:825) found that the USA, being one of the strictest countries in terms of visa requirement as it requires more than 80 percent of countries in the specific study sample to fulfil visa requirements, could increase its inbound tourist by 1.4 percent when a one-unit elevation is applied in the EOTF. In addition, a study by Joshi, Poudyal and Larson (2017) investigated the pillars of the WEF's Travel and Tourism Competitiveness Index, though a panel analysis in 131 countries. Joshi *et al.* (2017:833) found that the "policy" pillar in the WEF's Travel and Tourism Competitiveness Index, is the most important component in determining the number of international arrivals and therefore the competitiveness of a tourist destination. The coefficient of the "policy" pillar was indicating that there is an elasticity value of 0.97.

2.5 SYNOPSIS

This chapter presents both the literature review and empirical explanations on the workings of tourism. In the literature review various definitions, concepts and theories were explained to better the reader's understanding regarding tourism destination competitiveness. The most relevant definition of tourism is that of the OECD which states that tourism is all the activities that an individual undertake for a visit to a specific destination for the purpose of business or leisure not exceeding a year period. The main theme of the study, tourism destination competitiveness, is best explained by Crouch and Ritchie. They define tourism destination competitiveness as the capability of a specific tourism destination to deliver tourism goods and services that surpasses that of another destination. The important component of tourism destination competitiveness, market share, is stated by d'Hautesserre as the key determinant of a destinations competitiveness.

Various conceptual models exist which aims to explain the competitiveness of a destination in terms of tourism. The most known are those of Crouch and Ritchie, Enright and Newton, Dwyer and Kim as well as Koo, Shin, Gretzel, Hunter and Chung. From these models, the most fitting model to describe tourism destination is that of Crouch and Ritchie. Crouch and Ritchie model is

based on the work of Porter as explains that 36 factors in the mirco environment, macro environment, qualifying determinants, management of a destination, and attractions and finally supporting elements and resources have an impact on a tourism destination competitiveness. This is a comprehensive measure, but lacks some factors required in today's tourism market. In addition it does not provide an empirical measure of competitiveness.

The empirical evidence section provides numerical explanations on the impact of detriments on tourism destination success; the literature review and empirical findings sections examine the impacts of various determinants on tourism destination competitiveness. However, the extent of the impact on the determinants are not precise and are therefore examined in Chapter 5.

The next chapter puts forward an analysis of tourism trends in two developing, two developed and two countries neighbouring South Africa. A national analysis of the South African Travel and Tourism Competitiveness Index is offered and in addition to this national analysis, three selected provinces of South Africa are also discussed.

CHAPTER 3: TOURISM TREND ANALYSIS

3.1 INTRODUCTION

The tourism industry has a major impact on the global economy (World Bank, 2016). Although this industry is not labelled as an official economic sector¹, its contributions occasionally exceed those of leading industries such as food and automobile productions and surprisingly, the exports of oil in certain countries (United Nations World Tourism Organisation (UNWTO), 2018b) and consequently, this sector's benefits are greatly valued by citizens and economies worldwide. The global tourism industry contributed 3.2 percent to GDP in 2017 and is expected to contribute 4.0 percent in 2018 (World Travel and Tourism Council (WTTC), 2018:1). In terms of employment, 117 454 thousand individuals found employment during 2017 in the tourism industry, which is forecasted to employ 150 139 thousand individuals by the end of 2018 (WTTC, 2017a:1). The number of tourist arrivals on a global front increased from 1 184 million travellers in 2015 (UNWTO, 2018b) to 1 323 million in 2017 (UNWTO, 2017b:11) and is predicted to reach 1.8 billion international tourist arrivals by 2030 (UNWTO, 2018b).

This chapter provides an overview of the trends within the tourism sector, which include tourist arrivals, expenditure, contribution to gross domestic product (GDP) and job creation as well as government expenditure on tourism. Trends between 1995 and 2016 are also discussed. This period was selected to provide a long-term overview of the changes in the tourism sector within economies. The discussion includes trends and statistics of developed and developing (including African countries) countries as well as comparisons between these economies. The selection of two developed, two developing and two African neighbouring countries mentioned in the previous chapter, was based on their ranking in the Travel and Tourism Competitiveness Index (TTCI) of 2017. Each of these countries are ranked the highest in terms of travel and tourism competitiveness index in their classification. In terms of developed economies, Spain (1st out of 136 countries) and France (2nd out of 136 countries) were selected. The two developing countries selected were China (15th out of 136 countries) and Mexico (22nd out of 136 countries) and for African countries neighbouring South Africa, Namibia (82nd out of 136 countries) and Botswana (85th out of 136 countries) were selected. This selection provides an in-depth analysis of global tourism trends in countries which are economically and physical diverse. Thereafter, an analysis of three South African provinces is undertaken to convey an understanding of the tourism sector's

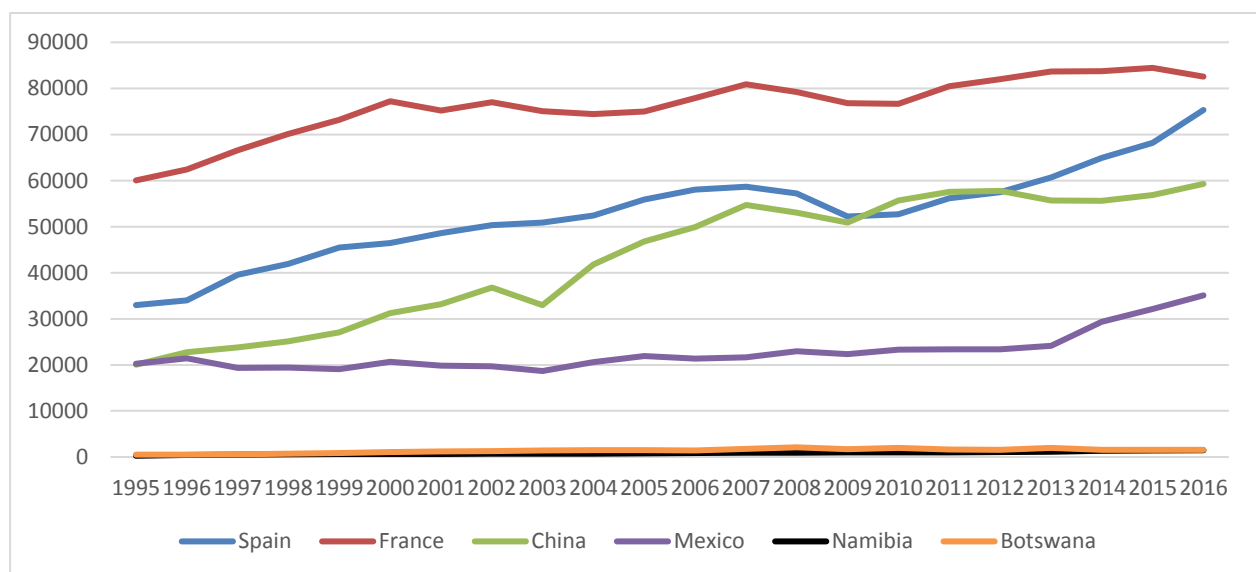
¹According to Stats SA (2018:2) the official economic sectors are: mining, manufacturing, agriculture, transport, construction, telecommunication, trade, finance and electricity.

changes in terms of a provincial region. In addition, South Africa's ranking in the TTCI is discussed with a view to providing insight and possible reasons for the said ranking position of the country.

3.2 INTERNATIONAL TOURIST ARRIVALS

The number of international arrivals to a country is commonly used in studies (Akinboade & Braimoh, 2010:156; Palamalai & Kalaivani, 2016:36; Shahzad, Shahbaz, Ferrer & Kumar, 2017:226) as an indicator of the success or failure of a tourist destination. Tourist receipts are also used; however, not to the extent of tourist arrivals. Joshi, Poudyal and Larson (2017:827) argue that tourist receipts better represent tourism development as it accounts for both the number of arrivals, as well as the number of nights stayed, which also yields information on the monetary contributions made. The number of international tourist arrivals may be influenced by a number of factors, such as infrastructure development, regional stability, communication (Joshi *et al.*, 2017:827), cultural and historical resources (Figueroa, Herrero, Báez & Gómez, 2018:11) as well as the scenery of a destination and thus, its image (Allameh, Khazaei Pool, Jaber, Salehzadeh & Asadi, 2015:192). According to Joshi *et al.* (2017:826) for a tourist destination to be successful, a pleasing experience is required to encourage further entrants. Figure 3–1 presents the number of tourist arrivals for abovementioned two developed, developing and African countries between 1995 and 2016. Tourist numbers are expressed in number of arrivals, which are referred to by thousands. These tourist arrivals are defined as the arrival of an overnight tourist to a specific international destination.

Figure 3–1: International tourist arrivals



Source: Compiled by author, adapted from the World Bank (2018)

As developed economies, both Spain and France received a higher number of international arrivals compared to the selected developing countries. **Spain** received 32 971 thousand international tourist arrivals that eventually grew to 75 315 thousand in 2016. A decrease is noted from 57 192 thousand to 52 178 thousand over the year 2008 to 2009. For the second consecutive year, Spain is ranked first in terms of its overall travel and tourism competitiveness. The success of Spain as a tourism destination was greatly contributed by its natural and cultural resources, as well as tourism-related infrastructure that encourages tourist arrivals (WEF, 2017a:10) of which the Camino de Santiago pilgrimage is an example. **France** received the highest number of international tourist arrivals reaching a maximum of 84452 thousand in 2015. The success of the tourism sector in France is also contributed to by the efficiency of tourist guidance. The WTTC (2015:40) listed the various bodies responsible for the welfare and progress of the tourism sector in France. This includes the Directorate General for Enterprise which forms part of the Ministry of Economy, Industry and Digital Affairs that is responsible for formulating and execution of tourism policies, the Regional Tourism Counsel that is concerned with medium-term goals of the development of tourism within regions and gathering useful data on tourism statistics as well as the avocation of a region as a tourism destination. The Departmental Tourism Committee aims to work in unison with other bodies to better tourism development and is actively involved with the construction of a development action plan. Lastly, the Local Tourism Office is maintained by the Municipal Council which has direct contact with potential and current tourists in the form of information and making necessary arrangements. These bodies work independently and in cohesion to ensure the success of France as a tourism destination, in this way improving the sector's performance which attracts international arrivals. During 2009, France and Spain respectively held the first and second place for the most international arrivals, globally (UNWTO, 2010:5). The positive growth trends in terms of international arrivals for both Spain and France could be a potential contributor to the high ranking they received in the TTCL.

China however, surpassed France in terms of international tourist arrivals in 2010, when it was ranked fourth, globally (UNWTO, 2015:5). An overall positive incline is seen for tourism, especially since 2011. It is plausible that this incline is caused by China's effort to launch and stimulate the tourism industry (Andrades & Dimanche, 2017:362). According to Bhoj, Bhoj and Barwer (2016:107), the decline in the number of international tourist arrivals is attributed to the variation in the exchange rates, food security and corruption issues as well as the global financial crisis from 2007. Chen, Chen, Lee, and Tsai (2016:61) projected that China will be fourth, globally in terms of tourist arrivals in 2020. According to the Ministry of Land, Infrastructure, Transport and Tourism (2016:150) the Tourism Vision project adopted by China is a strategy aimed at encouraging international tourist arrivals through the reduction of visa requirements.

Over the period 1995 to 2013, **Mexico** experienced a relatively stable number of international arrivals in relation to its counterpart China, also making the tenth spot for most international arrivals in 2009 (UNWTO, 2015:5). The year 2013 brought an upward movement in the number of international arrivals. The elevation in terms of international tourist arrivals experienced by Mexico since 2013 has possibly be contributed by the depreciation of the Mexican Peso, (OECD, 2017:3). A depreciation of the Mexican Peso enables tourists from countries such as the USA and UK with stronger currency values to be more inclined in visiting Mexico. As such, Mexico's price competitiveness has therefore increased as a tourist destination.

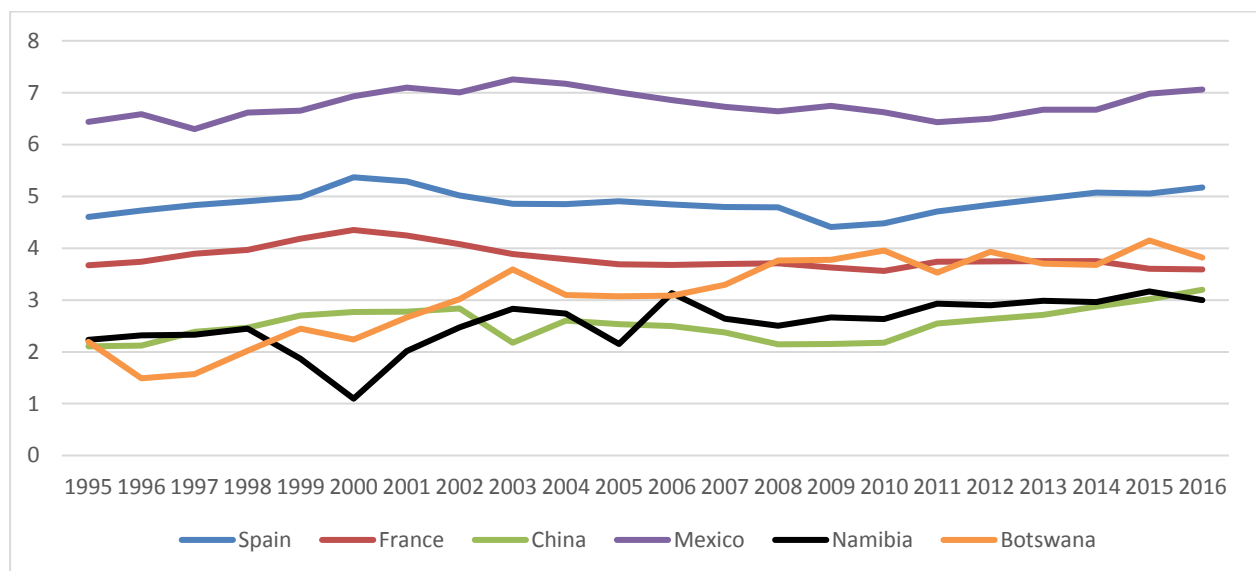
South Africa's neighbouring countries, **Namibia** and **Botswana** received a mediocre number of international tourist arrivals compared to the developed and developing countries. However, it is plausible since these countries are both physically and economically smaller than each of the selected developed and developing economies. Various factors restrict the possibility of an increase in tourist arrivals and it is possible that these countries do not have the capacity to host as much as the others. According to the Ministry of Environment and Tourism (2016:7), tourists from the three countries that visited Namibia the most (in order) were: Angola, South Africa and Zambia, which are the least visited African countries from developed economies, such as the United Kingdom and the United States of America. Leechor and Fabricius (2004:5) stated that the decline in international tourist arrivals in Botswana is contributed by Zimbabwe's political unrest, poor performing major currencies such as the US\$ and the high cost factor (perceived as an expensive destination). Countries such as France, Spain, and China saw a significant overall increases in the number of international tourist arrivals from 1995 to 2016. Mexico, on the other hand just increased by 14 838 thousand during this period in relation to, for example, China's increase of 39 236 thousand.

3.3 CONTRIBUTION OF TOURISM TO GDP

Some researchers (Webster & Ivanov, 2014:137; Jucan & Jucan, 2013:81), refer to the tourism sector as an "engine" or "driver" of economic growth. Rooney (2016) explains that the connection the tourism sector has with other economic sectors enables its assistance with regard to economic growth. The contribution made by a sector to a country's GDP is an important indicator, as it shows the importance of the specific sector to improve the economic outlook in a specific country. As tested by the Tourism-Led Growth Hypothesis (TLGH), tourism development contributes positively to economic growth (Kumar, Stauvermann, Patel, Kumar & Prasad, 2016:1099). In their literature study on the validations of TLGH, Brida, Cortes-Jimenez and Pulina (2016:394) found that, considering various time-periods and methods, the TLGH is valid in most countries, which include countries such as, Japan, Chile, Mexico, the United Kingdom, Germany and Pakistan.

The contribution to GDP is analysed as the percentage of activities in the tourism industry that contributed to the national GDP of a country. The higher the contribution to GDP, the more important the impact that the tourism sector has in the success of an economy (Chiu & Yeh, 2017:627). This makes sense as the performance, and in some cases the size of a sector, determines the reliance of a county in a sector. A study of Webster and Ivanov (2014:139) found that in 131 countries a significant relationship exists between the contribution of GDP and the competitiveness of a tourism destination. However, some countries could possibly use its contribution of tourism to GDP as a factor, which could positively affect the competitiveness of a destination. Figure 3–2 presents the tourism sector’s contribution to GDP for the selected developed, developing and African countries between 1995 and 2016.

Figure 3–2: The tourism sector’s contribution to GDP



Source: Compiled by author, adapted from the World Bank (2018)

Spain’s tourist sector contributed 5.3 percent to GDP in 2000. During 2009, the tourism sector’s contribution declined by 0.9 percent to 4.4, which could have possibly been caused by the global financial crisis. However, Spain’s tourism sector recovered, contributing 5.1 percent in 2016. (García Moreno & Fernández Alcantud, 2016:4). **France** was the only country whose tourism sector was contributing less to GDP in 2016 than in 1996. An overall negative trend is noted, contributing 4.3 percent in 2000 and 3.5 percent in 2016.

China’s tourism sector contributed 2.8 percent to GDP during 2002, however it experienced a decline of 2.1 percent in 2003. According to Bhoj, *et al.* (2016:107), China has an “*ancient civilisation*” which is one of the key attractions to this country and through effective utilisation of these ancient historical and cultural aspects these could be used to encourage more international arrivals. The UNWTO (2010:10) ranked China as one of the ten highest tourism related spending

countries of over US\$ 44 billion. Surprisingly, the developing country, **Mexico's** tourism sector contributed more than any of the selected developed, developing or African countries. It is plausible that this is due to the high dependency of Mexico on its tourism sector in relation to the other countries. Therefore, the Mexican tourism sector could be a larger contributor to GDP.

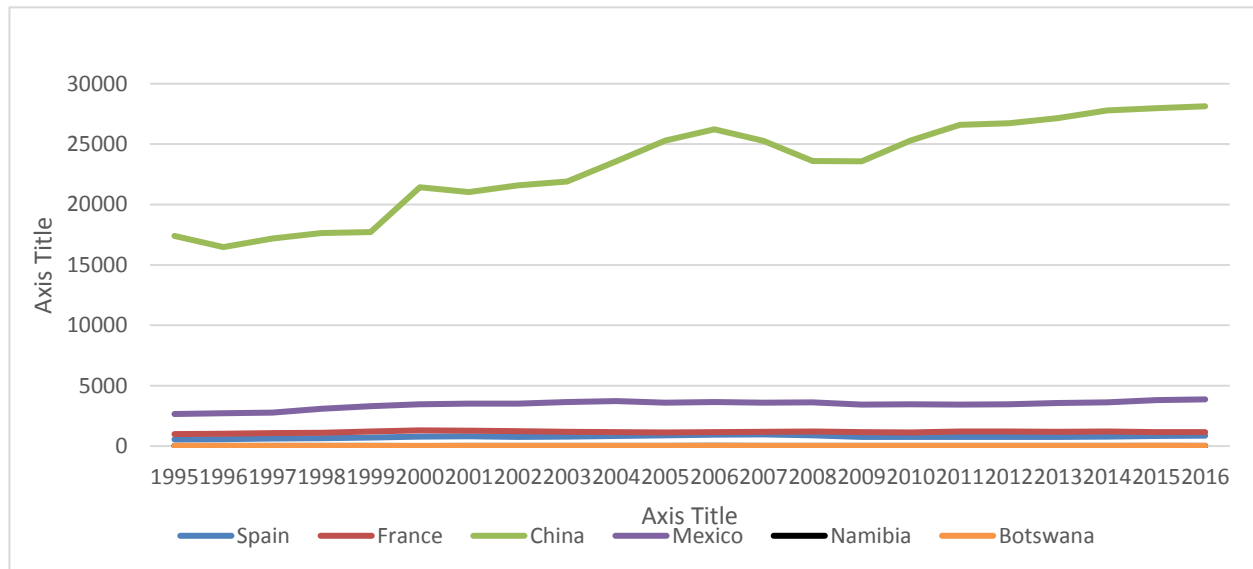
Namibia, on the other hand, had a significant decrease in its tourism sector's contribution to GDP of 1.4 percent between 1998 and 2000. This is a large decline when compared to the other 5 countries. Notwithstanding, Namibia recovered to the point of eventually contributing 2.9 percent to GDP in 2002. According to the Namibia Tourism Board (2013:13), the Namibian tourism sector was strengthened by collaborations, departures of poor performing organisations, entrance of new competitors as well as provision of capital for investments. **Botswana's** tourism sector contributed less than any of the selected countries during 1995. Through association with International Air Transport Association (IATA), Botswana was able to minimise their fuel cost to approximately \$ 34 million (IATA, 2018:38). However, Botswana ended the year 2016 by contributing more than Namibia, France and China. According to the WEF (2017b:17), Botswana is one of the few countries that has better infrastructure conditions in comparison to developed economies. Seasonality issues was also a great contributor to the success and/ or failure of a tourism destination and therefore, the tourism sector contributed to the national economy (Ministry of Environment and Tourism. 2016:24).

