## UNIVERSITY OF ZULULAND

## BILATERAL TRADE FLOWS BETWEEN SOUTH AFRICA AND THE BRICS MEMBER STATES, 2011-2015

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## BY

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## Quotation

"Hope is that stubborn spark in us that, in the midst of adversity, whispers that tomorrow will be better than today"
(Prof Thuli Madonsela)

## Declaration

I Nokwazi Nombulelo Adora Mthembu declare that: Bilateral Trade Flows between South Africa and The BRICs Member States, 2011-2015 is a product of my own effort, both in notion and completion. All the sources used have been appropriately acknowledged in the form of reference for future research.

Student $\qquad$

Nokwazi Nombulelo Adora Mthembu

## Supervisor

DR M.Z Shamase

## KwaDlangezwa

## Dedication

I dedicate this magnum opus work to my family, more especially to my parents, Nkosinathi Jabulani and Brenda Sizakele Mthembu, whom I adore and respect very much. Without their sacrifices in life I wouldn't be where I am; I dearly appreciate them.

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All praise to Almighty God of the Heavens. Without his love, grace and mercy I wouldn't have had the power to finish the race in completing this work. The journey has not been easy but with God by my side I found myself walking in his victory. Every day the Lord reassured me that he's my Alpha and Omega, that the victory is mine through all the challenges.

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#### Abstract

Bilateral trade flows among the BRICS member states thus far have contributed mutually between the progressions of each country and continue to. Nevertheless, South Africa's economy does not allow it to continue lagging behind its alliance partners. South Africa needed to be robust when it comes to the trade agreements with the group, since South Africa's economy has been scrabbling in growth in the past few years. With South Africa's economy still experiencing pressure from the global economic slowdown and domestic structural bottlenecks including labour unrest, unemployment remains high especially among young Africans and income inequality has increased. Economic growth has been volatile as the country has had to cope with the consequences of global crises. With all of these challenges the country is facing, one can only ask about where the aid of the BRIC countries is.

Conversely, South Africa's role as the member of BRICS still remains cognisance. The bilateral flows of BRICS countries still remain largely influenced by the gains of China, however with time, the export and import performance continue increasing the volume of trade of each BRICS country, which also alone increases each country's economic activities like the FDI and the in-flow and out-flows of imports and exports industry. ${ }^{1}$

The BRICS countries today present an opportunity as new growth poles in a multi-polar world. As demonstrated during the global crisis when they played a pivotal role by recovering fast from the crisis; more than just that, the BRICS countries as a unit carry the capacity of changing the world on account of both the threats and the opportunities they present economically, socially and politically. ${ }^{2}$ Analysts and international agencies suggest and advice that investors should pay careful attention to the opportunities offered by BRICS member states and the impact and influence they carry globally.


[^0]
## ISIFINQO

Amazwe angamalunga eBRICS kanye nobuldlewano bokuhwebelana kwamazwe sekube nomthelela wokubambisana ekuthuthukeni kwamazwe ngamanye. Nanoma kunjalo umnotho waseNingizimu afrika awukuvumeli ukusalela emuva kwamazwe okubanjiswene nawo. INingizimu Afrika kumele iziqhakambise uma yenza izivumelwano zohwebo namanye amalunga, kakhulukazi njengoba umnotho kade unenkinga yokudlondlobala kule minyaka embalwa edlule. Njengoba umnotho waseNingizimu Afrika usenengcindezi ykudodobala komnotho womhlaba jikelele kanye nokubambezeleka kwezinto ezenzeka ngaphakathi ezweni okumbandakanya ukungazinzi kwezabasebenzi, izinga eliphezulu lokungasebenzi kwabantu abasha abangama-Afrika Kanye nokukhula kokuhlukana kwamaholo. Izinga lokukhula komnotho belehla lenyuka okwenza ukuba kubenzima ezweni ngenxa yokungazinzi komnotho womhlaba jikelele.Uma kubhekwa zonke lezi zinselelo ezibhekene nezwe umuntu angabuza ukuthi lukuphi usizo kumalunga eBRICS.

Ngokunjalo, iqhaza leNingizimu Afrika njengelunga leBRICS lisabhekiwe. Ukuhwebelana kwamazwe eBRICS kusalokhu kukhombisa ukuzuza kwezwe laseChina okukhulu, nanoma kunjalo ngokuhamba kwesikhathi ukudayiswa nokuthengwa kwempahla kwamanye amazwe kukhombisa izinga lokwenyuka okmthamo wokuhwebelana kumalunga eBRICS ngalinye, khona kukodwa kuthuthukisa umnotho wezwe ngalinye ezinweni ezinjengo FDI kanye nokuphuma nokungena kwempahla ephuma kwamanye amazwe.

Amalunga eBRICS namhlanje asethubeni lokuba senhlonhlweni yokudlondlobala kulomhlaba onamathuba ahlukahlukene. Kwabonakala ngesikhathi esibucayi sokudodobala komnotho womhlaba jikelele ngesikhathi bebamba iqhaza elibalulekile ngokuthi basimame ngokushesha esimeni esibucayi, nangaphezu kwalokho, amazwe eBRICS njenge sikhungo banamandla okuguqula umhlaba ngokwezinto ezimbili okunga ubungozi noma amathuba abangawaveza ngokomnotho, ngokwenhlalo nangokwepolitiki. Abahlaziyi kanye nezinhlangano zomhlaba baluleka ukuba abatshalizimali babhekisise ngokucophelela amathuba angalethwa amazwe angamalunga eBRICS kanye nomthelela abangaba nawo kumhlaba jikelele.
ABBREVIATIONSBRIC - Brazil, Russia India and ChinaBRICS - Brazil, Russia India China and South AfricaDTI - Department of trade and industryEU - European UnionECOWAS - Economic Community of West African States
FDI - Foreign Direct Investment
GDP - Gross Domestic Product
IBSA - India, Brazil, South AfricaIMF- International Monetary FundOECD - Organisation for Economic Cooperation and Development
PPP - Purchasing Power ParitySA - South AfricaSADC- Southern African Development CommunitySARB- South African Reserve BankSSA - Sub-Saharan Africa
UNCTAD - The United Nations Conference on Trade and DevelopmentUSA - United States of AmericaUSD - United States DollarsWTO - World Trade Organisation

## GENERAL INTRODUCTION

BRICS is a South-South economic bloc of the fastest emerging economies in the World. It is made of by giants such as China, (the second leading economy in the World after the United States of America, Russia, (one of the European power houses), Brazil (the giant of Latin America), India (the rival of China in Asia), and the economic powerhouse of the African continent, South Africa. Undoubtedly, the BRICS countries together are a force to reckon with, challenging the modus operandi of the western economies. The introduction of BRICS countries saw a shift in world power. ${ }^{3}$ The developing world in Asia, Africa and Latin America came up with ways to speed up growth and development in their regions through the formation of a plethora of international programs to address their economic plight. The power possessed by this group is changing the world politics and several developing countries are eager to join the South -South big five. ${ }^{4}$

The inclusion of $S$ for South Africa expanded the acronym to BRICS. The 2011 invitation to South Africa happened to be a positive move for South Africa's economic position in the world. The inclusion really enhanced South Africa's influence in world markets. Though South Africa is a small economy, its inclusion signified the importance of African credentials enhancing the status and power of BRICS with its trans-continental breadth. Small as it is, South Africa carries a significant weight and a voice to uplift the developing world and that of the African continent in particular, but most of all looking out for its own self-interest. ${ }^{5}$ The weight of South Africa is said to be boosted by the continent's market. The sentiment that the BRIC states shared was that South Africa would be used as a gateway to the continent; hence, its addition as the fifth member of the bloc saw countries like Kenya and Nigeria in 2013 showing interest in joining the BRICS countries. The BRICS countries also share similar economic challenges, particularly the task of raising the standards of living for their citizens.

Being part of the BRICS bloc also affords South Africa the opportunity to cooperate with fellow BRICS countries in the realms of finance, agriculture, statistics, business development

[^1]and exchange, science, technology, climate change and energy, and sport. ${ }^{6}$ South Africa's rich endowment of mineral and natural resources complements Brazil's specialization in agriculture and raw materials, Russia's position as a major player in the commodity market, India's services-exporting economy, and China's recognition as the 'world's factory'. ${ }^{7}$

The changing global environment has seen a greater political and economic role of South Africa. The 2010-2011 Global Competitiveness Report of the World Economic Forum ranked South Africa favourably in relation to the other BRIC countries. South Africa's BRICS membership has enhanced its reputation as one of the leading campaigners for the reform of multilateral institutions, the World Trade Organization, the World Bank, and the International Monetary Fund. ${ }^{8}$ Even though South Africa does not have a huge and powerful economy compared to its BRICS partners, the country carries the ability to influence decisions that concern global participation and those affecting the continent of Africa. Moreover, the South Africa's vision to reap positive results alone out of BRICS without challenges is not an obvious case. This country is in alliance with the world's most powerful emerging states; for South Africa to survive, the only way is to guard its own interest and that of the continent, and to realize its aims and objectives in the BRICS bloc.

Thus, the topic under investigation evaluates the bilateral trade flows between BRIC member states and South Africa. The reality is that with this alliance, all five countries are guarding their own interest as individual countries. South Africa's role and position in the BRICS is thoroughly analysed so that South Africa's mandate in BRICS is manifested. Bilateral trade flows between the groups have always been skewed towards China and India since they are exporting more to other BRICS countries which makes them gain more when calculating each country's gain from bilateral trade within the group. Trade must equally benefit all parties involved.

[^2]
## CHAPTER ONE: AIMS, OBJECTIVES AND METHODOLOGY OF THE STUDY

### 1.1. BACKGROUND

The idea of BRIC was coined in 2001 by Jim O' Neil. It has risen to become a category of analysis in the economic and financial, business, academic, and communication fields globally. The formation of the BRIC group represents a shift in the global political economy and global institutions with regard to global governance issues as these emerging economies start to find solutions for their economic challenges. From 2003 to 2010, the BRIC countries accounted for $38.7 \%$ of global GDP growth. ${ }^{9}$ In 2011, South Africa received a formal invitation from the BRIC member states, that is, Brazil, Russia, India and China. The inclusion of ' $S$ ' for South Africa expanded the acronym to BRICS; this acronym is applied throughout this research study in describing this wider country grouping ${ }^{10}$. Though South Africa was a small economy its inclusion signified the importance of African credentials enhancing the status and power of BRICS with its trans-continental breadth.

Trading relationships are created based on benefits whether they are bilateral or multilateral. All trade agreements usually have opportunities and challenges that make or derail the benefits of trade. In the context of South Africa and BRIC countries' bilateral trade, South Africa needs to ensure that there is no exploitation of services in the trade agreement which might cause conflict that might nullify the bilateral trade relations.

The growing bilateral trade flows between South Africa and the BRICS countries contribute to trade and investment of South Africa which in the latter result in the economic growth of the group. Though South Africa remains a small economy comparatively her inclusion in 2011 truly signified the importance of African credentials in the world markets. According to Shameem, trade among the BRICS has significantly grown, however, trade and investment linkages among the group have been fragile and disjointed. ${ }^{11}$ This is a huge challenge for the group that they need to address moving forward.

[^3]
### 1.2. PROBLEM STATEMENT

In contrast with the other BRIC nations, the features of South Africa's economy are still of a developing country consisting primarily of natural resources. In fact, the flows of trade between the BRICS countries are mounting owing to trade in manufactured goods. That being so, the BRICS economies seem to be more incorporated in global trade than South Africa in terms of their production effectiveness. According to Wilson and Purushothaman, The BRICs countries are developing gradually and, by the next 50 years, they will become more cogent within the world economy by following the necessary factors listed in the Goldman Sachs report that serve as the conditions for the predicted growth. ${ }^{12}$ The BRICs nations could surpass the level of expansion in most industrialized countries. Additionally, their patterns of growth are displaying the mutual dependence of the BRICs countries. The Goldman Sachs report also looked at Africa, principally at South Africa, owing to the prominence of the country as the major leading African economy and one of the most significant political players of the continent.

Conversely, in Goldman Sachs, O'Neil has long resisted South Africa's invite into the BRICs because of its population of 54 million people, which is presently too small compared with the populations of the BRICS countries. This research study thus conducts an analysis of trade flows between South Africa and the BRICs economies and to investigate how South Africa is incorporated into the BRICs. This study serves as an incentive for future studies and it provides material that can be used by the BRICS administration executives to generate practical trade policies for further economic development, investment prospects, and growth

### 1.3. LITERATURE REVIEW

Literature review is indispensable to shaping what the method of investigating the question concerned. ${ }^{13}$ The literature review substantiated to be vital for this Dissertation and this was based on the understanding that, given the increasing nature of science, trustworthy accounts of past research are a necessary condition for orderly knowledge construction. This is what

[^4]exists from an academic point of view towards a clear understanding of the nature and background of the study under investigation.

In this research study the literature review is supplementary explained and thoroughly analysed in chapter two.

### 1.4.AIMS AND OBJECTIVES OF THE STUDY

The study aimed toward examining and analysing bilateral trade flows between South Africa and other BRICs states. This is completed by examining export flows between South Africa and the rest of the BRICs member states by applying the gravity model of trade from 2011 to 2015, based on data accessibility. This study had the following as its objectives:

- Identifying the arrangement and structure of bilateral trade flows in South Africa, with a concentration on trade from the individual countries of BRICs.
- Investigating the implication of bilateral trade flows, economic growth, exchange rate, and geographical distance among the BRICs economies and South Africa's economy.
- Analysing the recent patterns of the above-mentioned mechanisms between South Africa and the BRICs nations, as well as the economic performance of each BRICs country.
- Investigating the factors of bilateral trade flows between South Africa and BRICs countries, using the gravity model framework.


### 1.5. RESEARCH QUESTIONS

Main research question of the study: Was how best could the size, influences, and outcomes of bilateral trade flows that could benefit the BRICs member states as an end result of the South African economic incorporation and trade liberalization be explored?

Other subsidiary questions entailed:

- What is the arrangement and structure of bilateral trade flows in South Africa, principally trade from individual BRICs countries?
- Why are bilateral trade flows, economic growth, exchange rate, and geographical distance among the BRICs economies and South Africa's economy noteworthy?
- In what way could current patterns of the above-mentioned mechanisms amongst South Africa and the BRICs nations, as well as the economic performance of each BRICs country best be understood?
- How imperative are determinants of bilateral trade flows between South Africa and BRICs countries, using gravity model.


### 1.6. SIGNIFICANCE OF THE STUDY

The essence of this research study entailed investigating more knowledge and adds to the existing body of knowledge. So far, most studies on BRICS have focused on trade relations in general, without an in-depth focus on bilateral trade flows between South Africa and BRICS member states. Considerable lack of focus in literature on BRICS' bilateral trade flows with South Africa has limited current understanding of their economic growth trajectories. This study proposed to fill the gap in literature by providing a different approach in understanding the underlying fundamental determinants of bilateral trade flows between South Africa and BRICS member states. This study therefore investigates bilateral trade flows between South Africa and the other BRICS countries. It will add appropriate and anticipated value to academic discussions and emerging threats to intra-BRICS Trade Flows, political and economic governance.

### 1.7. THEORETICAL FRAMEWORK

A theoretical framework is used to limit the scope of the relevant data by focusing on specific variables and defining the specific viewpoint that the researcher will take in analysing and interpreting the data to be gathered. ${ }^{14}$ It also facilitates the understanding of concepts and variables according to given definitions and builds new knowledge by validating or challenging theoretical assumptions. ${ }^{15}$ The research study is correspondingly guided by different theories, Economic regionalism theory, Gravity model, theories of International Relations such as the International Political Economic (IPE) theory together with the two

[^5]dominant orthodox theoretical perspectives, Realism theory and Liberalism theory. In addition, the study also applied the customs union theory. The above mentioned theories are applied because of their evolution on trade, more specifically in explaining bilateral trade flow's effect between South Africa and BRICS countries. These above mentioned theories are thoroughly analyzed and explained for the benefit of the study.

### 1.7.1. Economic Regionalism Theory

This study shall, from the beginning adhere to economic regional theory as a framework. Regionalism means the establishment of trade agreements among geographical grouping or non-geographical grouping of countries. A number of changes in the international political economy of the 1980s saw a worldwide resurgence of interest in regionalism, concurrent with the rise of neoliberal economic theory as the dominant new force in the global economic system and changing global power relations. This second-wave of regionalism was given added impetus with the end of the Cold War and the new wave of democratization which swept through Eastern Europe, Africa and Latin America in the late 1980s and early 1990s.

Since the 1980s, regional integration theory has been largely dominated by a focus on its effects on trade, financial flows and economic integration, as well as an increasing concern over its relationship with forces of economic globalization and multilateralism. The debate over this aspect has been of particular concern to economists, especially with regard to the patterns of interaction between regional and global trade. ${ }^{16}$ For many, the growing prevalence of 'economic regionalism' defined as "the design and implementation of a set of preferential policies within a regional grouping of countries aimed at the encouragement of the exchange of goods and/or factors between members of the group" is the central feature of regionalism's 'second-wave' which will be applied to this study for better analysis of the nature of the research topic.

Unlike the old regionalism, which was protectionist, inward-looking and relied on collective strategies of self-reliance, the new regionalism is open, outward-looking and inclusive. ${ }^{17}$ It prescribes that policy should be directed towards the incorporation of the region into the world economy, a goal best achieved through the elimination of obstacles to trade and investment. The main concern of open regionalism is with economic efficiency or, more

[^6]broadly, with ensuring economic growth through participation in global wealth creating activities.

The financial crises of the late 1990s marked an intellectual watershed for the global economy, and also for regionalism as the central face of globalization. At the beginning of the twenty-first century, the theory and practice of regional cooperation and integration may evolve along different lines to how it was understood for most of the second half of the twentieth century. ${ }^{18}$ The attempts to explain economic regionalism in theoretic terms in the post war era started with the emergence of regional integration in Western Europe. Jacob Viner was the eminent economist supporting economic regionalism and regional trade arrangements in post war periods. According to Jacob Viner, regional bilateral trade flows can lead to trade creation if due to the formation of regional agreements, regional trade arrangement switch from efficient domestic producers and import more from other members of regional trade agreement. ${ }^{19}$

Bilateral trade flows have always been the most essential factor in economic relation amongst countries. Given the importance of trade in the economic growth process, it is indispensable to analyse and explore the nature of this research study expending the economic regionalism/ integration theory. It is important to state that the BRICS countries had long played an important role in their individual regions in terms of trade before some becoming powerful. Since 1994, South Africa has encouraged regional integration in Africa and part of the world especially developing countries based on the findings of international Trade Organization. The trade relations between South Africa and BRICS have thus been expanding and seem to be integrating effectively into the global trade flows.

The sudden turmoil in South Africa's economic growth is shattering, but one needs to be optimistic that the economy will strive since the Rand is gaining its strength. However, the trade relations between South Africa and BRICS countries are yielding positive outcomes. Furthermore, economic regionalism has contributed to the improvement of economic performance of these countries. Economic regionalism is the good platform and strong base for BRICS to expand in international level. ${ }^{20}$ BRICS as a regional grouping contributed the largest scale of trade volume in international trade. In this context, regional trade is considered as a binding factor to regional integration trade between South Africa and BRICS.

[^7]The alliance has accelerated largely because South Africa supplies commodities needed by China and India. Economic regionalism will tap into analysing and exploring the effects of bilateral trade flows between South Africa and BRICS member states as to how far are they thrusting for economic development and growth. The pivotal role BRICS is playing in intraregional and international trade. ${ }^{21}$

### 1.7.2. Gravity Model

International trade flows when analysed, economists usually apply another model, known as the gravity model that was first familiarised by Tinbergen in 1962. Tinbergen and Pöyhönen primarily identified stipulations and assessments on how trade flows are determined, then applied gravity models to international trade. ${ }^{22}$ They followed the general main beliefs of the Newton gravitational model in Physics, which states that when two bodies are attracted to one another, the resultant attraction between them is positively proportionate to the product of their masses and negatively proportionate to the distance between the objects. ${ }^{23}$ Based on Newton's theory, Tinbergen and Pöyhönen established that when the two bodies (countries) are involved in international trade, correspondingly represent the exporting and importing countries, their 'mass' variables are their GDP and population (economic extents). Nevertheless, their influence was instinctive without strong theoretical foundations and assertions. All the same, Tinbergen and Pöyhönen were the first to conduct econometric studies on bilateral trade flows based on this gravity model. Based on this model, bilateral trade volume between two countries is determined by their economic sizes and reductions with bilateral trade resistance.

Linnemann recommended theoretical descriptions for the gravity model in terms of imperfect competition, increasing returns to scale, and transport costs. In step with Linnemann, the gravity model was derived from a Walsarian general equilibrium model, asserting that the exports of one country to another country deal with the potential supply of exports of one country, prospective demand of imports from the other country, and trade barriers. ${ }^{24}$ Conversely, the Walsarian system integrates various explanatory variables for each trade flow that need to be practical to the gravity equation. Furthermost of the existing studies show that the gravity model could be derived from either theories of trade or models of trade, with

[^8]differentiated goods by the source country, economies of scale, or technological or factor endowment differences. In addition, these studies have verified and improved the theoretical foundation of the gravity.

Practical studies have presented that the gravity model has become the standard tool in explaining bilateral trade flows, not just for developed countries, but also for several developing countries and African economies, which produce homogeneous goods rather than differentiated goods. ${ }^{25}$ Generally, Hummelsand and Levinsohn made use of the gravity equation to test trade theories. For example, they tested if the monopolistic competition is applicable in international trade by using intra-industry trade data. They found that country pairings are supplementary defined by intra-industry trade. ${ }^{26}$ Henceforward, the gravity model could be consequent based on the supposition of either perfect competition or monopolistic market structure. In addition to numerous studies dealing with trade flows and gravity models amongst countries, the importance has been placed on the investigation of the trade potential, trade determinants, trade costs, trade direction, and trade enhancing effects. ${ }^{27}$ Their papers use both the cross -section and panel data methodologies.

In addition Frankel examined the role of geographical factors and trading blocs by expressing a more complex and advanced type of gravity equation. This was done in order to determine bilateral trade flows and evaluate the impact of regional integration on bilateral trade flows. The importance was placed on the geopolitical factors such as border-sharing and adjacency, common language, distance and historical links. He found that regional trading arrangements are statistically significant on trade flows and encourage trade among a group.

### 1.7.3. Absolute Advantage Theory

The first model of international trade was identified by Adam Smith, who is considered as the originator of modern economics. Though Smith contradicted the ideas and economic policies of mercantilists by creating the notion of absolute advantage in order to support free trade, he was conscious that complete free trade is unrealistic. ${ }^{28}$ In general, the aim of Smith was to demonstrate that all nations involved in trade could gain in equal portions from the

[^9]international trade, yet with the warning that trade is not necessarily beneficial to all countries. According to Smith, trade permits countries to specialize in producing goods or services that they have absolute advantage in. This is done both by using a minor quantity of resources at a lower resource cost compared to another country, and by using the equivalent amount of production yet yielding more product and service than other countries. This idea of trade envisages that all countries will benefit from international trade with condition that free trade is experienced and specialisation is done in accordance with their absolute advantage.

The first trade theory was one that signified that all nations could equally gain from international trade if free trade is practiced with specialization in the production of goods or services and the division of labour. ${ }^{29}$ The key facet in this theory is the absolute advantage theory. Moreover, it is important to note that Smith built his theory of international trade based on the concepts of division of labour and specialization. This showed that countries specializing in the production of goods or services in accordance with their absolute advantage, and then trading with other countries, could lead to mutually beneficial international trade, allowing all countries to gain in international trade. However, Smith's argument could not clarify the reason why other countries that do not have absolute advantage appear to perform in international trade. ${ }^{30}$

Trade has always been the most essential factor in economic relations amongst countries. This is the case with the BRICS member states. The absolute advantage theory comprehensively shows how the flows of goods and services are exchanged between two or more countries in order to enhance economic growth. ${ }^{31}$ Regional trade seems to be a great influence on the trade relations between South Africa and its South-South alliance, the BRICS nations. The notion of international trade is a key feature of a nation's economic improvement and has always been one of the preferred areas of interest amongst researchers and policy makers. In the case of BRICS countries and South Africa, it should be acknowledged that economic integration seems to have played a significant impact on trade flows and increase trade among the BRICS countries. Thus, regional economic integration may have contributed to the improvement of the economic performance of these nations as a result of gains from trade flows.

[^10]It was observed that the theory of trade developed by Smith was intimately connected with the theory of economic development because of the division of labour, which consisted of a growth in the total volume of the resources and an augmentation in the level of productivity. ${ }^{32}$ One of the most important elements in Smith's theory of trade was the vent for surplus principle. When this principle was combined with the notion of division of labour, Smith was able to examine foreign trade's impact on the development of the domestic economy. In his book "Wealth of nations" the theory of international trade was based on the ideas of division of labour and specialization. ${ }^{33}$ Conforming to Smith's doctrine, the more the division of labour was advanced and economies of scale were exploited, the greater the production would be, while retaining the same (Feenstra, R. C. 2004) Advanced International Trade: Theory and Evidence quantity of labour, as it enhanced the real wealth of nations and promoted the growth of the general economy.

### 1.7.4. Comparative Advantage Theory

In the nineteenth century, David Ricardo in 1817 wrote of the theory of comparative advantage after discovering a defect in the absolute advantage approach. ${ }^{34}$ Ricardo reworked Smith's ideas, indicating that a country might produce goods at lower opportunity cost compared to another country and specialize in goods in which the country has the comparative advantage in a more efficient way. ${ }^{35}$ Ricardo thus pointed out the importance of the law of comparative opportunity costs instead of financial costs. The theory of comparative advantage serves as a tool used by economists in order to explore international trade. In reality, this principle of comparative advantage allows countries to specialize in those particular goods and services in which they have the highest absolute advantage, which improves resource allocation and increases production internationally.

Smith's argument failed because he neglected to address comparative costs, the efficiency of the resources' distribution and modern econometric approaches. Criticisms and questions about Smith's ideas were addressed by David Ricardo, who established the principle of comparative advantage as a vital theory of international trade in his book the principles of

[^11]Political Economy. ${ }^{36}$ He revealed that countries specialising in goods or services with the highest comparative advantage in efficient productivity gain from international trade by exporting those goods or services. Countries will also import goods or services with the smallest comparative advantage. ${ }^{37}$

It seems that both comparative advantage and disadvantage were described by the Ricardian model, indicating that the opportunity cost in the production of goods or services is lower or greater in one country than another. In addition, tariffs and other barriers to trade are not assumed of the theory of comparative advantage, and opposed by Ricardo, since the only way for countries to specialise in goods and attain a more efficient production is by the use of the comparative advantage principle.

Mill too, in 1844, analysed the theory of comparative costs from the identical perceptions and assumptions as Ricardo, did also indicated that the interchange of nations was determined by the difference in comparative cost of production and not by the absolute cost. Mill aimed to determine the percentage in which the increased produce was divided between countries as a result of the saving of labour and how these countries would share the advantage of international trade. ${ }^{38}$ This was an attempt to find a solution to the dilemma left by Ricardo. Mill applied the principles of demand and supply in order to identify the existence of a price ratio, which would enable successful distribution of foreign trade's gains among countries. The theory of comparative advantage did not support tariffs or other restrictions of trade and presumed that international trade should be balanced by adopting an automatic mechanism of adjustments so that the value of imports and exports should be equal within a nation. ${ }^{39}$ Based on these ideas, more of the existing resources were efficiently used because of international trade, in that nations would benefit from effective allocation of these resources.

Agreeing to Ohlin's analysis that each country should use a large amount of its most abundant factor to specialise in the production of the goods of trade so that the goods in which the nation's abundant factor is intensively used to produce would be exported by that country. South Africa and the BRICS nation's bilateral trade flows must be analysed in detail. There are signs of exploitation in South Africa's position within BRICS when it comes

[^12]to trade relations. The trade gains from these countries are massively huge. Apart from China and India being the major players, Brazil and South Africa still face challenges in economic growth. This leaves a gap for criticism that trade gains are not allocated for the benefit of all the BRICS nations. Comparative advantage allows countries to specialize in those particular goods and services in which they have the highest absolute advantage, which improves resource allocation and increases production internationally.

### 1.7.5. Realism Theory

Realism theory advocates the primacy of politics over economics. It is a doctrine of state building and proposes that the market should be subordinate to state interests. ${ }^{40}$ The organisation of the national economy and its external relations should, at all times, remain consistent with national security concerns. National economic interests, especially those that are directly related to the security and survival of the state should be maintained to avoid dependence on other states. This may result in the discouragement of foreign ownership of firms and the adoption of protectionist measures in trade policy. ${ }^{41}$

The starting point for the realist perspective is that the international system is anarchical. This means that in the absence of a world government, states are the highest form of political power and the main actors in international relations. It is natural for states to pursue power in such a system and they aim to shape the economy to this self-interested end. The implication here is that the domestic and international spheres of the economy are viewed as distinct and separate. What is crucial for realists is the relative position of a state regarding other states, and for this reason their view of the world is often described as a zero-sum game. In other words, one state's gain is viewed as another state's loss.

Realist thinking is mostly concerned with how changes in the distribution of power in the international state system affect the workings of the international economy. It is the relative power resources between states that are the ultimate arbiter in the outcome of international economic relations. ${ }^{42}$ It is true that economies of states are mostly determined by political affairs of the state, the happenings influence the growth and development of the country's economy. The realist scholars affirm that politics are the determinant factor when it comes to

[^13]economic prospects of the state. Observing the economies of BRICS member states and South Africa, it is clear that their trade relations of the countries were created because of their political standpoints, their political relations manifested their economic relations. This theory touches strongly on the power of trade agreements. In the case of this study, bilateral trade flows are part and parcel of trade agreements. The realism theory states clearly that in most cases, powerful states take advantage of weaker states or states that do not have strong economies by exploiting them in many possible ways. ${ }^{43}$

Conversely, it is arguable in the case of BRICS countries that through their relations with South Africa, China and India are using South Africa to gain their influence in Africa. The organisation of the national economy and its external relations should, at all times, remain consistent with national security concerns. National economic interests, especially those that are directly related to the security and survival of the state should be maintained to avoid dependence on other states. This is a view expressed by the realism theory that countries should learn to prioritise their security in trade agreements. They should not jeopardise their sovereignty for their survival. It essential for South Africa to coordinate with BRICS member states but it should not be that the trade agreements only favour South Africa lesser, the bilateral trade flows must be fair on all parties involved.

### 1.7.6. Liberalism Theory

David Hume laid the first foundation of liberal thinking by demonstrating a central problem with the mercantilist position. Prior to the First World War, almost all currencies were convertible to gold, and this was how international economic transactions were resolved. Although there is a tradition of liberal thought that can be traced back to Jeremy Bentham, John Stuart Mill, John Locke and Thomas Jefferson, who all made political arguments for the freedom of Liberalism, the individual, who is seen as the central figure in the birth of liberal political economy is Adam Smith. Smith provided a critique of the mercantilist view, that the pursuit of power and wealth by a nation can only be achieved at the expense of other nations. He also sought to demonstrate how the free market is the most beneficial way of organising the economy, and in doing so aimed to show how this required minimum state involvement. ${ }^{44}$

[^14]Liberalism theory adopts that, at least ideally, politics and economics exist in separate spheres. Markets should be free from political interference for the sake of efficiency and growth. ${ }^{45}$ Liberalism assumes rationality in economic behaviour. It is argued that human beings are able to maximise their own utility; in other words, they possess the ability to assess the potential costs and benefits of any individual decision or action.

There are clear links here to liberal political theory, which is committed to individual equality and liberty. The harmony of interests, which liberals argue exists within states, is also said to exist between states. The degree to which the state should be involved in the economy is one of the key debates between various liberal thinkers, and differences of opinion do exist. Contrary to the realist position, trade between states is viewed as a mutually beneficial exercise and this is often described as a positive sum game. International economic relations between states are also judged by liberals to be a major source of peaceful relations among nations. By expanding the interdependence of national economies through free trade relations, more cooperative and less hostile relationships become more likely. ${ }^{46}$ The greater the degree of economic interdependence, the less likely states will be to enter into military conflict. The views shared by the liberalist scholars that trade amongst countries and wealth can be achieved without exploitation is a matter of discourse, on the contrary, many countries around the world are in military conflicts because of their fight of economic interdependence from Western hegemony e.g. Nigeria, Libya etc. It is true that trade between states play a major role in peace keeping but for the worth of peace weaker states must be exploited.

BRICS member states and their bilateral trade relations thus far have contributed mutually and continue to. Nevertheless, South African economy does not allow it to continue lagging behind its alliance partners. South Africa needs to be robust when it comes to their trade agreements with its alliances. The liberalism theory rejects the notion that economy of the state must be in line with its influence on the markets. The liberalists affirm that markets should be free from political interference for the sake of efficiency and growth, that politics should not determine the flow of markets which may lead to a stagnant economy and military confrontation.

[^15]
### 1.7.7. Customs Union Theory

Customs union theory is a theory that promotes regional trade between countries through trade creation and trade diversification. A customs union exists when a group of countries, normally geographically close to each other, apply a common external tariff to goods originating from third parties/non-members, while goods from members move freely within the union's territory (Krugman and Obstfeld in 2000). ${ }^{47}$ In a customs union, all members establish a uniform tariff administrative structure to ensure compliance. Customs union is an agreement between countries to maintain a free trade area and common external tariff. Common external tariff is an agreement between countries to eliminate their respective national tariff schedules and replace them with a common tariff schedule. When nations participating in a regional trade agreement go beyond removing trade barriers among themselves and adopt common barriers to trade with other countries, then they have established a customs union. To ensure equivalent trade policies members of customs union must establish elaborate coordination schemes. Therefore, in principle, customs union entails a more significant commitment as compared to a free trade area. ${ }^{48}$

The literature also suggests that regional trade arrangements can lead to trade creation due to the formation of regional agreements. Viner affirmed that regional trade arrangement members would switch from inefficient domestic producers and import more from other members of regional trade agreement. On the other hand, free trade diversion occurs when regional trade agreement members switch imports from low cost production with the rest of the world and import more from higher cost producers with partner states. Furthermore, trade diversion lowers welfare not only for the partner states but also for the rest of the world. ${ }^{49}$ Customs union theory was later modified and broadened by Franz Gerherls in 1956, Richard Lipsey in 1957 and Paul Collier in 1979, who then introduced into their models other welfare effects, such as consumption effects and terms of trade effects; in addition, Lipsey's 1960 survey article on customs union welfare effects of changing trade flows became a cornerstone of this theory. ${ }^{50}$

[^16]Viner's analysis shows that trade creation and trade diversion have opposite welfare implications and the net effect might take place on which these two effects dominate. ${ }^{51}$ This is the case with the BRICS member states, trade has grown massively and it has been consistent trade with positive effects. Trade creation has, in the new era of globalisation, been expanding strongly also because of the power and influence of regional integration. The bilateral flows of these BRICS countries with South Africa must be beneficial to both parties, like Viner says the trade must be complementary to parties involved. The customs union theory states coherently that trade diversification is essential when it comes to trade. The BRICS member states trade must comprehend the welfares of diversifying trade and how that combined with trade creation could grow their GDP's through strong bilateral flows.

When nations participating in a regional trade agreement like the BRICS coalition go beyond removing trade barriers among themselves and adopt common barriers to trade with other countries, then they have established a customs union. ${ }^{52}$ The South-South countries, as they are usually called, have significantly grown their economies through their common relations of trade affairs. The scholars of this theory affirm that trade can tremendously show growth if the countries involved in trade agree on a common tariff that would be reasonable for all parties be it bilateral or multilateral.

### 1.8. RESEARCH METHODOLOGY

The study adopted a qualitative research methodology and relied on a multi-disciplinary approach. The reliance on this method is because qualitative research method enables the researcher to collect data in a natural setting and thereby provide the researcher with an insight into the phenomenon of "interest". While defining qualitative research, Danzin and Lincoln argue that a qualitative research methodology is guided by a process which includes field notes, oral interviews, photographs, and recording. In essence, the qualitative method enables the researcher to examine issues based on their natural settings and interpret events in terms of the meanings people give to them ${ }^{53}$. Lechner in their study stated further that the qualitative methodology is important because it gives rich information. In addition to the fact

[^17]that this methodology is so comprehensive that it helps the researcher to develop a full understanding of the information investigated ${ }^{54}$.

In this research study the qualitative methodology is supplementary explained and thoroughly analysed in chapter three.

[^18]
## CHAPTER TWO: LITERATURE REVIEW

### 2.1. INTRODUCTION

Literature review is necessary in defining what the method of investigating the question concerned. ${ }^{55}$ This study is guided by literature that is literal on the thematic question. The researcher used both theoretical studies and empirical studies on the question investigated. The literature used in this study is of cognizance, it thoroughly analysed the trade flows fluctuations and added to the importance of trade in the world. The literature reviewed improved the findings of the study under analysis.

### 2.2. THEORETICAL STUDIES

The paper "South Africa in BRICS: A Bilateral Trade Analysis" from the South African Institute of International Affairs, collaborated by Chukwuka Onyekwena, Olumide Taiwo and Eberechukwu Uneze,=, examines the value, intensity, complementarity, balance, and structure of South Africa's trade with its partners in the BRICS (Brazil, Russia, India, China, and South Africa) alliance. It highlights the increasing dynamism of intra-BRICS trade, which started at the turn of the millennium. Key drivers of this dynamism include China's rapid economic growth, accompanied by a dramatic rise in demand for primary commodities, and South Africa's rich endowment of natural resources. Indices of the intensity and complementarity of trade show the dominance of India and China. While the strength of South Africa's trade with India is linked to their historical and cultural ties, the rising intensity of trade with China is primarily a demand side effect.

The inclusion of South Africa in the BRIC (Brazil, Russia, India and China) grouping in 2010 coincided with two developments: its trade balance with most BRIC countries switched from deficit to surplus, and the value of its exports to BRIC surpassed the value of its exports to the European Union (EU) for the first time. ${ }^{56}$ The latter development is probably attributable to the growing BRICS demand for South Africa's natural resources, coupled with the EU's slow recovery from the global financial crisis, rather than trade diversion from the EU to BRICS, as some analysts argue. However, the EU remains a major South African trading partner, while BRICS is rapidly catching up. Indeed, South Africa could leverage the

[^19]differences in the structure of trade with the rest of BRICS and the EU to achieve more inclusive growth. While trade in natural resources is more likely to stimulate employment in (low-skilled) labour-intensive primary industries, intra-industry trade with the EU would boost the (high-skilled) manufacturing and services sectors. Given this, South African trade with the bloc could yield complementary effects. This paper undoubtedly dwells on bilateral agreement between BRIC countries and South Africa, and the authors give detailed analysis on the economic development of the BRICS countries.

Sandrey and Jensen reconnoitred the major factors of the bilateral trade and the flows of trade from respective partners by providing figures, which also indicated the performance of these trading relationships between Brazil, India, and South Africa. By analysing the data of exports and imports, they found that South Africa is being viewed as a way of connecting the developed world and developing countries in the African continent ${ }^{57}$. South African imports are stronger than Indian imports, with gold being the main import into India. Brazil seemed to be more important than South Africa in terms of any country's source of imports, with oil being the leading import. To some extent, equivalent trading relationships are shared by all three partners in the world economy. South Africa is a major global exporter of minerals and associated products; India of precious metals and stones, mineral fuels, clothing, and organic chemicals; and Brazil of vehicles, machinery, iron, steel, and ores, as well as being the main agricultural exporter.

According to Oxford Business Group the Report: South Africa 2013, ${ }^{58}$ the Rainbow Nation benefits from an internationally competitive private sector, which accounts for roughly $70 \%$ of GDP, and extremely competitive infrastructure, its utility sector; for example, produces just under half of the total power generated in the African continent. The Oxford Group found that South Africa is by far the most developed market in Africa, but that there are still structural challenges it is grappling with. Government strategies have set a target of increasing labour market participation from $54 \%$ in 2010 to $65 \%$ by 2030; this will bring the number of workers in the formal sector to 25.3 million people and lowering unemployment from $25 \%$ to $6 \%$. While its fiscal space is narrow, long-term investments in infrastructure, education and health are expected to be key to attaining its growth potential. Recent years have seen both the public and private sectors look to strengthen regulatory

[^20]frameworks in mining and industry - in some cases, like the automotive sector, with impressive results. This will assist the economy to grow and develop. The Oxford Group ensures that South Africa's economy needs driving forces that will boost the country's economic activities.

The article "Rising BRICS and Changes in Sub-Saharan Africa's Business Cycle Patterns"" 59 assesses the extent to which Sub-Saharan Africa's (SSA) business cycle is synchronized with that of the rest of the world. Findings suggest that SSA's business cycle has not only moved in the same direction as that of the WTO, but has also gradually drifted away from the G7 in favour of the BRICS. Trade with the BRICS turns out to be the strongest driver of this shift, much of this impact unfolds through aggregate demand impulse from trade. As fiscal policy stances in SSA and the BRICS are not synchronized; they have not caused cyclical output correlation between these two groups of countries. Also, financial openness, which is at a very early stage across most SSA countries, has acted as a neutral force. This article does not get into details on how BRICS member states grow and strengthen their economic trade ties in growing South Africa's economy.

There has been a number of studies on the exploration and development of trade flows among the BRICS countries using trade indicators and indices such as trade intensity, trade complementarity, revealed comparative advantage, regional orientation, market share, export share, and competitiveness. For instance, Havlik et al. examined the trade between the EU and the BRIC countries by analysing their revealed comparative advantages with their global economic site in world trade. They found that the most important role of EU in the BRIC trade was that Russia was BRICS' main export partner, and China was its principal import partner ${ }^{60}$. In addition, China is emerging as a factor in the EU's industrial competitiveness, because of the performance and the composition of Chinese exports, especially its manufacturing export, which is comparable to a developed country. However, there was a trade deficit between the EU and all BRICS countries, except for India. The authors also considered the bilateral trade relations between Triad countries (Japan, Western Europe, and North America) and the BRICS countries, based on the analysis of the revealed comparative

[^21]advantages ${ }^{61}$. These results showed how BRICS contributes to the trade deficit of the EU and the U.S.A.

William Gumede on his article titled The BRICS Alliance: Challenges and Opportunities for South Africa and Africa states that for the past decade, Africa has experienced the longest continuous growth spurt since independence from colonialism. The African boom has been fuelled mostly by a mining boom, with income generated by the export of natural resources financing a consumer boom. Natural resources still account for three-quarters of sub-Saharan Africa's exports, according to World Bank figures. The seemingly unlimited appetite for African commodities from the fast-growing emerging markets mainly the BRICS countries, such as China and India, have been among the key drivers of African growth. The rush by BRICS countries to invest in Africa has turned it into a globally positive investment story, rewriting Africa's narrative into one of new opportunities, rather than the old narrative of the continent being a burden, waiting for handouts from the West and former colonial powers. This paper however does not touch on trade agreements between BRICS member states, which this study seeks to find.

Renato Baumann and Rubem Ceratti wrote a paper: Trade among Brics: Still a Bumping
Road from a Brazilian Perspective. This paper provides an appraisal of trade flows between Brazil and the other BRICS member states from a different perspective than has been adopted by other studies. Emphasis was given to the roles of the indicators of comparative advantage, as well as to the role of different tariff barriers imposed on Brazilian products and on Brazil's potential competitors in the neighbourhood of each BRICS countries. ${ }^{62}$ This paper also maps out the import tariffs between each BRICS country and each one of its regional partners, as well as the tariffs that Brazilian products face when exported to these markets. The aim here is to identify whether the conditions met by Brazilian products to enter the markets of the other BRICS as well as their neighbours are different from the conditions that each BRICS provides to its neighbours and the conditions each BRICS faces in their neighbouring countries. This work by Renato Baumann and Rubem Ceratti is at the midpoint of this research study since this work touches on trade among BRICS comparing one state of BRICS with the other BRICS member states, in this case its Brazil whilst this study looks at trade agreement between BRICS member states and South Africa. This work and my work are very

[^22]much correlated. It traces on exports and imports from each BRICS member state to the others through trade.

Baumann and Ceratti assessed the trade flows between Brazil and the other BRICS countries by identifying the relative importance of revealed comparative advantage and the tariffs applied by many countries faced with Brazilian products. They also recognised that the tariffs applied by each BRICS country to the products of each Brazilian competitor in the neighbour country were then applied to Brazil's products in order to provide a general image of the trade relations among BRICS countries. ${ }^{63}$ The paper also analysed trade among these nations, based on the markets conditions of access to the economies, taking into account the economic influence of each BRICS country.

Trans-culturalism and Business in the BRICS States ${ }^{64}$ edited by Yvette Sánchez and Claudia Franziska Brühwiler is the first handbook on BRICS States that offers a transcultural perspective, which goes beyond the typical 'how to' manuals or economic projections. This handbook provides an understanding of trans-culturalism as it is studied and practised in the respective countries. This unique reference book also offers insights into the relations between the corresponding states and the challenges facing those trying to foster more intense business exchanges. The reader learns to interpret cross-cultural issues from the perspectives of the BRICS states and gains insight into the way scholars in the BRICS area reflect on trans-culturalism. However, this handbook does not consider deeply the importance of trade and bilateral agreements between BRICS member states; how it is important towards each state's economic growth.

Stephen Kingah and Cintia Quiliconi on their published work titled Global and Regional Leadership of BRICS Countries ${ }^{65}$ present a systematic ordering of the regional and global dimensions of the leadership role of BRICS countries. The book analyses the rising regional and global leadership of BRICS, using specific benchmarks to gauge the nature of this leadership. The elements examined include willingness to lead, the capacity to do as much, and the degree to which the given actor is accepted as a leader both within and beyond its region. The chapters in the book capture the nature of trends in regional and global leadership within the contexts of a changing international order. It is taken for granted that Brazil,

[^23]Russia, India, China and South Africa are now engineering a unique pool of governance that is seeking alternatives to the current order of global economic and political affairs. The fact that these countries have jointly decided to forge ahead with the BRICS constellation of states that is now taking consequential decisions such as the creation of the BRICS' New Development Bank, is not to be treated lightly. In this book, the majority of papers take a step back and systematically analyse the real state of the leadership that is provided by the BRICS on a litany of regional and global relevant issues. While no one doubts the fact that these countries have the capacity to provide leadership especially in their various regions on many issues, what remains arguable is whether they are willing and capable to do so at the global level. Nonetheless, this detailed book does not dwell much on trade relations between BRICS alliances which this research intends to investigate.

Bricking the BRICS: A case of interdependence in Globalized era ${ }^{66}$ is another work to be considered in a book written by Shameem CC. This book talks about political will and political action that they have the potential to break the vicious circle of regional conflict, insecurity and underdevelopment. Additionally, the book talks about economic regionalism theory as a prominent concept in international political economy. For BRICS member states to dominate and lead greater regional economic interdependence, for instance to have a stronger co-movement of business cycles, increased transmission of macro shocks, increasing intra -regional trade and investment to boost economic growth of their countries; they need to make sure that they establish strong trading agreements between them and other countries. The author talks about trade agreements and how they are benefiting each BRICS country and South Africa.

The scholarly account by Marko Juutinen and Jyrki Kakonen titled Battle for Globalisation ${ }^{67}$ debates about BRICS and US, looking at mega-regional trade agreements and looking as if it has an influence in the changing world order. This perspective stretches a view that indeed the debate around the west and East powers is hot on the table. Various authors are arguing that the world power is slowly moving from the West. ${ }^{68}$ This book further stretches the reason why the BRICS member states are dominating the 21 st century. However, the book does not accurately express valid reasons as to why the US is losing its power, but one can add that both BRICS and the US represent two different groups:

[^24]developed and underdeveloped; the underdeveloped being the South countries. This book contributes greatly to this study; it touches on trade agreements in a changing world order and how they will influence the big markets.

BRICS Economic and Trade Cooperation with Africa ${ }^{69}$ is a paper from Yao Guimei. The paper shares views that at the end of the Cold War, especially after the globe-sweeping financial crisis, the world economic and political landscape underwent profound changes that led to the constant adjustment of interest distribution. Traditional economic powers witnessed sluggish growth while emerging economies represented by the BRIC have become important engines in international economy with their eye-catching growth. According to IMF estimate, the BRIC countries' share of global output has climbed from 13.7 percent in 2007 to 17.5 percent in 2010; by 2015, their share would further increase to 22.1 percent. In addition, Goldman Sachs Group which firstly coined the popular term 'the BRIC' forecast that by 2027 the sum of BRIC GDPs may outrun that of the Group of Seven. As the BRICS cooperation mechanism gradually gets refined, their international influential shall be bigger and stronger. However, this paper does not consider deeply the importance of trade and bilateral agreements between BRICS member states, how it is important for each state's economic growth and development. The paper however does not give empirical analysis of how BRICS countries could strengthen other African countries' economic progress in order to compete strongly in global markets.

### 2.3. EMPIRICAL STUDIES

When international trade flows are analysed, economists usually make use of another model known as the gravity model, which was first introduced by Tinbergen in 1962. Tinbergen and Pöyhönen initially identified specifications and assessments on how trade flows are determined, then applied gravity models to international trade ${ }^{70}$. They followed the general principles of the Newton gravitational model in Physics which states that when two bodies are attracted to one another, the resultant attraction between them is positively proportionate to the product of their masses and negatively proportionate to the distance between the objects. Based on Newton's theory, Tinbergen and Pöyhönen established that when the two bodies (countries) are involved in international trade they represent exporting and importing

[^25]countries, their 'mass' variables are their GDP and population (economic extents) ${ }^{71}$. However, their contribution was intuitive without robust theoretical foundations and assertions. Nevertheless, Tinbergen and Pöyhönen were the first to conduct econometric studies on bilateral trade flows based on this gravity model. Based on this model, bilateral trade volume between two countries is determined by their economic sizes and decreases with bilateral trade resistance.