3.4 JOBS CREATED THROUGH THE TOURISM SECTOR

Employment is a major component of any sector. According to Chiu and Yeh (2017:625) job opportunities created in the tourism sector supplies income which in turn fuels economic growth. Dwyer and Kim (2003:372) believe that the creation of employment puts forth a higher competitiveness edge in a country. On the other hand, Gani and Clemes (2017:937) believe that the competitiveness of a tourism destination and the general economy ensure job creation. There could possibly be a bi-directional relationship between jobs created in –and the competitiveness of the tourism sector. The tourism sector, according to Meyer and Meyer (2015:208) provides employment opportunities for low-skilled individuals. Solarin (2014:77) stated that the labour intensity of the tourism sector allows for the creation of a variety of jobs since the labour-intensity dynamic of the tourism sector enables the employment of many individuals (Chiu & Yeh, 2017:625). According to UNWTO (2010:5), income generated from tourist spending on transport, accommodation, food and beverages is a crucial pillar of competitiveness which allows for the creation of jobs and regional progress. Figure 3–3 represents the employment opportunities created over the period 1995 to 2016 for the selected developed, developing and African countries, whilst also discussing South Africa's employment within the tourism sector. The number

of jobs created is the number of employment opportunities created within the tourism sector are expressed in thousands.

Figure 3–3: Jobs created in the tourism sector



Source: Compiled by author, adapted from the World Bank (2018)

During the period 1995 to 2016, **Spain** had created a relatively stable number of jobs. An average of 773 thousand jobs were created every year. The highest recorded number of jobs created was in 2007 when 966 thousand jobs were created. According to García Moreno and Fernández Alcantud (2016:5) even though the national economy of Spain struggled to maintain positive economic figures, the tourism industry increased in the number of employment opportunities generated. **France**, with an average of 1 164 thousand tourism jobs created every year is characterised by an abundance of accommodation available (IPK International, 2015:36). It is plausible to assume that these accommodation organisations have encouraged the appointment of labour within these organisations

On average, **China** created 23 162 thousand jobs within the tourism sector each year. During the last eight years China had an increase in tourism jobs from 23590 thousand in 2008 to 28 130 thousand in 2016. It is plausible to assume that the Chinese tourism sector's ability to generate employment opportunities is assisted by the growth in GDP. **Mexico** had an average of 3430 tourism thousand jobs created every year. The various strategies formulated by the private and public sector to better the performance of tourism aims to assist in the generation of job opportunities, especially that of entrepreneurs in informal tourism (OECD, 2017:9).

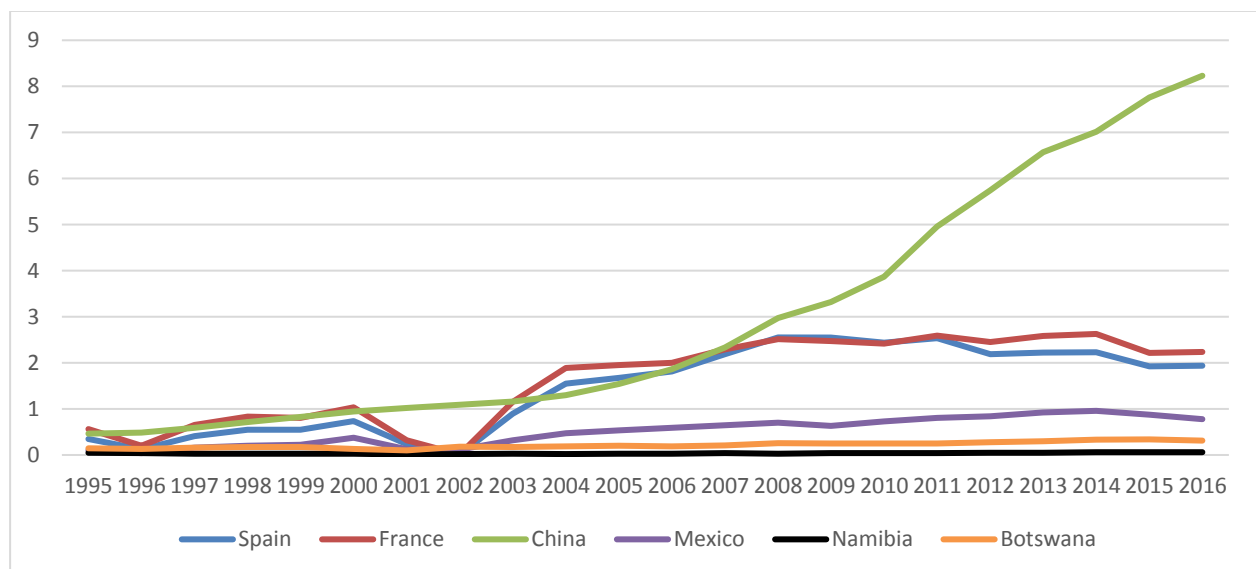
Namibia and **Botswana** have created on average 18 thousand and 20 thousand jobs respectively within the tourism sector. In 2011, Namibia's tourism sector employed 5.3 percent of the total

labour force and 5.1 percent in 2012 (Namibia Tourism Board, 2013:5). In addition the increase in employment was contributed by private and public initiatives (Namibia Tourism Board, 2013:13). According to Leechor and Fabricius (2004:5) the diversification of the tourism sector enables it to be a significant contributor to economic success and job opportunities.

3.5 GOVERNMENT EXPENDITURE ON TOURISM

The above mentioned economic factors give evidence to the importance of tourism as a sector which is of great interest to governments. According to WTTC (2018:2), governments are concerned with ensuring “inclusive” growth and the inclusiveness of tourism is a means by which they can accomplish this objective. Government involvement in the tourism sector has become more evident in the last decade where they assist in planning, promoting and financing (Kubickova & Hengyun, 2017:224; WTTC, 2015:14). Kumar *et al.* (201:1089) stated that a government’s policies should be potent and practical to ensure development within tourism. Expenditure by government for the selected developed, developing and African countries is represented in Figure 3–4. The expenditure is expressed in US\$ billions.

Figure 3–4: Government expenditure on tourism



Source: Compiled by author, adapted from the World Bank (2018)

Notably, **Spain** and **France** had a significant change in terms of the percentage of government budget allocated to tourism related issues in 2002, at 0.01 percent. Since 2008, **China** proved to be a frontrunner of its governmental expenditure on tourism, reaching a high of 8.2 percent. **Mexico’s** tourism development has been a priority for the governmental authorities in Mexico. Tourism as a priority appears in three plans implemented by governmental authorities in Mexico. The National Development Plan 2013/18, the National Infrastructure Plan 2014/18 and the

Regional Development Programme 2014/18, hold great potential but require attention (OECD, 2017:3). The OECD (2017:4) indicated that budgetary constraints could dampen the potential tourism related strategies. The fact that there are some limitations, means that resources should be effectively allocated to reach set goals. Both **Namibia** and **Botswana** had more or less the same government expenditure on tourism throughout the analysed period. However, in recent years Botswana's tourism sector had government expenditure exceeding that of Namibia. Government expenditure on infrastructure contributed to the improved performance of the Namibian tourism sector (Namibia Tourism Board, 2013:17).

3.6 SOUTH AFRICAN PROVINCIAL ANALYSIS

In addition to a national analysis, a provincial analysis is able to provide deeper insight into historical and current tourism trends in key regions in South Africa. For the purpose of this analysis, just three provinces were selected and compared within South Africa: Gauteng, the Western Cape and KwaZulu–Natal. This selection was made based on certain differences between these three provinces in terms of natural resources, population and climate. Table 3–1 provides information on tourism arrivals and tourism expenditure in these three regions. The calculation of an index score was done by taking into account both tourism arrivals and tourism spending. These two variables were given a value in terms of their performance of a province in relation to the other two provinces. The value is between 0 and 1. The higher this value the better the joint performance of these two variables in a region.

Table 3—1: Provincial tourism analysis from 2002 to 2017

Variables	Region							
	South Africa		Gauteng		Western Cape		KwaZulu–Natal	
Year	2002	2017	2002	2017	2002	2017	2002	2017
Tourist Arrivals (000)	12 347	14 800	2 607	3 814	1 783	2 524	2 694	1 704
Tourism Spending (R 000)	93 825	276 540	23 590	74 046	20 780	66 705	19 797	33 675
Total provincial tourism index value			0.983	1	0.797	0.781	0.468	0.919

Source: Compiled by author, adapted from Global Insight (2018)

Between 2002 and 2017, **South Africa** saw an increase of just 2 453 thousand in tourist arrivals. Nevertheless, spending by tourists increased by R 182 715 thousand. It is plausible that the reason behind the increase in spending by tourists without a significant increase in arrivals could

be that the prices of tourism goods and services increased, which is interpreted as increased spending. The increase in inflation could be explained by the elevation of prices in tourism-related goods and services. If this is the case, it could be dangerous to assume South Africa is performing well, as these price increases could eventually scare visitors away, leading to a poor competitiveness in the global market. The WTTC (2015:52) stated that the minor increase in tourist arrivals is attributed to the strict immigration and visa regulations and absence of the private sector acknowledgement of tourism's importance. The strict visa regulations imposed had a dampening effect on South Africa as a tourism destination (IATA, 2018:4).

Gauteng had the highest number of tourism arrivals, increasing to 3 814 thousand in 2017 from 2 295 in 2001 and tourist spending increased by R 50 456 thousand between 2002 and 2017. In terms of total tourism performance, Gauteng was the province which performed the best in 2017. Gauteng is the "*Place of Gold*", characterising the commerce and upbeat (Government Communications and Information System, 2016:430) which gives opportunity for various tourist activities. The culture in Gauteng is, however, different from that of Western Cape in the sense that Gauteng features more shopping tourism and cultural history whereas the Western Cape depends more on its natural resources as a tourist attraction.

The **Western Cape's** tourist arrivals increased by 741 thousand over the period 2002 to 2017. Tourism spending increased by R 45 925 thousand over the period 2002 until 2017. The Western Cape has the lowest index value when compared to Gauteng and KwaZulu-Natal. Droughts were a possible contributor to the overall poor performance of this province in terms of tourism success. Various factors contributed to the increased tourism spending in the Western Cape: there are 30 Blue Flag beaches along the coast, making this province the best rated in terms of state of beaches, the world's highest bungee jump, vineyards and the Table Mountain (one of the (new) 7 Wonders of the World) and many other attractions (Government Communications and Information Systems, 2016:408). These sights are a great attraction to both national and international tourists which encourage tourist spending. This indicated that the overall performance of tourism (arrivals and spending) in the Western Cape underperformed compared to Gauteng or KwaZulu-Natal.

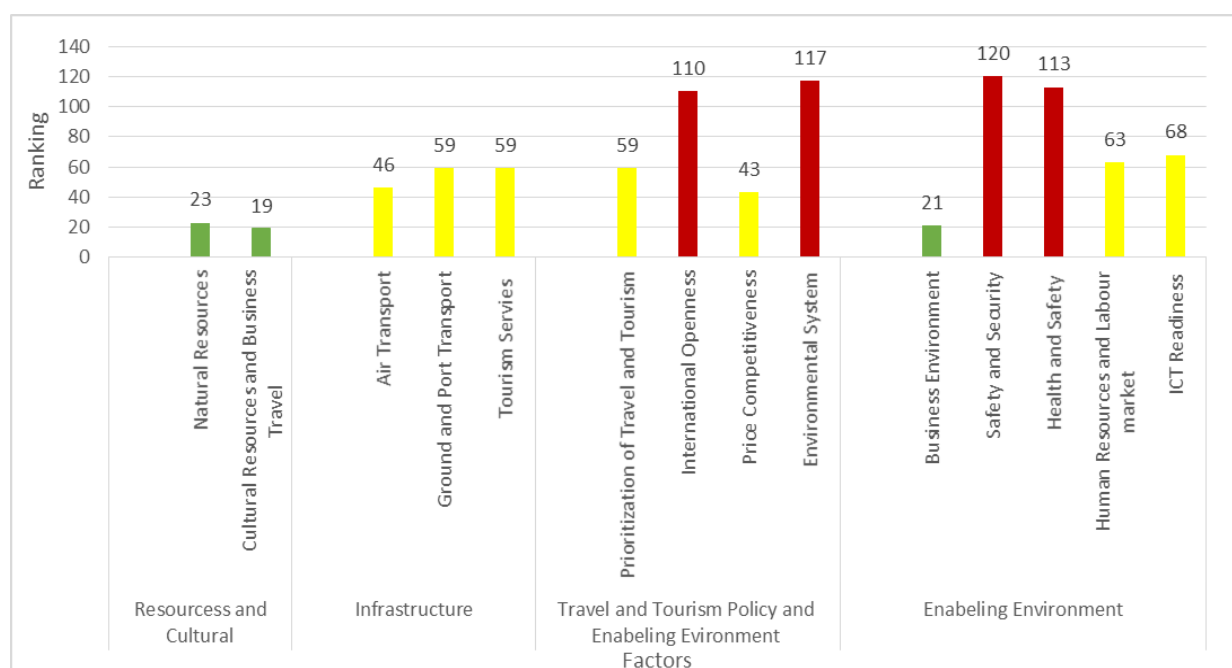
Unlike Gauteng and the Western Cape, **KwaZulu-Natal** saw a decrease in the number of tourist arrivals to the province over the period 2002 until 2017. With an index value of 0.468, calculated from tourism arrivals and tourism spending, KwaZulu-Natal ended 2002 with the lowest ranking. However, this province ended 2017 second, with an index value of 0.919. In an effort to attract tourists, Tourism KwaZulu-Natal (2017:53) promoted trade shows, promoted air transportation

(King Shaka International Airport) within the province and the provision of training programmes for travel agents as a means of encouraging tourist arrivals.

3.7 SOUTH AFRICA'S TRAVEL AND TOURISM COMPETITIVENESS RANKING

The World Economic Forum (WEF) gave South Africa the Travel and Tourism Competitiveness index (TTCI) ranking of 53rd out of 136 countries in 2017 (WEF, 2017a:304), which means South Africa has moved down five places since 2015. This indicates a downturn in South Africa's performance. This overall ranking was calculated by evaluating the country's position in four groups: (i) resources and cultural, (ii) infrastructure, (iii) travel and tourism policy and enabling conditions and (iv) enabling environment. Within these four groups there are several categories which also receive a ranking. In each of the categories various determinants are discussed to give prominence to the provided ranking value.

Figure 3–5: South Africa's Travel and Tourism Competitiveness ranking for 2017



Source: Compiled by author, adapted from WEF (2017a:304)

Performance indicators of sub-categories:	
Green	indicates excellent performance of factor,
Yellow	indicates averaged performance of factor,
Orange	indicates below average performance of factor and
Red	indicates extremely poor performance of a sub-category

The WEF (2017a:305) puts forward the performance of South Africa in each category within the four groups:

(i) Resources and cultural

Natural resources (ranked 23rd out of 136 countries)

The scenery, infrastructure and buildings are the pillars on which a destination's resources are built (Joshi *et al.*, 2017:826). South Africa is ranked 6th in terms of the attractiveness of the natural resources. This is a very favourable ranking as South Africa's natural resources are very attractive in relation to other tourism destinations. Li, Song and Li (2017:158) stated that the climate also has a significant influence on the *desirability* of a tourist destination. (Li *et al.*, 2017:158). The South African Department of Environmental Affairs (2015:13) stated that their mission is to produce adequate leadership for the "*protection, conservation and management*" of the environment to promote sustainability, which will be in the interest of current and future South Africans. This governmental department strives to ensure uniformity between natural resources and the use thereof. However, South Africa is only ranked 100th in the number of protected areas. The National Environmental Management: Protected Areas Amendment Act 15 of (2009) states that areas which are announced as special, national parks and world heritage sites are protected to; (i) not allow flights over these regions (only with special permission), and (ii) division of national parks (Department of Environmental Affairs, 2015:14).

South Africa has 10 world heritage sites which include Robben Island, the Cradle of Humankind, Vredefort Dome and iSimangaliso Wetland Park. (United Nations Educational, Scientific and Cultural Organization (UNESCO), 2018). In this regard, South Africa is ranked 16th amongst countries that have world heritage sites. Countries such as Canada (20 sites), Mexico (35 sites), Spain (47 sites) and China (53 sites) have more sites than South Africa and therefore received a better ranking (UNESCO, 2018).

Cultural resources and business travel (ranked 19th out of 136)

South Africa's sport stadiums are ranked 13th, based on cultural resources and business travel. This ranking was awarded as South Africa has a sizable number of large sports stadiums. The four major sport events held in South Africa were the Rugby World Cup (1995), African Nations Cup (1996), Cricket World Cup (2003) and FIFA Soccer World Cup (2010). According to Knott, Fyall and Jones (2015:48), major sport events such as these play an important role in a destination's attractiveness and make a significant contribution to a country's economy. In addition, South Africa was ranked 37th on the number of international association meetings held over a 3-year average. South Africa is an active member of the International Congress and

Convention Association (ICCA) who has named the Cape Town International Convention Centre the best in Africa (ICCA, 2018).

(ii) Infrastructure

Air transport infrastructure (ranked 46th out of 136 countries)

South Africa's air transport infrastructure quality has been ranked in 10th place. With South African Airlines (SAA), the well-known South African State-Owned Enterprise (SOE) airline, performing poorly, this ranking is somewhat surprising as it indicates success in the air transport sector. According to SA Tourism (2015:35), air transport plays a major role in the performance of a tourism sector, as it is in some cases the only means of transport for certain tourist arrivals and that it is also the first experience certain tourists have with the services of the country. IATA (2018:4) stated that O.R. Tambo airport situated in Johannesburg, Gauteng made the list of the top 100 airports, internationally. South African airport density (number of airports / population in millions) ranked 79th, indicating that the number of airports available in terms of the population size are not as many as desired. This contributed to the ranking of 44th out of 136 for the number of operating airlines. There are currently 49 operating airlines in South Africa (IATA, 2018:4).

Ground and port infrastructure (ranked 59th out of 136 countries)

In terms of quality of roads and the efficiency of ground transport, South Africa is ranked 29th and 66th respectively. The Department of Transport (2018) stated that a total of 158 124 kilometre (km) roads are paved compared to 591 876 km gravel roads in South Africa. On a global front, South Africa's roads are the 18th longest network of paved roads. Therefore, South Africa is ranked 91st in terms of the paved roads as a percentage of its total number of regions. It is probable that South Africa's ranking in terms of ground transport will decrease in the near future, due to the recent significant increases in petrol prices.

Tourist services infrastructure (ranked 59th out of 136 countries)

The poorest ranked indicator in this sub-group is the number of hotel rooms / 100 population, with a ranking of 108th. This indicates a very poor performance of the number of hotel rooms available. However, South Africa received a very good ranking, which misses the top 5 with one position, at a ranking of 6th out of 136 countries for the quality of tourism infrastructure. When renting vehicles, a tourist will experience minor difficulties as South Africa ranked 51st in this category, while Automated Teller Machines (ATM's) are relatively easy to find in South Africa, and are ranked 34th out of 136.

(iii) Travel and tourism policy and enabling conditions

Prioritisation of travel and tourism (ranked 59th out of 136 countries)

Despite the South African government investing in the tourism sector, the government's expenditure in the tourism sector as a percentage of the government's budget was ranked at 130th by the WEF. This indicates that in relation to other countries, the South Africa government is not as invested in the tourism sector as it could be. The overall prioritisation of the tourism sector by the South African government is ranked 40th. The WTTC (2015:52) notes that even although government is familiar with the benefits of tourism to the nation, the private sector is yet to realise and uncover these benefits. In addition, the WTTC (2015:52) indicates that the National Department of Tourism is responsible for corporate and governmental support; South Africa Tourism, which is a national tourism organisation that provides information and marketing and does promotion in order to encourage tourism in South Africa for both national and international tourists.

International openness (ranked 110th out of 136 countries)

South Africa has approximately 14 trade agreements which include free trade agreements such as The Trade, Development and Co-operation Agreement (TDCA) and EFTA-SACU Free Trade Agreement (FTA) as well as preferential trade agreements such as SACU-Southern Common Market (Mercosur) PTA (Department of Trade and Industry, 2018). In addition, South Africa was ranked 71st and 54th for visa requirements and bilateral air service agreements and openness respectively.

Price competitiveness (ranked 43rd out of 136)

In terms of airport fees and ticket taxes, South Africa is ranked 80th and its Purchasing Power Parity 61st. South Africa is ranked 71st for the level of fuel prices in terms of US\$ per litre. Currently, South Africa faces significant price hikes of more than R17 a litre, which could add to the decrease in the ranking position in terms of fuel prices (Classens, 2018).

Environmental sustainability (ranked 117th out of 136 countries)

For the rigidity and implementation of environmental rules, South Africa is ranked 42nd and 54th respectively. South Africa has a high number of threatened species as a proportion of all species and is therefore ranked 102nd. The development of the tourism sector of South Africa's sustainability level is ranked 28th. The best ranking in this group was awarded for environmental treaty approval with a ranking value of 31st, while the percentage of treatment given to waste

water is ranked 52nd. This indicates that overall, South Africa should be more focussed on environmental sustainability.

(iv) Enabling environment.

Business environment (ranked 21st out of 136 countries)

Property rights in South Africa are fairly protected with a ranking of 29th. However, talk of land expropriation without compensation inspires doubt and uncertainty. The impact that business rules and regulations have on foreign direct investment (FDI) 61st which is a relative high ranking that indicates how reliant the success of encouraging FDI is on the regulations of local businesses. The legal framework's ability to solve disputes are ranked 9th, indicating that South Africa is fairly effective on this front. The most favourable ranking for South Africa is given to the cost of starting a business at 4th. However, the time to start a company is ranked 123rd, making it one of the top five cheapest countries to start a company in. The number of days required to handle construction permits is ranked 65th and the cost thereof 36th. The effect of tax on incentives to work and invest is ranked 58th and 39th respectively. In addition, overall taxes including personal and business tax, are ranked 31st.

Safety and security (ranked 120th out of 136 countries)

The cost of violence and crime to business is ranked 131st and the cost of terrorism occurrences to businesses is ranked 64th, while the Terrorism Index ranked South Africa 94th. The South African Police Service is not known for its reliability and is evident in a ranking of 113th. The homicide rate in South Africa is ranked 131st. According to Lubbe (2015:10) and Knott *et al.* (2015:46) the safety and security component in the business environment is one of the causes of the decrease in the competitiveness ranking, due to the increase in bribery, Xenophobia and crime figures. The Institute for Economics and Peace (2018:9) reported that according to the Global Peace Index, South Africa is ranked 125th out of 163 countries globally and 30th of 44 countries in the sub-Saharan region. In terms of this index, South Africa is classified as a country with a very low state of peace.

Health and hygiene (ranked 113th out of 136 countries)

The least favourable ranking in this sub-group is given to human immunodeficiency virus (HIV) prevalence for adults with a ranking of 134th. In 2016, South Africa had 7.1 million individuals living with HIV, which makes it one of the countries with the highest prevalence (Avert, 2018). Malaria incidences per 100 000 population is ranked 93rd and the availability of hospital beds per

10 000 population is ranked 60th. The access to good sanitation and drinking water is ranked 98th and 84th respectively. Physician availability in terms of the total population ranked 93rd.

Human resources and labour market (ranked 63rd out of 136 countries)

The enrolment rate in primary and secondary education is 42nd and 70th respectively. The degree of employee training is ranked 19th. Companies' hiring and firing methods are ranked 131st and skilled employees are not as easy to find resulting in South Africa being ranked 99th and foreign labour 134th. Male/ female equality in the labour force is ranked 68th. Productivity and pay is ranked 96th indicating that improvements still need to be implemented. The formulation and implementation of new minimum wages in South Africa is a possible means to ensure equal pay to all males and females in a specific work category in the tourism sector.

ICT readiness (ranked 68th out of 136 countries)

Joshi *et al.* (2017:826) stated that the progress in information technology allows tourists to make better decisions when choosing a destination. The state of South Africa's electricity supply is ranked 111th and the coverage of mobile networks 36th. The subscriptions to mobile–broadband 49th and subscriptions to mobile–cellular telephones 9th and fixed broadband internet subscriptions 98th. The number of internet users as a percentage of the total population is ranked 74th. Information and Communication Technology (ICT) use for biz–to–biz transactions 28th and internet use for biz–to–consumer transactions 51st. Joshi *et al.* (2017:827) stated that communication is a crucial tool in ensuring the arrivals of tourists.

3.8 SYNOPSIS

The purpose of this chapter was to provide an overview on the tourism trends and the sector's performance over the past two decades. Thus, indicating the importance of this sector, which adds to the significance of the study. As such, data on tourism in South Africa was examined to investigate the trends. Globally, tourism is a positive contributor to economic growth, jobs are created on various platform of the tourism sector and international tourist arrivals are continuously rising, generating updated tourism spending figures. On a South African regional level, Gauteng was the best performing province in 2017 and KwaZulu–Natal the province with the most improvements between 2002 and 2017. The various factors influencing the South African Travel and Tourism Competitiveness Index were explained to give understanding into the index ranking. From this the cultural and historical resources and business travel and the best performing factor of South Africa in the TTCL, followed by natural and cultural resources. The analysis indicated that South Africa as a tourism destination is not as safe and secure as required. This could potentially

be one of the key reason behind its poor international tourism performance. The following chapter will detail the methods used to successfully undertake this study.

CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN

4.1 INTRODUCTION

The purpose of this study was to formulate a tourism destination competitiveness index which could be applied to different regions. The tourism competitiveness index questionnaire developed involved the various competitiveness determinants found at a tourism destination. These determinants influence the competitiveness and therefore, the success or failure of a tourism destination within a region. The intention of developing the competitiveness index questionnaire was to generate expert opinions from a sample of the population on the determinants of tourism destination competitiveness. As indicated in Chapter 1, this study encompasses both a literature review and an empirical analysis. The determinants used to formulate the index were selected through document analysis in Chapter 2, while different themes and determinants that were identified from a literature review were contextualised and the determinants were explained. The previous chapter analysed the trends of variables directly linked to the performance of the tourism sector in developed, developing and African countries. An in-depth analysis, discussing the South African tourism sector more extensively was also presented. In addition to a national trend analysis, three of South Africa's provinces (Gauteng, Western-Cape and Kwazulu-Natal) were also analysed.

Chapter four provides a detailed description on the methods used in this study. According to Berrington, Smith and Sturgis (2006:3), the primary objective of empirical research in the social science field is to investigate the relationships between variables. The determinants selected in Chapter 2 are analysed first, through compilation and use of a tourism destination competitiveness index and second, by performing an econometric analysis of the relationship between tourism, economic and social variables. A Regional Tourism Destination Competitiveness Index was formulated by assigning weighted values for each determinant and sub-group in the index. These values indicate the importance of each determinant and sub-group as a contributor to tourism destination competitiveness. The results were collected by distributing the index form and was analysed using basic weighted averaged Excel™ calculations.

In addition, an econometric analysis was performed where economic and social variables were tested in their relation to tourism-related variables. To test the relationship between the selected economic and social variables and tourism in the nine provinces of South Africa from 2001 to 2017, a panel statistical analysis was performed. Hsiao (2014:1) stated that panel data is progressively gaining favour as its increased capacity to better explain the complex workings of

individual's behaviour. For the panel study, an Autoregressive Distributed Lag (ARDL) model based on a Pool Mean Group (PMG) estimation method was constructed to investigate the relationship between tourism and selected economic and social variables. According to Lee and Wang (2015:751), this method is advantageous as it investigates the long and short-run relationships between variables. The results may be useful in further research upon application of the tourism destination competitiveness index in various regions. While this study builds on previous literature and empirical studies on the determinants of tourism destination competitiveness, it contributes to the existing literature by developing an index of tourism competitiveness that can be applied on a regional level to determine how competitive a region's tourism sector is.

Before explaining the methods used in this study in more detail, it is important to differentiate between a research design and methodology. These two concepts are regularly perceived as similar, however, there is a distinct difference between them. In research, the word method means the "*technique or tool*" used to collect and analyse data (Bailey, 1982:32). In addition, Nieuwenhuis (2016:51) postulates that the tools applied in a study allow for the gathering and analysing of data. Kumar (2011:24) explains that the selection of a research design is important as it will influence the results. According to Bailey (1982:14), a research design is an explanation on the method used to study the key variables or to test the hypothesis and the sample frame. Therefore, the research design is an indication of how the research question will be answered. The research design could also be seen as a research strategy, layout or procedure. According to Hammersley (1992:190), the decision regarding methods and techniques used in a study rest on the objectives and context of the study. The research design and methodology section should therefore detail the research process from start to finish to sufficiently answer or solve the research question or problem.

Besides the research design, a study also has a specific research methodology approach. Bailey (1982:33) explains that methodology implies "*the philosophy of the research process*", which consists of standards, presumptions, premise, beliefs and logicity for research and the discussion of results and concluding remarks. Thus, it explains the point of view from which the research is conducted. Neuman (2014:94) identifies two main philosophical frameworks: first, ontology, which is the section within philosophy that concerns the essence of being and what exists, by questioning the realities of the world, and second, epistemology, which aims to generate understanding by focussing on how knowledge is gained and what methods are best suited to obtain the facts. Therefore, an ontological approach considers the existence of things and the basic essence of reality and an epistemological approach concerns the process of how we come

to know certain things and reasons why they are truthful. The paradigms thus describe an individual's beliefs about the universe (Nieuwenhuis, 2016:52).

4.2 RESEARCH METHODOLOGY

The research methodology followed in this study is based on an epistemology approach as it sets out to formulate knowledge based on those factors that drive competitiveness in tourism destinations. The research paradigm on which this study is based is a functionalist paradigm. This paradigm entails the investigation into a current problem; i.e., low tourism destination competitiveness, to determine its effect and extent of influence on the economy. Thus, this study aimed to formulate a tourism destination competitiveness index, on which regions could be rated to assist in identifying the strengths and weaknesses in tourism destinations to formulate recommendations as a means of increasing the tourism destination competitiveness of regions.

4.3 RESEARCH DESIGN

4.3.1 Literature review and document analysis

After a research problem is identified, the succeeding step is to present and analyse existing literature (Creswell, 2014:27). This step was completed in the second chapter of this study. A literature review, according to Creswell (2014:28) should assist in the (i) formulation of the theoretical background and evidence on the research problem (ii) present results in former studies and (iii) highlight the significance of the study. In order to successfully complete a study of this nature, a comprehensive literature review is required. Reviewing the literature aids in the conceptualisation of themes which carries significance in the formulation of an index. This also helps in comparing previous studies, which allows for analysing the various strengths, weaknesses and limitations found within certain methodologies. These resource materials were collected from books, journal articles; existing indexes were also used to provide valuable information in identifying determinants of tourism competitiveness. To identify the research gap, a thorough analysis of existing models on tourism destination competitiveness was done and a systematic approach was followed in the execution of the literature review that allowed for comprehensive analysis of academic and research documents. Onwuegbuzie and Frels (2016:10) define a systematic literature review as “*a critical analysis and evaluation of all research studies that address a particular research question on a research topic*”. The next section describes the empirical portion of the study.

4.3.2 Empirical study

The second part of this study was undertaken as empirical research. Before the selected methods are explained, the possible methods that could be utilised in empirical studies are briefly explained to generate a background and a better understanding regarding the choice of methods selected for this study. The empirical section of studies could follow one of three approaches: a qualitative, quantitative or a mixed method. First, a quantitative study focuses solely on the collection of data numeric information as a means of analysing in order to interpret, forecast or describe a specific situation (Onwuegbuzie & Frels, 2016:4). Creswell (2014:5) also explains that quantitative data is used to deliver the relationship between certain determinants. Second, a qualitative study collects data in the form of narrative and descriptive research. A qualitative study could not be measured numerically, but rather in terms of names, labels, documents and photographs (Onwuegbuzie & Frels, 2016:4). Silverman (2014:5) explains four differences between quantitative and qualitative research as: (i) quantitative research creates information which makes numerical analysis possible whereas qualitative research explains a situation in context, (ii) statistical calculations are used in quantitative research and in qualitative research the meaning and workings are explained, (iii) quantitative research makes use of statistical software and qualitative research focuses more on theoretical established concepts and (iv) a quantitative research aims to generate explanations of the relationships between variables, whereas qualitative research only aims to generate comprehension. Third, by integrating qualitative and quantitative methods, a mixed method study is executed. The benefits of a mixed method study include (i) that it provides a more comprehensive explanation on the investigated phenomena (Creswell, 2014:5). This study follows a quantitative research method to successfully satisfy the research aim.

Within the three research methods, there are two data collection approaches: primary data and secondary data. Kumar (2014:140) states that the choice of the data collection method depends on several factors, such as the study's aim, the author's expertise and the obtainability of resources. Primary data is collected by means of observations, interviewing and questionnaires (Kumar, 2014:141) while secondary data is collected from government and other organisations or own former research (Kumar, 2014:163).

In this quantitative study, primary and secondary data were collected. In terms of the primary data, results collected from the regional tourism destination competitiveness questionnaire provided this information. Based on Creswell (2014:155) it was anticipated that the competitiveness index questionnaire would generate quantitative (numerical) data on the perspective of individual respondents regarding determinants on tourism competitiveness. As the

results were dependent on the subjective opinions of respondents regarding secondary results, existing economic statistical data were also collected from economic databases.

Furthermore, the time dimensions in a study could either be cross-sectional or longitudinal. A cross-sectional study focusses on a specific phenomenon, factors or individuals at a single point in time (Bailey, 1982:34). The characteristics of these individuals however do differ. Nonetheless, Kumar (2014:107) stated that a cross-sectional study approach enables the researcher to gain a clear illustration at a certain period. A cross-sectional study approach is therefore suited when researchers seek to explain the occurrence and frequency of a phenomena (Kumar, 2014:107). On the other hand, in a longitudinal study, data are collected over more than one period (Neuman, 2014:44). Neuman (2014:44) simplified the difference between these two-time dimensions by stating that cross-sectional research takes a “*snapshot*” of a situation, whereas longitudinal research is based on a “moving picture” thereof. Bailey (1982:35) indicated the disadvantage of a longitudinal study in stating that it is costly and does not allow the researcher to select a wide variety of respondents, but rather focuses on a small respondent list. Neuman (2014:44) concurs with this view, stating that longitudinal research requires time, effort and resources, especially in terms of data collection. The advantage of making use of a longitudinal study is that it allows a researcher to study the transformations over time (Bailey, 1982:35) allowing the trends to be analysed.

Longitudinal research takes the form of times-series, cohort and panel studies. Neuman (2014:47) differentiates between these three forms of research: a time-series study investigates the interaction or effect of variables over various time periods, a cohort study involves the examination of different individuals (respondents that have similar life experiences) over a certain time-period, while a panel study investigates features for the same individuals or variables over various time-periods. In the second part of this study, a panel analysis was conducted to indicate the correlation and statistical workings of different economic variables and tourism.

According to Bailey (1982:95) the sample size in a study is based on the aim and nature of the study. Sampling is the procedure in which just a selected number of the total population is chosen to participate in the study (Kumar, 2014:193). In terms of sampling, two key methods exist: yield probability and yield non-probability sampling. For yield probability, the respondents are familiar to the researcher and for the latter, yield nonprobability, the selection's probability is unfamiliar. Bailey (1982:87) identified and distinguished between the different methods of sampling: yield probability refers to random systematic, stratified random and cluster sampling while yield non-probability refers to convenience, quota, dimensional, purposive sampling. Quota sampling makes use of categories in which to divide the possible respondents; thereafter, a fixed number

within each category would be selected as participants (Neuman, 2014:249). Random sampling is the method used that enables each individual globally to have a fair and equivalent likelihood of being selected. Systematic sampling is a more labour-intensive method that requires the respondents to be selected from a list. Stratified sampling is accomplished by dividing the different population components into non-overlapping categories. Subsequent to the division, certain respondents are selected from each group. Cluster sampling is defined as the method in which every sampling unit is a group and convenience sampling is primarily based on ease (Neuman, 2014:248). The sample selected for this study included individuals based internationally. The method that share likeness of stratified sampling with an additional stipulation that the groups should be alike representatives of the population is quota sampling. Dimensional sampling considers every dimension within a population and ensures the incorporation of all dimensions to represent each dimension at least once. In purposive (judgemental) sampling, the choice depends on the researcher's own preference, thus respondents are chosen who satisfy the aim of the study. This method is similar to convenience sampling. Silverman (2014:60) stated that purposive sampling urges researchers to be critical regarding the population's parameters and to be precise when selecting the sample.

4.4 REGIONAL TOURISM DESTINATION COMPETITIVENESS INDEX STUDY

The first section of the empirical study consisted of a competitiveness index questionnaire that provides information on the subjective opinions of individuals active in the tourism industry, as well as those from the field of economic development research on the importance of certain determinants as tourism destination success contributors.

4.4.1 Determinant selection

Factors, attributes, indicators, determinants and variables from previous research studies and models were critically analysed. Frequent determinants in previous studies and models were given specific attention. Notwithstanding, the possibility exists that these determinants could be outdated and therefore not as relevant to today's highly sophisticated tourism industry as before and therefore these determinants needed to be re-evaluated and updated. Based on the literature review on the determinants of tourism destination competitiveness, certain determinants were selected based on the contribution and influence they have on a tourism destination's competitiveness and success. This critical analysis led to the selection of 21 determinants that have a direct and indirect impact on tourism destination competitiveness. The determinants were selected based on: firstly, the importance in previous research through comparative keyword analysis (CKA) and secondly, based on current relevance and importance. To simplify the analysis, these determinants were divided into four sub-categories.

4.4.2 Specialist feedback on proposed regional tourism destination competitiveness index (pre-test)

A pre-test for the tourism competitiveness index was conducted to determine whether the determinants are practical and adequate. This was done by sending out the proposed tourism competitiveness index questionnaire to five specialists in the field of economics at North-West University. As directed by the feedback and inputs of these selected specialists, the changes that needed to be made to the proposed tourism competitiveness index included: (i) to reduce redundant determinants and simplify determinants (from the original 30 determinants they were reduced to 21), (ii) to make use of determinants that directly influence tourism competitiveness and development and (iii) to focus just on weighting the importance of the determinants.

4.4.3 Finalise weighting scale of determinants

The determinants of tourism destination competitiveness are not all equally important. As such, a weight was given to each determinant according to its importance in predicting competitiveness. To explain the weighting given to each determinant and sub-group in the index, a weighting scale was developed to simplify and generalised regarding how individuals experience or feel about a certain phenomenon or statement (Neuman, 2014:230). A scale, described below, was used.

The Likert scale developed by Rensis Likert in 1932, was used by respondents to obtain answers from “*strongly agree*” to “*strongly disagree*” (Bailey, 1982:346). The key assumption of the Likert scale is that each factor on the scale has an equivalent weight which is an indication of significance also known as the “*attitudinal value*” (Kumar, 2014:170). A ranking value is then chosen. Neuman (2014:230) indicated that scales assist in the conceptualisation procedure by determining the potency, correlation and extent of variables. Kumar (2014:171) highlights a few considerations when constructing a Likert scale: (i) determine the number of directions or categories in the scale and (ii) the scale should represent numerical values or categories (there should be at least two, for example, *agree* and *disagree*). However, Neuman (2014:231) stated that the precision of individual’s beliefs or attitude to a specific statement will increase with more options.

Kothari (2004:86) lists the advantages and disadvantages of the Likert scale; its advantages are: (i) little effort and time is used to construct and use the Likert-type scale, (ii) it produces an empirical result (iii) it is reliable and comprehensive as it generates individual information on each statement. The disadvantages are: (i) that the Likert-scale and similar scales provide information just on whether a respondent agrees or disagrees with a statement and not on how much the respondent agree or disagrees, (ii) respondents’ answers could be influenced by what they feel

the correct response should be. However, despite its limitations, the Likert scale is well-known and frequently used.

In contrast to the Likert scale, the Thurstone scale is a method that makes use of interval measurements. This scale is used to enable respondents to separate various factors into different categories (Neuman, 2014:234). It assists in the computation of each factor's weight (significance) (Kumar, 2014:174), and therefore makes it more complex (Kothari, 2004:86). This is a valuable benefit as it allows the researcher to determine the absolute– and not relative– belief of each respondent. Furthermore it allows researchers to receive information on the best suited answers that are in accordance with most of the respondents' beliefs. To clarify, the Likert scale examines each factor individually, whereas the Thurstone scale examines each aspect of a statement in relation to the other statement.

The weight scaling and ranking method is very similar to the method used by the United World Tourism Organisation (UNWTO) to deliver a Tourism Confidence Index. The method aims to simplify the answers given to certain questions and to reduce the number of different explanations for the same conclusion. Survey participants were required to answer two questions by indicating whether the performance and future prospects for tourism in the respondent's regions is (0) much worse, (50) worse, (100) equal, (150) better or (200) much better (UNWTO, 2017:18). Thereafter, averages were calculated for each sector and region.

In this study, the weight scale, indicating importance, was first allocated to each of the three sub-groups and then a weight was allocated to each of the 21 determinants by the respondents. There are a total of three sub-groups that comprises 21 determinants. The weighting allocated thus provides an understanding of the importance of each determinant and sub-group to ensure competitiveness in a tourism destination. The weighting scale used in this study is as follows;

- (0) indicates that the determinant or sub-group has no significance in determining tourism destination competitiveness
- (1) indicates that the determinant or sub-group has limited importance
- (2) represents the determinant or sub-group who has an average importance
- (3) signifies determinant or sub-group carrying significant importance
- (4) indicates that the determinant or sub-group has very high importance in ensuring the competitiveness of a tourism destination.

4.4.4 Final regional tourism destination competitiveness index questionnaire design

The proposed tourism competitiveness index questionnaire design comprises three sub-groups: (i) resources, (ii) infrastructure and (iii) economic impact. Within each sub-group several determinants were presented which are specifically linked to each sub-group.

- **Sub-group A: Resources**

The first sub-group consists of determinants, which can be classified as resources. This group includes natural, historical and cultural resources, as well as technology and innovation. Labour resources and entrepreneurs also play an important role in the productivity and success of a business. These determinants are very practical and could potentially contribute to achieve success in a tourist destination if managed effectively.

- **Sub-group B: Infrastructure**

In this sub-group the determinants listed are a mixture of tourism specific and general infrastructure features, as well as hard and soft infrastructure. General infrastructure is made available for use by both residents and visitors of a region. On the other hand, tourism specific infrastructure is specifically used to satisfy the needs of visitors. Even though health and education facilities are categorised as general infrastructure, it could also be the purpose of a tourist visitation as in the case of medical tourism. In the case of medical tourism, a visitor will come to a specific region to make use of health facilities. Sport and recreation facilities are more linked to tourism infrastructure as they involve tourism activities when a visitor from another region or country travels to the destination to enjoy the sports and recreation facilities.