Linnemann suggested theoretical descriptions for the gravity model in terms of imperfect competition, increasing returns to scale, and transport costs. According to Linnemann, the gravity model was derived from a Walsarian general equilibrium model, stating that the exports of one country to another country deal with the prospective supply of exports of one country, prospective demand of imports from the other country, and trade barriers ${ }^{72}$. However, the Walsarian system incorporates various explanatory variables for each trade flow that need to be applied to the gravity equation.

Most of the existing studies show that the gravity model could be derived from either theories of trade or models of trade, with differentiated goods by the source country, economies of scale, or technological or factor endowment differences. In addition, these studies have tested and improved the theoretical foundation of the gravity model by looking at trade costs or restrictions of trade and by providing an econometric methodology.

Anderson provided a theoretical interpretation and economic justification for the gravity equation applicable to commodities under the assumption of Cobb-Douglas preferences (constant elasticity of substitution (CES) ${ }^{73}$. Here, it is assumed that consumers have preferences defined over all goods differentiated by the home country. This suggests that, where products are differentiated, a country will at least consume a certain number of each good from every country so that there would be trade for all goods by all countries. He proposed a reduced-form gravity equation derived from a general equilibrium model which contains the properties of expenditure systems.

Bergstrand further developed this subject by implementing the microeconomic foundations of the gravity equation within the increasing returns to scale concept. He demonstrated that the

[^26]gravity model is obtained from a model of trade based on monopolistic competition, where differentiated goods are traded by the same countries, since all individuals have numerous preferences ${ }^{74}$. He presented the general equilibrium model of world trade under the assumption of the economic agent utility and profit maximisation as well as the impact of the price variables on aggregate trade flows. In addition, he further presumed Dixit-Stiglitz monopolistic competition in the economy and product differentiation among firms instead of countries.

Deardorff indicated that a gravity model could be a direct indication of a traditional factorproportions model describing international trade. He identified that the gravity model can also be applied to the Heckscher-Ohlin models and product-differentiated models ${ }^{75}$. He derived the resultant gravity equation from two cases of the Heckscher-Ohlin framework by showing that the equation relies on the Heckscher-Ohlin model of trade in homogeneous goods through perfect competition.

In contrast, Feenstra argued with the assumption of an existing theory for the gravity model by indicating that gravity equation could also be obtained from the reciprocal dumping model of trade where goods are not only differentiated, but are also homogeneous. The market structure for the homogeneous goods was represented as Cournot-Nash competition in order to display trade patterns ${ }^{76}$. They also showed the different implications of the home market effect on both homogeneous and differentiated goods in terms of domestic-income elasticity or partner-income elasticity. Therefore, both differentiated and homogeneous goods could raise gravity equations.

Egger provided a more convenient econometric specification of the gravity equation. He improved the gravity model by suggesting that the fixed effects model or the random effects model econometrically illustrate accessible data that is strongly dependent on the correlations of individual effects ${ }^{77}$. When there is zero correlation between individual variables, the random effect specification is supported.

[^27]Empirical studies have shown that the gravity model has become the standard tool in explaining bilateral trade flows, not only for developed countries, but also for many developing countries and African economies, which produce homogeneous goods rather than differentiated goods ${ }^{78}$. Hummels and Levinsohn made use of the gravity equation to test trade theories. For example, they tested if the monopolistic competition is relevant in international trade by using intra-industry trade data. They found that country pairings are more defined by intra-industry trade. Hence, the gravity model could be derived based on the assumption of either perfect competition or monopolistic market structure ${ }^{79}$. In addition to various studies dealing with trade flows and gravity models between countries, the significance has been placed on the investigation of the trade potential, trade determinants, trade costs, trade direction, and trade enhancing effects. Their papers use both the cross-section and panel data methodologies.

Frankel investigated the role of geographical factors and trading blocs by expressing a more complex and advanced type of gravity equation. This was done in order to determine bilateral trade flows and assess the impact of regional integration on bilateral trade flows. ${ }^{80}$ The emphasis was placed on the geopolitical factors such as border-sharing and adjacency, common language, distance and historical links. He found that regional trading arrangements are statistically significant on trade flows and encourage trade among a group of countries. Regional membership bloc positively influence bilateral trade flows when trading partners are neighbours.

Anderson and Wincoop showed how important it is for a well-specified gravity model to control relative trade costs because of many implications of trade barriers on trade flows. The results of the theoretical gravity equation indicated that bilateral trade is determined by relative trade barriers, so that the tendency of country $j$ to import from country $i$ is subject to country $j$ 's trade cost towards $i$ 's resistance to imports and to the average resistance faced by exporters in country $i$. They did not look merely on the absolute trade costs between country $i$ and country $j^{81}$. Based on their assumption, trade costs are carried by the exporter.

[^28]For a single good transported from country $i$ to country $j$, there would be export costs experienced by the exporter. The price indices are referred to as the multilateral resistance variables ${ }^{82}$. The logic behind the multilateral trade resistance is that if two countries are enclosed by other vast trading economies then there will be less trade between themselves. The opposite will occur if they were bordered by oceans, deserts or mountains.

Furthermore, Helpman and Krugman explored how international trade flows are assessed with the use of the gravity equation, paying attention to numerous measures of trade resistance. They improve the standard gravity model estimation of trade flows by correcting certain prejudices in the estimation procedure. They develop an international trade theory, which describes zero trade flows between a couple of countries, enabling larger numbers of exporters to fluctuate across many different destination countries ${ }^{83}$. Following the above trade theory, a two-equation system is derived in order to show the influence of trade resistances on trade flows, which, in turn, lead to the impact of intensive (trade volume per firm) and extensive (number of exporting firms) margins. The result reveals that a two-stage estimation technique can be applied parametrically, semi-parametrically, and non- parametrically ${ }^{84}$. Given the three parameters, this method emulates the effects of trade frictions. Additionally, with this procedure, the intensive and extensive margins of trade are determined and the variation of exporters among countries depends on how developed the nation is.

Studies on developed economies have also examined trade integration between regional trading blocs; investigating bilateral trade patterns and trade relationships by the use of the gravity model for the aggregate bilateral trade and also for the trade at product level. For example, Hellvin and Nilsson used the gravity model to examine the level of trade integration between three trading blocs: the EU, Asia, and the North American Free Trade Agreement (NAFTA) by comparing actual trade between the blocs with projected trade ${ }^{85}$. They identified that among these blocs, trade flows were significantly determined by the national income of the countries, the per capita income, distances, trade agreements among these nations, the allocation of common borders, and language resemblances.

[^29]Evenett and Keller examined the standard gravity model based on the Heckscher-Ohlin model with perfect production specialisation, and the increasing returns theory with imperfect product specialisation. They analysed the model by gathering a sample of 58 countries' cross sectional data in 1985, which had respectively GDPs above U.S. $\$ 1$ billion with the total share of 67 percent of global imports and 79 percent of overall GDP, in order to estimate the regression parameters ${ }^{86}$. They found that when the share of intra-industry trade in total trade rises, specialisation and trade will also increase. However, specialisation does not properly predict the production of more differentiated goods compared to imperfect specialisation. This is due to the differences in factor endowments since the size of the differentiated goods sector is related to the share of intra-industry trade ${ }^{87}$. They also established that the variations in trade patterns and volumes were explained better by models of trade with imperfect product specialisation rather than those with perfect product specialisation.

Eaton and Kortum developed a gravity-type equation from a Ricardian type model based on technology and geography. The model expressed that bilateral trade volumes are related to distance and to the product of the home and destinations countries' GDPs by using the two parameters of technology and geographical barriers. The parameters of the model were estimated with the use of cross-sectional data on trade flows in manufactures, prices and geography among 19 OECD countries ${ }^{88}$. However, although they ignored other Ricardian assumptions, they assumed that mobile labour is the only global factor and technology is common to the world.

Zarzoso and Lehman explored the determinants of Mercosur-European Union trade flows by using the gravity model in order to examine the relationship between the volume and direction of international trade and to forecast trade potentials between the two blocs. The paper used an augmented gravity model by including a number of variables such as infrastructure, income differences, and exchange rates in order to investigate their role in influencing bilateral trade flows in a panel data analysis ${ }^{89}$. They found that all the variables were statistically significant, except for the infrastructure variable, implying the need for some important economic policy. In addition, their findings showed that the fixed effects

[^30]model is more appropriate than the random effect model in explaining trade flows when more variables are included in the standard gravity model.

Cortes evaluated the bilateral trade relationship and trade performance between Australia and a selection of nine Latin American countries based on the gravity model, focusing on the appropriate factors or variables regarding the composition of trade. In the paper, the analysis used cross-sectional data for wide categories of total exports and total imports and has included non-traditional variables such as openness and political changes ${ }^{90}$. The results showed that political power significantly influenced bilateral trade flows in most Latin American countries; openness played an important role for Australian imports, and distance seemed to restrict the flows of trade between these countries.

Rault et al. examined trade flows between CEEC and OECD countries with the use of progressive panel data techniques through fixed effects in order to consider and regulate unobserved heterogeneity ${ }^{91}$. In previous studies, estimation with cross-section data did not seem to pay attention to the unobservable characteristics of bilateral trade relationships, which may lead to biased and inconsistent results of parameter estimates. Consequently, the OLS technique is not the most appropriate method for individual heterogeneity estimates because heterogeneous trading relationships are not controlled ${ }^{92}$. These authors estimated the gravity model by applying pooled ordinary least squares (POLS), random effect estimator (REM), within estimator (FEM) instrumental variables, and Hausman-Taylor estimator (HT) methods. Among the techniques, the HT approach seems to be the most suitable, generating consistent parameter estimates and deriving parameter estimates for the time-invariant variables.

On the empirical front, most findings show that gravity models across countries has been a successful formulation in describing trade flows between different nations. There have been a number of studies on developing or African economies investigating the effects of trade or trade flows in a single country or between multiple countries to evaluate further prospective for trade development. For example, Chan-Hyun analysed Korea's trade patterns empirically based on the gravity model, seeking to identify the factors determining Korea's bilateral trade flows. In this context, the analysis used cross-sectional bilateral trade flows data between

[^31]Korea and its 30 main trading partners ${ }^{93}$. The result of the analysis showed that the bilateral trade flows of the country follow the basic gravity model with a positive effect on trading partner's GDP, and, with distance retaining negative implications. His paper also included the trade conformity index in order to measure bilateral trade structures, which was done to investigate whether Korea's trade patterns are based on the Heckscher-Ohlin model through inter-industry trade, or the differentiated products model through intra-industry trade ${ }^{94}$. In addition, this study looked at how a regional economic bloc can influence Korean bilateral trade flows. Finally, Chan-Hyun's analysis implied that the country should trade with countries in close proximity, with large economic growths, and the patterns of trade should follow inter-industry trade rather than intra-industry trade.

Rahman analysed Bangladesh's trade with its major partners by applying the generalised gravity model. The paper used the panel data estimation technique in order to examine the main determinants of Bangladesh's trade that affect exports or imports when evaluating the gravity model, considering the most important economic factors such as the exchange rate, partner countries' total import demand, and the openness of this country's economy, rather than natural factors ${ }^{95}$. The result showed that all three economic factors are positively related to exports. However, transportation costs affected Bangladesh's trade negatively.

Batra used the gravity approach to estimate trade prospective for India by analysing primarily the bilateral trade flows in the world with an augmented gravity model. Even though there is an advantage of using panel data in order to apprehend the relevant relationships over time, the estimation of this gravity model was done by means of the OLS technique with crosssection data between pairs of countries ${ }^{96}$. The use of the gravity model with cross-section data was to evaluate trade effects and trading relationships at a specific period of time. Furthermore, India's trade potential was compared across diverse regions of the world. The result revealed that India can potentially trade with the Asia-Pacific region, followed by Western Europe and North America ${ }^{97}$. The magnitude of trade between India and countries

[^32]such as China, the United Kingdom, Italy, and France is significant, which implies further potential for expansion of trade.

Huot and Kakinaka explored bilateral trade flows between Cambodia and its 20 trading partners using a modified gravity equation for the period 2000-2004. Here they included a trade structure variable in order to check which trade model could dominate the other: the Heckscher-Ohlin model (inter-industry trade) or an Increasing Return Scale model (intraindustry trade $)^{98}$. Empirically, the results of this gravity model showed that trade flows are better explained by the Heckscher-Ohlin model in terms of trade complementarity level where there is difference in factor endowment between countries rather than monopolistic competition. The paper also examined the negative impact of foreign exchange rate volatility on trade flows, implying the need of a stable foreign exchange rate.

Xu and Sheng examined trade patterns across the Taiwan Strait, investigating the trade abnormality affecting both Mainland China and Taiwan. The paper used the gravity model to normalise bilateral trade flows and measure the determinants and potential of trade between Mainland China and Taiwan so that many trade restrictions could be removed ${ }^{99}$. According to the structure of trade, inter-industry trade dominated bilateral trade flows between Mainland China and Taiwan, leading to the increase of trade flows. The prediction of trade potential between these countries was based the OLS and panel random effect estimations. They also found that Mainland China was more open to Taiwan than the other way round.

Lwin analysed the trade patterns and directions of the Cambodia, Laos, and Myanmar (CLM) economies due to their similar characteristics as members of ASEAN, following the standard gravity model in order to assess the effectiveness of the model in explaining trade flows of these economies, which seemed to grow faster in the region that other economies ${ }^{100}$. The bilateral trade flows between each CLM country and their partners have been examined in order to investigate the determining factors of trade flows and identify trade policies. The OLS methodology with pooled cross-sectional data was used in the paper. Partner country's GDP was found to largely affect CLM's trade patterns ${ }^{101}$. The free trade agreement helped in

[^33]rising bilateral trade flows between them, while geographical distance being a factor of resistance for the flows of bilateral trade.

Thapa used the gravity model in order to appraise the determinants of trade flows between Nepal and its 19 major trading partners, and also evaluate and forecast trade potential for Nepal. The analysis was based on cross-section data of goods traded at an aggregate level with limited independent variables, such as GNI, per capita GNI, and distance ${ }^{102}$. The result showed that the elasticity coefficients of income and distance were significant, while per capita income and distance variables were insignificant. It was suggested that trade promotional strategies should be adopted as the result of the increased trade.

Looking at trade flows within a country, Daumol and Özyurt investigated how Brazil's trade flows can influence the economic growth of Brazilian states based on the level of their income. They use the system GMM (Generalized Method of Moments) instead of the gravity model estimator to determine the impact of international trade flows on growth ${ }^{103}$. However, the result indicates that wealthier Brazilian states gain from trade openness - which delivers more supplementary advantages - than that of poorer states, leading the poorer states to further traditional goods' specialization with no technological advancement or long-term growths. Brazil's international trade seems to exacerbate regional inequalities of the nation.

Studies on African countries put emphasis on the improvement of steady trade policies to enable these economies to exchange diversities of goods and benefit through trade, contributing to their sustained economic growth. Simwaka, for example, examined bilateral trade between Malawi and its major trading partners with the use of an econometric gravity model. His analysis used the panel data estimation served to determine the main factors of Malawi's trade ${ }^{104}$. The result revealed that the fixed effect model was more suitable compared to the random effects of the gravity model. Additionally, he found that one of the challenges faced by Africa when estimating bilateral trade flows is transport infrastructure network - which needs to be improved - and the exchange rate policy, which should be stable. The trade flow in regional blocks was found to have an insignificant impact on bilateral trade flows.

[^34]Zannou examined the key factors affecting the intra-Economic Community of West African States (ECOWAS) trade flows by means of the pooled form of the gravity model. The panel data econometric analysis has been used in this paper in order to eradicate the prejudice related to the heterogeneity of the trade flows by including fixed effects in the gravity model ${ }^{105}$. This model was found to be important in explaining significantly intra-ECOWAS trade flows and ECOWAS' positive and considerable impact on trade flows among the states of the economic and trading union. Exchange rates, population, and openness of these economies were the major factors determining the volume of the intra-community trade flows.

Adekunle and Wanjiru assessed the trade flow between China and Sub-Saharan Africa (SSA) countries by detecting the impact of the variables such as Gross Domestic Product (GDP), distance, foreign direct investment (FDI), inflation, exchange rate, and GDP per capita ${ }^{106}$. In addition, the examination of trade flow between China and oil-rich SSA Countries was done, using the gravity model. The panel data (cross-sectional cum time series) methodology was applied - along with the use of the Hausman test - in order to identify which models of trade - fixed or random model - are the most suitable for required policies that will develop China - SSA trade, protecting the industries in SSA ${ }^{107}$. The result indicated that SSA countries should improve GDP, be able to manage the exchange rates correctly, and, where there is a comparative advantage, local production of goods should increase so that they will gain from the trade relationship.

Mjema et al. analysed the trade flows between Tanzania and Kenya as members of the East African Cooperation (EAC), with a particular focus both economic and non-economic factors ${ }^{108}$. The paper showed that the fact that the countries have power over the economy of EAC and share similar characteristics - such as border within EAC, large population, access to Indian Ocean, and same languages - necessitated trade facilitation. The modified version of the gravity model was used in the paper in order to question how trade flows are determined between these countries and if they have gained from the creation of the EAC ${ }^{109}$.

[^35]The fixed, random, pooled effects, and the Hausman ${ }^{110}$ test have been used in this paper in order to find out how stable trade policies and regional integration system can be implemented in East Africa.

Studies on South Africa and its major partners of trade have usually used the gravity model to consider the potential of exports. For example, Sichei et al. explored South African exports of motor vehicles, parts and accessories by applying the augmented gravity model. As the country ranked 19th in the global production of motor vehicles, South Africa benefited from vehicle production. This was the second fastest growing industry in the manufacturing sector of the country, owing to the establishment of the Motor Industry Development Programme ${ }^{111}$. However, there was little contribution of the South African share to the world's motor vehicles output. This study was done by examining amount of bilateral trade between South Africa and its 71 partners from 1994 to 2004, following the panel data analysis method to specify the model, estimate the parameter coefficients, and control and avoid heterogeneity among the trading nations. They found that the significance of the importer GDP was positively related to South Africa's exports. In addition, how effective the importer government was, how quality was regulated, how corruption was controlled, and whether or not the countries shared English as a common language played an important role in exports ${ }^{112}$. These issues significantly affected the exports of automobile goods in the country. In addition, it was noted that the country's trade (exports and imports) of motor vehicles improved due to the fact that South Africa is a member of the EU, NAFTA, MERCOSUR, Middle East, and SADC, as well as that fact that it plays a key function in the African continent ${ }^{113}$. However, distance and importer price index both had a negative impact on South Africa's exports and trade between the country and its partners.

In addition to their working paper, Eita and Jordaan investigated South Africa's exports of woods and articles of woods with the use of the gravity model. The paper analysed the flows of trade between South Africa and its 68 major partners of trade for the period 1997 to 2004 within the industry of wood products. The paper also incorporated a dummy variable - the English Language - in order to encourage exports between countries that have this language

[^36]in common, as well as regional trade agreement (NAFTA, EU and SADC) dummies ${ }^{114}$. They adopted the methodology based on the panel data econometric techniques in order to assess the gravity model. They found that the fixed effect model was more suitable than the random effect model when determining export flows between countries ${ }^{115}$.

The empirical results based on the fixed effect model revealed, on the one hand, the positive and statistical significance of importer GDP and South Africa's population on the exports of wood and wood products. On the other hand, the relationship between South Africa's GDP, importer population, distance and exports of woods was negative and statistically significant for all variables except for distance ${ }^{116}$. Additionally, the negative outcome of South Africa's GDP was inconsistent with the expected theory of the gravity model. The country's status as a member of NAFTA and EU also adversely influenced exports, yet exports of woods were growing as a result of South Africa's membership with SADC. In looking at the potential of wood exports, it is clear that there was a requisite to promote growth in order to diminish unemployment and ease poverty.

Much work has been done on comparative study of the trade flows between the European Union and the BRICS, using the revealed comparative advantage method. Most of the literature usually examines the importance of BRICS in the world trade, in the developing world, and the growing trade among themselves ${ }^{117}$. Moghadam, for example, explored the role of BRICS countries in the development of Low-Income Countries (LIC), showing how the rapid growth of these economies' trade has a positive impact on LIC's trade flows based on the analysis of exports, trade complementarity index, and gravity model. He examined the recent progress of trade relations between LIC and BRICS economies, analysed the exports by distance between these countries, and showed how the pattern of LIC-BRICS trade is usually explained by the revealed comparative advantage method ${ }^{118}$. His paper indicated an intersection between the composition of LIC exports and those of the partner country using a trade complementarity index. The gravity model analysis appears to confirm that LIC-BRICS trade complementarity is very important for overall LIC exports. The outcome of the study

[^37]revealed that LIC imports from China and India are greater than the impact of Russia and Brazil on LIC trade.

Groot et al. showed the importance of BRICS countries for Dutch trade by using the revealed comparative advantage method (the Balassa index) to describe the intensity and the development of trade of the Netherlands, as well as the competitive position's implications for their industries. In the last twenty years, there was the rising aggregate share in Dutch exports and imports to and from BRICS countries ${ }^{119}$. In addition, the portion of BRICS countries in Dutch imports has increased much faster than the BRICS' portion in Dutch exports, representing a current trade deficit with the BRICS countries. The significant growing import share is that of Chinese products, and the country is also presently the second largest importer of Dutch products.

Oehler-Şincail presented a comparative analysis of the trade and investment flows between the EU member states and the BRICS during 2004-2009, and the USA-Japan-BRICS relations. Factors that mainly contributed to the economic growth of these countries' trade and investment flows were also determined ${ }^{120}$. The interrelations and trade exchange between the EU and the BRICs, based on trade in goods, services, exports, imports and FDI flows were analysed and determined depending on the statistics published by Eurostat, the WTO, the UNCTAD, and the national authorities. Oehler-Şincail revealed a significant increase of the BRICS' shares in the EU exports and imports of goods greater than these countries' share in the EU trade in services during the previous decade except in 2009. In addition, the share held by the BRICS countries in the EU FDI flows is much lower compared to their respective share in trade ${ }^{121}$. These investment flows are thus expected to increase over the next years resulting from the implementation of innovation strategies influenced by the EU, the USA and Japan.

De Castro assessed the evolution of the intensity of bilateral trade flows among BRICS countries, as well as with EU during the period 1995-2009, based on the measures of trade indices such as trade intensity, trade complementarity, and revealed comparative advantage. The trade intensity index, which designated the quality of intra-trade with other partners, was

[^38]examined in order to test if some changes have been made in trend patterns between the preBRICS period and the post-BRICS period ${ }^{122}$. In terms of trade relations, De Castro found that the EU has been and continues to play a significant role for each of the BRICS. Since 2001, Russia's trade intensity with other BRICS countries indicates declining trends, while the country is the most important intensive partner for the $\mathrm{EU}^{123}$. The findings also revealed that the EU intra-trade intensity with Brazil and India was decreasing owing to trade diversion to other BRICS partners, yet the intra-trade intensity with China was rising as a result of the significant role of the country in European trade.

Baumann and Ceratti assessed the trade flows between Brazil and the other BRICS countries by identifying the relative importance of revealed comparative advantage and the tariffs applied by many countries faced with Brazilian products. They also recognised that the tariffs applied by each BRICS country to the products of each Brazilian competitor in the neighbour country, were then applied to Brazil's products in order to provide a general image of the trade relations among BRICS countries ${ }^{124}$. The paper also analysed trade among these nations, based on the markets conditions of access to the economies, taking into account the economic influence of each BRICS country.

There have been a number of studies on the exploration and development of trade flows among the BRICS countries using trade indicators and indices such as trade intensity, trade complementarity, revealed comparative advantage, regional orientation, market share, export share, and competitiveness. For instance, Havlik et al. examined the trade between the EU and the BRICS countries by analysing their revealed comparative advantages with their global economic site in world trade. They found the most important role of EU in the BRICS trade was that Russia was BRICS' main export partner, and China was its principal import partner ${ }^{125}$. In addition, China is emerging as a factor in the EU's industrial competitiveness, because of the performance and the composition of Chinese exports, especially its manufacturing export, which is comparable to a developed country. However, there was a trade deficit between the EU and all BRICS countries, except for India. The authors also considered the bilateral trade relations between Triad countries (Japan, Western Europe, and

[^39]North America) and the BRICS countries, based on the analysis of the revealed comparative advantages ${ }^{126}$. These results showed how BRICS contributes to the trade deficit of the EU and the U.S.A.

Singh et al. analysed the mutual flows of trade between Brazil, Russia, India, China, and South Africa by evaluating several trade flows indices collected from the World Integrated Trade Solution database and UNESCAP during 2001-2010. They found an overall increase in the values of almost all the indices for the majority of the BRICS countries. However, Russia's trade with South Africa was negligible ${ }^{127}$. Hongna and Zengfeng made use of comparative, statistical, and historical analyses to evaluate the BRICS' foreign trade, the competiveness of trade, and the composition of exports and imports. Their analysis indicated an increased trend of the overall imports and exports from 2004 to 2010. However, in 2009, the rate of growth decreased as a result of the global economic crisis. In terms of the characteristics and levels of national trade, they found that BRICS countries may complement each other ${ }^{128}$. Only few studies have been done on the inclusion of South Africa into the BRICS, including BRICS' economic perspective that South Africa must acknowledge, the expected contribution of South Africa, and the examination of BRICS trading relationships. In addition, these mentioned authors assessed the trading relationship between BRICS and South Africa from a South African perspective.

Sandrey and Jensen explored the major factors of the bilateral trade and the flows of trade from respective partners by providing figures, which also indicated the performance of these trading relationships between Brazil, India, and South Africa. By analysing the data of exports and imports, they found that South Africa could be viewed as a way of connecting the developed world and developing countries in the African continent ${ }^{129}$. South African imports are stronger than Indian imports, with gold being the main import for India. Brazil seemed to be more important than South Africa in terms of any country's source of imports, with oil being the leading import. To some extent, equivalent trading relationships are shared by all three partners in the world economy. South Africa is a major global exporter of

[^40]minerals and associated products; India of precious metals and stones, mineral fuels, clothing, and organic chemicals; and Brazil of vehicles, machinery, iron, steel, and ores, as well as being the main agricultural exporter.

Sidiropoulos acknowledged the fact that South Africa's joining with the BRICS economies implied economic opportunities for the country to play a significant role in both the African continent and at the global level. Being a member of IBSA (India, Brazil and South Africa) and BRICS, South Africa should make use of the given opportunities ${ }^{130}$. This necessitates a close relationship between the national government and the private sector and an open market. In addition, SA should also lead foreign investment in developing countries in Africa by reducing barriers of trade with the purpose of intensifying bilateral trade and investment with the other BRICS economies.

Other studies have been done on the trade linkages between BRICS and South Africa, showing how South Africa - and the growing trend of investment and trade in the African continent - does serve the BRICS economies. Laverty ${ }^{131}$ indicated that, even though the South African economy is small compared to the other BRICS members in terms of GDP or the rates of growth, the country's magnitude of trade with Africa, particularly Southern Africa, is valuable in light of the current trend of trade and investment in the continent. He examined the extent of South Africa's participation and relationship with the continent in order to investigate the motives of BRICS in South Africa ${ }^{132}$. He found that South Africa would certainly benefit from the growth of the African market, so the BRICS countries would grow as well, becoming competitors in the continent. Çakir and Kabundi investigated the trade linkages and shock transmission between South Africa and the BRICS economies by applying a global autoregressive model and examining the response of trade and output in South Africa when shocks are created by the BRICS countries as a bloc, or individual countries. Thirty two countries were included in the model from 1995 to $2009{ }^{133}$. They found that the BRICS- SA trade flows are dominated by China, and South Africa's most important exports to the BRICS are usually basic commodities. Based on the empirical results, real

[^41]exports and imports shocks from the BRIC economies positively and significantly affected the imports and exports of South Africa. However, output remained unchanged.

Despite the fact that the theory of the gravity model has been relevant for trade flows and performs successfully empirically, there are not many detailed studies dealing with BRICS' international trade flows using the gravity model in order to explain the trade patterns between South Africa and other BRICS countries. In addition, there is still a gap in the literature on estimating trade flows of BRICS economies using panel data techniques. This research study thus intended to conduct the analysis of trade flows between South Africa and the BRICS economies, using a gravity model framework with a panel data econometric technique (instead of trade indicators or indices) to investigate how South Africa is integrated into the BRICS. This study served as an incentive for future studies and provided information that could be used by the BRICS government executives to generate practical trade policies for further economic growth, investment prospects, and development.

### 2.4. CONCLUSION

The above discussed literature provides an analysis of how bilateral trade influences economic growth and development. The literature both theoretical and empirical touches the core of the thematic question which is to investigate the bilateral trade flows between South Africa and the BRICS member states with the application of the gravity model on empirical literature. Empirical studies have shown that the gravity model has become the standard tool in explaining bilateral trade flows, not only for developed countries, but also for many developing countries and African economies, which produce homogeneous goods rather than differentiated goods.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1. INTRODUCTION

This chapter coherently deals with the methodology applied in the study. The methodology is precisely designed to direct the study in achieving its main objective of discovering bilateral trade flows between South Africa and the BRIC member states. To this end, the five countries in the BRICS community play an important role in the G20, in shaping global economic policy and promoting financial stability. The body of this chapter is an exposition on the research methodology applied to examine the topic under investigation.

### 3.2. MEANING OF RESEARCH

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. ${ }^{134}$ In fact, research is an art of scientific investigation. The Advanced Learner's Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." ${ }^{135}$ Redman and Mory define research as a "systematized effort to gain new knowledge." ${ }^{136}$ Some people consider research as a movement, a movement from the known to the unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness, for when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain fuller understanding of the unknown. This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

Moreover, research is an academic activity and as such the term should be used in a technical sense. ${ }^{137}$ According to Clifford Woody research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organising and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis. D. Slesinger and M. Stephenson in the Encyclopaedia of Social Sciences define research as "the manipulation of things, concepts or symbols for the purpose of generalising to extend, correct or verify knowledge, whether that

[^42]knowledge aids in construction of theory or in the practice of an art. ${ }^{138}$ Research is, thus, an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning generalisation and the formulation of a theory is also research. As such the term 'research' refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analysing the facts and reaching certain conclusions either in the form of solutions(s) towards the concerned problem or in certain generalisations for some theoretical formulation. Thus, research is the fountain of knowledge for the sake of knowledge and an important source of providing guidelines for solving different business, governmental and social problems. It is a sort of formal training which enables one to understand the new developments in one's field in a better way.

### 3.3.RESEARCH METHODOLOGY

### 3.1.1. Qualitative Research

Research Methodology is a way of finding out the result of a given problem on a specific matter or problem that is also referred to as the research problem. In methodology, the researcher uses different criteria for solving the given research problem. Different sources use different types of methods for solving the problem. If we think about the word "methodology", it is the way of searching or solving the research problem. ${ }^{139}$

In Research Methodology, researcher always tries to search the given question systematically in his/her own way to find the answers. If the researcher does not work systematically on the problem, there would be less possibility to find out the final result. For finding research questions, a researcher faces a lot of problems that can be effectively resolved with using correct research methodology. ${ }^{140}$

Qualitative research is considered to be particularly suitable for gaining an in-depth understanding of underlying reasons and motivations for research. It provides insights into

[^43]the setting of a problem. At the same time, it frequently generates ideas and hypotheses for later quantitative research ${ }^{141}$. Data collection in qualitative research is seldom based on unstructured or semi-structured method but on flexible techniques, e.g. individual in-depth interviews or group discussions that are suited to elicit great detail and a comprehensive view. Quantitative research uses highly structured, rigid techniques such as online questionnaires, on-street or telephone interviews. Unlike qualitative research which allows unlimited expression from respondents, quantitative research requires responses to preformulated questions. ${ }^{142}$ Qualitative method is suitable for this research study in that it is typically exploratory and/or investigative in nature. Its findings are often not conclusive and cannot automatically be used to make generalizations. However, it is indispensable in developing a deep understanding of a given thematic complex and sound rationale for further decision making. Moreover, quantitative research is essential for providing a broad base of insight on which typically a final course of action is recommended ${ }^{143}$.

In addition Qualitative methods include direct observation, document analysis and overview, participant observation, and open-ended unstructured interviewing. These methods are designed to help researchers to understand the meanings people assign to social phenomena and to elucidate the mental processes underlying behaviours. Worthen and Sanders characterize qualitative inquiry as a research approach that is generally conducted in natural settings, utilizing the researcher as the chief instrument in both data gathering and analysis. ${ }^{144}$ The benefits of qualitative inquiry are embedded in its emphasis on thick description, i.e. obtaining real, rich, deep data which illuminates everyday patterns of action and meaning from the perspective of those being studied. ${ }^{145}$ This view emphasizes the importance of the voice of the researched and gaining first-hand information regarding the lived experiences of the researched on a particular subject. It tends to focus on social processes, where the established relationship between the researcher and the respondents is valued, rather than primarily or exclusively on outcomes. ${ }^{146}$

[^44]Qualitative approach to research is concerned with subjective assessment of attitudes, opinions and behaviour. Research in such a situation is a function of researcher's insights and impressions.

Sample selection in qualitative research is usually based on a smaller number of notnecessarily representative cases. Respondents are frequently selected with the expectation that they fulfil certain criteria. ${ }^{147}$ In quantitative research, sample selection seeks out a large number of cases that are expected to best represent the population of interest. Individual respondents are selected at random. In general, qualitative research generates rich, detailed and valid process data that contribute to the in-depth understanding of a context. Qualitative analysis involves a continual interplay between theory and analysis. In analysing qualitative data, we seek to discover patterns such as changes over time or possible causal links between variables ${ }^{148}$.

The data for this study were obtained from an extensive review of the relevant literature taken from scholarly research, books, popular articles, and writings published by the alternative press that deal with specific areas in the field of international relations. To enable a successful execution of the study, the researcher has chosen to use secondary data because of its effectiveness and ability to add to the debate on whether the BRICS bloc will result in positive outcomes to its members on bilateral trade flows, thereby ensuring sustainable political and economic governance. The research applied secondary data as it was already available and easily accessible. To add value to the subject presented, the researcher consciously selected informed persons on the issues related to BRICS' bilateral trade flows and conducted structured qualitative interviews to acquire data to add knowledge on the subject. In this case the researcher considered the experience and qualifications of the interviewees. These included experts, such as university lecturers, scholars from the BRICS Think Tanks, economists and other people related to the topic. ${ }^{149}$

What distinguishes qualitative research method from other methods is its effectiveness to collect pure/raw data and this is mostly expressed using words. ${ }^{150}$ It can also be described as

[^45]interpretive and humanistic as it seeks to unearth the internal meaning from the sources by exploring issues under the study beyond the standard responses of answering the research question of the paper.

Qualitative inquiry involves employing multiple data gathering methods, especially participant interviews, and uses an inductive approach to data analysis, extracting its concepts from the mass of particular detail which constitutes the data base. The strength of Qualitative inquiry involves employing multiple data gathering methods, especially participant interviews, and uses an inductive approach to data analysis, extracting its concepts from the mass of particular detail which constitutes the data base.

### 3.4.DATA COLLECTION METHOD

In using social science techniques to collect data, the researcher used two forms of data collection: documentary sources and semi-structured interviews.

### 3.4.1. Interviews

The interviews were held in a conversational manner to make it as natural as possible, to put the respondents at ease as they talked about their own perceptions, experiences and expressed their views. The friendly yet somewhat professional helped to make the interview a relaxed open space for sharing.

### 3.4.1.1 Unstructured Interviews

Minichiello et al. defined them as interviews in which neither the question nor the answer categories are predetermined. ${ }^{151}$ Instead, they rely on social interaction between the researcher and the informant. Punch described unstructured interviews as a way to understand the complex behaviour of people without imposing any categorization, which might limit the field of inquiry. ${ }^{152}$ Patton described unstructured interviews as a natural extension of participant observation, because they so often occur as part of ongoing participant observation fieldwork. ${ }^{153} \mathrm{He}$ argued that they rely entirely on the spontaneous generation of

[^46]questions in the natural flow of an interaction. While the definitions are not the same, there is more agreement about the basic characteristics of unstructured interviews. ${ }^{154}$

The decision to use unstructured interviews as a data collection method was because they are aligned to the aim, objectives and research questions. Researchers making use of unstructured interviews often hold a constructivist point of view of social reality and correspondingly design studies within an interpretive research paradigm.

### 3.4.2. Desktop method

Desktop method refers to secondary data or that which can be collected without fieldwork. The secondary data collection that was used in this study involves the print and electronic sources such as books, journals, pamphlets, dissertations, government publications, reviews, reports of various committees, diaries and other relevant manuscripts. As such, the study also employed a comprehensive study and evaluation of conference materials and other relevant primary documents such as interviews.

### 3.5.DATA ANALYSIS

Data analysis explains the route by which raw data is orderly organized so that useful information can be spotted and used in the study. ${ }^{155}$ The data were analysed through a qualitative research (secondary and primary) methods. This research method allowed the researcher to look at materials such as books, journals, newspapers, online informants and other useful materials to analyse data accordingly. In this case, analysed data assisted in looking at how BRICS assisted in improving the bilateral trade flow with South Africa, and the constraints and prospects that accompanied the BRICS forum. The researcher analysed data by looking at various informants for their views about the BRICS forum and how it impacted on the economic development and trade and investment of South Africa. The data covered both the prospects/benefits and the constraints that BRICS may have on the trade flows stability. The paper was analysed by looking at both positive and critical analysis submitted by different authors to analyse the role of South Africa in bilateral trade flows with the bloc so that the information was not one-sided or biased but provided a clear panoramic understanding on the impact South Africa had by joining BRICS and future outcomes to be offered by this cooperation agreement.

[^47]
### 3.5.1 Target group (population)

The targeted group/population is member states of BRICS inclusive of South Africa, academics and experts involved in BRICS Think Tank.

### 3.5.2 BRICS Think Tank members

The BRICS Think Tank members helped greatly with their valuable knowledge on the foundation of the alliance and whether South Africa's role and position in the group has any impact toward the growth of the alliance and South Africa's trade and economic industry. They further gave a coherent explanation as to how the BRICS countries have influenced the monetary hegemony of the $21^{\text {st }}$ century.

### 3.5.3. Academics that may have knowledge about the BRICS

Academics played a pivotal role in the execution of the study, especially in providing the clarity whether the BRICS economies are capable of maintaining its power in the forever changing environment of trade and economics and as to whether the group is a united front when it comes to global governance issues.

### 3.5.4. Economists and Experts

Economists and experts helped very much with their expertise in explaining how exports and imports determine trade flows and what impacts that has in each country's economic growth through exports and import sectors, and how the BRICS economies sustain their influence in world trade.

### 2.5.SAMPLING METHOD

All items in any field of inquiry constitute a 'universe' or 'population.' A complete enumeration of all items in the 'population' is known as a census inquiry. ${ }^{156}$ It can be presumed that in such an inquiry, when all items are covered, no element of chance is left and highest accuracy is obtained. But in practice this may not be true. Even the slightest element of bias in such an inquiry will get larger and larger as the number of observations

[^48]increases. ${ }^{157}$ Moreover, there is no way of checking the element of bias or its extent except through a resurvey or use of sample checks. Besides, this type of inquiry involves a great deal of time, money and energy. Therefore, when the field of inquiry is large, this method becomes difficult to adopt because of the resources involved. At times, this method is practically beyond the reach of ordinary researchers. Perhaps, government is the only institution which can get the complete enumeration carried out. Even the government adopts this in very rare cases such as population census conducted once in a decade.

Further, many a time it is not possible to examine every item in the population, and sometimes it is possible to obtain sufficiently accurate results by studying only a part of total population. In such cases there is no utility of census surveys. However, it needs to be emphasised that when the universe is a small one, it is no use resorting to a sample survey. When field studies are undertaken in practical life, considerations of time and cost almost invariably lead to a selection of respondents, i.e., selection of only a few items. The respondents selected should be as representative of the total population as possible in order to produce a miniature cross-section. The selected respondents constitute what is technically called a 'sample' and the selection process is called 'sampling technique.' In this type of sampling, items for the sample are selected deliberately by the researcher; his choice concerning the items remains supreme. In other words, under non-probability sampling the organisers of the inquiry purposively choose the particular units of the universe for constituting a sample on the basis that the small mass that they so select out of a huge one will be typical or representative of the whole.

Sampling may be defined as the selection of some part of an aggregate or totality on the basis of which a judgement or inference about the aggregate or totality is made. In other words, it is the process of obtaining information about an entire population by examining only a part of it. In most of the research work and surveys, the usual approach happens to be to make generalisations or to draw inferences based on samples about the parameters of population from which the samples are taken. ${ }^{158}$ The researcher quite often selects only a few items from the universe for his study purposes. All this is done on the assumption that the sample data will enable him to estimate the population parameters. The items so selected constitute what

[^49]is technically called a sample, their selection process or technique is called sample design and the survey conducted on the basis of sample is described as sample survey. Sample should be truly representative of population characteristics without any bias so that it may result in valid and reliable conclusions. ${ }^{159}$

The main purpose of sampling is to achieve representativeness of the population from which it is taken. ${ }^{160}$ The purposive and snow-ball samplings were utilized in this research. Kumar argues that the primary consideration in purposive sampling is the judgement of the researcher as to who can provide the best information to achieve the objectives of the study, ${ }^{161}$ the researcher only goes to those who in her/his opinion are likely to have the required information and be willing to share it. This type of sampling is extremely useful in developing something about which only a little is known."

This research study, by virtue of its thematic question, adopted the snow-ball sampling. A snow-ball sampling is a type of sampling where a researcher starts with one participant or member of the population and then uses that member's contact to identify other contacts that may have experiences or interest, thus increasing the sample. ${ }^{162}$ Snow-ball sampling is most commonly used when the researcher would have difficulty in finding participants who might otherwise not be identified easily. Snow-ball sampling often allows the inclusion of several views or experiences. ${ }^{163}$ For purposes of this study, however, justification is in that the study deals with bilateral trade flows between South Africa and BRICS member states. As such, it is business-like in nature and is the most popular in business and trade flow matters in that it allows for research to take place where otherwise it might be impossible to conduct because of a lack of participants. Snowball sampling in this research undoubtedly assisted with discovering characteristics about a population that the study was not aware existed ${ }^{164}$.

### 2.6.SAMPLE SIZE

This refers to the number of items to be selected from the universe to constitute a sample. This is a major problem before a researcher. The size of sample should neither be excessively

[^50]large, nor too small. ${ }^{165}$ It should be optimum. An optimum sample is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility. ${ }^{166}$ While deciding the size of sample, the researcher must determine the desired precision as an acceptable confidence level for the estimate. The size of population variance needs to be considered as in case of larger variance, usually a bigger sample is needed. The size of the population must be kept in view for this also limits the sample size. The parameters of interest in a research study must be kept in view, while deciding the size of the sample. Costs too dictate the size of sample that we can draw. As such, budget constraints must invariably be taken into consideration when we decide the sample size.

The method of purposive sampling was used to develop the sample of the research under discussion. According to this method, which belongs to the category of non-probability sampling techniques, sample members are selected on the basis of their knowledge, relationships and expertise regarding a research subject according to Freedman et al. In the current study, the sample members who were selected had special relationship with the phenomenon under investigation, such as sufficient and relevant work experience in the field of economics.

A total of 30 individuals were interviewed in this research study to provide a balanced research analysis of the study. ${ }^{167}$ Ritchie argued that for a qualitative study, samples involving individual interviews usually lie at fewer than 50, whereas Alder and Alder recommended a sample between 12 and 60 for a qualitative approach. ${ }^{168}$ Ragin argued that a sample should be between 20 and 50 ; he further argued that if a sample is larger than 50 , they can start to become difficult to manage in terms of the quality of data collection and analysis that can be achieved. ${ }^{169}$ Warren also remarked that, for a qualitative interview study to be published, the minimum number of interviews required seems to be between 20 and 30. The sample size of 30 interviews conducted is justifiable for the research study and the data collected has been manageable in terms of the quality and analysis.

[^51]
### 2.7.ETHICAL CONSIDERATIONS

When it comes to dealing with human participants, research projects should rigorously follow ethical considerations. ${ }^{170}$ According to Cohen et al, as interviews are considered an intrusion into participants' private lives with regard to time allotted and level of sensitivity of questions asked; a high standard of ethical considerations should be maintained. ${ }^{171}$ Therefore, ethical issues should be considered at all stages of the interview process. That is, participants should provide their informed consent before participating in the interview: a key step that researchers should adhere to throughout the whole research project. However, an ethical challenge to researchers would be the openness and intimacy of the interview situation as it may lead participants to disclose information that they may later regret, and there is a risk that the interaction may become a quasi-therapeutic relationship for which most researchers might not have been trained. ${ }^{172}$ Therefore, to protect the participants' rights and to avoid causing them any harm, the researcher assured that the collected data would be strictly confidential and anonymous. More importantly, participants were told that their participation in the interview was entirely voluntary, and that they could withdraw at any time.

Concerning the rules and regulations of the university with regard to conducting research using human subjects, the following ethical considerations were taken into account during the course of the research. These considerations applied to both the quantitative and qualitative research sections of this study. The current study was subject to certain ethical issues. Next to this, participants were fully informed regarding the objectives of the study, while they were reassured that their answers were treated as confidential and used only for academic purposes and only for the purposes of the particular research. Except from the above, participants were not harmed or abused, both physically and psychologically, during the conduction of the research. In contrast, the researcher attempted to create and maintain a climate of comfort.

### 3.8.1. Permission

The University's ethical committee gave permission to conduct the research study by providing an ethical clearance certificate, which is attached to the research document.

[^52]
### 3.8.2. Confidentiality and Privacy

Confidentiality refers to handling the information concerning the respondents in a confidential manner. ${ }^{173}$ Respondents were assured that their names and the names of their schools would be dealt with in the strictest confidence. This aspect includes the principle of trust in which the researcher assured the participants that their trust would not be exploited for personal gain or benefit, by deceiving or betraying them in the research route or its published outcomes.

### 3.8.3. Voluntary Participation and Informed Consent

The principle of voluntary participation was explained to the respondents and they were also informed that they had the right to withdraw from the study at any time. The principle of informed consent was attached with the interview sheet and verbally explained to the interviewees. Both principles entailed explaining the research process and its purposes to the participants. ${ }^{174}$

### 3.9. INTERVIEWS

Seale, Giampietro, Gubrium and Silverman define an interview as a social encounter where speakers collaborate in producing retrospective and prospective accounts or versions of their past or future actions, experiences, feelings and thoughts. According to Kvale an interview is "a conversation, whose purpose is to gather descriptions of the [life-world] of the interviewee" with respect to interpretation of the meanings of the 'described phenomena'. ${ }^{175}$ In a similar vein, Schostak, adds that an interview is an extendable conversation between partners that aim at having an 'in-depth information' about a certain topic or subject, and through which a phenomenon could be interpreted in terms of the meanings interviewees bring to it. Accumulating such meanings can be done in various ways, of which one-on-one interviews are the most common. Besides one-on-one interviews, focus groups interviewing is also popular according to Marshall and Rossman.

In this study, an unstructured interview method was used to allow for an open, in-depth discussion of the research topic. Denzin and Lincoln argue that unstructured interviews allow the researcher to understand the complexity of the situation without imposing any prior

[^53]categorization. ${ }^{176}$ Through choosing interviews as a method of data collection the researcher hoped to gain a deeper understanding of the participants' constructions through dialogue and through the language they use in constructing the different discourses. The interview method allows the researcher to seek clarity and probe for deeper understanding. As a result the reporting and analysis of data is reflective of the views of the participants.

Qualitative research is considered to be particularly suitable for gaining an in-depth understanding of underlying reasons and motivations for research. It provides insights into the setting of a problem. Data collection in qualitative research is seldom based on unstructured or semi-structured, but methodologically flexible techniques, e.g. individual depth interviews or group discussions that are suited to elicit great detail and a comprehensive view. ${ }^{177}$ Quantitative research uses highly structured, rigid techniques such as online questionnaires, on-street or telephone interviews. Unlike qualitative research which allows unlimited expression from participants, quantitative research requires responses to pre-formulated questions. ${ }^{178}$ Qualitative method is suitable for this research study in that it is typically exploratory and/or investigative in nature.

Furthermore, a small number of studies have explored the patterns and magnitude of trade flows between South Africa and the BRIC economies as a result of South African economic integration into the BRICS .The interviews in qualitative research play a vital role in unearthing primary data. That contributes to the literature of trade flows between South Africa and its alliance, the BRICS. In this research study, unstructured interviews were used in this research to gain more in-depth data that gave more insight and different perspectives / views on the thematic question under investigation.

### 3.10. CONCLUSION

Although many previous studies highlighted the importance of trade among BRICS economies, a small number of studies have investigated the patterns and magnitude of trade flows between South Africa and the BRIC economies with regards to the economic integration of South Africa into the BRICS. In addition, some authors such as Manzombi and Mazenda have applied the gravity model and econometrics panel to identify whether the

[^54]magnitude of these flows are beneficial to all BRICS member states. The gravity model serves as very effectual and prominent tool in international economics and bilateral trade flows modelling. ${ }^{179}$ As it has often been utilised in international trade for empirical studies, theories of the gravity model have been discussed in this research study.

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## CHAPTER FOUR: TRADE PROFILE OF SOUTH AFRICA AND BRICS MEMBER STATES

### 4.1. INTRODUCTION

South Africa during the period under study faced a plethora of challenges both political and economic affairs. In 1910 South Africa was declared a Union; later in 1961 it was declared again a republic. 1994 was also a watershed year, the end of apartheid era in South Africa. After the end of apartheid the country was challenged to construct new democratic institutions and an inclusive civic society/culture from the sour legacy of many years of statutory racism and ideological division. ${ }^{180}$ With the new administration in the presidency, new economic policies were amendment for the benefit of the country, in order to keep the country flowing. However post- apartheid South Africa has had to deal with a number of challenges such as unemployment, poverty, stunted economic growth etc., all these challenges required the government to introduce economic policies that were to address the country's problems. ${ }^{181}$ Nevertheless South Africa's economy has seen growth in the last 23 years. At the start of 2017 South Africa encountered a recession, economic growth had been stagnant. International rating agencies, standards \& poor's and Fitch downgraded South Africa's economy status to junk meaning that South Africa's economy was facing stagnancy, however Moody's gave hope to the slow growing economy by not downgrading the country's economy.