- **Sub-group C: Enabling Environment and Authorities**

Lastly, this sub-group explains all the determinants linking to governmental and private organisations and their workings. These workings are individually evaluated; what these organisations do on their own as well as jointly, how they influence the tourism sector with collaboration, for instance public-private partnerships. Thus, focusing on creating an enabling environment for a tourism destination, the public and private sector could positively contribute to its success.

4.4.5 Sample frame and size

A purposive method was used in the selection of participants for this study. Even though Kothari (2004:59) warns that this method could in some cases elicit bias for a researcher's anticipated

hypothesis, this is not applicable to this study as the selected participants were required to have knowledge and insight into the tourism sector and economics.

The tourism competitiveness index questionnaire was administered to 42 (N) respondents. The rationale of the sample size lies behind the number of respondents in the field of tourism operators as well as tourism and economic development researchers that have knowledge on the workings of the tourism industry. A single-stage sampling method was used, defined by Creswell (2014:159) as the sampling process, where access to respondent names are available and sampling can be made personal. The shortcoming of this selection method is that randomisation is not present; thus, there is no equal opportunity given to each individual in the study population, which is a benefit of random sampling. A purposive sampling method was used in the study. Of the 42 respondents selected, 25 responded, giving a response percentage of 60%. The participants in the study were mostly people from tourism organisations and tour operators, but also included a few tourism and economic development research specialists. These participants are located throughout South Africa.

4.4.6 Data collection

Data on specific determinants of tourism destination competitiveness was collected by means of a tourism competitiveness index questionnaire. Bailey (1982:148) puts forward the various advantages and disadvantages of survey data collection through mail which could also be applied to e-mail (electronic mail) and questionnaires. The advantages include: (i) efficiency in terms of time and cost (ii) respondents could complete the tourism questionnaire on their own time, (iii) there is no interview bias, (iv) there are no geographical barriers (v) anonymity is easy to establish. The disadvantages on the other hand are (i) low response rate, (ii) incomplete answers, (iii) date of response is uncontrollable and (iv) the questionnaire cannot be very complex. This data collection method is, however, preferred as it is limited in cost and time used and thus more efficient.

The selected respondents who were requested to complete a tourism competitiveness index questionnaire also received clear and simple instructions. Respondents were required to: firstly weigh the importance of certain determinants in ensuring competitiveness in a tourism destination and secondly, to weigh the importance of each sub-group. In addition, they were encouraged to add any comments and suggestions based on their expert knowledge and expertise. The questions in the tourism competitiveness index questionnaire were closed-ended. According to Neuman (2014:331), there are numerous benefits to these types of questions: (i) they minimise the occurrence of unrelated and complicated answers, (ii) they simplify answering from respondents, (ii) and finally, they ease comparisons between answers of diverse respondents.

Notwithstanding, this questioning approach also has some disadvantages such as (i) it limits the variety of possible answers, (ii) complex issues have to be explained by very basic answers, (iii) it could provide respondents with options they would not have given and (iv) respondents with no knowledge regarding a question, could answer it anyway (Neuman, 2014:333).

4.4.7 Descriptive analysis

Data collection upon the completion of the tourism competitiveness index questionnaire was captured on Microsoft Excel™. The spreadsheet rows included the tourism competitiveness index questionnaire's results and each column consisted of each determinant and sub-group. The averages of each determinant and sub-group's weight were calculated to provide a final value. These values provide an understanding regarding the importance of a determinant to achieve destination competitiveness in a tourist destination and the significance of each determinant in relation to one another.

4.5 TIME–SERIES ECONOMETRIC ANALYSIS

4.5.1 Sample frame, size and period

In terms of the statistical study, data collected was for certain economic and tourism-related variables that best represent the economy and have an influence on tourism in South Africa. This allowed for a more comprehensive analysis of South African tourism by including all nine provinces. A single-stage sampling method was used for this analysis. The study sample ranges from 2001 to 2017, since tourism has only started to develop after the 1994 democratic election. This encompasses 17 observations for each of the nine provinces² (this accounts for a total of 153 observations for all nine provinces in total). The logic behind the selected time-frame lies in the obtainability of information and that the tourism sector in terms of both national and international tourism started to develop after the 1994 democratic election.

4.5.2 Data collection and variable description

In this study, the dependent variable is a Tourism Index (*Tl*), which is constructed from the number of international tourist arrivals and the spending on tourism goods and services within each province. The independent variables are; (i) crime (*crime*) – expressed as an average of the overall crimes committed per every 100 000 individuals, (ii) the measurement of international openness –presented by total trade as a percentage of GDP (*Trade_GDP*), (iii) population (*pop*)

² The nine provinces are, Western Cape, Northern Cape, Eastern Cape, North–West, Mpumalanga, Gauteng, Limpopo, KwaZulu–Natal and Free State

–the number of individuals within the regions, (iv) infrastructure (*infra*)– given by the infrastructure index available for each region, (v) income inequality – presented by the Gini coefficient (*gini*), (vi) EAP (*eap*) – the number of economic active people, (vii) the performance of individuals in terms of socio–economic development is given by the HDI (*hdi*) (human development index), (viii) the level of urbanisation (*urban*) , (ix) the official unemployment rate (*unemp*), (x) the TRESS index (*tress*) which is an indication of the diversification of economic sectors,(xi) the poverty rate (*pov*), (xii) economic growth is measured by GDP (*gdp*) and (xiii) income (*income*) – the disposable income of individuals. These variables were collected from the Global Insight™ (2018) for each of the nine provinces in South Africa.

Each of these variables relate to the research question as they make a direct and/ or indirect contribution to tourism destination competitiveness. The determinants are connected to the economy in their financial contribution to either organizations or nations. For example, the contribution of the tourism sector to GDP provides an idea on the size and success of this sector as a contributor to the economic growth of a nation. In terms of an organisation, the productivity of that organisation will determine the success or failure thereof. The dependent and independent variables were transformed to their natural logarithm for mainly ease of interpretation.

4.5.3 Correlation

The correlation between the dependent and independent variables indicate the nature of the relationship between these variables which is signified by the “*r*” symbol (Koop, 2000:23). According to (Neuman, 2014:216), correlations should not only be assumed but determined through formulas. The formula for the correlation between variables is given by Koop (2000:23)

as; $r = \frac{\sum_{i=1}^N (Y_i - \bar{Y})(X_i - \bar{X})}{\sqrt{\sum_{i=1}^N (Y_i - \bar{Y})^2} \sqrt{\sum_{i=1}^N (X_i - \bar{X})^2}}$. The null hypothesis states that there is no correlation (Wang *et al.*, 2011:4872). Therefore when the H_0 is rejected, correlation is assumed. According to Koop (2000:28), correlation does not necessarily indicate causality relationship between variables and which creates a basis for the performance of the Granger causality test. This test can however not be performed in an ARDL panel analysis. Studenmund (2001:424) warns that “*spurious correlation*” sometimes occurs which is when a significantly strong relationship exist between specific variables. Even though this method is characterised with some limitations it still remains one of the most used econometric statistical analysis methods.

4.5.4 Unit root test

The first step in conducting a panel analysis is to perform unit root tests. The determination of the presence of unit roots are of great importance (Koop, 2000:133) as this determines the statistical

characteristics of estimators by determining the data set's stationarity (Hsiao, 2014:386). Tests for unit roots are executed on individual time series variables. Gujarati and Porter (2010:383) stated that a non-stationary coefficient in time series is zero. Hsiao (2014:298) explains that even though a specific variables is of significance to a researcher, the statistical properties need to be determined by unit root tests. Studenmund (2001:462) postulates that a time series which is stationary does not have adjustments in its fundamental properties and that a non-stationary time series will experience adjustment in trends. When testing the unit root, there is a null hypothesis and an alternative hypothesis. According to Wang, Zhou, Zhou, & Wang (2011:4872), Karlsson and Löthgren (2000:249) and Barbieri (2006:5), the null hypothesis (H_0) states that there exist a unit root and the variables are not stationary and opposite the alternative hypothesis (H_1) states that the variables containing no unit root and are stationary. The best known stationary tests are those of Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP), but others also exist, such as the Levin-Lin-Chu (LLC) test. These tests are important as they provide information regarding the stationarity of variables (Wang *et al.*, 2011:4872; Bhattarai, 2015:77).

The Dickey-Fuller test was constructed by two statisticians David Dicky and Wayne Fuller. This test uses the *t*-statistic to determine whether a variable is stationary or not (Koop, 2000:141). Thereafter, Dickey and Fuller constructed the Augmented Dickey-Fuller (ADF) as it considers the likelihood of correlation in error terms (Gujarati, 2003:173). Neusser (2016:148) indicated that this adjusted Dickey-Fuller test does not alter the asymptotic spread of the statistic. A test that is used as an alternative to the ADF-test is the Phillips-Perron (PP) test. According to Neusser (2016:149) this while this unit root test does not contain autoregressive correction terms, however, both the Dickey-Fuller and Phillips-Perron test, are limited in data samples with less than 30 observations. Maddalla and Wu (1999:633) criticised both the DF and PP test arguing that these unit root tests do not perfectly differentiate between the alternatives of stationaries. In addition to these two tests, the LLC (Levin, Lin and Chu) unit root test also provides information on the stationarity of variables. According to Barbieri (2006:5) the Levin, Lin and Chu technique was constructed to permit heterogeneity of an individual deterministic outcome. Thus, the LLC technique is presumed to consist of homogeneous autoregressive coefficients. The LLC unit root method investigates the segment's heterogeneity and its success increases with larger samples (Wang *et al.*, 2011:4872). Following the Dicky-Fuller test, the Levin, Lin and Chu, investigates the Levin-Lin (LL) test (Maddalla & Wu, 1999:632).

4.5.5 Panel

A study that focusses on the same cross sections (individuals or factors) over a period in time is defined as a panel study (Bailey, 1982:35). In a panel study, both time series and cross-section data are merged (Studenmund, 2001:145). Kumar (2014:125) agrees, when he states that a panel study makes use of longitudinal data. Thus, it takes into account each time-series observation and each cross-sectional variable making it a comprehensive approach to solving a research question. The panel data used in this study is therefore useful to analyse different variables during different time periods.

Hsiao (2014:4) noted the advantages for making use of panel data as; (i) streamlining calculation, (ii) providing precise assessments, (iii) exposing complex relationships, (iv) increased ability to establish practical behavioural assumptions as it has the capacity to manage more observations and (v) supplying micro-foundations for total data examination. Phillips and Greenberg (2008:52) also provided a list of advantages, using panel data: (i) permits the manipulation of variation, (ii) better the issues of omitted variable bias (iii) can be performed with limited amount of observations. Hsiao (2014:10) however also listed the disadvantages of panel data, which are (i) sample weakening, (ii) individuals and time could have heterogeneous (iii) have random parameters and multifaceted statistics. Notwithstanding, the disadvantages for use of panel data, it is selected as the best suited from of data to successfully execute the empirical study.

An ARDL model approach is used to estimate the relationship between the dependent variable and independent variables. According to Nkoro and Uko (2016:76), the use of an ARDL model will produce estimates that are both effective and realistic for variables stationary and $I(0)$ and/ or $I(1)$. This is the main reason for using and ARDL estimation approach for the relationship between the dependent and independent variables. Models can either be estimated in terms of Mean Group (MG) or Pooled Mean Group estimation. According to Pesaran, Shin and Smith (1999:1), MG estimation provides results of constant estimates of parameters and does not take into account that estimators may be equal to one another over different cross-sections. PMG estimation allow intercepts to differ across cross-sections but parameters are estimated the same (Pesaran *et al.*, 1999:2). Lee and Wang (2015:755) stated that a PMG model assumes first that the error terms or not correlated second, there exist a relationship between the dependent variable and independent variables in the long-run and third, that the parameters across the cross-sections are the same in the long-run. Accordingly, Lee and Wang (2015:756) states that these estimators are “*constant*” when the time periods and cross-sections are large.

Panel data analysis is a useful tool as it investigates the relationship between various cross-sections over a time-period. In order to thoroughly investigate the impact of various economic

variables on tourism, a panel analysis was performed for the analysis of the relationship between various variables for nine provinces over a time period 2001 to 2017. The variables collected represent the impact of economic activity and social development in each province. This will analyse how various economic and social factors impact tourism destination competitiveness in South African regions, identified as the nine provinces. Unit root tests, co-integration tests were also executed to successfully determine the relationship and effect of economic and social variables on tourism. The following basic equations represents the variables used in the two models which will be investigated through a PMG-ARDL analysis.

$$\begin{aligned} \text{Eq 1: } L\text{Tourism_Index}_t = & \alpha_0 + \sum_{j=1}^k \beta_j L\text{Tourism_Index}_{t-j} + \sum_{j=0}^k \lambda_j L\text{Trade_GDP}_{t-j} + \\ & \sum_{j=0}^k \lambda_j LGDP_{t-j} + \sum_{j=0}^k \Delta \lambda_j LTRESS_{t-j} + \sum_{j=0}^k \lambda_j LUNEMP_{t-j} + \sum_{j=0}^k \lambda_j LEAP_{t-j} + \sum_{j=0}^k \lambda_j LINC_{t-j} + \\ & \varphi_1 L\text{Tourism_Index}_{t-1} + \varphi_2 L\text{Trade_GDP}_{t-1} + \varphi_3 LGDP_{t-1} + \varphi_4 LTRESS_{t-1} + \varphi_5 LUNEMP_{t-1} + \\ & \varphi_6 LEAP_{t-1} + \varphi_7 LINC_{t-1} + e_t \dots \dots \dots (4.1) \end{aligned}$$

$$\begin{aligned} \text{Eq 2: } L\text{Tourism_Index}_t = & \alpha_0 + \sum_{j=1}^k \beta_j L\text{Tourism_Index}_{t-j} + \sum_{j=0}^k \lambda_j LHDI_{t-j} + \sum_{j=0}^k \lambda_j LURBAN_{t-j} \\ & + \sum_{j=0}^k \lambda_j LCRIM_{t-j} + \sum_{j=0}^k \lambda_j LGINI_{t-j} + \sum_{j=0}^k \lambda_j LINFRA_{t-j} + \sum_{j=0}^k \lambda_j LPOV_{t-j} + \sum_{j=0}^k \lambda_j LPOP_{t-j} + \\ & \varphi_1 L\text{Tourism_Index}_{t-1} + \varphi_2 LHDI_{t-1} + \varphi_3 LURBAN_{t-1} + \varphi_4 LCRIM_{t-1} + \varphi_5 LGINI_{t-1} + \varphi_6 LINFRA_{t-1} + \\ & \varphi_7 LPOV_{t-1} + \varphi_7 LPOP_{t-1} + e_t \dots \dots \dots (4.2) \end{aligned}$$

Where for both Model 1 and Model 2; α_0 signifies the intercept, k represents the number of lags. Denoting the long-run relationship is the symbol φ . β_j and λ_j represents the short-run relationship and e_t signifies the error terms. In Model 1, $L\text{Tourism_Index}$ is the natural log for the tourism index constructed at time t , $L\text{Trade_GDP}$ is trade as a percentage of gdp at time t , $LGDP$ the gross domestic product at time t , $LTRESS$ is the TRESS index at time t , $LUNEMP$ is the unemployment rate at time t , $LEAP$ is the number of economically active people at time t and $LINC$ is the disposable income at time t . In Model 2, $L\text{Tourism_Index}$ is the natural log for the tourism Index at time t , $LHDI$ is the natural log for the Human Development Index at time t , $Lurban$ is the natural log for the level of urbanisation at time t , $Lcrim$ is the natural log for the number of crimes committed at time t , $Lgini$ is the natural log for the Gini coefficient at time t , $Linfra$ is the natural log for the infrastructure index at time t , $Lpov$ is the natural log for the number of individuals living under the poverty line at time t and $Lpop$ is the population at time t .

These two models were analysed by selecting fixed effect models. This is best suited in a model where some variables are exogenous (Hsiao, 2014:69). In these models not all the values of each variable are dependent on another which allows the estimator to be unbiased. For example, the number of economic active individuals is theoretically not significantly depend on percentage of

trade to GDP. However, logically these variables could have a minor impact on their values. A PMG estimation – proposed by Perasan, Shin and Smith (1999) – is used as it assumes the homogeneous coefficients in the long–run which according to Adom, Bekoe and Akoena (2012:532) results in unbiased long–run estimates.

4.5.6 Normality test

According to Studenmund (2001:92), whether or not a data set is normally distributed is dependent on the variance and mean. Koutsoyiannis (1977:549) indicated that the shape should be evenly round the mean. Therefore, each shape should be normally distributed around the mean but the size of the normal distribution can differ from one data set to another. Ideally, the curve should be normally distributed which is characterised with a “*symmetrical, bell-shaped and continuous*” (Studenmund, 2001:92). Further the Central Limit Theorem states that the curve would be more near to normal distribution with the increase in the sample size (Koutsoyiannis, 1977:554). In addition, Ghasemi and Zahediasl (2012:486) state that in a large sample size (above 30), the violation of the normal distribution assumption will not cause significant statistical issues. With this statistical analysis having a large sample size, the focus will not be on the results of the normality but will focus on the results from the relationship analysis.

4.6 SYNOPSIS

This chapter has a detailed explanation on the methods used in the study to assist in satisfying the research problem. To summarise, both primary and secondary data was collected to perform a quantitative study. Primary data was collected through a tourism competitiveness index questionnaire and secondary data from a national database. The tourism destination competitiveness index questionnaire aimed to generate knowledge on the determinants of tourism destination competitiveness and the secondary data attempted to explain the relationship between economic, social variables and tourism variables. A panel model is useful when dealing with a number of cross–sections over a time–period for various variables. The following chapter presents and discusses the empirical findings on first the tourism competitiveness index questionnaire as a means of evaluating the significance of specific determinants and second, the statistical panel analysis in order to investigate the relationship between tourism and economic variables and tourism and social variables.

CHAPTER 5: RESULTS AND DISCUSSIONS

5.1 INTRODUCTION

The primary objective of this study was to formulate a Regional Tourism Destination Competitiveness Index (RTDCI) as explained in Chapter 1. The second chapter provided a literature overview on the determinants of tourism competitiveness, as well as empirical evidence of previous studies. A thorough literature study was key in formulating the RTDCI, as it assisted in the identification of possible deterministic variables used in this study. Chapter 3 provides a national and international trend analysis of the tourism sector. In addition, South Africa's tourism industry was analysed and explained in terms of the factors of the World Economic Forum's (WEF) Travel and Tourism Competitiveness Index (TTCI). This afforded further understanding of the importance and workings of the tourism sector. The chapter proceeding this one, (Chapter 4) provided a blueprint upon which the empirical study was based.

This chapter provides the results and the related discussions are presented in two sections. The first section addresses the Regional Tourism Destination Competitiveness questionnaire, which consists of 21 determinants and 3 sub-groups. In addition to the discussion on the RTDCI, a policy statement is made on the application of the index.

The second section is a discussion of the two time-series panel Autoregressive Distributed Lag (ARDL) model based on a Pooled Mean Group (PMG) estimation. The analysis included a unit roots test to indicate whether the variables were stationary or not. To best analyse the variables that represent the economic and social influences of tourism, two models were constructed. Model 1 was used to analyse the relationship between tourism and economic variables and Model 2 was used to analyse the relationship between tourism and social variables. A discussion on the techniques and methods used is introduced below, thereby limiting repetition of the explanation, thus presenting the results clearly and concisely.

To clarify: in a time-series statistical analysis, various techniques and methods are performed to uncover the relationships between variables. The first test is the unit root test which tests whether or not a variable is stationary. The purpose of uncovering the level of integration is, in the first instance, the selection of an adequate model and, in the second, to reject the inclusion of non-stationary variables in the model. The unit root tests; ADF, LLC, PP and IPS are based on the null hypothesis that unit roots exist and that the variables are not stationary. This hypothesis was analysed in terms of the p-value. For the purpose of this analysis, the significance level of 5 percent was used as an indicator of acceptance or rejection of the null hypothesis (H_0). Thus, the

integration order of each variable would be identified as either integrating at level $I(0)$ or integrating at first difference $I(1)$. The final result is based on the collective outcome of each of the four tests, and the criteria of acceptance is based on the majority results. Therefore, if three of the four tests are in favour of the result, it would be accepted as the final result.

To analyse the correlation between variables, a correlation analysis is performed. The purpose of the correlation analysis is to provide evidence into the linear relationship of one variable to another. The association is given by the correlation coefficient that ranges from zero to one and indicates the extent of the relationship. In addition, the signs of the correlation coefficient could be negative, indicating a negative relationship, or positive, indicating a positive relationship, between variables. Therefore, in the case of a positive sign and a high correlation coefficient value, this would indicate that a strong positive relationship exists between the variables.

After the correlation analysis has been performed, a panel ARDL would be used on the two selected models and the results would indicate both the long and short-run relationship between the dependent and independent variables. In this study, the lag selection for Model 1 was (1, 1, 1, 1, 1, 1, 1) and for Model 2 it was (1, 1, 1, 1, 1, 1, 1, 1) with one lag selected for each variable. Lastly, diagnostics tests would be performed to investigate the characteristic of the results provided and to state whether the results are not true or false. With regard to the normality test, in this study, the Jarque–Bera test was used to indicate the distribution.