### 4.2. SOUTH AFRICA'S BILATERAL TRADE FLOWS WITH INDIA AND CHINA

China and India are the fastest growing markets in percentage growth by sector amongst the BRICS countries. From a global perspective, China and India are poised to be playing a key role in the $21^{\text {st }}$ century monetary hegemony and from a domestic perspective; China and India constitute unprecedented stories of economic development. Owing to vibrant growth rates in the last decade, they have already reached heavyweight status in the global economy. Indeed, after adjusting for the price of non-tradable, India is already the fifth largest economy, just behind Japan, while China is the world's second largest economy. ${ }^{182}$ The most obvious signs

[^56]of China's and India's importance in the global economy are their large economic size, huge population and dynamic economic growth.

The Asian miracles, as they are often referred in the present day are the two countries amongst BRICS countries to have big economies. Their influence has changed the world markets and global trade landscape, owing to their big populations and large economic size through their huge economic activities and financial flows. ${ }^{183}$ China and India, apart from being members of BRICS alliance, have good and mutual bilateral trade relations which many call "Chindia".

At the moment, China is the second largest economy in the world. Among the BRICS countries, China is seen as progressively becoming a leading figure in the world economic market by means of its largest population and its fastest growing economy in the world. According to Polodoo, the country's economic growth depends enormously on the manufacturing industry, with more than 40 per cent of its total GDP coming from the manufacturing sector. ${ }^{184}$ Both the industry and services sectors produced around 45 per cent of the country's GDP, while agriculture accounted for 10.1 per cent in $2012 .{ }^{185}$

As far as the growth in India is concerned, the country's economy is driven by services, which represent more than 50 per cent of its GDP and has been a predominant source of the Indian expansion. India's economy is more diversified, consisting of farming, agriculture, industries, and excess services. Industries such as software, IT, and pharmaceutical industries are more competitive in India. The contribution of agricultural and industrial sectors has also promoted rapid growth in India. ${ }^{186}$ In comparison with other BRICS countries, India outperforms them in Gini co-efficient index with a rating of $36.8 \%$.

Although South Africa's bilateral ties with India and China vary in historical depth, they predate South Africa's formal accession to the BRICS bloc in April 2011. Trade and commerce between post-apartheid South Africa and India have grown steadily. The contemporary South Africa-India trade partnership established in March 1997 has been defined by predictably strong political relations based on a foundation of mutual trust forged through New Delhi's

[^57]early and staunch support for the anti-apartheid struggle. ${ }^{187}$ This has since been buttressed by the two countries' shared aspiration of creating a more just and equitable multilateral world order; however, years later this economic engagement is yet to reach its full potential. Bilateral trade between South Africa and India has grown at an annual rate of 30 percent since 2004 to reach 81 billion Rand in 2013, and was expected to exceed R116 billion in 2015.

Furthermore, there is a vital need to improve rail, road, and sea connectivity between the two countries for the more competent movement of goods and services. It is also important that both South Africa and India prioritise achieving their national economic growth and development objectives, in order to withstand the upward growth trend in bilateral trade, and to benefit more fully from their increasing commercial ties.

China is South Africa's single largest bilateral commercial partner, it is clear that SA and China's bilateral relations have grown significantly in the last decade. China and SA's trade relations contribute immensely to South Africa's economy. Chinese markets are the top destinations for South African exports and leading source of imports, highlighting the need to engage purposefully with the newly joined BRIC group and to prioritise productive capacity. ${ }^{188}$ South Africa is China's largest trade partner in Africa, accounting for 31 percent of Beijing's trade with the continent in 2013. Furthermore, between 2004 and 2012, total Chinese FDI stock in South Africa increased from $\$ 59$ million to $\$ 5$ billion, making South Africa the leading recipient of investment flows from China to Africa. ${ }^{189}$

From a global perspective, it is estimated also that China is becoming a dominant player for both high-tech and low-tech goods. In 2004, China became one of the world's first exporters of high-tech goods. China's aptitudes in technology will help the South Africa's technology and innovation fields to boost technology industry and further strengthen its ministerial element to further broaden the innovation in SA and Africa. ${ }^{190}$ There are many concerns about South Africa's industrial strategy when it comes to its economic relations with China. Few South African industries have gained from the Chinese market; in this case consideration has to be given to those South African industries that are threatened. The way things are

[^58]going, South Africa needs to restructure its approach to China and understand how its economic relations with China will impact on its presence in the SADC region and the African continent. South Africa also needs to research and come up with ways to draw conclusion about whether this Chinese economic boom does not become exploitative toward itself and African countries.

China's Foreign Direct Investment (FDI) and infrastructure financing are unified; they continue to a play an important role in promoting China's economic growth. China's regions have been successful in attracting FDI by providing improved infrastructure and regulatory environment. Moreover, China has experience in financial macro-management, no wonder they have been able to grow their economy and be ranked as the second largest economy in the world after US. The reform and development of China's banking industry and financial market is an important driver of the country's rapid and sustainable growth. Furthermore, the policy challenges for China are to sustain rapid and stable economic growth, which is mostly driven by exports and domestic demand in more balanced way, to facilitate restructuring of the economy. Financial sector reforms need to improve the intermediation of China's large private saving.

South Africa's relations with China have faced harsh criticism from many economic and political observers. Many share the narration that China is the new African imperialist. South Africa needs to ensure that their trading relation with China does not exploit African countries since SA is seen as Africa's gateway for foreign investment. Moreover, Saliem Fakir believes that South Africa can either truly be a part of Africa, or it can fall in danger of being part of the scramble for Africa. ${ }^{191}$

### 4.3. SOUTH AFRICA'S BILATERAL TRADE FLOWS WITH BRAZIL AND RUSSIA

Five years after the BRICS bloc was formally established in June 2009, bilateral trade relations between its five member states have remained their primary technique for consolidating these relationships. South Africa's relations with both Russia and Brazil are of importance, apart from being in BRICS South Africa's diplomatic cooperation with Brazil and Russia has grown rapidly over the past decade. Notwithstanding their distinct dynamics, South Africa's bilateral ties with both Brazil and Russia are characterised by a mutual lack of information that remains an obstacle to greater political, economic, and cultural cooperation.

[^59]In addition, Brazilian companies often find it easier to conduct business in luso-phone African countries, such as Angola and Mozambique, than in South Africa. ${ }^{192}$

Brazil and Russia are richer than China and India in terms of material resources. It is important to note that Brazil possesses abundant natural resources such as oil, iron, and tropical rain forest, which favours the development of agriculture, but the country depends on the exportation of the raw material goods for the growth of its economy. ${ }^{193}$

According to a Statement by Guido Mantega, Minister of Finance in Brazil in 2004, Brazil's economic growth has averaged 3.1 percent per year in the crisis period since 2008. In 2013, GDP expanded by 2.3 percent, with investment rising by 6.3 percent. ${ }^{194}$ Brazil is preparing for a new phase of the world economy by undertaking structural reforms, notably through strong investment in infrastructure and education. ${ }^{195}$ The Brazilian government is implementing one of the largest infrastructure concession programs in the world, of around US\$ 400 billion, that includes highways, railroads, ports, airports, energy, and oil and gas.

South Africa's involvement in BRICS awarded the country an opportunity to spread its wing in Latin America. This opportunity does not only sustain trade relations between SA and Brazil but also for SA to attract other Latin American countries through investment and mutual relations. South Africa and Brazil relations were customarily strengthened by the IBSA cooperation which started in 2003. SA and Brasília then further signed a strategic partnership agreement and a memorandum of understanding on consultation and cooperation in the area of inter-governmental relations in 2009. In Latin America, Brazil is South Africa's largest trading partner. However, the volume of bilateral trade between the two countries was R21 billion in 2013 and it has remained on the low. ${ }^{196}$

Additionally, South Africa's trade relations with Brazil has not been smooth sailing, owing to the dispute concerning Brazil's dumping of faulty poultry to SA. However, that dispute was settled through WTO framework. ${ }^{197}$ In addition, the case of language barrier between SA and Brazil has also posed an additional obstacle to increasing investment, with Brazilian

[^60]companies finding it comparatively easier to conduct business in Portuguese-speaking countries such as Angola and Mozambique, which host significant Brazilian populations, than in Anglo-phone South Africa. ${ }^{198}$ However, trade between these countries is still continual from IBSA to BRICS; moreover, a number of Brazilian firms like Brazil Foods and Marcopolo maintain offices in South Africa, and these serve mainly as headquarters for their operations in other African countries. South African companies, in turn, have a similarly limited presence in Brazil, although the multinational company, Anglo-American, has investments worth $\$ 16$ billion in Brazilian mining through its subsidiary, Anglo-American Brasil Limited. That said, there are emerging areas of cooperation between South Africa and Brazil, with the two countries negotiating an agreement still unsigned in November 2014 on nuclear technology.

Russia remains a powerful country. As the biggest country in the world, covering more than one-ninth of the world's land area, it is a country with fabulous natural resources. It owns the highest mineral resources reserves, the largest natural gas reserves, the primary fresh water reserve, the second largest coal reserves, as well as holding the eighth greatest oil reserves. A strong economic growth was perceived in Russia due to the fact that oil prices were rapidly increasing; however, its economy was deteriorated by the global financial crisis, causing the country to perform poorly, with annual average growth reaching 1.8 per cent, 3.7 per cent, and 6.2 per cent respectively in the agriculture, industry, and services sectors in 2009. ${ }^{199}$ Russia's oil industry has alone attributed to the rise and powerful Russia.

South Africa's bilateral ties with Russia date back to the Soviet epoch, with Moscow an early and staunch supporter of the anti-apartheid struggle. However, the trade between SA and Russia has been low in the last few decades. Their relations started being effective when SA joined BRICS; still the relations were below 3\%. Russia's President Vladimir Putin seeks to engage more with SA's business. Russia's interests in South Africa are mainly concentrated in the mining, oil and gas, and petrochemical sectors. ${ }^{200}$ Hence, the Russia government made an offer on a nuclear deal with SA in 2014. The nuclear plant in SA caused an uproar amongst politicians and economists who believed that SA does not have that kind of money needed by Russia to implement the nuclear deal. In the meantime, the nuclear deal has not

[^61]been signed. There are questions to whether if this deal does not go through as many observers are projecting, trading relations between Russia and SA will not be massively affected.

It remains to be seen whether these relations would be affected; however, trading relations between Russia and SA still shows that there is not much growth in SA's economic activities, especially when compared to other BRIC countries.

### 4.4. SOUTH AFRICA'S TRADING SIGNIFICANCE WITHIN BRICS

South Africa was considering expanding its footprint and intra-regional trade and being a member BRICS unlocked that opportunity. Given the size of BRICS country economies, South Africa is said to be a small economy. ${ }^{201}$ It is supposed that its GDP is high only when compared to African standards, but is miniscule in relation to other BRICS; however, South Africa has worked hard to enjoy the position they hold in the world. Her stature is sustained by willing to grow her industries, invest and bring good business to South Africa, small as it is their economy, they have proved the world markets that they are a force to reckon with. Being part of the BRICS bloc affords South Africa the opportunity to cooperate with fellow BRICS countries in the realms of finance, agriculture, statistics, business development and exchange, science, technology, climate change and energy, and sport. ${ }^{202}$

South Africa's trade with BRICS countries in 2013 was $\$ 38$ billion - a $27.5 \%$ increase compared to 2012. ${ }^{203}$ South African trade with China, its largest trading partner, increased from $\$ 20$ billion to $\$ 27$ billion between 2012 and 2013. South Africa's rich endowment of mineral and natural resources complements Brazil's specialization in agriculture and raw materials, Russia's position as a major player in the commodity market, India's servicesexporting economy, and China's recognition as the 'world's factory'. Moreover, to ensure that BRICS member states invest and bring commerce to Africa; since the 2011 invitation to the BRICS summit, South Africa's role in world politics confirmed that Africa is a place to invest in. The whole of Africa was to partner in new resolutions with the East countries. The transaction between South Africa and the BRICS member states was not meant for South

[^62]Africa only; South Africa was to be the frontline of business and investment of Africa. ${ }^{204}$ Shortly after being a member of the coalition, South Africa faced criticism both domestically and internationally.

Western countries were eager to know why South Africa had become a member of BRICS and whether South Africa was aware of the consequences. South Africa being part of BRICS coalition had both positive and negative impact on the Rand. Even though trade with the EU was not much affected by the move, with the US, the trading relations were affected, especially poultry industry; this was a huge debated issue between South Africa and the US. Some politicians in South Africa shared the narrative that the US hegemony was over and that they were attacking South Africa because of its brave choice to join the BRICS member states and that South Africa was now investing in trading relations with the East.

Furthermore, as they gained strength economically, the BRICS member states became not only key markets for South African exports and imports, but also financiers, investors, and donors, therefore acting as an important growth powerhouse. ${ }^{205}$ Not surprisingly, the impressive commodity-driven growth sustained during much of the last decade has been attributable in part to the growing economic dynamism of the BRICS. Such a development suggests that output correlation between South Africa and the BRICS has risen recently. Nonetheless the three big rating agents, which are Standards \& Poor's, Fitch and Moody's, downgraded South Africa's economy to junk status, illustrating points that the central factor is based on political uncertainty in the country, what happens when statements such as this rise to surface: An International Monetary Fund (IMF) mission, led by Ana Lucia Coronel, visited South Africa during October 30 - November 8, 2017, to discuss recent economic developments and outlook in the context of its regular surveillance activities? At the end of the visit, Ms. Coronel issued the following statement:
"Despite South Africa's institutional strength and favourable global conditions, increasing domestic political uncertainty and stalled reforms point to a challenging economic outlook. Some sectors, including agriculture and mining, are certainly generating growth, but other key activities have stagnated or declined, as investment decisions are being postponed or abandoned".

[^63]With South Africa's challenges with the economy, economists question the role of BRICS in sustaining and bringing stability in the economy. The main question is whether the BRICs member states should not be bringing business to South Africa, as one would assume that the relations comprehend such policies of contributing to economic development.

Furthermore, Saliem Fakir wrote an article "Despite the emerging geopolitical competition over Africa, South Africa will continue to sit at the BRICS table" ${ }^{206}$ The critical question is: what influence can South Africa exert over the direction of the BRICS countries? Even for keen observers of foreign policy, South Africa's own sense of priorities within the BRICS bloc seems to be unclear. It could be influential by taking on an enlightened leadership role, or it could also take the narrow road of geo-political self-interest and use participation in BRICS as a status symbol, doing little for the rest of Africa. ${ }^{207}$ Or it may just want to ensure the lucky receipt of BRICS trade-relations.

Indeed, the country has reached a cross-road now that it sits at the BRICS table: South Africa can either truly be a part of Africa, or it can fall in danger of being part of the scramble for Africa. ${ }^{208}$

### 4.5. TRADE FLOWS ACROSS IBSA COUNTRIES

South Africa under President Thabo Mbeki set about cobbling together a democratic developing country entrance, across the three continents Africa, Asia and Latin America, to fight for global political, economic and trade fairness. An important part of this was attempting to create the largest developing country or South-South free trade area, connecting India, Brazil and South Africa. ${ }^{209}$ South Africa was thus also an architect behind IBSA (India, Brazil, and South Africa which was launched in 2003. South Africa's role in IBSA became the most significant part of understanding the BRICS expansion. Brazil, India and South Africa are multi-ethnic liberal democracies with market orientated economies. All three also have large income disparities and they therefore represent the democratic forces within BRICS and the inner working of global governance change in IBSA. ${ }^{210}$ The BRICS

[^64]expansion therefore has to be considered in the light of growing trade and investment flows as well as participation in global governance forums.

The three regional powers (IBSA) viewed themselves as global figures of the developing world, and they felt a need to forge closer ties between themselves, so that they would be able to improve cooperation and trade alliance between their regions. South Africa is the superpower of the Southern African Customs Union and the Southern African Development Community, Brazil is by far the most influential member of the Mercosur trading bloc of South America, and India has by far the largest economy in Southern Asia and this is evident why IBSA countries merged themselves as one bloc.

Furthermore, linked by their past historical relations, socio-economic and political challenges, the countries of the South shared issues that commonly affected them. These areas of cooperation included trade investment, human resource development, good governance, technology, health, climate change and human rights management. The cooperation of South countries further raised a common voice on issues of critical importance to developing countries such as the reform of global governance institutions to create more equitable world order to achieve the millennium goals, which countries of the south committed themselves to achieve through the advantages that globalization offer. ${ }^{211}$

According to Green, most of the developing world is characterised by economic challenges, which slow economic growth, increasing unemployment rate, falling shares in world trade, and high debt burden. ${ }^{212}$ The extent and nature of economic growth is central to development and to the lives of the poor. Countries that have reduced poverty invariably had to grow and implement progressive policies to reduce poverty in their societies. ${ }^{213}$ If growth is properly managed in the market economy, it can create jobs, increase incomes, and generate tax revenues that states can use to invest in infrastructure, schools, hospitals, but, most of all, creating wealth is an inseparable part of reducing poverty.

According to Badasie, South Africa does not have a huge and powerful economy compared to its BRICS partners; however, SA carries the ability to influence decisions that concern global participation and those affecting the continent of Africa. ${ }^{214}$ This is not limited by

[^65]geographic size but on the national policies a state has, and the foreign policy that can compete with global powers and, is more than anything else, concerned with national interest. The stable politics of South Africa and its quest of promoting peace in Africa is one of the elements which make this African state to be recognised as worthy to represent and interact in bilateral agreements with emerging economic powers of the world. ${ }^{215}$ However, the vision of South Africa to reap positive results alone out of BRICS is not an obvious case. This country is in alliance with the world's most powerful emerging states; for South Africa to survive, the only way is to guard its own interest and that of the continent to realize its aims and objectives in the BRICS bloc.

The bilateral trade relations between of the IBSA countries paved a way for South Africa's inclusion to BRICS. Yes, it is a known narrative that China initiated the invitation, but the IBSA relations proved that their trading relations together with South Africa had been fruitful. For any developing country, it is never easy to initiate monetary policies that will benefit everyone equally. South Africa is also facing a situation of economic inequality; inequality in the sharing and distribution of wealth. Prior to joining the BRICS member states, the country was already a big player in Africa; that is why it initiated the advent of IBSA in order to expand its monetary affairs and trading relations with other big players and sustain its hegemony in the continent. ${ }^{216}$

The statement by the Minister of International Relations and Cooperation, NkoanaMashabane, at the meeting of the $8^{\text {th }}$ India, Brazil, South Africa (IBSA) Trilateral Ministerial Commission (ITMC), in October 2017, expressed the importance of being a member IBSA, that IBSA continues to play a moral and leadership role globally and offers the space for South-South cooperation. It provides an intimate platform from which to coordinate on matters of common interest in respect of global governance issues, notably in the political, socio-economic and security domain. In order to continue to be relevant in today's dynamic and changing political and economic environment, the alliance would need to leverage their strengths and unique identity as a grouping of the Global South with which they bring

[^66]together three large pluralistic, multi-cultural and multi-ethnic societies from three continents ${ }^{217}$.

Small as it is, the South African economy, the country's influence in Africa and South-south countries is amicable; that is why South Africa continues attracting investors from all over the globe. As the leading economy in Africa, they continue to prove that maintaining good relations with trading partners undoubtedly stimulates a stable position in regional and global markets for all parties involved. ${ }^{218}$ The IBSA relations till this present day still plays a significant role in the development of trade and industry in South Africa ${ }^{219}$. Moreover, not only that, but they have been able to maintain a sound and pivotal role in growing each country's economic, social and political dynamics, which was initiated as an objective to be achieved when IBSA was created and to also maintain order, ensure dominance in world trade and to promote trade democracy amongst global trade.

### 4.6. SOUTH AFRICA, BRICS AND INTERNATIONAL TRADE FLOWS

Post-apartheid South Africa renewed and refined its role and position in the face of the world. The inception of democracy in South Africa introduced positive change in the country. Trade between South Africa and the rest of the world was much strengthened when South Africa became a democratic country in 1994. Trade has always played an essential role in alleviating poverty and reducing unemployment in any country in the world. In the last few decades, the world witnessed South Africa stimulating business in all its sectors as South Africa became a major player in world trade. The country owed its veneration in world trade through its mineral resources, particularly gold and platinum. South Africa's prominent role and position in world trade was also influenced by their trade with the EU and BRIC countries. ${ }^{220}$ South Africa and the EU trade had existed for many years; in fact, this trade relation between the two had never been surpassed by South Africa's trade shift to Asian countries. The EU remained the number one trader with South Africa.

Economic transformation is the result of a combination of structural and politically based factors. The BRICS position in global markets is very significant. To this end, the five

[^67]countries in the BRICS community play an important role in the G20, in shaping global economic policy and promoting financial stability. Their contribution to the economic revolution in the world has placed the alliance on a pedestal. ${ }^{221}$ The BRICS rise changed the world order hegemony. Many scholars argued that the rise of this group changed the world into a multi-polar world. The $21^{\text {st }}$ century is a century that has been characterised by the rise of the powerful BRICS alliance in their quest for monetary hegemony in the world, the 2001 projections by Jim O'Neil that the emergence and rise of the BRIC countries may perhaps change the world's economic structure and with their GDP's combined they could surpass the G7's dominance. ${ }^{222}$ At the time of the prediction, the world was in another structure; economic growth of the world was much influenced by the Western nations only. O'Neil's prediction proved that west monetary hegemony was at risk of being run over by countries that were not seen as having any real power. The change of the acronym to BRICS with South Africa's inclusion gave the alliance significant rise not only in Africa but to the world too. ${ }^{223}$

However, the rise of BRICS in the global markets was first seen as a hyper technique by the critics. The alliance had an obstacle of penetrating the Bretton woods institutions. These institutions play a huge role in influencing rating agencies, currencies of countries and world economy etc. The BRICS group wanted to challenge the Bretton wood institutions' modus operandi. This was in quest for transparency in the institutions and trade democracy in world trade. The BRICS continue with their quest of challenging the institutions hegemony and ensuring that the institutions work without any manipulation of any sort.

BRICS countries' influence in the world markets is of cognizance. Conserving mutual trading relations with the global community enhances high opinion and value to each country's foreign policy strategy. South Africa's eminence in the world trade has risen to high criteria in the last few decades. ${ }^{224}$ South Africa's advent and influence to world markets and trade should not only be attested by the country's noteworthy role in Africa, but also their economic policy and trade policy which permits the country to be a force to reckon with. South Africa's trade policy allowed the country to ensure that its trade agreements benefit the

[^68]country's economic activities. ${ }^{225}$ South Africa's invitation to be part of BRICS member states alliance changed the game for South Africa greatly. This improved the country's voice and dominance in the SADC region and the continent. South Africa being part of BRICS boosted the global community's confidence, including ratings agencies, the IMF and the UN etc. Even though South Africa's economy has been facing stagnancy in the last few years, the country continues to make use of their financial institution in growing and developing the country's economy and ensuring that the macroeconomic policy is mandated in fighting slow economic growth.

South Africa's economy is still experiencing pressure from the global economic slowdown, and domestic structural bottlenecks, including labour unrest, unemployment remains high, especially among young Africans, and income inequality has increased. Economic growth has been volatile and lacklustre as the country has had to cope with the consequences of global crises. However, the South African Reserve Bank (SARB) has limited room to manoeuvre in stimulating economic growth through easier monetary policy. ${ }^{226}$ Moreover, success in the implementation of the National Development Plan, could unlock the economy's potential within an inclusive growth agenda that is in the best interest of South Africans. ${ }^{227}$

Growth momentum in South Africa has faded progressively since 2011, reflecting growing domestic constraints. Real GDP growth declined from a post crisis peak of 3.6 percent in 2011 to just 1.9 percent in 2013 and to 1.3 percent in the first half of $2014 .{ }^{228}$ These figures speak volumes about the country's challenge to maintain a flowing economy; however, that should not be blamed on the country's economic policy; monetary fluctuations are inevitable. In this case, inflation and global markets keep on shifting. The 2013 Term Budget Policy Statement advanced fiscal consolidation measures to underpin fiscal targets and stabilize the debt burden.

Nonetheless, with the new measures, the Medium Term Budget Policy Statement safeguards the decline in the deficit from a revised 4.1 percent of GDP in 2014/15 to 2.5 percent of GDP in $2017 / 18$, which is expected to stabilize the gross debt burden at around 49.8 percent of

[^69]GDP in 2017/18. ${ }^{229}$ The package contains a combination of spending cuts and yet to be announced tax increases that will raise 0.6 percent of GDP a year in the next two fiscal years. ${ }^{230}$ Even so, the fiscal targets remain subject to downside risks from possible shortfalls in real GDP growth, rising borrowing costs, and contingent liabilities related to the finances of state-owned enterprises. ${ }^{231}$

In addition, South Africa's position in world trade is pivotal. This is attested by the country's protracted membership in BRICS group. Moreover, South Africa's trade relations with the EU community have been strengthened. Overall, South Africa's influence in world trade has added to the country's stripes of good governance of its financial institutions and economic policy of the country, further playing a positive role in African economies through trade. The BRICS alliance from its advent to the present day has always prioritised trade transparency, trade between BRICS economies has shown significant growth in the last few years which contributed to the groups influence in world trade. The significance of the BRICS lies in their ability to both influence and be influenced by the global economy, stemming from a wide range of influences as well as policy-induced factors.

### 4.7. SOUTH AFRICA'S TRADE AS HEGEMONY IN AFRICA

Though the Goldman Sachs 2001 report did not include SA when it coined the grouping SA has proved its worth in being part of the alliance this also highlighted the importance of transcontinental influence, moreover this partnership has added on SA's hegemony in the continent. South Africa's major strength lies in its record of responsible macroeconomic management ,together with strong financial, a deep and liquid local bond market together with the country's sophisticated and well-regulated banking sector. ${ }^{232}$ South Africa's rich endowment of natural resources places it in a good position to benefit highly on commodity prices and increased investment in resources. This partnership has added on South Africa's hegemony in the continent. ${ }^{233}$ It is certain that South Africa carries an important position within the international political economy class. It is the most developed state in the continent of Africa. Within the Southern African Development Community (SADC) South Africa has a

[^70]huge influence that confirms its hegemony in the region. Its Gross Domestic Product (GOP) contributes $84 \%$ to the regions' Gross National Product. ${ }^{234}$ South Africa's major strength lies in its record of accountable macroeconomic management ,together with strong financial, a deep and liquid local bond market together with the country's sophisticated and wellregulated banking sector. South Africa's rich endowment of natural resources placed the country in a good position to benefit highly on commodity prices and increased investment in resources. ${ }^{235}$

Cutting-edge, all the ups and downs South Africa's economy has faced in post-apartheid epoch; they have retained their hegemony in the continent. South Africa's economy constitutes a third of economic activity in sub-Saharan Africa, and $80 \%$ of economic activity in the Southern African Development Community. ${ }^{236}$ South Africa is the largest economy in Africa and the 28th largest economy in the world, as per World Bank estimates it is an upper middle-income economy and the fifth highest in terms of income per capita in Africa. ${ }^{237}$ The Republic is located at the tip of the African continent; it is the 25th biggest nation as far as zone and the $24^{\text {th }}$ biggest regarding populace, with 56.504 million ${ }^{238}$ people. South Africa is a large country, bigger than France, Germany, Italy and Belgium combined and is the continent's economic power house. It generates at least 50 per cent of the region's electricity and produces 83 per cent of the steel and 97 per cent of the coal. Almost 69 per cent of the entire continent's freight is carried by South African railways. South Africa is endowed with abundant mineral and natural resources, and has relatively well-developed financial, energy, and transport sectors, unlike most African countries. It is obviously a mainland pioneer as far as infrastructure, financial institutions, and outward investment.

With all the hegemony the country has in the continent, it is no doubt that it has greatly contributed to South Africa being invited to join the BRICS alliance. It is a shared narration amongst the world that South Africa is seen as a gateway for investment in Africa. South Africa's position in the continent is of importance and remains like that. The impact of South Africa's hegemonic influence in the continent became more visible after the end of apartheid. ${ }^{239}$ South Africa's hegemonic influence not only appeared appeasing to the SADC

[^71]region, it even reached as far as West and East Africa. South Africa has always put the continent at the forefront, through promoting African Renaissance culture.

The Southern African Development Community (SADC), formerly known as the South African Development Co-ordination Conference (SADCC), was established in July 1980. The main aims of the co-ordination conference were to regulate the economic development of Southern African countries. ${ }^{240}$ In the year 1992, the SADCC was formerly re-introduced as SADC. It is fair to say that South Africa's dominance in the region and the whole continent was because of their involvement in SADC. South Africa's role in SADC made it to be a valued country. Promoting Africa to the world for investment and fair trade was what united the outside world with Africa. South Africa's economy constitutes a third of economic activity in sub-Saharan Africa, and $80 \%$ of economic activity in the Southern African Development Community. Moreover, like other regional blocs in Africa, the SADC shares and promotes visions of economic well-being, improved standard of living and quality of life, freedom, social justice, peace and security for the people of Southern Africa. ${ }^{241}$

Moreover, as the most industrialised economy in Africa, South Africa led by its corporate sector has sought to position itself as a key strategic access point to the rest of the continent. ${ }^{242}$ With its strong financial institutions, South Africa has used that to its advantage in retaining its power and position in the continent. South Africa in the continent is seen as a hub for business; South Africa continues to promote trade amongst African countries. The country's foreign policy has strengthened its position in the continent. South Africa, through macroeconomic policy, continues to be Africa's leading economy. South Africa needs to continue protecting the continent from outside exploiters, whether it is China or the West. In addition, the country must continue promoting Africa intra-trade to strengthen cooperation among African countries.

### 4.8. CONCLUSION

South Africa, like its BRICS member states is playing a more visible role in global politics and seeks to create new regional and global institutions while exerting influence through softpower measures, a good strategy that would sustain its power in global affairs. Since 2011, 8

[^72]years later, after South Africa marked its importance in the coalition, the country still attests to the world at large its intentions for joining the BRICS member states in its mandate of world monetary hegemony. ${ }^{243}$ The BRICS countries trade has grown since 2003 from IBSA to the present day BRICS, advancing to bilateral trade amongst the south-south countries and what can be done to improve trade between the BRICS countries.

The combined economic strength of the BRICS is unquestionable. These countries would always strive to attract foreign direct investment as corporations hope to gain access to their growing markets. They are further increasingly rebalancing their national consumption to achieve a more sustainable growth model that would see these countries growing in a constructive manner. ${ }^{244}$ This increased economic power gives BRICS influence and leverage to assert their needs and desires in the international arena. ${ }^{245}$

However, the key challenges for South Africa are to achieve higher levels of inclusive growth that would raise employment and reduce inequality. The low domestic savings, currency volatility, inadequate investment in productive sectors of the economy, skills shortages and efficient government service delivery are just some of the other challenges that are facing the country; however, South Africa's government has been prioritizing its policy measures focused on the expansion of infrastructure networks, skills development, interventions to raise youth employment, further industrial policy that promotes higher value added exports, the development of rural economies, small enterprises promotion, green economy initiatives and regional integration.

[^73]
## CHAPTER FIVE: SOUTH AFRICA AND BRICS BILATERAL TRADE FLOWS

### 5.1. INTRODUCTION

Trade has perpetually been the foremost necessary element in economic relations amongst countries. The theory of international trade shows how the flows of goods and services are exchanged between two or more countries in order to enhance economic growth. ${ }^{246}$ The notion of international trade is a key feature of a nation's economic improvement and has always been one of the preferred areas of interest amongst researchers and policy makers. International trade assists countries in playing an essential role in the economic integration of their regions. The allocation of resources, access to markets, and growth of the economy are promoted in order to be a potential driver of trade in the globalised economic environment, while mutual trade in goods and services remain expanded and liberalised. ${ }^{247}$

The BRICS role in the world trade has also expanded. Trade within the BRICS member states has accelerated sharply, largely because all BRICS countries supply each other with commodities needed by one another, e.g. Brazil and Russia supply many of the commodities needed by China, India and South Africa. However, trade relations between these countries still require balance. Trade relations are created to benefit all parties involved. ${ }^{248}$ The BRICS alliance is a powerful force that has altered the rules of western hegemony. The south-south trade relations have shown significant growth in the past years which have contributed to its strong relations, further expanding its trade influence all over the world.

### 5.2. FROM BRIC TO BRICS

When the BRIC term was coined by Jim O'Neil in 2001, he had predicted that these four countries which are Brazil, Russia, India and China would in the next decade replace the western hegemony, the G7 group. Together, the BRIC countries' GDP combined, and observing the fast pace in which the BRIC economies were growing, could surpass the influence of the G7, giving BRIC countries total control of the world markets. Moreover, ten years after the prediction, the BRIC countries have achieved so much; for instance, in 2008 when the world was facing economic challenges, the BRIC countries were the ones who recovered early. Nonetheless, their growth was no longer growing as estimated. Goldman

[^74]Sachs had piled a report in 2001 affirming that the BRIC countries were growing steadily, and by the next 50 years, they would become more influential in the world economy by following the four fundamental factors listed in the report that serve as the conditions for the predicted growth. ${ }^{249}$ The BRIC nations could surpass the level of expansion in most present developed countries. In addition, their patterns of growth have been displaying the mutual dependence of the BRIC countries.

In 2011, when South Africa officially joined the BRIC coalition and the acronym was expanded to BRICS, the matter became a huge debate in South Africa and in global arena at large. Some analysts suggested that the South African economy and demography represented serious economic handicaps to the other BRICS nations' economies and demography. Some academics and economists suggested that South Africa was being used as gateway to Africa, as BRICS had an agenda for African natural resources, and it was believed that South Africa was a strategic partner to achieve their agenda.

Jim O'Neil shared the same sentiments too. He believed that South Africa's joining the BRIC countries would not do the group any good. His observation was that South Africa's population was small compared to other BRIC countries and that South Africa's GDP was also little. He concluded that South Africa was not a big economy and thus should not be part of the four emerging world economies. ${ }^{250}$ Moreover, his debate was a question of why the BRIC member states did not invite Canada or East countries since their economies were far better than that of South Africa. O'Neill did not regard the four BRIC countries as emerging giants anymore. He believed they had shifted their focus in building powerful economies to form a political talk-shop that is trying to wield great influence on the global negotiation stage, and that they were no longer emerging giants but powerful markets because of the sizes of their economies. ${ }^{251}$ These emerging giants placed themselves in a position of calling the shorts and expressing their concerns. The inclusion of South Africa into the BRICS was an important contribution to the group, owing to the country's economic significance in Africa. As one of the major suppliers of mineral raw materials to developed countries, South

[^75]Africa possesses substantial scientific and technical potential that can create opportunities for and enhance the power and prominence of all BRIC economies. ${ }^{252}$

Though the Goldman Sachs 2001 report did not include SA when it coined the grouping, SA proved its worth in being part of the alliance. This also highlighted the importance of transcontinental influence; moreover, this partnership added on South Africa's hegemony in the continent. South Africa's major strength lay in its record of responsible macroeconomic management, together with strong financial, a deep and liquid local bond market together with the country's sophisticated and well-regulated banking sector. South Africa's rich endowment of natural resources placed it in a good position to benefit highly on commodity prices and increased investment in resources.

### 5.3. GEOGRAPHICAL STRUCTURE OF BRICS COUNTRIES

Bilateral trade between two countries is comparative to their respective magnitudes, measured by their GDP, and inversely proportional to the geographic distance between them. ${ }^{253}$ While the role of economic size is well understood, the role played by distance remains a mystery. However, it is obvious that the impact of distance between trading partners in bilateral trade does have positive effects when determining the absorptive capacity of the partner country, known as remoteness. ${ }^{254}$ This positive relationship illustrates that if a pair of countries is more remote from the rest of the world, then their bilateral trade would also be greater if the absorptive capacity of the partner country is reflected in the average weighted distance. In addition, according to Borgatti there can be a reduction of the negative effect of distance and remoteness in the presence of competitive transport costs. ${ }^{255}$ Finally, Melitz expresses that international trade could be stimulated if distance and differences in latitudes between countries are well controlled.

The BRICS member states are countries from different continents, Asia, Latin America and Africa. Their geographical points make it challenging for smooth transportation of goods and the distance also plays a role on the moderation of bilateral flows of these countries. The

[^76]location of each BRICS country plays a huge role on the impact of the patterns of trade amongst these countries. For example, in the case of Russia, it is difficult to access Moscow from East Asia where China is located because it is squarely encountered by Western Europe. That is the reason why most Russian trading partners come from Europe. In addition, East Asia is very far from West and South Asia where India is located. In the case of Brazilian trade, the Sao Paulo-Rio Cluster faces the South Atlantic, which facilitates the country's high degree of export diversification from North America, Western Europe and Western Africa. In the same way, China's main economic activities are conveyed by the sea, as are the products of India's most important economic centres. Trade at the sea thus has also influenced patterns of trade. ${ }^{256}$

Another important aspect that is considered when investigating trade flows between the BRICS countries is the distance between and among these countries. According Disdier and Head, geographical distance appears to reduce the flows of trade between countries. It not only leads to the costs of trade but also to the costs of insubstantial trade or transaction costs. ${ }^{257}$ Remoteness causes multilateral trade resistance to increase because countries are likely to trade more locally than trading with countries that are further away. Conversely, distant, isolated countries are less likely to prefer trading at home, as compared to those countries with numerous neighbouring countries and trading opportunities.

South Africa is located at the bottom of Africa, whilst Asia and Latin America are not far from each other. The movement of bilateral trade goods between the BRICS and South Africa faces challenges of distance which contribute negatively to these countries' trade flows. However, the BRICS countries have made it their responsibility to ensure their different geographical locations do not become a barrier in their trade.

Table: 1 Distances between BRICS countries.

|  | BRAZIL | INDIA | RUSSIA | CHINA | SA |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BRAZIL | 0 | 14774.6 | 14450.82 | 16632.05 | 7776.76 |
| INDIA | 14774.6 | 0 | 4985.43 | 2983.65 | 8254.63 |
| RUSSIA | 14450.82 | 4985.43 | 0 | 2854.48 | 12576.59 |
| CHINA | 16632.05 | 2983.65 | 2854.48 | 0 | 11236.5 |

[^77]| SA | 7776.76 | 8254.63 | 12576.59 | 11236.5 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Source: distance fromto.net (2017) ${ }^{258}$

### 5.4. TRADE BETWEEN BRIC MEMBER STATES AND SOUTH AFRICA

The BRIC countries have big economies compared to South Africa, due to their population and GDP. The Federative Republic of Brazil is the largest country in South America and fifth largest in the world in land area, about 8.515 million square kilometres, a population of 201 million and Brazil is the world's biggest producer of sugar, oranges and coffee, accounting for over 35 percent of the world's coffee output. The Russian Federation is the largest country in the world crossing 10 time zones. Its shores touch 12 seas with a landmass of 17.125 million square kilometres and a populace of 145.842 million. The Republic of India has an area of 3.287 million square kilometres and a population amounted to 1.252 billion. People's Republic of China with area 9.597 million square kilometres and population of 1.357 billion.

At the moment, BRICS countries have a combined population of three billion people (almost $43 \%$ of the global population) in the geographical area of 39.72 million sq. (more than a quarter of world land surface). ${ }^{259}$ In addition, these countries produce nearly 16 trillion US dollars GDP, which consist of approximately 21 per cent of global production. Each of these five countries has a significant geostrategic location, which is the reason that they also serve as regional economic leaders in their respective regions: Brazil in Latin America, China in East Asia, India in South Asia, the Russian Federation in Central Asia and South Africa in Africa.

Nevertheless, in contrast with the BRIC countries, the characteristics of South Africa's economy and exports are still of a developing country, consisting predominantly of natural resources. ${ }^{260}$ In fact, the flows of trade among the BRIC countries are rising due to trade in manufactured goods. That being so, the BRIC economies seem to be more incorporated in global trade than South Africa in terms of their production efficiency. ${ }^{261}$ However, it is

[^78]important to note that the overall performance of the BRICS trade flows and the rise of their share of global trade have been impressive, showing a continuous increase, surging by approximately $17 \%$ in $2012 .{ }^{262}$ However, South Africa's economic and trade performance was still lower than that of the BRIC countries, for that reason, according to the Department of Trade and Industry (DTI), South Africa aims to increase its rate of exports in order to achieve more dynamic economic growth.

Furthermore, the subsequent significant growth in South African exports flows may probably constitute an important feature of the country's attempts to emulate the BRIC economies as well as further contribute to the global economy. ${ }^{263}$ According to the United Nations Conference on Trade and Development (UNCTAD), foreign direct investment (FDI) flows to the BRICS in 2013 have been estimated at USD 322 billion, or more than double the annual average of USD 158 billion recorded over the pre-crisis period 2005 to 2007. Furthermore, this figure was $21 \%$ higher than in 2012 and represented approximately $22 \%$ of the world's FDI inflows in 2013, which totalled an estimated USD 1461 billion. This is almost double the average annual share of $11 \%$ of global FDI inflows claimed by the BRICS over 20052007.

Although China was the leading recipient of FDI inflows amongst the BRICS (estimated at USD 127 billion) in 2013, followed by the Russian Federation (USD 94 billion), Brazil (USD 63 billion) and India (USD 28 billion), South Africa (USD 10 billion) outperformed its BRICS counterparts by recording the highest growth rate at $126 \%$, whilst Brazil's was the lowest ( $-4 \%$ ). South Africa should progressively reap the benefits of its economic and political relationships with fellow BRICS countries if the latter increasingly open up and/or liberalise their economies, while domestically it simultaneously addresses the structural problems that are constraining competitiveness, including improvements in productivity, infrastructure and logistics, as well as skills development.

According to Frankel and Rose, Stronger trade relations are expected to increase business cycle correlation through the aggregate demand channel. ${ }^{264}$ Consistent with the Keynesian multiplier principle, an expansion in one country results in an increase in demand for imported goods and services from its trading partners, therefore transmitting the expansion to

[^79]these partners. Furthermore, a similar outcome also emerges when intra-industry trade dominates trade relations. If much of the bilateral trade between BRIC member states and South Africa is intra-industry rather than inter-industry, any increase in trade integration encourages similar industrial shocks which will lead to greater business cycle synchronicity.

### 5.5. BRICS BILATERAL TRADE FLOWS

Over the previous decades, the important role played by individual countries of the BRICS in the global economy resulted in their identification as some of the great producers of goods and services, receivers of capital, prospective consumer markets, and drivers of the world economy recovery process. ${ }^{265}$ However, the economic structures of BRICS and their organisational patterns are relatively different. The numerous, diverse features embraced by each of the BRICS countries gave each an enormous opportunity and potential to develop. Some evidence shows that economic growth prospects have been stimulated and development has been encouraged through trade liberalisation in all the BRICS countries. According to Nayyar, as far as globalisation is concerned, it is clear that there should be increasing economic openness, interdependence, and deeper integration in the world economy. Rapid economic growth in the BRICS countries has been influencing the growth performance of the global economy by improving international trade and providing markets for exports, capitals for investment, sources of finance for expansion, and technologies for efficient production.

BRICS exports to the international market are significant, and do not only contribute to the global development, but also play a major role in the prosperity of their respective regional economic communities. ${ }^{266}$ As for the openness of trade, BRICS economies are more concerned with the growth of exports as they are also becoming dominant in international trade. According to Polodoo, it is from this perspective that BRICS intends to become the world's economic dominant group through trade liberalisation. To this extent, although the BRICS economies are still regarded as exporters of natural resources, they are making progress in becoming exporters of manufactured goods instead of primary goods. BRICS report stated that South Africa, like Brazil, is a resource-endowed country. ${ }^{267}$ From platinum and chromium to manganese, gold, and vanadium amongst others, SA's mining sector has

[^80]boomed over the past years and it is the base of its growing economy. South Africa's advantage also emanates from its infrastructure development, and unexploited possible growth of the African continent.

According to Szirmai, the strategy of export-led growth especially exports of manufactured goods - the key device of growth in China has been well recognised. India has been progressively adding the exports of IT services in addition to manufactured goods, while Russian and South African exports predominantly consist of resource-based goods and commodities, which have contributed to their economic development. Moreover, Brazil has also exported natural resources in addition to some kinds of manufactured goods. Services also tend to play a significant role in the economies of South Africa, Brazil, and Russia, while India's exports acceleration could be attributed to its high share of the agricultural sector.

FIGURE: 1. BRICS TRADE
(a) Figure 5.1. 1. Trade between South Africa and the rest of the BRICS member states


Source: based on UNCTAD website, http://untadstat.unctad.org.
(b) Figure 5. 1.2. Trade between China and the rest of the BRICS


Source: based on UNCTAD website, http://untadstat.unctad.org
(c) Figure 5.1.3. Trade between India and the rest of the BRICS


Source: based on UNCTAD website, http://untadstat.unctad.org.
(d) Figure 5.1.4. Trade between Russia and the rest of the BRICS


Source: based on UNCTAD website, http://untadstat.unctad.org
(e) Figure 5.1.5. Trade between Brazil and the rest of the BRICS


Source: based on UNCTAD website, http://untadstat.unctad.org.
China is the largest trade partner of each of other BRICS countries with a trade more than $85 \%$. China's influence plays a significant role in boosting each country's trade volume both
exports and import activities. ${ }^{268}$ According to Singh, BRICS countries' global dominance has also been noticeable in international trade. Within the BRICS economies, China seems to dominate South Africa-BRIC trade flows of total goods by becoming a market with a high potential for imports and exports, and by being the largest partner of trade for Brazil, Russia, and South Africa, and the second-biggest trading partner for India. However, the structure of trade differs for each BRICS country. BRICS share of South Africa's aggregate exports has shown a significant increase from early 2000s to 2012. Indeed, each BRICS country's exports with South Africa have expanded considerably, particularly in the case of China and, to a smaller extent, India.

## 5. 6. SOUTH AFRICA'S EXPORT AND IMPORT PERFORMANCE

In the last epochs, there has been a robust evidence of increased global integration that has been accompanied by increasing global production of goods and services and trade relationships to a great extent. In fact, international flows of trade have not only increased but they have also been extensively liberalised, supporting many countries in their process of economic development. ${ }^{269}$ In addition, trade relationship acts as an imperative aspect of economic integration between countries, and the role of trade flows remains significant in the global economic growth given that the patterns and compositions of bilateral trade flows might possibly describe how countries are integrating and flourishing in the world economy . Furthermore, economic ties are created and developed in view of international trade openness, which is associated with increases in the flows of trade and, in turn, generates rapid economic growth and welfare. ${ }^{270}$

Agreeing to Kusi South Africa as an emerging economy is not excluded from these realities. Since the early 1990's, trade liberalisation by means of an export-oriented trade procedure has been adopted in South Africa to contribute to the process of globalisation, which has resulted in a substantial increase in the value of exports in the country. In addition Loots believes empirical evidence also shows that the effects of globalisation stimulate more than $90 \%$ of the economic growth performance of the country. Post-apartheid the country's

[^81]economic profile has seen tremendous growth, however that growth has been conceptualised by inflation, rising interest rates and so on in the last five years.

Whichever perspective one chooses to view South Africa's growth, it is clear that their role towards economic independence and development is of great importance. From being invited to join the BRIC countries to its supremacy in Sub-Sahara region is significant. The economic chronicle of South Africa has mostly been influenced by the EU and the US. Through time that all changed when South Africa altered its direction to the EAST countries. This change was pivotal not only for SA but also for Africa, it was a trade and industry growth that was about to transform Africa's interest in East countries. From a long time South Africa had been trading with East countries IBSA was built on those mutual relations which extended to BRICS. Africa too had been trading with China, India and Brazil, for quite some time however South Africa's investment and interest in the East really marked a new period for Africa and the world economy at large

Furthermore, according to Petterson, the subsequent significant growth in South African exports flows may almost certainly constitute an important feature of the country's attempts to emulate the BRIC economies as well as further contribute to the global economy. ${ }^{271}$ South Africa's exports to BRIC over the period 2001-2014 were mainly dominated by minerals and beneficial products. Overall share of iron ores and concentrates and coal related products to the BRICS rose from 24 percent in 2001 to 27 percent in 2007 and 48 percent in 2014, indicating a much greater degree of concentration. ${ }^{272}$ Prior to the formation of BRICS, SA exports were concentrated in the minerals sector to all the BRIC economies. A steady change occurred after the BRICS formation, which saw the composition of SA exports changing into semi-finished and finished products. ${ }^{273}$

In 2014, BRICS economies consisted about biggest market of the world economy. BRICS global population includes about $40 \%$ contribution from their economies in order to strengthen the purchasing power parity (PPP) and have a strong domestic demand. ${ }^{274}$ BRICS

[^82]member states undoubtedly have a huge special role to play in international trade market and trade in world imports. ${ }^{275}$

There has been growth on SA imports; imports from BRICS to South Africa are mostly finished products. Machinery, nuclear reactors and boilers, electrical and electronic equipment and mineral fuels, oils and distillation products are the most dominant imports. ${ }^{276}$ The overall share of machinery, nuclear reactors and boilers rose from 10.3 percent in 2001 to 18.3 percent in $2014 .{ }^{277}$ Electrical and electronic equipment rose by 8.2 percent from 9.9 percent in 2001 to 18.3 percent in 2014, a clear reflection on the intensity of imports in response to BRICS formalisation. The South African economy has slowed in recent years, from growing by almost 6 per cent prior to the global financial crisis, to a mere 1,3 per cent in 2015. In the first quarter of 2016, growth contracted by 1,2 per cent. South Africa has been buffeted by a number of negative developments, namely, the slowdown in China and reduction in commodity prices; weak demand in advanced and emerging market economies, as well the deterioration in growth prospects for the Sub-Saharan Africa region; policy uncertainty; and suffering one of the worst droughts on record during 2015/2016. ${ }^{278}$ According to the SARB's most recent forecast the economy will only grow by a meagre 0.6 per cent in 2016.