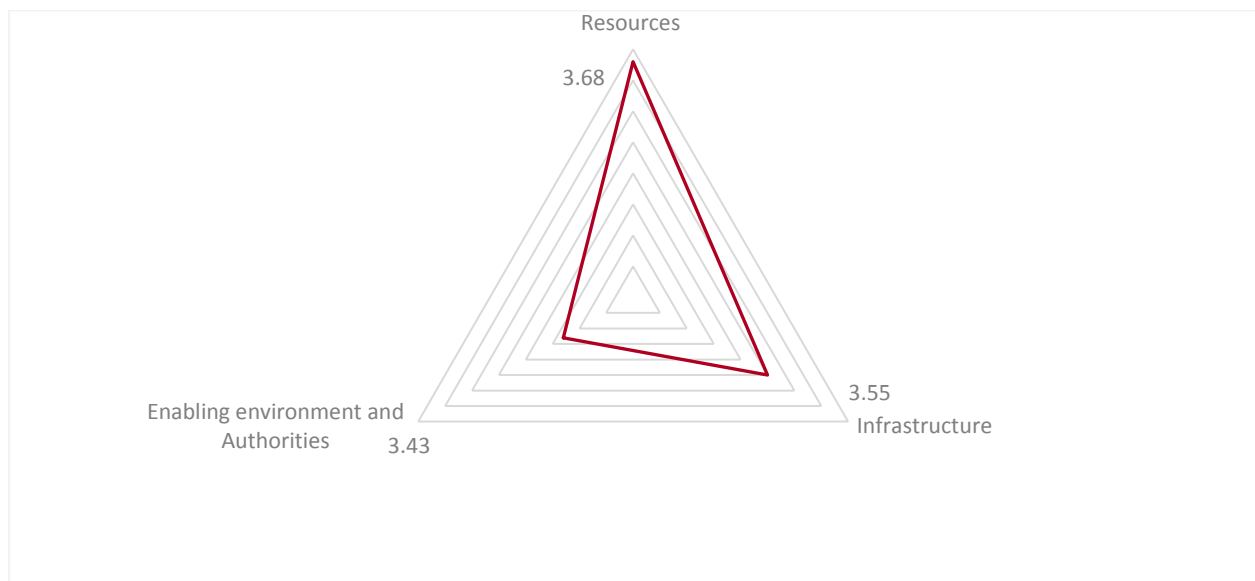
5.2 REGIONAL TOURISM DESTINATION COMPETITIVENESS INDEX RESULTS

The results from the Regional Tourism Destination Competitiveness questionnaire were analysed through use of Microsoft Excel™. The averages were calculated by using the averaged formula provided as a tool in Microsoft Excel™.

5.2.1 Sub-groups

The sub-groups contain three factors: resources, infrastructure and enabling environment and authorities. The 21 selected variables were each grouped and placed within a sub-group. The rationale behind grouping is for ease of analysis and interpretation. Figure 5–1 is a presentation of the results of the three sub-groups of the said questionnaire. These results will provide an understanding of the importance of each sub-group as determinants of a tourism destination's success.

Figure 5–1: Questionnaire results for sub–group



Source: Compiled by author

As depicted above, the two more important determinants are resources and infrastructure, each weighted with an average value of 3.68 and 3.55, respectively. This indicates that they are extremely important determinants; followed by enabling environment and authorities, weighted an average value of 3.43 indicating a significantly important determinant, to ensure destination competitiveness. These values show that the above–mentioned sub–groups are significantly important to ensure the success of a tourist destination and should therefore be considered as priorities in policy and strategy formulation. From the point of view of the literature, resources, and specifically, natural resources, are considered crucial to ensure competitiveness within a tourism destination.

Resources as a factor, is noted by various models and authors as the key towards a successful tourism destination. This factor was included in the diamond model of Porter (1990) under factor conditions; Ritchie and Crouch’s model of destination competitiveness under core resources and attractions and by Koo *et al.* (2016) in their smart destination competitiveness model as well as in Buhalis’ and Amaranggana’s (2013) list of the six most important attributes to a successful tourism destination, amongst other studies.

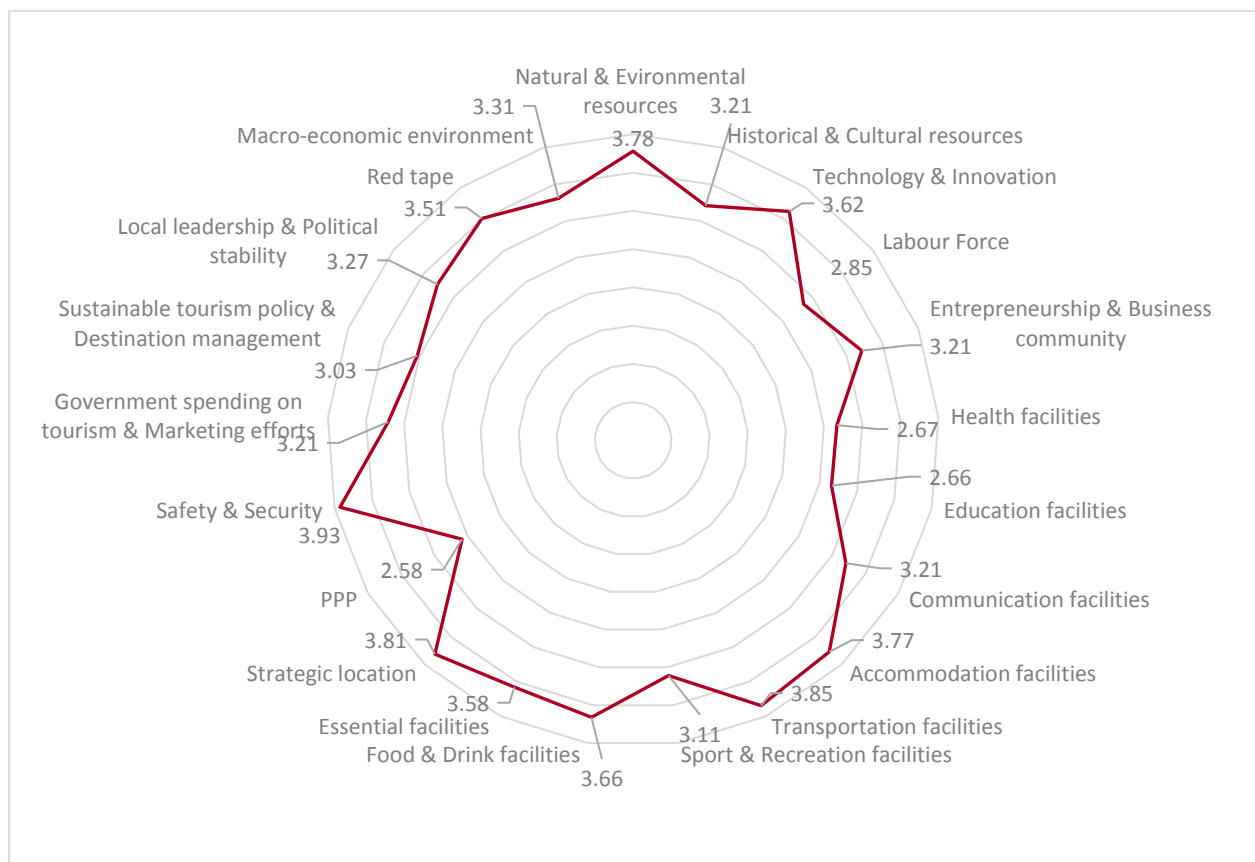
Infrastructure was also found to be important throughout the discipline of tourism research. Crouch and Ritchie (1999), Goffi (2013) and Koo *et al.* (2016) are only a few of the many sources who have pointed this out. However, the factor, **enabling environment and authorities**, is not specifically mentioned in previous research of these authors, despite it being identified in the questionnaire. Goffi (2013), however, did mention that management and strategies, which could be found in the sub–group, Enabling environment and authorities, are contributors of overall

tourism destination success. This is in line with the results of a value of 3.43 awarded to the sub-group. This weighting could possibly be due to enabling environment and authorities not being the foremost important component for visitors. However, this factor is required by tourism-related businesses to ensure their success and is thus still important to ensure tourism destination competitiveness.

5.2.2 Individuals determinants

Through a literature analysis and pilot study, 21 determinants of tourism destination competitiveness were selected to be presented in the questionnaire. The purpose of this method of data collection was to have the opinions of specialists in the discipline of tourism and development economics on the significance of determinants of tourism destination competitiveness. The questionnaire results are presented in Figure 5–2 which indicates the average weighted value for each of the 21 selected determinants of tourism destination competitiveness. It should be noted that the results were categorised based on the averaged weighted values rounded to the nearest one. For example if a value is produced such as 3.6 a value of 4 is given to the determinant.

Figure 5–2: Questionnaire results for selected determinants



Source: Compiled by author

5.2.2.1 *Highly important determinants in ensuring regional tourism destination competitiveness*

The results depicted above indicate that the majority of the determinants selected carry significant importance in ensuring the success of a tourism destination. The determinants: natural environmental resources, technology and innovation accommodation facilities, transportation facilities, food and drink facilities, essential facilities, strategic location, safety and security, and red tape received an average weighting of 4. This indicates that in general, the respondents perceive these determinants as crucial to ensure the success of a tourist destination. When formulating tourism policies and strategies in regions, these determinants should be prioritised.

A majority of the previously published literature reviewed mentioned that **natural environmental resources** are crucial for attracting tourists, with natural environmental resources being the key determinant in most models and theories. The results from the tourism destination competitiveness questionnaire agree with the statement that natural resources is therefore a crucial element in a tourism destination to encourage tourist arrivals. Depending on the purpose of the visit, tourists travel to a specific region to experience and see what they have not encountered or seen before. This includes natural resources such as rivers, oceans, mountains, fauna and flora. These results are in accordance with the study by Khin *et al.* (2014), which indicated the three most important determinants, in order of significance are: cultural and historical resources, friendliness of locals and scenery. Goffi (2013) found that natural resources have a value of 9 out of a maximum of 13, which indicates that it is crucial. Lo *et al.* (2017:764) found that there is a positive and significant relationship between natural resources and the competitiveness of a tourism destination. This is given through analysing the t-stat values in path coefficient testing. The p-values were below 0.05, indicating that it is statistically significant with a high t-value of 2.066.

The fourth industrial revolution is increasingly becoming a reality and **technology and innovation** is therefore necessary for a tourism destination to stay current and technologically advanced. Organisations and businesses will be more effective with the introduction of technology designed to reduce operational time and effort required. Investing in technology and innovation could therefore ensure that a tourism destination remains competitive and is therefore an important determinant of tourism destination competitiveness.

With regard to **accommodation facilities**, Goffi (2013) also investigated the importance of tourism services. The results indicate that accommodation has PCA values of 12 out of 13. It is plausible that a major part of a tourists' budget is allocated towards accommodation, in which case a great deal of consideration goes into the selection of accommodation. In some cases,

tourists could possibly book accommodation that suits their preferences, even though it is outside the region in which they're visiting. This statement is applicable in small regions such as districts.

Being basic needs, **food and drink facilities** provide essential services to tourists. However, Stetic *et al.* (2014) found that the importance of restaurants is ranked as 2.97 out of 5. This is not per se, the opposite of the result of a 4 weighted importance, but it is however, less important.

Transportation facilities links these various activities, such as restaurants, accommodation and sight-seeing activities in the tourism network. Thus, it makes these activities a reality. Khan, Qianli, Zaman and Zhang (2017) believe that the development of infrastructure in terms of ports will contribute to the development of regions.

Essential facilities are the back bone of any industry. Without proper water and electricity supplies, organisations and businesses cannot operate effectively. Ineffective organisations or businesses would possibly discourage potential and second-time tourist arrivals. Gül and Gagatay (2015) agree with this view in their investigation into the importance of energy supply in tourism. They found that a 1 percent decrease in the energy supply will have a minor impact in the decline in the tourism-related activities such as hotels, restaurants and accommodations. The reason for this could possibly be that the tourists are not responsible to cover the price changes in electricity, but rather that the suppliers of tourism services have this responsibility. As such, the suppliers could increase their prices, however this would only minimally affect tourists.

Selecting the **strategic location** of a tourism destination is not always possible. Nonetheless, the location could either be the success or failure of a tourism destination. Bulatović and Rajović (2015) concur concerning the importance of location, stating that the geographic location of a tourist destination is crucial with a ranking of 3.58 out of 5. In addition to location, **safety and security** of a region also has a significant influence on the success of a tourism destination. It is logical that tourists will not in the majority of cases select a region known for terrorism, murder, violence and criminality, which could present physical and emotional harm. Bulatović and Rajović (2015) ranked safety and security 3.43 out of 5. In the case of international tourists especially, their safety and the security provided plays a major role in the selection of a tourism destination.

Finally, **red tape** limits business and organisations in their long-run and day-to-day operations. In tourism, a current, major limitation is the strict immigration regulations faced by tourists. Making this requirement less strict could potentially increase the number of tourists visiting a tourism destination as an increase in tourist arrivals represents the success of a tourism destination. Lawson and Roychoudhury (2016) found that a one unit increase in the application of the Visa Waiver Program (VWP) (USA-based) could lead to a 1.4 percent increase in international tourists

5.2.2.2 *Significantly important determinants in ensuring tourism destination competitiveness*

The determinants awarded a weighting of 3 include: historical and cultural resources, labour force, entrepreneurship and business community, health facilities, education facilities, communication facilities, sports and recreation facilities, PPP, government spending on tourism and marketing efforts, sustainable tourism policy and destination management, local leadership and political stability and macro–environment.

Historical and cultural resources, are given a PCA value of 8 out of 13 in the study of Goffi (2013), which investigates the PCA value of various deterministic factors. These results are in favour of the weighted value 3 provided for this determinant by respondents in the questionnaire. By contrast, Khin *et al.* (2014) stated that traditionally made arts and crafts are one of the least important determinants on which a tourist will spend money. However, Bulatović and Rajović (2015) also agree with the significant importance of a cultural atmosphere, which in their study was rated 4.44 out of 5. In addition, Lo *et al.* (2017) also found that the cultural heritage of a region is the 2nd most important determinant of success in a tourism destination. This is in accordance with the findings by Stetic, Simicevic, Pavlovic and Stanic (2014) from their study, which presented richness in history and culture as the 2nd most important factor, with an average of 4.29 out of 5.

As in the case of any business, the **labour force** is one of the key deciding factors in productivity and consumer satisfaction delivery. Without the labour and the necessary skills required, businesses would not be as successful. The friendliness of locals are said by Khin *et al.* (2014) to be a desired characteristic for a tourism destination.

Entrepreneurship and business community are just as important as the labour force and are interlinked in a way to collectively ensure the success of businesses and organisations in a tourism destination. Jaafar *et al.* (2015) indicated the importance of market knowledge and marketing skills with values of 3.42 and 3.39 out of 5, respectively. When organisations and companies, both private and public, do not invest or rank these determinants as important, it could provide limitations in the operations of a successful tourism destination.

Health facilities are also an important factor in the selection of a tourism destination, particularly in the case of medical tourism where tourists require medical services that are only provided in a specific region. In addition to safety and security, the availability of medical aid in a foreign region could provide potential tourists with ease of mind. **Education facilities**, as in the case of health facilities, are an important determinant for attracting tourists. Again, an individual travelling possibly for the purpose of education and training will select the best regions to fulfil their needs.

Communication facilities, could not only provide, but also be a potential marketing tool. As mentioned, technology should be used to elevate a tourism destination above its competitors.

Furthermore, **sports and recreation facilities** are major attractions for tourists. The Olympics, the Rugby World Cup, Formula 1 Grand Prix, International Cricket Council (ICC) and the World Cup are all among the major sport events that attracts tourists to different countries. The results indicate an average weighted value of 3 which was given to **public–private partnerships**. The respondents indicated that partnerships between private and public organisations are the least important determinant of tourism destination competitiveness. It is plausible that co–operation between the public and private sector could encourage idea sharing as well as financial and marketing assistance, all aiming to better a tourism destination’s level of competitiveness.

Government spending on tourism and marketing efforts, are important as contributors to the success of a tourism destination as this assists in the promotion and attractiveness of a tourism destination. Jaafar *et al.* (2015) empirically evaluated the importance of government in the tourism industry and ranked government engagement 3.03, 3.01 and 2.94 out of 5 for their presence in skills development, financial support for start–ups and assistance in marketing, respectively. This indicates that these factors and government as well, are significant contributors to the success of a tourist destination. Goffi (2013) mentioned that policies, development and planning, which are ranked the most important in this particular study, were given a value of 13 by the PCA. This indicates that planning and policy formulation are crucial to ensure a successful tourism destination. This further provides an argument in favour of the high weighted value of the determinant **sustainable tourism policy and destination management**. This is because **local leadership and political stability** go hand in hand. Politics influence where– and if– government invests in a specific region. Leadership in business is needed to encourage entrepreneurship and as a result, job creation. High unemployment is a well–documented socio–economic issue facing South Africa. This presents further issues such as inequality and poverty, ultimately creates a downward spiral, whereas leadership in businesses could better the pace of progress and development and the success of businesses in a region. Each sector is influenced by the **Macro–environment** in a region and the tourism sector is no different.

It is worth also taking note that none of the determinants was awarded a weighting value of between 0 and 1. This shows that the selected determinants are representative of a tourism destination’s competitiveness. Table 5–1 presents the Regional Tourism Destination Competitiveness Index, which was constructed, as explained earlier, through a thorough literature review and an empirical questionnaire analysis. Table 5–1 presents the Regional Tourism

Destination Competitiveness Index (RTDCI) and the final weightings allocated to each determinant and sub-group.

Table 5—1: Regional Tourism Destination Competitiveness Index

Determinants	Description	Average weight
A. Resources		3.68
1. Natural environmental resources	Quality of scenery, climate, water resources, fauna and flora. Attractiveness of natural assets and environmental management with conservation	3.78
2. Historical and cultural resources	Diversity of local cultures and indigenous knowledge	3.21
3. Technology and innovation	Level of innovation and technology and incentives for investments in R&D	3.62
4. Labour force	Supply (size of labour force), cost of labour and skill levels	2.85
5. Entrepreneurship and business community	The quality and number of entrepreneurs and development of entrepreneurship. Strength and activities of local business chambers	3.21
B. Infrastructure		3.55
6. Health facilities	Quality and number of health facilities, such as hospitals, clinics. Prevalence of malaria and HIV	2.67
7. Education facilities	Quality and quantity of education facilities including higher education facilities.	2.66
8. Communication facilities	Quality of ITC – Number of internet users and internet speed	3.21
9. Accommodation facilities	Quality and number of hotels, bed and breakfast facilities, resorts, etc.	3.77
10. Transportation facilities	Quality of transport, air and sea ports, roads, railways	3.85
11. Sport and recreation facilities	Quality and number of recreational facilities, sports stadiums, parks and open spaces	3.11
12. Food and drink facilities	Quality and number of restaurants, bars and cafes, etc.	3.66
13. Essential services	Capacity, quality, access and maintenance of services such as roads, rail, sewer, water and electricity	3.58
C. Enabling environment and Authorities		3.43
14. Strategic location	Location features determining success of a destination	3.81
15. Public-private partnerships	Number and efficiency of PPPs	2.58
16. Safety and security	Level of safety and security in region. Crime rates, homicide, burglary rate, and reliability and responsiveness of the police	3.93
17. Government spending on tourism and marketing efforts	Percentage of budget allocated to travel and tourism. Efforts and effectiveness of marketing to international and national tourists	3.21

18. Sustainable tourism policy/ Destination management	Number and success rate of policies and strategies formulated and implemented	3.03
19. Local leadership and political stability	Leadership in the community of tourism organisation and entrepreneurs. Political situation in a destination	3.27
20. Red tape reduction	Visa requirements and other regulations; Time to open a business	3.51
21. Macro-economic environment	Exchange rate, interest rate and economic growth etc.	3.31

Source: Compiled by author

5.2.3 Policy statement on the implementation of the RTDCI

The Regional Tourism Destination Competitiveness Index is aimed to uncover the strengths on which a destination should be built as well as the weaknesses that it should aim to reduce or eliminate. This could potentially provide valuable insight that assists in a tourism destination's success. This information could furthermore facilitate the bodies within a region to collaborate in terms of strategy and policy formulation. Since each determinant is individually recognised, it simplifies the identification of specific strategies required to better a tourism destination. When applying the index to a specific region, it will be advantageous to collect information from three representatives: local businesses, government organisation and tourists. This could provide information on the district perception of each representative. Also, the collective opinion of all three participants could be put forwards as the final value. Subsequently, a SWOT analysis can be used to give a comprehensive understanding into a specific tourism destination's competitiveness. In the instance where a tourism destination consists of a specific determinant, which is not listed in the index, but which is identified by an analysis as being important, it could be explained in the discussion of the results as a possible contributor.

5.3 TIME-SERIES ECONOMETRIC ANALYSIS RESULTS

The time-series analysis was conducted on Econometric views 9 (Eviews 9)TM, and it was undertaken in an attempt to understand the relationship between tourism and economic growth, as well as other social variables. This provides further confirmation of the importance of determinants concerning tourism destination competitiveness.