### 5.7. EXCHANGE RATES ON TRADE FLOWS

According to Aziz, one of the foremost necessary policy variables that determine the flows of trade in countries is the exchange rate, which represents the local currency measured in terms of foreign currency. Exchange rates are instrumental features in determining the stability of exports and imports. In addition, exchange rates are favourable tools for international trade flows as they foresee the welfare of a nation. Real exchange rate fluctuations should be taken into consideration in exports or imports markets since they create uncertainties that could, in turn, hinder international trade. ${ }^{279}$

[^83]Conventionally, the standard regimes used in international trade are fixed exchange rates, assigned by an agreed, precise, official target and floating exchange rates determined by the demand and supply of the foreign exchange market. ${ }^{280}$ The proponents of the fixed exchange rate regime argue that they are less risky, which has been seen as beneficial to exporters and importers in making decisions in international financial markets, and determining how home inflation converges to external inflation which is crucially important in the fluctuations of exports and imports industries. However, there are also great risks associated with such a regime for larger emerging countries like China and India; it leads their economic policies to lose flexibility in facing external shocks, or lead to their government to lack aptitude in preserving the secured exchange rate. ${ }^{281}$

The vital issue for countries is how they select the optimal exchange rate rule and to appropriately manage that particular exchange rate system in order to benefit from it. In addition Edwards and Garlick maintain that, the main concern about the exchange rate policies should be of determining the essential elements correlated to the profitability and competitiveness of local exporters and industries that challenge imports. Any factors that restrain exports and encourages imports should be taken into consideration since the flows of trade may well be improved by policies of trade. Numerous emerging countries' exchange rates including the BRICS countries are managed in a floating regime underneath the administration of their respective central banks.

The BRICS economies are referred to as emerging/ developing economies and the common challenge that these five economies face is the need to push for the constant usage of their exchange rate when exchanging goods amongst themselves or with the international community. In 2012, the BRICS economies signed two agreements at their BRICS summit, called the Master Agreement on Extending Credit Facility in local currencies. This agreement was established in order to facilitate trade among the BRICS economies. These agreements were signed by the export and import banks of the five countries; it was the Brazilian Development Bank, Russia's State Corporation Bank for Development, the China's Development Bank and lastly the Development Bank of Southern Africa. Furthermore, these two agreements would allow trade among the BRICS countries to be conducted in domestic

[^84]currencies, thereby eliminating the constant use of the US dollar and it will reduce the risk of currency volatility as well as promoting the internationalisation of BRICS currencies. ${ }^{282}$

Moreover, there have been limitations to the emerging economies' exchange rates in that in international trade, the use of these currencies has always been scarce, despite the fact that the BRICS economies are growing and consistently contributing to the global economy. ${ }^{283} \mathrm{~A}$ number of advanced countries' currencies are still significantly used in international transactions. For instance, international trade flows are mostly invoiced in the U.S. dollar and Euro. ${ }^{284}$ In fact, the use of the U.S. dollar is more dominant than the Euro when making payments for both exports and imports by countries outside the Euro area ${ }^{285}$. On the other hand, the Chinese Renminbi has displayed the possibility of internationalization on a global scale due to its economic potency; it is making great progress in international financial transactions and expanding trade relations with neighbouring economies. ${ }^{286}$ The Chinese Renminbi has been striving to compete with the US dollar in international trade.

In fact, the constantly usage of Chinese and Russian currencies has already started in international trade. China's currency, the Renminbi, seems to be moving ahead toward international ranking, which will help BRICS to manage risk involved with the volatility of exchange rates and contribute to the trade gains of BRICS member states. ${ }^{287}$ In addition, according to Maradiaga, by using their own currencies, BRICS transaction costs will decline compared to the US dollar. According to Ricci, since 1994 after apartheid, the South African exchange rate trend has showed a significant depreciation against the US dollar, worse than the Rupee depreciation. This depreciation was especially noticeable in 2001, with a nominal Rand-US dollar exchange rate of 12.13 from a rate of 3.54 in 1994. This rapid rate of depreciation was possibly caused by the fact that the inflation rate in South Africa was higher than those of its major partners of trade. Also, the Rand was greatly volatile during the crisis periods in 1998 and 2001. From 2002 to 2004 the opposite trend did occur, indicated by the rand appreciation against the US dollar, but this was followed by another substantial

[^85]depreciation, which was particularly high in 2008 during the financial crisis. ${ }^{288}$ The rand also depreciated from 2013-2015/2016 against the US dollar. However, the challenge remains for the BRICS economies and that is that the US dollar exchange rate is still used amongst BRICS countries when measuring their trade flows in international trade.

### 5.8. GRAVITY MODEL IN ASSESSING THE TRADE FLOWS

The gravity equation in international trade is one of the most robust empirical findings in economics: bilateral trade between two countries is proportional to their respective sizes measured by their GDP, and inversely proportional to the geographic distance between them. ${ }^{289}$ While the role of economic size is well understood, the role played by distance remains a mystery. Existing theoretical models can easily explain the role of economic size in shaping trade flows, but none explains the role of distance. ${ }^{290}$ This trade theory is able to model and empirically analyse international trade flows between countries. The fundamentals of the gravity model in international trade were implemented in conformity with the Newtonian gravitational model in physics designed by Isaac Newton in 1687. Generally, in Newtonian physics, a flow is observed when two objects are attracted to one another, resulting in a positive relationship between the masses of these objects. The attraction is higher between two bodies with greater masses than two bodies with lesser masses. Also, the greater the distance between the two objects, the smaller the attraction. This means that the gravitational attraction between two bodies is proportionate to their masses and inversely proportionate to their distance. The gravity expression is below.

$$
F_{i j}=G \frac{M_{i} M_{j}}{D_{i j}{ }^{2}}
$$

Fij (in Newton's model) stands for the gravitational attraction or force, which corresponds directly to the product of the two masses $M i$ and $M j$, and inversely proportionate to the square of the distance Dij. $G$ is the gravitational constant, which is contingent on the units of measurement for mass and force, with a value resolved empirically. MiMj represent the masses of two bodies (in kilograms). Dij is the distance between two bodies ( $D^{2}$ in meters).

[^86]The application of the relationship between the elements shown above is suitable to any flows or movements.

From its role in Newton's law of gravitation, this rule was inserted into an international economics context in order to generate the gravity model. When the patterns of international trade flows between two countries are described, the two bodies refer respectively to the exporting and importing countries and their mass variables usually represent their GDP and population. This suggests that the bigger the economy of certain countries, the more trading will take place among these countries.

With the innovative work of Tinbergen and Pöyhönen, first specifications and assessments on the determination of trade flows were constructed and the standard gravity model was applied to international trade. Here, bilateral trade volume between two countries is directly proportional to the product of their masses measured by their economic sizes, and inversely proportional to the distance between them (as proxy of bilateral trade costs/resistance). The relation is depicted as follows:

$$
Y_{i j}=A \frac{Y_{i}^{a} Y_{j}^{b}}{D_{i j}{ }^{y}}
$$

The model explains how in the aggregate, trade flows are proportional to country size, and inversely related to trade barriers. To the extent that distance proxies for trade barriers, this model can also explain why distance has a negative impact on trade flows in general, but it has nothing else to say about the precise role of distance. Several others have shown that the same type of predictions as Krugman ${ }^{291}$ can be derived in various other settings. Anderson derives a similar gravity equation under the Armington assumption that goods are differentiated by country of origin. Eaton and Kortum derive a similar gravity equation in a modern version of trade driven by Ricardian comparative advantages.

Only few studies have been done on the inclusion of South Africa into the BRICS, including BRICS economic perspective that South Africa must acknowledge the expected contribution of South Africa, and the examination of BRICS trading relationships according to Sandrey

[^87]and Jensen, Sidiropoulos, In addition, these mentioned authors assessed the trading relationship between BRICS and South Africa from a South African perspective. For example, Sandrey and Jensen explored the major factors of the bilateral trade and the flows of trade from respective partners by providing figures, which also indicated the performance of these trading relationships between Brazil, India, and South Africa. ${ }^{292}$

Through analysing the data of exports and imports, South Africa could be viewed as a way of connecting the developed world and developing countries in the African continent. South African imports are stronger that Indian imports, with gold being the main import into India. Brazil seemed to be more important than South Africa in terms of any country's source of imports, with oil being the leading import. To some extent, equivalent trading relationships are shared by all three partners in the world economy. South Africa is a major global exporter of minerals and associated products; India of precious metals and stones, mineral fuels, clothing, and organic chemicals; and Brazil of vehicles, machinery, iron, steel, and ores, as well as being a main agricultural exporter.

Sidiropoulos acknowledged the fact that South Africa's joining with the BRICS economies implied economic opportunities for the country to play a significant role in both the African continent and at the global level. ${ }^{293}$ Being a member of IBSA (India, Brazil and South Africa) and BRICS, South Africa should make use of the given opportunities. This necessitates a close relationship between the national government and the private sector and an open market. ${ }^{294}$ In addition, SA should also lead foreign investment in developing countries in Africa by reducing barriers of trade with the purpose of intensifying bilateral trade and investment with the other BRICS economies. ${ }^{295}$. Regional membership bloc positively influences bilateral trade flows when trading partners are neighbours. ${ }^{296}$

[^88]
### 5.9. SOUTH AFRICA AND BRICS MEMBER STATES TOWARDS ECONOMIC PROGRESSION

Table 2: South Africa's GDP with the rest of the BRICS countries 2012-2015 ${ }^{297}$

|  | SOUTH <br> AFRICA | BRAZIL | INDIA | CHINA | RUSSIA |
| :--- | :--- | :--- | :--- | :--- | :--- |
| GDP | 344,06 billion <br> US dollars | 2080,92 billion <br> US dollars | 2439,01 billion <br> US dollars | 11937,56 billion <br> US dollars | 1469,34 billion US <br> dollars |
| GDP based on PPP | 757,33 billion <br> international <br> dollars | 3219,13 billion <br> international <br> dollars | 9446,79 billion <br> international <br> dollars | 23122,03 <br> billion <br> international <br> dollars | 4000,1 billion <br> international <br> dollars |
| Real GDP growth | $0,7 \%$ | $0,7 \%$ | $6,7 \%$ | $6,8 \%$ | $1,8 \%$ |

Source: https://knoema.com/atlas/maps

The above table shows exactly the gulf between these countries' GDPs. This is mostly attributed to each country's population and viability of their economic fluctuation e.g. export or imports, including inflation and other essential things. When one looks at each BRICS country's GDP or maybe looking at growth in GDP, you find that the BRICS economies' contribution to GDP has positive effects. Brazil is considered to be one of the fastest growing economies in the South America region in terms of the performance of its GDP especially in the agriculture, service, and industry sectors. ${ }^{298}$ In 2012, 5.24 per cent of Brazil's GDP was made up of the agricultural sector, and 26.29 per cent is attributed to the industrial sector. Services have been a vital portion of the Brazilian GDP, owing to its contribution of 68.47 per cent, while the manufacturing sector consisted of 13.25 per cent of the country's GDP in US dollars. The exceptional growth of Brazil in South America boosts the BRICS combined GDPs with the rest of the world. The BRICS group in the last three years has experienced some hardships due to stagnant growth of each country and inflation fluctuations which are inevitable.

[^89]For Russia, commodities seem to determine the size of the economy in terms of fuel and energy. ${ }^{299}$ The industry and services sectors have also been the two of the important sectors of the Russian economy - especially the service sector - which have contributed 36.1 per cent and 60.1 per cent respectively of Russia's GDP in 2012. Agriculture and manufacturing also seem to play an important role in the economy of Russia, mainly for their income contributing about 4 per cent and 14 per cent respectively of the aggregate GDP of the country in 2012. Fast forwarding to 2015 and 2017, Russia's economy has grown and continues to grow.

As far as the growth in India is concerned, the country's economy is driven by services, which represent more than 50 per cent of its GDP and has been a predominant source of the Indian expansion. ${ }^{300}$ This sector has experienced increases from 55.72 per cent to 56.86 per cent during 2011-12. In addition, India's economy is more diversified, consisting of farming, agriculture, industries, and excess services. Industries such as software, IT, and pharmaceutical industries are more competitive in India. The contribution of agricultural and industrial sectors has also promoted rapid growth in India, accounting for 17.39 per cent and 25.75 per cent respectively of India's GDP in 2012. ${ }^{301}$

At the moment, China represents the second largest economy in the world (the USA is the largest). Among the BRICS countries, China is progressively becoming a leading figure in the world economic market by means of its largest population and its fastest growing economy in the world. The country's economic growth depends enormously on the manufacturing industry, with more than 40 per cent of its total GDP coming from the manufacturing sector. Both the industry and services sectors produced around 45 per cent of the country's GDP, while agriculture accounted for 10.1 per cent in $2012 .{ }^{302}$

Commencing in 2012-2014, the trade balance between SA and the other BRICS countries emerged into a loss. Russia recorded a surplus; but for 2014, the effect of economic sanctions

[^90]imposed by the EU had crippling effects on its economy. China and India's trade with SA increased significantly; however, exports from SA were too little to offset a negative trade balance. The trade deficit with Brazil widened over the same period, which was most probably due to unfavourable trade policies and high tariffs from the Brazilian perspective towards South Africa.

### 5.10. SOUTH AFRICA'S TRADE BALANCE WITH BRICS MEMBER STATES

South Africa has achieved so much prior joining BRICS. The country has worked hard to a visible country whose voice is respected. South Africa not only represents the resource-rich African continent in the BRICS, but potentially has much to gain from its membership of the grouping in years to come. ${ }^{303}$ Under the wings of BRICS South Africa continues to expanding its influence and growth both regional and international. South Africa's bilateral trade flows with the rest of BRIC are properly determined by the analysis of export and import sectors and the countries exchange rates. In addition, this means that intra -BRICS trade should not be skewed to one country but the flow of goods must show trade balance. Moreover South Africa joining BRICS was evidence of the influence the country has made throughout the world. Looking into the post- apartheid South Africa, one can see that this country is indeed a force to be reckon with, through its wealth in natural minerals, the population mix and more than anything, having the impact and influence that the world superpowers have regionally, continentally and at an international level, and also in the relationships it has with the rest of the African states. ${ }^{304}$

When South Africa took a resolution to be part of the BRICS family, opportunities in trade and economic growth were part of their progressive agenda for South Africa and Africa. Regardless of South Africa's small population and GDP, her influence in Africa and the Southern region is noteworthy. Economic theory suggests that the gains from trade are much greater when a wider suite of countries are involved and this is the fundamental basis of multilateral liberalisation objectives of World Trade Organization (WTO). ${ }^{305}$ South Africa is the big gainer in the labour market, as the increases to both skilled and unskilled labour in

[^91]South Africa of $0.31 \%$ and $0.32 \%$ respectively are significantly higher than elsewhere. More detailed analysis shows that in a country that has a high unemployment rate the labour market changes are hopefully reflected in increased employment - for South Africa, getting the labour force into employment is a real priority.

South Africa, India and Brazil all make gains in the agricultural sectors, with gains to South Africa and Brazil in processed sugar (at the expense of mostly Russia but also marginally India) noteworthy this is the view shared by interviewed participants that are involved in BRICS, from BRICS think tanks. The big sector gainer is nonferrous metal production; however, resources are drawn into this sector at the expense of others in South Africa. Conversely, the sensitive textile and clothing sectors see their production decline by around $5.5 \%$ with reduced tariffs on imports from the globally competitive BRICS. There are some significant changes to South African trade flows. Exports of sugar increased by 9.13\%, nonferrous metals by (an unrealistic) 16.4\%, 'other machinery' by $11.3 \%$ and vehicles by $3.7 \% .^{306}$ All imports increase, with the dramatic changes as expected in the textile, apparel and footwear sectors that highlight an increase of $44 \%$ in clothing (a result that is mostly driving the reduction in the clothing sector). ${ }^{307}$

In terms of the economic performance of South Africa, the agricultural and manufacturing sectors appear to grow slower than other sectors, contributing about 3 per cent and 12 per cent respectively of the country's GDP in 2012. ${ }^{308}$ The agriculture sector appears not to be the leading sector in South Africa owing to its slight growth as the country tends to move towards the manufacturing sector. ${ }^{309}$ The manufacturing sector has developed, showing its flexibility and potential to take part in the global economy. South Africa's industrial and services sectors have grown immensely and are substantial contributors to the GDP and economic activities of South Africa - their combined proportion has accounted for the most economic growth. In 2012, the service sector contributed about 69 per cent of services to the GDP of the country followed by the industry sector's contribution of 28.41 per cent.

[^92]According to interviewed economic experts, the BRICS countries from their emergence have proved to be a force to reckon with. Each country's economic input and output contribute tremendously to economic stability and growth of the country. In 2001, when Jim O'Neil coined this group he had predicted that these countries' economies combined would shift the compass of world economic markets. Their GDPs, according to O'Neil, were much bigger and stronger to influence a new economic hegemony. However, it has been 17 years since the BRICS coalition was invented. Challenges and progress play a vital role in the economic growth of this group and each country with mostly GDPs that create a room for more growth, and for this group to achieve its mandate of being a staunch rival to the group G7, they need to dominate the $21^{\text {st }}$ century world markets unapologetically.

Though BRICS inflow and outflow percentage of gross domestic product (GDP) fluctuated substantially in recent years, it tended to decrease from 1997-2016 ending at $1.63 \%$ in $2016 .{ }^{310}$ Plethora of economists share the notion that South Africa as a member of BRICS has not shown much growth after joining the group. Through South Africa's economic analysis, its GDP has shown not much anticipated growth; however, one is entitled to analyse the South African case as a special one, meaning that South Africa even though is compared to other BRICS nations has a small population which also contributes to the GDP and GNP of the country. This makes it a challenge for South Africa to grow in a fast pace like its BRICS alliances.

## 5. 11. CONCLUSION

SA remains a business harbour for investment, being the leading economy in Africa settled the county's supremacy. Through trade with BRICS member states, the county started aiming to expand their market into the African continent in a way that would continue building up South Africa's infrastructure and economic institutions. The inclusion of SA in BRICS also gave South Africa an opportunity to diversify its export markets and avoid the danger of being trapped by the stagnating demand from the US and the EU. ${ }^{311}$ In addition, increasing access to big markets like India and China will allow South African businesses to capitalise on the high economic growth of these countries and escape what would otherwise be a long

[^93]road to recovery. Improving good strategy in execution of the trade policy would productively enhance more business to SA.

Moreover the country's GDP growth rates have to accelerate to much higher levels in order to deal adequately with South Africa's poverty and unemployment problems, but also, global economic difficulties appear to have a sharp and relatively long-lasting impact on South Africa's labour market. Many South African economists share the narrative that the country's economic policy needs to open up job creation, poverty alleviation, inequality and commit to building infrastructure that will play as a gateway for investment in SA. ${ }^{312}$

[^94]
## CHAPTER SIX: BRICS ECONOMIES AND BRICS-AFRICA TRADE DEVELOPMENT COOPERATION

### 6.1. INTRODUCTION

This research study is divided into six chapters, which are precisely premeditated to deal with different contents that direct the study in achieving its main objective of discovering bilateral trade flows between South Africa and the BRICS member states. Trade can create growth opportunities through trade reforms that formulate effective development strategies by member countries. However, trade openness by itself is not sufficient in ensuring sustainable growth, development and social inclusiveness. Other complimentary policies are needed also for the purpose such as sound macroeconomic management, efficient trade institutions, human capital and proper infrastructure. ${ }^{313}$ In any global crisis the world is largely shaped by financial instability and weak growth including major economies. The BRICS countries have a remarkable opportunity to coordinate their position as an alliance in the international and economic financial system, bringing stabilization in the world economic markets as a whole and maintain healthy and mutual relations with the Bretton woods institutions. ${ }^{314}$ Furthermore, it should be the priority of the BRICS countries to increase and coordinate their policies with a view to sustaining their growth momentum and capacity to weather global turbulence. The benefits of cooperation are immense not only for the BRICS but also for global economy.

As the most industrialised economy in Africa, South Africa led by its corporate sector has sought to position itself as a key strategic access point to the rest of the continent. Within the BRICS, South Africa has clearly indicated its intention to leverage Africa's voice; advance a continental development agenda; and promote global governance reform through greater south-south cooperation, ensuring that the other BRICS countries invest in Africa mutually not to exploit the continents minerals. ${ }^{315}$ It is the duty of SA to protect the interests of Africa in BRICS. South Africa should progressively reap the benefits of its economic and political relationships with fellow BRICS countries if the latter increasingly open up and liberalise their economies, while it domestically addresses the structural problems that are constraining

[^95]competitiveness, including improvements in productivity, infrastructure and logistics, as well as skills development. ${ }^{316}$

### 6.2. BRICS TRADE INTERGRATION REGIONALLY AND INTERNATIONALLY

Figure: 2. BRICS Countries in Numbers


Source: BRICS official website http://en.brics2015.ru/ ${ }^{317}$
BRICS has been a good platform to delineate the importance of intra-regional trade between countries. Intra-regional trade is mostly characterised by integrating the factor of regional trade. Intra-regional trade was stimulated by the work done in the 1960's by Verdoom analysing the impact of the formation of the European Economic Community (EEC) on trade flows within the European member countries. Verdoom found that specialization on trade between the member countries had taken place within similar product categories rather than between different product categories. The intra-trade effect is that labour rich economies have tended to export lower quality goods while importing higher quality versions from capital economies. In this context India, China, South Africa and Brazil promote labour intensive

[^96]advantage to produce more with cheap rate of production and exported more to developed countries.

Trade has always been one of the most important indicators that demonstrate how cooperation between the BRICS countries has evolved in the last few years. The Goldman Sachs predictions back in 2001 about the BRICS alliance shifting monetary hegemony has in the last years come to realisation. The BRICS first summit that was held in Russia laid the foundation on the objectives of the group. In 2009, the BRICS alliance made it their priority to ensure that trade hurdles would not hinder their future goal of promoting fair and transparent trade activities that would develop and grow their trade industries and their economies. The BRICS alliance from its advent to the present day has always prioritised trade transparency. Trade between BRICS economies has shown significant growth in the last few years which contributed to the groups influence in world trade. The significance of the BRICS lies in their ability to both influence and to be influenced by the global economy, stemming from a wide range of influence as well as policy-induced factors. ${ }^{318}$

Intra-BRICS trade has been playing a prominent role in international trade for promoting trade volume among its member states. The BRICS countries today present an opportunity as new growth poles in a multi-polar world, as demonstrated during the 2008 global crisis when the group played a vital role by recovering fast and growing their economies fast from the crisis. Intra-BRICS trade has been growing at an average of $28 \%$ annually from 2012 and currently stands at about \$ 230 billion. ${ }^{319}$ Intra-BRICS investment flows drawing from the group's complementarities, their economies have shown increment when compared to the rest of the world trade. ${ }^{320}$

Paul Krugman argues that while geography determines trade, it is also true that trade too determines geography over a period. Over time some countries decline while new regions emerge as important trade centres. Intra-BRICS trade impact and growth is also measured by the geographic distance. This argument by Paul affirms that trade becomes meaningful and shows benefit when all parties involved work well together in promoting their trade. ${ }^{321}$ Trade appears to have played a significant role in boosting the economic growth prospects of BRICS economies. There is evidence that suggest that trade liberalizations has been used as a

[^97]tool for promoting economic growth and facilitating development in all the BRICS countries. Recent data shows that in 2012 intra-BRICS trade now constitutes $12.22 \%$ of total trade of these countries.

Intra-BRICS trade has been strengthened by mutual collaboration of the BRICS economies. Brazil and South Africa are well endowed in natural resources, which are of import interest to others such as India and China. India is competitive in generic pharmaceuticals and labour intensive outsourcing areas which some of the countries in this grouping are interested in developing. ${ }^{322}$ China is competitive in manufacturing and technology which is of import interest as well as a competitive challenge for the others. Russia has the potential to provide much needed nuclear energy resources to countries such as India and China for which energy security is one of the main concerns today. Moreover, the service sector is one of the key sectors as where the BRICS could potentially strengthen each other through investment, trade and collaborative ventures, and also learn from each other's experience with the growing importance of services in the economies of all the BRICS member states. ${ }^{323}$

Intra-BRICS trade stimulates trade volume in each BRICS country. The export and import sector benefit when economic activities boom. In addition, intra-BRICS trade promotes financial systems; for example, the BRICS bank in which are custodian in promoting trade through innovative trade financing facilities. The intra-BRICS trade has assisted in promoting BRICS financial systems, like the BRICS bank, which was established to promote BRICS countries' currencies which would help in lessening tariff costs when trading; it helps reduce trade imbalance between BRICS member states. ${ }^{324}$ Reducing tariffs boosts majorly trade volumes of their economies. In a post-global crisis, the world has largely been shaped by financial instability and weak growth in major economies, the BRICS countries have a remarkable opportunity to coordinate their position as a grouping in the international economic and financial system but also to the stabilization of the world economy as a whole. ${ }^{325}$ The BRICS should increasingly harmonize and coordinate their policies with a view to sustaining their growth momentum and capacity to weather global turbulence. The benefit of cooperation is immense not only for the BRICS but also for the global economy.

[^98]
### 6.3. THE IMPORTANCE OF BILATERAL TRADE AGREEMENT BETWEEN SOUTH AFRICA AND BRICS MEMBER STATES

Since the dawn of freedom, South Africa has been trading with BRICS countries. The trading relations were, however, minimal with concentration on essential commodities and services. IBSA relations are the proof. According to Kocic, trade agreements are aimed at lowering trade barriers between member states, and thus increase the degree of economic integration. This is the most effective way of liberalising trade for developing states in an interdependent global economy. ${ }^{326}$ The bilateral trade agreements are considered as a way of improving the country's economic development.