5.3.1 Model 1: Tourism and economic variables

The first model was constructed to analyse the relationship between tourism and economic variables. The relationship between these variables is useful for indicating the effect of the economic variables on the success of a tourism destination. The following equation, (1) indicates the analysis of Model 1:

$$\begin{aligned}
LTourism_Index_t = & \alpha_0 + \sum_{j=1}^k \beta_j LTourism_Index_{t-j} + \sum_{j=0}^k \lambda_j LTrade_GDP_{t-j} + \sum_{j=0}^k \lambda_j LGDP_{t-j} \\
& + \sum_{j=0}^k \Delta \lambda_j LTRESS_{t-j} + \sum_{j=0}^k \lambda_j LUNEMP_{t-j} + \sum_{j=0}^k \lambda_j LEAP_{t-j} + \sum_{j=0}^k \lambda_j LINC_{t-j} + \varphi_1 LTourism_ \\
& Index_{t-1} + \varphi_2 LTrade_GDP_{t-1} + \varphi_3 LGDP_{t-1} + \varphi_4 LTRESS_{t-1} + \varphi_5 LUNEMP_{t-1} + \varphi_6 LEAP_{t-1} + \\
& \varphi_7 LINC_{t-1} + e_t \dots\dots\dots (5.1)
\end{aligned}$$

The economic variables are: the percentage of trade in GDP to present international openness (*Ltrade–GDP*), GDP (gross domestic product), (*LGDP*) as an indication of economic growth, tress (*Ltress*) which is an index that explain the level of sectorial diversification, unemployment (*Lunemp*) explaining the percentage of unemployment of individuals in a region, eap (economically active people) (*Leap*), and the disposable income (*Linc*) which could potentially be spent on tourism activities. The summary of Model 1's unit root results is presented in Table 5–2.

5.3.1.1 Correlation analysis

The correlation analysis provides information into the linear relationship between selected independent variables and the dependent variable. Table 5–3 depicts the results for the correlation analysis for the first model.

Table 5—2: Correlation matrix: Model 1

Variable	Ltourism_index	Ltrade_GDP	LGDP	Ltress	Lunemp	Leap	Linc
Ltourism_index	–	–	–	–	–	–	–
correlation	1.0000	0.5490	0.9160	0.2446	–0.4625	0.9376	0.7506
t–stat	–	8.0724	28.0613	3.1007	–6.4107	33.1502	13.9610
prob	–	0.0000*	0.0000*	0.0023*	0.0000*	0.0000*	0.0000*

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively

Source: Compiled by author

A moderately strong positive correlation exists between Ltourism_index and Ltrade_GDP. The p–value indicates that this is a significant correlation. The correlation coefficient and sign indicates that Ltourism_index and LGDP has an extremely strong positive correlation. In terms of the correlation between Ltourism_index and Ltress a low positive relationship is present. An inverse relationship exists between unemployment and tourism. This is indicated by the negative moderate correlation between these variables. This result is theoretically true, as the increase in the unemployment figures could lead to a decrease in the number of tourist arrivals and/ or in tourism spending. The correlation between the dependent variable and Leap are extremely strong and positive. Also, there is a moderately strong correlation between Ltourism_index and Linc.

5.3.1.2 Unit root test

Table 5—3: Unit root test: Model 1

Variable		Levels				1 st Difference				Re-sult
		ADF	LLC	PP	IPS	ADF	LLC	PP	IPS	
Ltourism_index	Prob	0.021**	0.000*	0.007*	0.034**	0.025**	0.009*	0.000*	0.000*	I(0)
	t-stat	32.028	-3.604	35.701	1.821	31.488	-2.330	60.435	-4.396	
Ltrade_GDP	Prob	0.000*	0.000*	0.000*	0.000*	0.000*	0.000*	0.000*	0.000*	I(0)
	t-stat	-74.20	-6.516	120.07	-4.000	68.007	-6.133	123.73	-8.571	
LGDP	Prob	0.024**	0.000*	0.000*	0.013**	0.196	0.001*	0.000*	0.087	I(0)
	t-stat	31.568	-6.245	67.152	-2.223	22.842	-3.029	42.842	-1.355	
Ltress	Prob	0.070***	0.002*	0.160	0.040 *	0.000*	0.000*	0.000*	0.000*	I(1)
	t-stat	24.500	-2.765	23.836	-1.740	50.095	-4.132	85.402	-4.230	
Lunemp	Prob	0.853	0.853	0.859	0.019	0.000*	0.000*	0.000*	0.019**	I(1)
	t-stat	11.875	11.875	11.760	-2.292	62.167	62.167	57.398	-2.058	
Leap	Prob	0.0388	0.001*	0.999	0.052	0.000*	0.000*	0.808	0.000*	I(0)
	t-stat	29.858	-2.979	3.938	-1.622	44.543	-5.351	12.716	-3.646	
Linc	Prob	0.882	0.0004	0.02**	0.848	0.005*	0.000*	0.000*	0.001*	I(1)
	t-stat	11.278	3.358	32.217	1.030	36.94	-3.175	45.366	-2.897	

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.

Source: Compiled by author

It is noted that Ltourism_index is stationary at levels, due to all four-unit root test resulting in p-values below 5%, thus, rejecting the null hypothesis (H_0) of the existence of unit roots. This also applies to variables, Ltrade_GDP, LGDP and Ltress. Similarly, these variables also reject the null hypothesis for all four-unit root tests at a 5% significance level. Leap is stationary at levels with only three tests in accordance with this statement as the PP test accepts the null hypothesis. However, as stated previously, this is the appropriate criteria for rejecting the H_0 . As these variables are stationary at I(0) it is not necessary to analyse the first differenced effect.

Nonetheless, some of the variables were not stationary at levels and therefore, the succeeding first stationary test was executed. Thus, the first difference for these variables was tested. The test results for the unit root test of Ltress indicate that it is only stationary at first difference as all the tests presented a p-value below a significance level of 1%. Lunemp is not stationary at the level order of integration and thus the first difference results were collected. These results shown

that Lunemp are stationary at first difference with all four tests rejecting the null hypothesis at p-values below 1%. Also, Linc is noted to integrate at the first order I(1) with the majority of p-values only significant at first difference.

5.3.1.3 Long and short-run relationship

The unit root test indicates that the variables are stationary at I(0) and I(1); therefore the panel is analysed by means of a PMG-ARDL model. Table 5.4 presents the results from the PMG-ARDL model for the long-run relationship between tourism and the economic variables.

Table 5—2: Long-run relationship: Model 1

Variable	Coefficient	t-Statistic	Prob
Ltrade_GDP	0.4965	3.0664	0.0030*
LGDP	0.7630	3.2446	0.0018*
Ltress	0.7317	1.5469	0.1261
Lunemp	-0.9814	-3.1128	0.0026*
Leap	0.4798	3.7016	0.0004*
Linc	-0.7101	-3.1887	0.0021*

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.

Source: Compiled by author

The following equation (5.2) presents the long-run equation for Model 1, which indicates the long-run relationship between tourism and economic variables.

$$\text{Eq 2: } L_{\text{tourism_index}} = 0.4965(L_{\text{trade_GDP}}) + 0.7630(L_{\text{GDP}}) + 0.7317(L_{\text{tress}}) - 0.9814(L_{\text{unemp}}) + 0.4798(L_{\text{Leap}}) - 0.7101(L_{\text{inc}}) \dots \dots \dots (5.2)$$

As all the variables were transformed into their logarithmic form, the changes in the dependent variables, as an influence by the dependent variables, are in percentages. In the long-run, a positive relationship exists between the dependent variable L_{tourism_index} and the independent variables L_{trade_GDP}, L_{GDP}, L_{tress} and L_{Leap}. This indicates that the increase in the independent variables causes an increase in the dependent variable. Therefore, a one percent increase in trade as a percentage of GDP will cause a 0.49 percent increase in the tourism index. In terms of economic growth, a one percent increase in GDP will cause a 0.76 percent increase in the tourism_index. A one percent increase in the Tress Index, will cause a 0.73 percent increase in the tourism index. However, this is not statistically significant as indicated by the p-value exceeding a 10% significance level. Therefore, the Tress Index does not have a significant impact in the changes in tourism_index Also, if the number of economically active individuals

increases by one percent, the tourism_index figure will increase by 0.47 percent. A negative long-run relationship exists between Ltourism_index, the dependent variable and Lumep, the independent variable. A one percent increase in the unemployment rate will decrease the tourism_index value by 0.98 percent. An unusual result for the relationship between income and tourism arose. The result indicated that there exists a negative relationship between Linc and Ltourism_index. A one percent increase in the disposable income causes a 0.71 percent decrease in tourism. A plausible explanation for this could be that tourism is characterised as a luxury goods and not a necessity in most households. As such, when an individual's receive an increase in their income, they will mostly likely spend it on necessities rather than tourism which will cause a decrease in the number of tourist arrivals as well as a decrease in tourism spending. Below 5 percent indicates a strong significance. Table 5–5 presents the results from the PMG–ARDL model on the short-run relationship between the dependent variable and independent variables.

Table 5—3: Short-run relationship: Model 1

Variable	Coefficient	t-Statistic	Prob
Cointeq01	–0.258349	–1.794405	0.0768***
D(Ltrade_GDP)	0.040193	0.529974	0.5977
D(LGDP)	–2.591432	–1.199134	0.2343
D(LTress)	0.412018	0.420382	0.6754
D(Lunemp)	0.109576	0.312381	0.7556
D(Leap)	1.407413	0.769356	0.4441
D(Linc)	1.439718	1.657601	0.1016
c	–21.60828	–1.775947	0.0798***

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.

Source: Compiled by author

For the variables in the model to have a short-run relationship, the sign of the coefficient should be negative and the p-value should be significant. As such, the results indicate that there is a short-run relationship between the dependent and independent variables. However, the p-value is above the 5 percent significant level; nevertheless, this could still be significant as the p-value is below 10% and still significant at a 10 percent significance level.

The number of time periods required to reach equilibrium in Model 1 is calculated by dividing one by the coefficients. Therefore, 1 divided by 0.258349 equals to 3.870 time periods required to reach equilibrium for Model 1 in the short-run. In other words, it will take approximately 3.8 years. None of the individual independent variables are statistically significant, which indicates that in

the short-run, the social variables have a limited to none effect on tourism. In addition to the short-run relationship of the series c for the nine provinces, a province specific short-run analysis was performed. Table 5–6 indicates the short-run relationship results from each of the nine provinces which were found to be statistically significant.

Table 5—4: Provincial short-run relationship: Model 1

Province	Variable	Coefficient	T-statistic	Probability
Western Cape	Cointeq01	–1.034891	–22.54057	0.0002*
	None	–	–	–
Eastern Cape	Cointeq01	0.101608	50.65464	0.0000*
	D(Ltrade_GDP)	0.156288	38.36041	0.0000*
	D(Lunemp)	–1.528884	–7.958340	0.0041*
Northern Cape	Cointeq01	–0.029316	–14.90617	0.0007
	D(Ltrade_GDP)	–0.004819	–16.52760	0.0005*
	D(Ltress)	–0.357593	–10.35936	0.0019*
	D(eap)	0.07017	4.111654	0.0261*
Free State	Cointeq01	–0.640059	–39.41815	0.0000*
	D(Ltrade_GDP)	0.251107	–79.18291	0.0000*
	D(Linc)	0.705422	2.990700	0.0500**
KwaZulu–Natal	Cointeq01	0.086697	221.4963	0.0000*
	D(Ltrade_GDP)	0.128920	65.95661	0.0000*
	D(Lunemp)	–0.116653	–4.61520	0.0191**
	D(Leap)	0.197484	3.185054	0.0499**
North–West	Cointeq01	0.039689	84.08533	0.0000*
	D(Ltrade_GDP)	0.013557	39.95316	0.0000*
	D(LGDP)	0.330384	5.781209	0.0103*
	D(Leao)	0.281951	7.820574	0.0044*
Gauteng	Cointeq01	–0.016421	–52.42573	0.0000*
	D(Ltrade_GDP)	0.054188	6.421710	0.0077*
	D(Lunemp)	–0.140502	–18.65195	0.0003*
	D(Linc)	0.434626	10.58316	0.0018*
Mpumalanga	Cointeq01	–0.766551	–5.13562	0.0112**
	D(Ltrade_GDP)	–0.136782	–4.130090	0.0257**
Limpopo	Cointeq01	0.065895	–117.0470	0.0000*
	D(Ltress)	0.574770	22.96369	0.0002*

	D(Lunemp)	−0.746627	−41.71751	0.0000*
	D(Leap)	0.522081	10.97685	0.0016*

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.

Source: Compiled by author

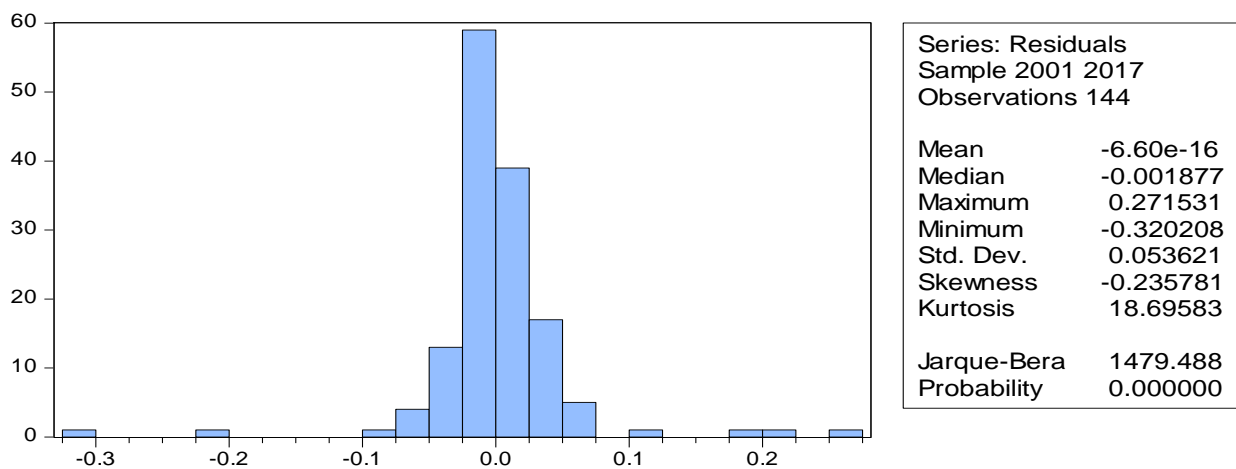
In the Western Cape, Northern Cape, Free State, Gauteng and Mpumalanga, a short-run relationship exists for all the dependent variables and independent variables included in Model 1. This is indicated by a negative sign for each of the coefficients of Cointeq01. In addition to a negative sign, the p-values indicate statistical significance at a 5 percent significance level. For the provinces of the Eastern Cape, KwaZulu– Natal, North–West and Limpopo, there were no short-run relationships discovered between the dependent and each independent variable as the symbol is positive and significantly so. For the purpose of this analysis, variables which are statistically significant were presented in Table 5.6 to explain the individualist short-run relationship between the dependent variables and independent variables for each province in South Africa.

Even though the Cointeq01 indicates that there exists a short-run relationship in the **Western Cape**, none of the variables are statistically significant and will therefore not be further elaborated on. In **the Eastern Cape**, two variables namely, Ltrade_GDP and Lunemp are statistically significant. A one percent increase in Ltrade_GDP would cause a 0.15 percent increase in Ltourism and a one percent increase in unemployment would decrease Ltourism_index with 1.52 percent. In the **Northern Cape**, a one percent elevation in Ltrade_GDP caused a 0.004 percent decrease in Ltourism_index, a one percent increase in Ltress caused a 0.35 percent decrease in tourism_index and a one percent increase in Leap would also cause a 0.29 percent increase in Ltourism. A one percent increase of the Ltrade_GDP and Linc in the **Free State** would decrease tourism by 0.25 percent and increase tourism by 0.70 percent, respectively. Tourism in **KwaZulu–Natal** is statistically influenced by Ltrade_GDP, Lunemp and Leap. Thus, a one percent increase in Ltrade_GDP and Leap would cause a 0.12 percent and 0.19 percent increase in the Ltourism_index. On the other hand, a one percent increase in Luemp would lead to a 0.11 percent decrease in the tourism_index. In the **North–West**, a one percent increase in Ltrade_GDP, LGDP and Leap would lead to a 0.01 percent, 0.33 percent and 0.28 percent increase in Ltourism_index. Tourism in **Gauteng** is statistically influenced by Ltrade_GDP, Lunemp and Linc. A one percent increase in Ltrade_GDP and Linc would positively influence a 0.05 percent and 0.43 percent increase in Ltourism_index. On the other hand, the increase in Lunemp by one percent would decrease Ltourism_index by 0.14 percent. In **Mpumalanga**, the sole statistically significant variable, Ltrade_GDP, indicates that a one percent increase in Ltrade_GDP would potentially decrease Ltourism_index with 0.13 percent. Lastly, the tourism sector in **Limpopo** is influenced

by Ltress, Lunemp, and Leap in the short-run. A one percent increase in Ltress and Leap and Linc had a positive relationship with Ltouris_index as a one percent increase in the independent variables caused a 0.57 percent, 0.52 percent and 0.03 percent increase in the dependent variables' Ltouirsm_index, respectively. An inverse short-run relationship exists between Ltourism_index and Luemp, where a one percent increase in the unemployment rate would cause a 0.74 percent negative movement in the Ltourism_index.

5.3.1.4 Normality test

Figure 5–3: Normality test: Model 1



Source: Compiled by author

First, the Kurtosis value, which indicates the high of flat the series is, exceeds 3 which indicates that the distribution is peaked. This is the explanation of the term leptokurtic. The probability states that the Jarque–Bera value is more than the H_0 's observed value. Therefore, the H_0 of normal distribution is rejected due to the probability being below 0.05.

5.3.2 Model 2: Tourism and social variables

The second model constructed was used to analyse the relationship between tourism and social variables. These variables have an indirect impact on tourism as it forms part of the determinants relating, *inter alia*, to labour, health, safety and poverty. Equation (5.3) presents the factors that could possibly have an impact on tourism.

$$\begin{aligned}
 \text{Eq 2: } LTourism_Index_t = & \alpha_0 + \sum_{j=1}^k \beta_j LTourism_Index_{t-j} + \sum_{j=0}^k \lambda_j LHDI_{t-j} + \sum_{j=0}^k \lambda_j LURBAN_{t-j} \\
 & + \sum_{j=0}^k \Delta \lambda_j LCRIM_{t-j} + \sum_{j=0}^k \lambda_j LGINI_{t-j} + \sum_{j=0}^k \lambda_j LINFRA_{t-j} + \sum_{j=0}^k \lambda_j LPOV_{t-j} + \sum_{j=0}^k \lambda_j LPOP_{t-j} + \\
 & \varphi_1 LTourism_Index + \varphi_2 LHDI_{t-1} + \varphi_3 LURBAN + \varphi_4 LCRIM_{t-1} + \varphi_5 LGINI_{t-1} + \varphi_6 LINFRA_{t-1} + \\
 & \varphi_7 LPOV_{t-1} + \varphi_8 LPOP_{t-1} + e_t \dots \dots \dots (5.3)
 \end{aligned}$$

The dependent variable, *Ltourism_index*, represents the spending by tourists and the number of tourist arrivals. The independent variables are *Lhdi* (human development index), *Lurban* which is the level of urbanisation in a region, *Lcrim* provides the figures on crime occurrences, *Lgini* is the Gini coefficient for each region and *Linfra* is the infrastructure index, while *Lpov* indicates the number of individuals living under the poverty line and *Lpop* indicates the population size. Table 5–7 presents the results from the four unit root tests conducted on Model 2.

5.3.2.1 Correlation Analysis

Table 5—7: Correlation matrix: Model 2

Variable(s)	Ltourism_index	Lhdi	Lurban	Lcrim	Linfra	Lgini	Lpov	Lpop
Ltourism_index	–	–	–	–	–	–	–	–
correlation	1.0000	0.1426	0.0622	–0.0794	0.1011	0.4455	0.8255	0.9014
t-stat	–	1.7715	0.7659	–0.9794	1.24987	6.1147	17.9795	25.5848
prob	–	0.0785	0.4449	0.3289	0.2133	0.0000	0.0000	0.0000

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.

Source: Compiled by author

The correlation between *Ltourism_index* and *Lhdi* is implied by the correlation coefficient's sign to positive and significant by the p-value of 0.07, which is still significant at 10%. The value of the correlation coefficient, 0.142, indicates a low but positive correlation between the variables. Thus, it is possible that the increase in the HDI of a region could possibly make a positive contribution to the increase in tourist arrivals and spending. *Lurban* and *Ltourism_index* is positively correlated, but the p-value indicates that the correlation is not significant. On the other hand, variables such as *Lcrim* have a negative correlation with *Ltourism_index*. This correlation has a very low probability of realising, since the p-value is above 32%. As such, a region that is known for criminality and injustices would not be seen as attractive to tourist and would thus not be a desired tourism destination. Even though the *Linfra* and the *Ltourism_index* have a positive correlation, it is surprising to see that this is not a strong correlation. The p-value also indicates that this is not significant.

Lgini, *Lpov*, *Ltourism_index* and *Lpop* has an extremely high and positive correlation and this is significant at 1%. It could possibly be that the increase in the population size leads to the urbanisation of regions. Therefore, urbanised regions are characterised with increased development in terms of accommodation, transport and other relevant tourism facilities. Tourist

are usually attracted to beautiful scenery and proper facilities, which could be found in these areas.

5.3.2.2 Unit root test: Model 1

Table 5—8: Unit root test: Model 2

Variable		Levels				1 st Difference				Re-sult
		ADF	LLC	PP	IPS	ADF	LLC	PP	IPS	
Ltourism_index	Prob	0.021**	0.000*	0.007*	0.034**	0.025**	0.009*	0.000*	0.000*	I(0)
	t-stat	32.028	-3.604	35.701	1.821	31.488	-2.330	60.435	-4.396	
Lhdi	Prob	0.000*	0.000*	0.010*	0.373	0.472*	0.011	0.108	0.000	I(0)
	t-stat	86.654	-84.84	34.532	-0.323	-0.947	-2.274	25.651	-4.407	
Lurban	Prob	0.000*	0.000*	0.004*	0.000*	0.030**	0.000*	0.000*	0.012	I(0)
	t-stat	73.541	-3.296	37.361	-6.865	30.842	-4.475	44.952	-2.229	
Lcrim	Prob	0.969	0.134	0.998	0.303	0.004*	0.010*	0.000*	0.001*	I(1)
	t-stat	8.555	-1.104	5.029	-0.514	37.853	-2.314	50.057	-3.025	
Lgini	Prob	0.983	0.743	0.970	0.999	0.002*	0.000*	0.000*	0.000*	I(1)
	t-stat	7.680	0.655	8.493	3.823	40.053	-5.599	62.801	-3.122	
Linfra	Prob	0.000*	0.000*	0.000*	0.000*	0.288	0.121	0.965	0.989	I(0)
	t-stat	53.869	-7.882	97.217	-4.399	20.814	-1.168	8.742	2.321	
Lpov	Prob	0.960	0.336	0.876	0.995	0.000*	0.000*	0.000*	0.191	I(1)
	t-stat	8.987	-0.420	1.413	2.694	49.933	-5.736	56.370	-0.871	
Lpop	Prob	0.06***	0.008*	0.024*	0.172	0.994	0.001*	0.999	0.982	I(0)
	t-stat	28.118	-2.404	31.672	-0.943	6.359	-2.909	4.138	2.107	

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.

Source: Compiled by author

As mentioned, the dependent variable *Ltouris_index* is stationary at levels. Likewise, *Lurban* and *Linfra* are variables of which the outcome of the four unit root test are *I(0)*. Also stationary at levels, *Lhdi* and *Lpop* rejected the null hypothesis for three out of the four unit root test performed. The variables *Lcrim*, *Lgini* and *Lpov* are not stationary at levels and were tested for unit root in the first difference. The results indicate that these variables are all stationary at the first order of integration *I(1)*. As such, the null hypothesis is rejected and no unit root exists for these variables at first difference.

5.3.2.3 Long and short-run relationship

The unit root test results from the ADF, PP, LLC and IPS methods indicated that both $I(0)$ and $I(1)$ variables are present in Model 2 when the relationship between tourism and social variables was investigated. Therefore, a PMG–ARDL method was applied to provide results on the long–and short–run relationship. Table 5–9 presents the results for the long–run relationship between the dependent variables representing tourism and the independent variables representing social variables.

Table 5—5: Long–run relationship: Model 2

Variable	Coefficient	t–Statistic	Prob
Lhdi	0.402648	5.238164	0.0000*
Lurban	0.029637	0.177345	0.8598
Lcrim	0.431232	3.144526	0.0025*
Linfra	0.937702	3.129387	0.0026*
Lgini	–1.186464	–2.255032	0.0275**
Lpov	0.606574	3.381473	0.0012*
Lpop	–0.679872	–4.758850	0.0000*

*Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.*

Source: Compiled by author

The following Equation (5.4), presents the long–run equation for Model 2.

$$\text{Eq 5: } Ltourism_index = 0.4026(Lhdi) + 0.0296(Lurban) + 0.4312(Lcrim) + 0.9377(Linfra) - 1.1864(Lgini) + 0.6065(Lpov) - 0.6798(Lpop) \dots \dots \dots (5.4)$$

In the long–run, a positive relationship exists between the dependent variable $Ltourism_index$ and the independent variables, $Lhdi$, $Lurban$ and $Linfra$. Thus, a one percent increase in the Human Development Index would lead to a 0.40 percent elevation in tourism, and a one percent increase in the level of urbanisation caused a 0.029 percent increase in tourism and a one percent increase in infrastructure would lead to a 0.93 increase in tourism.

A negative relationship in the short–run exists between the dependent variable $Ltourism_index$ and the two independent variables $Lgini$ and $Lpop$. Therefore, in the long–run, a one percent increase in the Gini coefficient would cause a 1.18 percent decrease in tourism a one percent increase in the population size would lead to a 0.67 percent decrease in tourism. The increase in the Gini coefficient represent an increase in income inequality, and in regions where the income inequality is high, the disparity between individuals is very notable. Here poor individuals are

extremely poor and rich individuals extremely so. This could possibly be an unattractive quality for potential tourists.

Some results generated were unexpected and are in contradiction to theory and knowledge accumulated thus far from the tourism research. Firstly, the long relationship between the development in the tourism industry and crime rate is noted as positive. This indicates that a one percent increase in the criminality rate will also be accompanied by increase the development in tourism with 0.43 percent in a region. The p-values indicate that this coefficient is statistically significant. The only plausible explanation for this statistic's results could be that rather than criminality having a positive impact on tourism, in a specific region, tourism in a specific region is progressing and apart from that there is an increase in criminality occurrence. Thus, these two variables occur at the same time, but not per se, as a result of one another. This could also be the case for Lpov where a one percent increase in poverty is said to increase tourism by 0.60 percent, which is also statistically significant at a significance level of 1 percent. To explain, tourists are possibly attracted to areas that are secluded and naturally unspoiled. These areas could be characterised by low economic development. As such, a region with high poverty does not attract tourists, but rather the raw landscape and scenery in regions do, which in some cases are accompanied by poverty. Table 5–10 provides the results on the short–run analysis of the relationship between the dependent variables and independent variables.

Table 5—6: Short–run relationship: Model 2

Variable	Coefficient	t–Statistic	Prob
Cointeq01	–0.5770	–3.0909	0.0029
D(Lhdi)	1.0279	1.3980	0.1669
D(Lurban)	2.1798	1.3231	0.1904
D(Lcrim)	–0.5005	–3.1073	0.0028*
D(Lgini)	1.6573	0.7366	0.4640
D(Linfra)	1.9017	0.2452	0.8070
D(Lpov)	–0.1200	–0.1996	0.8424
D(Lpop)	–5.5069	–0.9641	0.3385
c	27.5329	3.1129	0.0028

*Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively.*

Source: Compiled by author

In testing the short–run relationship, the rule of thumb is that the coefficients' sign should be negative and the p–value significant. Thus, Cointeq01's coefficient sign and p–value indicates that there is a short–run relationship between the dependent variable and independent variables. Accordingly, in the short–run, equilibrium will be reached.

To establish the number of periods the Model's variables will need to return to equilibrium, the value of the coefficient needs to be divided by 1. One divided by 0.577084 equals to 1.73, indicating that it will take approximately 1.73 years for the Model's variables to reach equilibrium. The negative coefficient and the significant p-value indicates that a short-run relationship exists in model 2. Variables, Lhdi, Lurban, Lgini, Linfra, Lpov and Lpop, are statistically insignificant. Therefore, they have a minor impact on tourism_index in the short-run. However, the variable, Lcrim is statistically and significant and will thus have a short-run impact on the tourism_index. Thus, Lcrim explains the short-run changes in the tourism_index variable. As such, a one percent increase in Lcrim would cause a 0.50 percent decrease in the Ltourism-index. The provincial analysis on the short-run relation between tourism and social variables is provided in Table 5–11.

Table 5—7: Provincial short-run relationship: Model 2

Province	Variable	Coefficient	T-statistic	Probability
Western Cape	Cointeq01	–0.9491	–12.6781	0.0011*
	None	–	–	–
Eastern Cape	Cointeq01	–0.1185	–47.486	0.0000*
	D(Lhdi)	–0.6559	–3.4221	0.0418**
	D(Lcrim)	–1.2946	–12.8691	0.0010*
	D(Lpov)	–0.4777	–4.7378	0.0178**
Northern Cape	Cointeq01	–0.6170	–18.3292	0.0004*
	D(Lcrim)	–0.2184	–25.5296	0.0001*
	D(Lgini)	–2.0250	–4.3903	0.0219**
Free State	Cointeq01	–1.5107	–80.7863	0.0000*
	D(Lcrim)	–0.9771	–22.3107	0.0002*
KwaZulu–Natal	Cointeq01	–0.2568	–59.8007	0.0000*
	D(Lpov)	–0.5251	–5.8145	0.0101*
	D(Lcrim)	–0.1021	–14.3040	0.0007*
North–West	Cointeq01	–0.3997	–68.6477	0.0000*
	D(Lurban)	0.1723	34.5268	0.0001*
	D(Lcrim)	–0.2121	–52.4234	0.000*
	D(Lgini)	–1.2341	–9.0721	0.0028*
	D(Linfra)	5.9262	3.9721	0.0285**
	D(Lpov)	–0.2743	–21.7466	0.0002*
Gauteng	Cointeq01	–0.0140	–366.4276	0.0000*
	D(Lhdi)	0.5356	16.0756	0.0005*
	D(Lurban)	3.9502	8.5528	0.0034*
	D(Lcrim)	–0.1774	–241.9048	0.0000*

	D(Lpov)	−0.0350	−19.0000	0.0003*
Mpumalanga	Cointeq01	−1.3088	−24.7784	0.0001*
	D(Lcrim)	−0.5795	−4.1417	0.0256**
Limpopo	Cointeq01	−0.0430	−2.7128	0.0730***
	D(Lhdi)	2.5747	3.5202	0.0389**

Note: *, ** & *** signifies statistically significant at 1%, 5% & 10% respectively

Source: Compiled by author

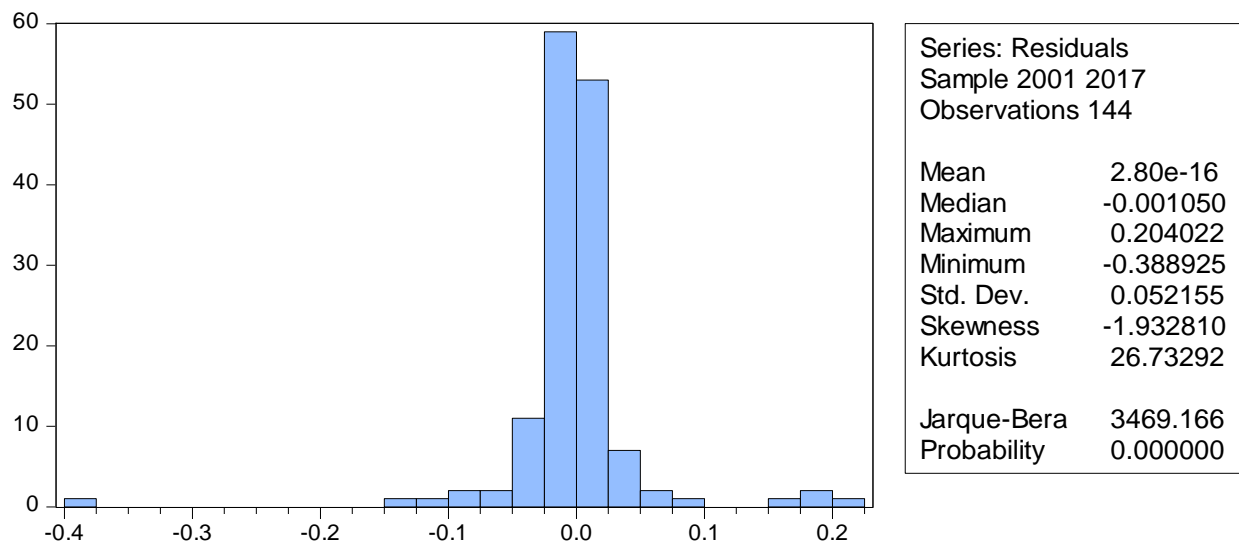
In the Western Cape, Northern Cape, Free State, Gauteng and Mpumalanga, a short-run relationship exists for all the dependent variable and independent variables included in Model 1. This is indicated by a negative sign for each of the coefficients of Cointeq01. In addition to a negative sign, the p-values indicate statistical significance at a 5 percent significance level. The cross section short-run coefficient indicates that a short-run relationship exists between the dependent and independent variables in the Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, North-West, Gauteng and Mpumalanga at a significant level of 5 percent.

None of the independent variables were statistically significant in **Western Cape**. For the **Eastern Cape** Province, a one percent increase in the Lhdi, Lcrim and Lpov would influence a 0.655 percent, 1.29 percent and 0.477 percent decrease in Ltourism_index, respectively. The **Northern Cape's** tourism_index is negatively influenced by Lcrim and Lgini as a one percent increase in these variables would decrease Ltourism_index with 0.21 percent and 2.02 percent each. Tourism in the Free State is statistically influenced by Lcrim. The results indicated that a one percent increase causes a 0.97 percent decrease in the dependent variable, Ltourism-index. For **KwaZulu-Natal**, Lpov and Lcrim has a statistically significant negative short-run relationship with the Ltourism_index. As such, a one percent increase in Lpov and Lcrim would decrease the Ltourism_index by 0.52 percent and 0.10 percent, respectively. In the **North-West**, the variables that have a statistically significant and positive impact on Ltourism_index are Lurban and Linfra; a one percent increase in these variables would respectively cause a 0.17 percent and 5.9 percent increase in Ltourism_index in the short-run. Contrary to this, Lcrim, Lgini and Lpov have a negative short-run relationship with the Ltourism_index. A one percent increase in Lcrim would cause a 0.21 percent decrease in Ltourism_index, and a one percent increase in Lgini would cause a 1.2 percent decrease in Ltourism-index and a one percent increase in Lpov would decrease Ltourism-index with 0.27 percent. Tourism in **Gauteng** is positively influenced by Lhdi and Lurban, as a one percent increase on Lhdi and Lurban would cause a 0.53 percent and 3.9 percent increase in the Ltourism_index in the short-run. In addition, Lcrim and Lpov have a negative short-run relationship with the Ltourism_index where a one percent increase in the independent variables, causes a 0.17 percent and 0.03 percent decrease in Ltourism_index respectively. For the province, **Mpumalanga**, Lcrim is the only statistically significant variable in

the short–run relationship analysis. The results indicate that a one percent increase in the Lcrim would cause a 0.57 percent decrease in Ltourism_index. Finally, **Limpopo’s** Ltourism_index would increase by 2.5 percent due to a one percent increase in Lhdi.

5.3.2.4 Normality test

Figure 5–4: Normality test: Model 2



Source: Compiled by Author

The Kurtosis indicators provide statistical evidence that Model 2 is distributed with a peak (leptokurtic), since the probability states that the Jarque–Bera value is more than the H_0 ’s observed value. The H_0 of normal distribution is rejected at a significance level of 1 %, exceeding a value of 3,

5.4 SYNOPSIS

Chapter 5 provided the empirical results and discussion from both the tourism destination competitiveness questionnaire and the statistical time–series analysis. These results aimed to satisfy the empirical objectives of the study and to fulfil the study’s aim of constructing a RTCI. The first section provided the results and its discussion on the weights produced for each sub–group and individuals determinants. The results from the tourism competitiveness index indicate that most of the determinants carry crucial significance in the determination of a tourism destination’s competitiveness. However, while Resources are the key to a successful tourist destination, Infrastructure and an Enabling environment and Authorities are also necessary in order to ensure tourism destination competitiveness. The key determinants of tourism destination

competitiveness, in no specific order, are: natural environmental resources, accommodation facilities, transportation facilities, food and drink facilities, essential facilities, strategic location and safety and security. It was established that the least significant determinant is PPP. Thereafter, the Regional Tourism Destination Competitiveness Index (RTDCI) was presented and a policy statement on the use of the index provided.

The second section presented and discussed the results determined by a time-series analysis. First, a unit root test revealed that four variables are stationary at levels in the first model and three variables are stationary at first difference. In addition, five variables are stationary all levels and three are stationary at first difference in the second model. The results of the panel unit root test indicates that a PMG-ARDL model is suited for further analysis. Thereafter, the correlation analysis indicated that in Model 1, the independent variables, *Ltrade_GDP*, *LGDP*, *Ltress*, *Leap* and *Linc* are all positively correlated with dependent variables *Ltourism_index* and that *Lunemp* is negatively correlated with the *Ltourism_index*. The correlation analysis of model indicates that the independent variables, *Lhdi*, *Lurban*, *Linfra*, *Lpop*, *Lgini* and *Lpov* is positively correlated with *Ltourism_index*. Moreover, *Lcrim* is negatively correlated with *Ltourism_index*.

The long-run relationship results indicated that in both Model 1 and Model 2, a positive relationship exists between the dependent variables and the independent variables. A short-run relationship is also noted for both Model 1 and Model 2. In addition to the short-run analysis, a provincial (cross section) short-run analysis was conducted for each province in each of the two models. The results presented the variables which have a statistically significant short-run relationship with the dependent variable. The results varied across cross-sections and variables. Finally, the normality test provided evidence of normal distribution. The following chapter concludes the study by providing recommendations based on both the literature and the empirical sections of the study. In addition, overall concluding remarks are provided.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The purpose of firms and the goal of countries are to be successfully competitive and prosperous. Likewise, a region itself operates in competition with other regions. Recently, there has been a shift in attention from national development to regional development. This study therefore focussed on the formulation of a Regional Tourism Destination Competitiveness Index by investigating the various determinants of tourism destination competitiveness. In order to achieve the objectives, set out in Chapter 1, the study largely consists of two sections: a literature review and an empirical study of a tourism competitiveness index which included a statistical time-series analysis. The first section, which investigated the importance of various determinants in achieving tourism destination competitiveness, drew upon the subjective opinions of respondents within the research field of tourism and economic development and of those active in the tourism industry. The second section took the form of an empirical study of participants' responses to a tourism destination competitiveness questionnaire. To complete the statistical analysis, data for the time-period, 2001 to 2017 for the nine South African provinces was also obtained. Chapter 6 reviews the study objectives firstly and then secondly, provides a summary of the entire study. Thirdly, it expands on the contribution made by the study as well as the limitations of the study. Finally, it offers recommendations for possible future research.

6.2 ACHIEVEMENTS OF STUDY OBJECTIVES

The objectives formulated include the primary objective, theoretical objectives and empirical objectives.

Table 6—1: Primary objective

Objective	Realisation of objective
Formulate a Regional Tourism Competitiveness Destination Index (RTDCI).	This objective was successfully met through a literature and an empirical study. The RTCI index was successfully constructed and can be found in Chapter 5, section 5.2.

The four theoretical objectives were achieved in Chapter 2. A thorough literature review provided background information on the workings of the tourism sector and the identification of determinants.

Table 6—2: Theoretical objectives

Objectives	Realisation of objectives
Theoretical objective 1: Discussion of definitions, concepts and theories on tourism and regional competitiveness	Definitions, concepts, approaches and theories were provided on themes that include tourism, regions, competitiveness, this provided understanding of various components that influence tourism destination competitiveness. This objective was realised throughout chapter 2 in section 2.2 and 2.3.
Theoretical objective 2: Review the literature on the determinants and importance of tourism competitiveness	Tourism destination competitiveness was discussed in detail in Chapter 2. The definition, concepts and theories and models relating to tourism destination competitiveness were put forward. This objective was achieved in Chapter 2 with focus on section 2.3.2.1.
Theoretical objective 3: Review the literature on the construction and importance of indexes.	The formulation of an index was the primary objective of this study. As such, it was necessary for the process to be studied beforehand to ensure the best possible outcome. The formulation of an index and its importance was investigated in section 2.2.3 of Chapter 2. This provided the steps that need be taken to formulate the tourism competitiveness index, the advantages and disadvantages of making use of indexes as well as examples of existing indexes.
Theoretical objective 4: Identify and define the contributors of tourism competitiveness in an economy	The determinants of tourism destination competitiveness were identified as contributors to tourism competitiveness. This was fulfilled through the investigation of possible determinants in Chapter 2 by reviewing existing literature and empirical studies. Section 2.2 to 2.4 focussed on the importance of specific determinants.

Table 6—3: Empirical objectives

The empirical objectives were completed in Chapters 2 and 5. An empirical study presented the importance of various determinants in achieving tourism destination competitiveness

Objectives	Realisation of objectives
Empirical objective 1: Identify the determinants of tourism destination competitiveness.	The literature review and pilot pre-test assisted in the identification of determinants of tourism destination

	competitiveness which was done throughout Chapter 2 as well as Chapter 4 section 4.4.2.
Empirical objective 2: Allocation of the weight of each determinant according to its importance in ensuring tourism destination competitiveness	Weighted values were allocated to each determinant to indicate its importance in tourism competitiveness. This was done through the completion of the Regional Tourism Competitiveness questionnaire by various respondents in the field of tourism and economics. In addition to the weighting of the selected determinants, the three sub-groups of the tourism destination competitiveness index was also weighted. The questionnaire provided information on the importance of tourism specific determinants on the success of a tourism destination. With regard to the importance and influence of economic specific factors (determinants) on the success of a tourism destination, a statistical analysis was performed and this was detailed in Chapter 5 section 5.2.
Empirical objective 3: Formulation of a final index and policy statement on the use of the index.	A policy statement on the use of the formulated RTCI was provided in section 5.2 of Chapter 5. This policy statement recommended the adequate application method of the RTCI and also provided a possible respondent framework that could be useful in data collection.

6.3 SUMMARY

Chapter 1: Chapter 1 provided an overview of the study, presenting the background, problem statement and the objectives. South Africa is characterised by high unemployment rates, inequality and poverty as well as poor standards of living for the majority of the population, coupled with dire future economic prospects. The key sectors such as mining and manufacturing are not performing according to their potential. Chapter 1 pointed out that a sector should be identified to assist South Africa in boosting growth and creating employment opportunities. An active tourism sector adds great value to an economy, not only in terms of monetary contribution, but also through social development.

Chapter 2: The second chapter made use of theoretical sources in three main sections. First, various definitions, concepts and approaches were provided on themes that include tourism, competitiveness and indices. It became evident that the definition of tourism, as well as that of competitiveness is dependent on various factors. The definition of tourism was shown to have progressed though time as researchers' understanding of the topic changed. Historically, tourism was defined as an activity relating to individuals touring and included accommodation and transport for leisure. This definition evolved over time to include a wide range of tourism activities,

such as sport events, festivals and medical services for the purpose of leisure and business. Competitiveness on the other hand has different meanings, depending on the author and discipline. In terms of a tourism destination, competitiveness is the ability to continuously attract tourists and encourage spending through improvement of tourism services and the perceived image of a destination, whilst protecting the environment.

Secondly, the chapter examined theories that relate to tourism, competitiveness, and specifically, relating to tourism destination competitiveness. The primary theory relating to tourism is the tourism-led growth hypothesis. This hypothesis explains that the development of the tourism sector will lead to economic growth. In terms of competitiveness, Porter's competitive advantage theory was used as a benchmark to explain the dynamics of competitiveness. Theories collaborating tourism and competitiveness are explained as tourism destination competitiveness. The work of Ritchie and Crouch features in the literature as it focuses on the identification of factors that influence the competitiveness of a tourism destination. This was used in the study to identify various determinants of tourism competitiveness and to formulate a conceptual model which could be used to measure the competitiveness of a tourism destination. Various other studies on tourism destination competitiveness have also been based on the model of Ritchie and Crouch.

Thirdly, empirical evidence on the importance of determinants in terms of tourism destination competitiveness was provided. The determinants were divided into four effects. The first is the effect of resources on tourism destination success, in which natural resources are noted as one of the most important deterministic factors in the success of a region. The discussion on the second effects' focussed on the impact of infrastructure on the performance of a tourism destination. In this section, the factors that stood out as crucial components in a tourism destination were transportation, accommodation, communication and the food and beverage industries. The economic effects were discussed in the third instance, referring to factors that were found in the previous research as well as economic growth and the production of goods and services. The fourth effect explained the impact that an enabling environment and the authorities have on a tourism destination, arguing that the strategies formulated and implemented by authorities are crucial to ensure the success of a tourism destination. Another deterministic factor of significance that was mentioned is the level of safety and the security provided at a regional tourism destination.

Chapter 3: Chapter 3 provided a broad overview on trends within the global tourism sector. This included international tourist arrivals, contribution to GDP, jobs created through tourism and finally, governments' expenditure on tourism. Overall, the best performing country in terms of the

selected countries is Spain. Spain was not necessarily the highest receiver of international tourist arrivals nor did it make the highest contribution to GDP through tourism, but each of the trends explained constantly increased in Spain. International tourist arrivals, being an important determinant of the success of a tourism destination indicated that South Africa is performing poorly when compared to developed countries, Spain and France and developing countries, China and Mexico. However, when compared to the neighbouring African countries, South Africa competes at an adequate level. On a provincial level, Gauteng is the province with the best performing tourism destination for both national and international tourists, followed by KwaZulu–Natal and the Western Cape.

In addition, a provincial analysis was done on the nine provinces of South Africa. The findings revealed that KwaZulu–Natal (when compared to Gauteng and Western Cape), is the province that improved the most in terms of tourism development; this includes tourist arrivals and tourist spending. However, in terms of the provincial tourism index value, Gauteng is leading with a value of one, indicating that Gauteng is currently the best performing province in terms of tourism arrivals and tourism spending. KwaZulu–Natal came in second with a provincial tourism index value of 0.92, despite the fact that the number of international arrivals decreased between 2002 and 2017. Western Cape came in third and is ranked 0.78 in the provincial tourism index.

Finally, the Travel and Tourism Competitiveness Index on South Africa, formulated by the World Economic Forum, was discussed. The analysis indicates that the majority of the factors in the TTCI, are working against the success of the tourism sector. The TTCI indicated that natural resources, cultural resources and business travel, as well as the business environment are the three best performing factors contributing to the success of the South African tourism industry. Natural resources are the heart of South Africa's success in tourism. Amongst the factors that demonstrated average performance were: air transport, ground and port transport, tourism services, prioritisation of travel and tourism, price competitiveness, human resources as well as the labour market and ICT readiness. However, transportation and tourism services should be the main focus for policymakers as these factors are crucial for a successful tourism destination. The determinants found to be performing poorly included: international openness, the environmental system, safety and security and health and safety. This is worrisome as safety and security are stated throughout the literature as a crucially important deterministic factor of success, representing a critical determinant in encouraging tourist arrivals and thus should enjoy great consideration in the formulation of policy and strategies.

Chapter 4: The presentation and rationale of methods used in the study was outlined in Chapter 4. The chapter provided the methodology and research design in the formulation of a TDCI and

for the statistical analysis. The methodology of the study was based on an epistemological approach as it aims to generate insight concerning the determinants of tourism destination competitiveness. A functionalist paradigm was used to investigate the performance of South Africa's destination competitiveness that could be applied to regions in South Africa as solutions in mitigating poor destination competitiveness.

The study followed two research designs. First, the development of the RTDCI was done starting a literature and document analysis on the determinants of tourism destination competitiveness and pilot study for the identification of determinants. Afterwards, a questionnaire was formulated and sent to respondents to allocate weighed values to each determinant. Second, a time-series statistical analysis was done in order to investigate the relationship between tourism and economic variables and tourism and social variables. The study investigated these relationships for South Africa's nine provinces. As such, a panel time-series analysis was done.

Chapter 5: The results from the questionnaire provided values for each determinant in terms of its importance. The questionnaire indicated that each of the selected determinants was weighted as highly important to significantly important in ensuring tourism destination competitiveness. This led to the construction of the RTDCI. From the RTDCI, the most important determinants of tourism destination success are: natural and environmental resources, accommodation facilities, Transportation facilities, Food and drink facilities, essential facilities and safety and security. The least important determinant of tourism destination competitiveness is PPP.

The first step of the econometric time-series analysis, the unit root test, indicated that the variables were stationary at $I(0)$ and $I(1)$. Therefore a PMG-ARDL method was performed. The PMG-ARDL for both Model 1 and Model 2 indicated that a long-run and a short-run relationship exists between the dependent variable and independent variables. The correlation analysis for Model 1 indicated that all the variables have a positive correlation except Luemp. Model 2's correlation analysis indicated that Lcrim alone has a negative correlation with the Ltourism_index.

6.4 CONTRIBUTION

This study contributed to the body of knowledge by providing an understanding into the workings of the tourism industry. It made a further, practical contribution in the form of a RTDCI. The RTDCI is provided with weighted determinants according to their importance to ensure tourism destination competitiveness. Policy recommendations for the application of the RTDCI were provided as a framework on the practical application to different regions. As such, this study did not only contribute to the tourism research field, but also to policy-makers' interest, as it resulted

in a RTDCI (mentioned above), which could be applied to any region to measure the success of a tourism destination.

6.5 STUDY LIMITATIONS

The tourism sector is a comprehensive sector effected by various factors. To formulate a holistic index that comprises of all the possible determinants, proved to be overwhelming for respondents. The RTDCI just investigated the impact of factors pertaining directly to the tourism industry. Thus, the economic variables were not listed, but rather given as a single determinant “macro–economic environment”. Another limitation of the study is the small sample size of 42 (n) participants who completed the index.

6.6 FUTURE RESEARCH

Future research could investigate the perceptions of three bodies in the tourism sector: government, businesses and tourists. Perceptions of these individuals and organisations concerning the competitiveness of a certain region can be investigated. This could be done by first, a scale development and validation that will indicates the level of competitiveness for each determinants in a region. Thereafter, the index will be submitted to the selected respondents applying the formulated tourism destination competitiveness index to a specific region. The outcome of this applied TDCI will provide valuable insight into the strengths and weaknesses of a tourism destination. This could also assist in the identification of opportunities for, and threats to the success of a tourist destination. Information generated from the applied TDCI could be of use to government officials and businesses in the formulation of policies and strategies to improve the performance of the tourism sector within a specific region.

Separate from this suggested future research, the different sub–sectors within tourism could also be analysed to compile a sector–specific index. For example, in the accommodation sub–sector an index could be formulated that undertakes an in–depth examination of the various determinants of the success or failure of accommodation facilities. In future research, larger sample sizes will be utilised.

6.7 RECOMMENDATIONS

Both the literature and empirical discoveries provided awareness that has led to making certain recommendations that can be formulated to provide solutions to the problem of low tourism destination competitiveness in South Africa. Later, when these regions are successful tourism destinations, it could be a step towards an improved ranking in the Travel and Tourism Competitiveness Index.

- *Improve the perception of tourists through national branding*

National branding entails the assessment and management of a tourist destination with the purpose of attracting potential tourists as well as past tourists (Knott, Fyall & Jones, 2015:47). National branding could therefore be an effective attempt to improve the competitiveness of a tourism destination. This process must, however, be included in the many areas of tourism such as the management of natural resources, transportation, accommodation facilities and so forth. National branding is mostly done through destination marketing. In this way, marketing initiatives initiated by the public and private sectors should aim to better the perception that tourists have of a particular tourism destination. A manner in which the tourism destination in South Africa could be marketed is by establishing a national competition where different tourism destinations would compete to be awarded recognition as the top tourism destination. Through this, tourism destinations would aim to better themselves and encourage competitiveness between them.

Another attempt to better the tourism sector in regions could be to invest in local tourism businesses in the region. In South Africa, Proudly South Africa is a brand that encourages the use of South Africa produced goods and services. This initiative is aimed to better the progress of South African based companies and advertises South Africa's competence.

- *Infrastructure development*

Adequate infrastructure in the tourism destinations could assist in performance improvement and as a result increase its contributions to economic growth in South Africa. The development of infrastructure is accomplished by identifying crucial infrastructural requirements, strategy formulation and the implementation of these. This should be done through the collaboration between the private and public sector. For example the funding of pothole repairs in roads could be provided by the local municipality and the labour could possibly be provided by the local community. Working together in unison, these participants could improve the performance of a tourism destination.

- *Improve ecological awareness*

The formulation of policies and campaigns against pollution, poaching, and endangering the natural environment is a crucial step in ensuring the success of a tourism destination. Recognising the significance of recycling in a region and educating on the significance of being environmentally responsible is important to ensure the physical attractiveness of a tourism destination. Placing dustbins which are individually allocated for paper, plastic and other waste materials should be placed throughout a tourism destination. This will be a physical reminder to be environmentally responsible and in this way encourage recycling. In addition, hosting tree planting days in tourism

destinations is a small but significant contribution to improving the natural environment of a tourism destination.

- *Planning tourism policies*

Tourism destinations should have a goal or objective to work towards in order to better themselves and be distinguished from other destinations. The formulation of regional tourism policies should aim to reach these goals. This should include budget allocations, a regulation framework, tourism research and evaluation programmes. Identifying the policies which carry priority and based on these, allocating resources to important policies. Accordingly, existing policies can be adjusted and new policies formulated, specific to the needs of a particular tourism destination.

- *Relaxing visa regulations*

South Africa implemented strict visa regulations and immigration regulations as a measure to reduce child trafficking, however, this reduced the number of international arrivals. Countries should therefore make the visa application process “tourist friendly” by reducing the requirements and application waiting times (Namibia Tourism Board, 2013:17). The Minister of Home Affairs, Mr. Malusi Gigaba, did state on 19 September 2018 that reforms of and amendments to travel regulations will be implemented by October 2018 (Department of Home Affairs, 2018). These amendments include; (i) when travelling with minors, it will only be recommended and not required to carry documentation with both the consent of parents for international tourist, however nationals will still be required to carry the documentation, (ii) a visa waiver programme will implemented for a number of African, Middle–eastern, Eastern Europe and Caribbean countries, (iii) Electronic visas (e–visa) will assist in the issuing of visas, (iv) Electronic gates (e–gates) will be placed at various airports to process tourists electronically rather than through an immigration officer. All these measures are planned to ensure ease of travel. This also forms part of national branding by simplifying the process of visiting the country.

- *Increase the participation of the public sector*

Government does not always have the necessary capacity and financial ability to successfully execute endeavours such as national branding. The public sector could prove helpful through involvement in the tourism sector. Its participation in terms of promoting, funding, and coordinating tourism–related activities. The Department of Environmental Affairs (2015:10) stated that by improving public–private partnerships, the department will be able to improve its operations. The World Travel & Tourism Council (WTTC) (2015:53) formulated a panel with both private and public sector representatives, its main desire being to improve the participation between them as it will eventually produce a South African tourism sector that could compete internationally. To provide

incentives for local (public sector) businesses to invest within the tourism sector, government could provide investment subsidies (Khunou, 2016: 262).

- *Increase safety in regional tourism destinations*

In some cases, criminals see certain tourist attractions as an opportunity for criminality. One example of a region that has experienced crime is the walking tours along Table Mountain. Popular attractions like these should be protected and portrayed as safe tourism attractions. These attractions should be protected by the provision of safety officers, warnings to tourist to remain attentive to their surroundings and co-operation with local police.

- *Training and skills development.*

Having abundant semi- and unskilled labour in South Africa, training is essential for the success of a region (Khunou, 2016:263). Providing skills development and training to these individuals could improve their capabilities to complete necessary tasks which increases the possibility of employment. Notwithstanding the value of skills development, mentoring is a big part of ensuring the success of individuals in a business. Mentors should be provided and continuously work with workers.

- *Modernisation*

For a destination to keep up with competitors, it should consider digital transformation as the way forward. The tourism sector is sophisticated and ever-changing and therefore should be technologically involved. The process of modernisation should first be implemented in local businesses. This could be done by installing wireless internet (Wi-Fi). The use of Cloud-based storage is a tool created to simplify the storage of documents and information, which is a 'greener' method of document storage and reduces the use of paper. Making use of technological marketing applications, such as Facebook, Twitter and YouTube, is another way of modernisation.

- *Assist potential and existing businesses*

In order to encourage the tourism sector to diversify to be more attractive to a wider range of tourists, new businesses need to be launched and existing ones improved. The reduction of approval time, capital and non-capital assistance will assist start-up businesses (Namibia Tourism Board, 2013:17). Improving the approval time of permits and documentation assistance could ease the application process for newly established businesses. Tax subsidisation is a viable financial incentive for start-ups to reduce the cost of permits and cost of applications could help

entrepreneurs without financial resources. Non-financial assistance can be in the form of consulting services. These financial and non-financial types of assistance will encourage entrepreneurs to take part in the tourism industry.

- *Better government and public involvement in tourism research*

A recommendation that presented itself through the questionnaire section of this study was to increase the involvement of government in tourism research. As mentioned in section 6.4 on the limitations, most governmental organisations failed to participate in this study. This is worrisome as even though their primary objective is to implement policies to ensure the success of tourist destinations, these organisations seemed to lack interest in tourism research which could provide useful answers to better the performance of the tourism sector in regions. Collaboration between academia, government and local tourism businesses on tourism research could assist in the identification of problems for tourism in regions. This collaboration could result in the provision of adequate solutions to the limitations of tourism and to gather sectoral knowledge and develop an enabling environment for tourism within regions.

6.8 SYNOPSIS

This research has provided relevant literature and empirical evidence on the significance of various determinants in ensuring the success of a tourism destination, identifying key determinants that influence the competitiveness of a tourism destination in a region. The objective of Chapter 6 was to give a summary of the key findings and accordingly provided recommendations. While researchers (Richie & Crouch, 2003; 2010; Dwyer & Kim, 2003) have formulated qualitative models which aim to explain the cause of competitiveness in tourist destinations, these models have failed to produce empirical numerals in which determinants could be weighed against one another. Despite the view held by some that a tourism destination should only focus on its competitive advantages, there could possibly be many treasures and opportunities that are overlooked by policymakers. The RTDCI, however provides a value for each determinant of tourism destination success. This enables researchers, policymakers and businesses to identify where the market opportunities lie. Thus, policies and strategies could be formulated to improve a specific determinant. The responsibility for improvement of a tourism destination should, however, not be that of government alone, but also the responsibility of the private sector and the local community. With tourism being a viable solution to the economic growth and economic development challenges faced by South Africans and the progress potential of tourism as a sector, South Africa could be on the road to economic and social recovery.

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ANNEXURE A: QUESTIONNAIRE

Dear Participant,

My name is Tanya van der Schyff, a masters student in Economics at the North–West University (Vaal Triangle Campus), under supervision of Prof. Danie Meyer and Mrs. Lorainne Ferreira. My study focuses on the development of a composite tourism destination competitiveness index. This index aims to assist in the tourism competitiveness analysis of regions, and as a result, be used to make comparisons between regions and potentially contribute in the development of regional development strategies. In order to complete this index, the most important and applicable determinants of tourism destination competitiveness need to be identified and analysed.

You have been identified as a specialist participant in either the tourism sector, tourism research or economic development. You are kindly requested to complete the index table below which will take approximately 10 to 15 minutes to complete. The table contains three sub–groups of determinants namely, (A) Resources, (B) Infrastructure, (C) Enabling Environment & Authorities, and include a total of 21 determinants (also known as factors).

The following instructions are provided:

You are kindly requested to weigh all 21 determinants as well as the 3 sub–groups of determinants. The weighting should be allocated to indicate the importance of the sub–group and determinants in achieving destination competitiveness for successful tourism and regional development. Please make use of the following weighting scale:

- 0 – Determinant has no importance
- 1 – Determinant has limited importance
- 2 – Determinant has average importance
- 3 – Determinant has significant importance
- 4 – Determinant has very high importance

After completion of the table, please email it back to me at vds.tanya@gmail.com. I would like to thank you for allocating your valuable inputs and time to this study. Please feel free to contact us (Tanya at 0827271708 and/or Danie at 0828505656 or daniel.meyer@nwu.ac.za) if you have any enquiries or inputs.

Thank you, Tanya van der Schyff

Indicator	Description	Weight	Comments
		0 – 4	
A. Resources			
1. Natural environmental resources	Quality of scenery, climate, water resources, fauna and flora. Attractiveness of natural assets and environmental management with conservation.		
2. Historical and Cultural resources	Diversity of local cultures and indigenous knowledge.		
3. Technology and innovation	Level of innovation and technology and incentives for investments in R&D.		
4. Labour force	Supply (size of labour force), cost of labour and skill levels.		
5. Entrepreneurship and Business community	The quality and number of entrepreneurs and development of entrepreneurship. Strength and activities of local business chambers.		
B. Infrastructure			
6. Health facilities	Quality and number of health facilities, such as hospitals, clinics. Prevalence of malaria and HIV.		
7. Education facilities	Quality and quantity of education facilities including higher education facilities.		
8. Communication facilities	Quality of ITC – Number of internet users and internet speed.		
9. Accommodation facilities	Quality and number of hotels, bed and breakfast facilities, resorts, etc.		
10. Transportation facilities	Quality of transport, air and sea ports, roads, railways		
11. Sport and Recreation facilities	Quality and number of recreational facilities, sports stadiums, parks and open spaces.		
12. Food and Drink facilities	Quality and number of restaurants, bars and cafes, etc.		
13. Essential services	Capacity, quality, access and maintenance of services such as roads, rail, sewer, water and electricity.		
C. Enabling environment and Authorities			
14. Strategic location	Location features determining success of a destination.		
15. Public–private partnerships	Number and efficiency of PPPs.		
16. Safety and security	Level of safety and security in region. Crime rates, homicide, burglary rate, and reliability and responsiveness of the police.		

17. Government spending on tourism and marketing efforts	Percentage of budget allocated to travel and tourism. Efforts and effectiveness of marketing to international and national tourists.		
18. Sustainable tourism policy/ Destination management	Number and success rate of policies and strategies formulated and implemented.		
19. Local leadership and Political stability	Leadership in the community of tourism organisation and entrepreneurs. Political situation in a destination.		
20. Red Tape	Visa requirements and other regulations. Time to open a business		
21. Macro-economic environment	Exchange rate, interest rate and economic growth etc.		

ANNEXURE B: LANGUAGE EDIT CERTIFICATE

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CERTIFICATE

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TO WHOM IT MAY CONCERN

This is to certify that I have edited the following document for English style, language usage, logic and consistency; it is the responsibility of the author to accept or reject the suggested changes manually, and interact with the comments in order to finalise the text.

Author: *Tanya van der Schyff*

Student number: *24943916*

Item / Qualification: *Dissertation: Magister Commercii*

Title / Topic: *AN INVESTIGATION OF THE FORMULATION OF A REGIONAL TOURISM
COMPETITIVENESS INDEX*

Institution: *School of Economic Sciences, Faculty of Economic and Management
Sciences, NORTH WEST UNIVERSITY (Vaal Triangle)*

Sincerely

DAVID LEVEY

Electronically signed

30 October 2018