Bilateral agreements promote the economic interests of countries focusing on developments within a country as well as good relations with other countries. ${ }^{327}$ With the growth of globalisation, countries affect one another either positively or negatively. More so, bilateral agreements are meant to benefit the partners involved. Consequently, that is why countries usually establish common ground and deal with disagreements to reach a final trade agreement. ${ }^{328}$

Bilateral trade between SA and BRICS countries is very important. According to the presidency in 2014, changes in the South African export market came with new opportunities for the country. When the new markets emerged in China, trading relations experienced growth of 12.9 percent share of non-gold merchandise exports in 2012, compared to 0.8 percent in 1994. ${ }^{329}$ The same happened to India-SA relations. India became the fifth largest export destination for South African exports, overtaking United Kingdom and Switzerland. ${ }^{330}$ It is no secret that trade between SA and BRICS countries is growing each day and this has means that SA exports will see growth. Trade between SA and the BRICS alliance has been critiqued by some economic observers who believe that no country amongst the group should export more to others, stressing that there should be a balance of trade.

[^99]According to Sandrey and Hans, it would be better if there could be a $50 \%$ reduction on tariffs between SA and BRICS countries. ${ }^{331}$

South Africa's position in the group is imperative. South Africa is the only African country in the group; this has contributed to its strides of economic hegemony in Africa and the SADC region. However, it is very important for SA to priorities its position both in Africa and in the BRICS alliance. The bilateral trade between SA and BRICS nations is very important for the growth of South Africa's economy; however, it is in the best interest of SA to ensure that there is no exploitation of trade now and in the future. This will give attributes for SA as a country that comprehends the chains of trade to easily influence other African states into making business with the BRICS countries. South Africa should be a mirror for other African countries who want to strengthen their relations with BRICS countries, like China and India who already have strong ties with the African economies. There must be a balance of trade and SA needs to continue engaging progressively with the BRICS alliance.

The trade gains from other BRICS countries are massively huge. Apart from China and India, being the major players, Brazil and South Africa still face challenges in economic growth. ${ }^{332}$ This leaves a gap for criticism that trade gains are not allocated for benefits of all the BRICS nations. Trade and Industry ministry issued that South Africa and the BRICS nations' bilateral trade is hoped to grow in the future with SA exporting more. It is true that trade between states play a major role in keeping peace but for the worth of the peace, the weaker states must be exploited. Though SA is not a weak state, keeping mutual and beneficial relations with the BRICS countries is of high alert. Nonetheless, SA should not sell itself short to a point where it is seen as a weak state that is taken advantage of. The focal issue is ensuring that the South Africa's economy is benefiting and growing.

### 6.4. BRICS AND INSTITUTIONS OF GLOBAL GOVERNANCE.

The powerful desire to restructure Western-dominated institutions of global governance, and to construct a more democratic and equitable world order, lies at the heart of the collective endeavours of the BRICS countries, when one looks at the inclusive picture for global economy, one reaches an inevitable conclusion that the same forces that have transformed

[^100]and controlled the world since the $16^{\text {th }}$ century are still shaping the modern-day world. ${ }^{333}$ These forces include not only the flow of goods and services but forms of economic organization and above all, the production of ideas and concepts to support those physical flows. Therefore it is inconceivable to consider that developing or emerging nations could be independent from the core of the global economy.

The path and economic destination of the BRICS and other emerging economies cannot be different from those followed by developed nations from Europe and the West. The latter set the basic parameters on which the economy is based. However, this dynamic process is not exclusive to a specific centre, but shared by several centres producing and spreading ideas and practical knowledge. ${ }^{334}$ The grouping's pursuit of its fundamental objectives should not be perceived as an anti-Western exercise; the five emerging powers want the architecture of global governance to be reshaped.

The Bretton Woods institutions, the IMF and the World Bank have long been criticised for having undermined the role of governments in developing and emerging countries through their one-size-fits-all structural adjustment programmes from the 1980s onwards, particularly in Africa. Powerful Western countries still maintain a strong grip on these bodies, with voting weighted according to each country's contributions. Bretton Woods's institutions were established to set out the rules for commercial and financial relations among the major industrial states of the world. ${ }^{335}$ The BRICS alliance holds less than $12 \%$ of the voting rights in the IMF and on the other hand since 1946 the U.S. and Europe continue to have the excessive privilege of the heads of both the World Bank and the IMF being from these continents. ${ }^{336}$

The establishment of the New Development Bank was also established based on the BRICS objective of reducing their dependent power from the Bretton woods institutions. BRICS economies have remained vulnerable to actions by the dominant Western economies. ${ }^{337}$ For example, in 2013, a small increase in US interest rates by the American Federal Reserve led to an outflow of capital from emerging markets, damaging interest rates in the five BRICS countries and exposing the fragility of their economies.

[^101]The eight BRICS summit held in Goa, India was a huge success; numerous positive resolutions were mandated towards the future plans of the group. The BRICS country leaders reiterated their determination to use all policy tools in their disposal, monetary, fiscal, and structural, individually and collectively to achieve the goal of strong, sustainable, balanced and inclusive growth. The BRICS ensured that the monetary policy continues to support economic activity and ensure price stability, consistent with central bank's mandates. Monetary policy alone, though, cannot lead to balanced and sustainable growth; in this regard, the alliance underscored the essential role of structural reforms. The BRICS economies emphasised that fiscal policies are equally important to support common growth objectives. Moreover, the alliance took note that the spill over effects of certain policy measures in some systemically important advanced economies can have adverse impact on growth prospects of emerging economies.

It is considerably essential that the BRICS countries strengthen their ties. The $21^{\text {st }}$ century is characterised by many things and the BRICS emergence is part of the $21^{\text {st }}$ century story. The Bretton woods institutions were created to only afford opportunities to Europe and the Western economies. This is attested by their hold onto power and their limited voting weight given to other countries. Whether in the near future the BRICS alliance will have influence in these institutions, it is undoubted that the BRICS alliance continues to remain a major contributor to global growth. The BRICS countries still need to address the hegemony of the World Bank and IMF in the governing of these institutions to be inclusive and fair to all countries and they must retain its commitment to non-conditionality and non-interference in the policymaking space of borrowing countries.

Economic transformation is the result of a combination of structural and politically based factors. The BRICS position in global markets is very significant. To this end, the five countries in the BRICS community play an important role in the G20, in shaping global economic policy and promoting financial stability. Their contribution to the economic revolution in the world has placed the alliance on a pedestal. ${ }^{338}$ The BRICS rise changed the world order hegemony. Many scholars argued that the rise of this group changed the world into a multi-polar world. The $21^{\text {st }}$ century is a century that has been characterised by the rise of the powerful BRICS alliance in their quest for monetary hegemony in the world, the 2001 projections by Jim O'Neil that the emergence and rise of the BRIC countries may perhaps

[^102]change the world's economic structure and with their GDPs combined, they could surpass the G7's dominance. ${ }^{339}$ At the time of the prediction, the world was in another structure. Economic growth of the world was much influenced by the Western nations only. O'Neil's prediction proved that west monetary hegemony was at risk of being run over by countries that were not seen as having any real power. The change of the acronym to BRICS with South Africa's inclusion gave the alliance significant rise not only in Africa but to the world too. ${ }^{340}$

The modification in the pattern of world trade happened since the establishment of the WTO in 1995. The most significant change in BRICS trade was the revival of south-south trade. South-south trade accounted for $32 \%$ of world trade in 2005. The BRICS is also a key player of international division of labour with over $40 \%$ of world's labour force. They have made their pressure felt in other important areas such as global energy demand. The BRICS countries have been responsible for most of the economic growth in the global economy with stagnating European economies and the now gradually recovering US economy. The BRICS have also become major investors worldwide, with their outward FDI rising from USD 7 billion in 2000 to USD 126 billion by 2012, representing $9 \%$ of the global flows. ${ }^{341}$ The BRICS alliance has only existed for ten years but already has a big global economic and political impact in a short time. ${ }^{342}$

The BRICS countries have a combined population of three billion people (almost $43 \%$ of the global population) in the geographical area of 3972 million sq.m (more than a quarter of world land surface). ${ }^{343}$ In addition, these countries produce nearly 16 trillion US dollars GDP, which consist of approximately 21 per cent of global production. ${ }^{344}$ Each of these five countries has a significant geostrategic location, which is the reason that they also serve as regional economic leaders in their respective regions: Brazil in Latin America, China in East Asia, India in South Asia, the Russian Federation in Central Asia and South Africa in Africa.

[^103]The BRICS leaders guaranteed in the 2016 GOA declaration action plan that they will continue to work closely with all G20 members to strengthen macroeconomic cooperation, promote innovation, as well as robust and sustainable trade and investment to propel global growth, improve global economic governance, enhance the role of developing countries, strengthen international financial architecture, support for industrialisation in Africa and least developed countries and enhance cooperation on energy access and /efficiency. Furthermore, the group stressed the need for enhanced international cooperation in addressing illicit crossborder financial flows, tax evasion and trade mis-invoicing.

Moreover, the progress in the implementation of the Strategy for BRICS Economic Partnership has been noteworthy towards the importance of the BRICS Roadmap for Trade, Economic and Investment Cooperation until 2020. The group believed that close cooperation between the sectoral cooperation mechanisms like the BRICS Contact Group on Economic and Trade Issues, the BRICS Business Council, New Development Bank and the BRICS Interbank cooperation mechanism are crucial in strengthening the BRICS economic partnership. Moreover, in this context, the continued realisation of the major BRICS economic initiatives such as enhanced cooperation in e-commerce, IPR cooperation, trade promotion and micro, small and medium enterprises (MSMEs) are essential towards the growth of BRICS economies.

Regardless of arguments about the decoupling of the main emerging economies from the G7 and other developed nation's economic cycles, the truth is that the dominant economies' impact on BRICS is more decisive than normally admitted. ${ }^{345}$ It is only about consumer markets and direct investment sources. The global economy is not just an economic space for the exchange of goods and services, where each nation can have greater or lesser physical interaction; it is also fundamentally an arena for the exchange of ideas. However, the rise of BRICS in the global markets was first seen as hyper technique by the critics. The alliance had an obstacle of penetrating the Bretton woods institutions. These institutions play a huge role in influencing rating agencies, currencies of countries and world economy etc. The BRICS group wanted to challenge the Bretton wood institutions' modus operandi. This was in quest for transparency in the institutions and trade democracy in world trade. The BRICS continue

[^104]with their quest of challenging the institutions hegemony and ensuring that the institutions work without any manipulation of any sort.

It is no doubt that the BRICS economies have shown significant growth in trade volumes in world markets, both global and intra-BRICS trade. ${ }^{346}$ As the BRICS cooperation mechanism gradually gets refined, their international influence keeps getting bigger and stronger. This is attested by their intra-BRICS trade that grew at an average of $28 \%$ in $2014 .{ }^{347}$ The BRICS continue playing a prominent role in international trade by promoting trade volume among its member states. In 2008 to 2012, the BRICS countries were responsible for most of the economic growth in the global economy, when the European economies were facing the euro-crisis.

The BRICS member states share the sentiments that Small Medium Enterprises (SME's) are an important segment in their respective economies and would work with their governments to evolve innovative policies and solutions to support them in areas of finance, marketing and technology up-gradation. There is also a need to consider issues of mutual interest and systematic importance in order to share concerns and to develop lasting solutions. There is an urgent need of progressively developing BRICS into a full-fledged mechanism of current and long term coordination on a wide range of key issues of the world economy and politics. As the global economy is reshaped, these countries need to be committed to exploring new models and approaches toward development that is more equitable and inclusive global growth by emphasizing complementarities and building on their respective economic strengths.

The BRICS first summit that was held in Yekaterinburg in Russia, it was where the alliance showed the world markets that their arrival was bringing amendment. In the previous year (2008) the world had faced economy crisis, growth was stagnant. The BRIC countries were the only ones that recovered early with significant growth in their markets. The BRICS countries in the last years have been facing slow economic growth, consistent with Shameem the BRICS is unlikely to indicate global economic development trends soon since economic indicators are unpredictable on their own and are often caused by technological transformation and capital, scientific and strategic information flows, however according to Duncan BRICS countries have maintained their world growth by providing new markets for

[^105]corporations and investors and restructuring institutions of the global economy since 2001, the year of the creation of this economic bloc. ${ }^{348}$ The growth of these economies tends to accelerate more strongly than the developed countries, leading to a considerable increase in these countries' prosperity. ${ }^{349}$ It is clear that these countries are significant to the global economy.

### 6.5. THE NEW DEVELOPMENT BANK (BRICS BANK)

The birth of the new development bank was an idea first proposed by India's Prime Minister Manmohan Singh during the fourth BRICS summit that was held in New Delhi. ${ }^{350}$ The fifth BRICS summit which was held in Durban 2013 saw this idea of an establishment of the new development bank being prioritised and all BRICS leaders agreeing to the urgent initiation of this new bank project, which was to be built in Africa. The New Development Bank was initiated. The purpose was for the bank to mobilize resources for infrastructure and sustainable development projects in BRICS and other emerging economies in developing countries. The bank would provide financial stability amongst its member states. Furthermore, the bank would also assist in facilitating currencies swap arrangement in BRICS intra-trade. ${ }^{351}$

The establishment of the New Development Bank was expected to reduce trade transaction costs amongst its countries and further promote growth in intra-BRICS trade. ${ }^{352}$ The BRICS alliance puts development high on the agenda with the goal of common development. Cooperation between members has been flourishing in recent years and is now covering a wide range of fields, such as trade, banking, taxation etc. The BRICS New Development Bank is the development objective of the alliance to seve as a stimulus to development between BRICS members as well as in other developing economies and countries.

The BRICS bank has been a timely response to continental initiatives such as the AU Programme for Infrastructure Development in Africa. The BRICS bank came a good time when several developing countries are in need for investment and some need loans to settle

[^106]their debt. ${ }^{353}$ The headquarters of the bank are situated in Africa. This speaks volumes that indeed, the BRICS alliance takes their relations with SA and Africa serious and also the establishment of the bank affirms that development in Africa is upward rapidly. Conversely, it remains to be seen how the BRICS bank will fare as a provider of development finance, given that three of its members Brazil, China, and India - together have outstanding World Bank loans worth $\$ 66$ billion. ${ }^{354}$ It would be a wrong move from the BRICS alliance if they cannot sustain their development objective of promoting development. Time would tell if the BRICS bank would withstand itself since it is still a new bank that is not older than 5 years.

Nonetheless, the usefulness of the BRICS bank for African countries extends beyond the provision of capital; it includes knowledge-sharing about innovative ways to meet the demands of development in the global South. In this respect, the New Development Bank could create space for BRICS and other developing and emerging economies to contribute more meaningfully to their own sustainable development.

### 6.6. BRICS-AFRICA TRADE DEVELOPMENT COOPERATION

Many development theorists argue that the quality or sophistication of exports is a key determinant of long-term economic performance. They argue that while the manufacture of export goods creates forward and backward linkages with other economic sectors, the export of primary commodities does not, and also tends to be capital-intensive rather than labourintensive. Moreover, they argue that primary commodities are vulnerable to price volatility as their prices are determined in world markets. Some even argue that the exploitation and export of primary resources are economically detrimental. Thus many development theorists do not believe that African countries can effectively develop their economies and alleviate poverty by continuing to concentrate on exporting mineral and agricultural products.

As part of growing south-south co-operation, the burgeoning partnerships between BRICS and African economies have been the subject of intense interest in recent discourse and literature. The increased economic relationship between Africa and BRICS is viewed as a welcome development, considering the opportunities it offers for tackling the long-standing economic and social challenges in Africa. Indeed, the dismal view of Africa as an impoverished continent is speedily changing into one of immense potential, and the discourse

[^107]has recently shifted to how the rapidly growing trade and investment relations between Africa and BRICS can stimulate the long-sought-after industrialisation of African economies. ${ }^{355}$

The short-term effects of the economic ties between BRICS and Africa seem promising.
The recent strong economic growth witnessed in the majority of African countries amidst financial turmoil and slowed growth in developed countries is largely attributable to their increased association with BRICS. More importantly, this association remains a key determinant of their future growth prospects. In 2012, BRICS trade with Africa ( $\$ 340$ billion) surpassed trade within BRICS itself ( $\$ 310$ billion), driven mainly by the growing need for natural resources in China and India. ${ }^{356}$ The structure of trade between Africa and BRICS remains largely 'North-South', with Africa exporting raw materials and BRICS exporting manufactured products. Nigeria and Angola are the main sources of ores and minerals, Ethiopia is a major source of agricultural products.

The fifth BRICS summit that was held in Durban, South Africa in 2013 saw the renewal of Africa's position in the world and strengthening of trade ties with the BRICS countries. The fifth BRICS summit took resolutions on sustaining cooperation between Africa and BRICS on economic development, the BRICS New Development Bank was strategically built in Africa to attract more investment in Africa. ${ }^{357}$ For a long time, Africa has had individual relations with each BRICS country. These relations have had their own fruitful journey. China and India have strong relation ties with many countries in the continent. In fact, as early as before the BRIC cooperation mechanism established, China, India, Russia and Brazil had formed good bilateral economic and trade relations with African countries. ${ }^{358}$ Especially China and India, in the past several decades, have made large amount of trade related investment in Africa.

However, only after the overall rise of the BRICS in the first decades of 21 st century, the BRICS made a greater positive impact on African development. Many of these relations were built prior to SA joining the BRICS alliance. However, SA's influence and hegemony in the continent shaped the future of African trade with the rest of the BRICS countries. The BRICS

[^108]alliance development cooperation has shown rapid growth in the past years and continues to; however, there are questions about Africa benefiting from the BRICS forum. Numerous scholars believe that these relations are built based on exploitation of African materials.

As the BRICS cooperation mechanism progressively gets refined, their international impact keeps getting bigger and stronger. Their development ties with Africa have had significant growth, the BRICS economies have increasingly been trading with African countries with total BRICS-Africa trade reaching USD 256.5 billion in 2012-2014, or more than eleven times the value recorded in 2001 (USD 22.9 billion). ${ }^{359}$ BRICS-Africa trade has increased by approximately $47 \%$ since 2008, a period characterised by relatively slow economic growth globally. ${ }^{360}$ There are many reasons leading to this round of continuous improvement of African economy. First, the engine of growth does not solely lie in energy industry, but also demographic dividend, urbanization construction and increasing domestic demand from growing middle class. Besides, African economic growth attributes to external factors, in particular its cooperation with China, India and other new partners.

The African economy in the past decade has won worldwide attention by its strong performance. Since mid-1990s, the GDP of Africa has grown at an average annual rate of 5 percent. ${ }^{361}$ After the occurrence of international financial crisis, Africa has demonstrated good response capacity by growing steadily and inclusively which highlighted the world economy. By now, international authorities generally agreed that the foundation of African economic growth has become more solid than it was; therefore, a positive development outlook is preferred. The current round of economic growth in Africa is not a one-time event. Rather it may be the starting point for the economy to really take off and alleviate poverty and create jobs.

The mounting economic prominence of the BRICS is one of the major forces that have shaped the $21^{\text {st }}$ century global economy. This rise has manifested itself through stronger trade and financial ties with the rest of the world. As the alliance gained strength economically, the BRICS countries have become not only key markets for African trade, exports and imports but also financiers, investors, and donors, thus acting as a vital growth powerhouse. Not

[^109]surprisingly, the alliance's impressive commodity-driven growth sustained during much of the last decade has been added in part to the growing economic vitality of the BRICS. Such development suggests that output correlation between African countries and the BRICS has risen in the last few decades. ${ }^{362}$

The 2013 BRICS summit declaration on Africa was carefully constructed to show BRICS good intentions to Africa, vowing that BRICS alliance is committed to supporting Africa's development agenda by strengthening their cooperation in the search for collaborations for investment in Africa's infrastructure, agriculture and manufacturing sectors. The BRICS countries are pushing for the global trade, economic and political architecture to be made fairer to all the countries that are referred to as third world countries. This would ensure that there is a rebalance in global politics, trade and industry. The BRICS group aims at transforming trade systems away from Western bias, and bring new ideas and fresh solutions to the globe's pressing problems. ${ }^{363}$

Moreover, in 2011 BRICS total trade with Africa was said to be more than trade between intra-BRICS trade. In 2012, BRICS total trade with Africa was estimated at $\$ 340$ billion, while trade between BRICS countries for the same period amounted to $\$ 310$ billion. In 2013, BRICS members' trade with Africa stood at $\$ 350$ billion. ${ }^{364}$ According to South Africa's Standard Bank, BRICS members' trade with African countries had jumped 70 per cent in the past five years or by $\$ 150$ billion since 2008. With China's share of the BRICS-Africa trade in 2013 was 61 per cent, with India having 21 per cent, Brazil 8 per cent, South Africa 7 per cent and Russia 3 per cent. The BRICS countries share of total global output was 20 per cent in 2013. ${ }^{365}$

Underneath the BRICS and Africa trade lie some opportunities and challenges related to greater engagement of African countries with the BRICS. First are the opportunities, undoubtedly, stronger trade ties with the BRICs have constituted the key dimension of the ongoing diversification of the destination and origin of Africa's exports and imports. This development has made the region less dependent on traditional partners, the G7 in particular, and increased resilience in the face of economic volatility occurring in these countries. Also,

[^110]macroeconomic policy coordination, namely fiscal coordination, if deepened, may be relatively effective in synchronizing business cycles, therefore indicating that discretionary fiscal policy could be an effective instrument in governments' policy tool kit in Africa. ${ }^{366}$ The challenges are that some African states, civil society groups and analysts have rightly complained that BRICS engagement with Africa could replicate Africa's low-quality growth model that might enrich African elites, rather than the masses, undermine Africa's own agricultural and manufacturing sectors, lead to vanity infrastructure projects for African elites and further undermine attempts to foster democracy on the continent. ${ }^{367}$

According to William Gumede, "Africa's trade deals with BRICS are often skewed in favour of BRICS countries". ${ }^{368}$ Affirming that Africans need to engage in better trade deals and agreements; this will enable African countries to have better returns from their trade with the BRICS. Scholars argue that Africa must ensure that it puts business first and the interests of Africa first. The establishment of the BRICS alliance has offered a potential economic windfall to African states; however, unless African countries engage more astutely with the alliance powers, they might put in jeopardy the continent's long-term prosperity. ${ }^{369}$ Looking to the future, African countries may have the opportunity to negotiate better development aid terms from BRICS countries. However, to benefit from the rise of BRICS, African countries will have to make some structural changes: they must be more pro-active, clearly identifying their priorities and be more hard-nosed in their negotiations with BRICS.

### 6.7. BRICS AND AFRICAN INFRASTRUCTURE DEVELOPMENT

The true meaning of African development lies in the investment of proper and sustainable infrastructure. The building of infrastructure in Africa would attract investment within Africa, which would change Africa's landscape globally. The involvement of BRICS countries in Africa has somehow attributed greatly towards the building of infrastructure e.g. The Africa Union headquarters situated in Addis Ababa in Ethiopia was built by Chinese government in

[^111]quest for promoting investment in the continent. ${ }^{370}$ The BRICS countries have continued developing infrastructure in African countries. However, this development of infrastructure has faced some critics, concerning cheap material that is used in building, and that these contracts that are used to build are actually not Africans. This is a great concern towards growth of infrastructure development. ${ }^{371}$

The reality is that Africans need partners, to help finance infrastructure projects that they have identified for their long-term industrial needs. According to William Gumede, Africa infrastructure development has rarely been integrated into broader economic development. It often takes place on a standalone and ad hoc basis. Successful infrastructure development goes beyond building transportation routes, for example. It should be seen as a tool for longterm economic investment integral to a country's industrialisation and, to be effective, it must be linked to "other regional economic stimulus measures in-order to complement the infrastructure investment and generate synergistic effects". ${ }^{372}$ However, Africans need to prioritise development that is fast and important. African countries should be pro-actively deciding where development should be placed, what should be developed and how the development should take place, and then partnering foreign investment to these home-grown targeted development initiatives.

Furthermore, in regard to the choice of cross-border infra-construction projects proposed by the BRICS alliance, it should begin with SADC, supporting southern Africa network and transportation grid projects at first, and then spread to financing western Africa mining development plan, power development plan, west-east rail/road project and eastern Africa agriculture cooperation planning. ${ }^{373}$ In most African countries, agriculture remains the largest sector in which people find it very easy to maintain and grow. This should make it obvious to African countries to put their efforts into supporting people to at least produce food for them and carry out the basic easy manufacturing of products without having to import these from abroad. Moreover, BRICS countries, especially China, must continue to encourage enterprises by preferential investment to participate in African infrastructure construction and

[^112]operation to explore and promote cooperation in transnational power, telecommunications and transportation network and hub to further promote growth. ${ }^{374}$

### 6.8. BRICS AND THE INDUSTRIAL DEVELOPMENT OF AFRICAN COUNTRIES

The African landmass has continuously been one continent that has all the necessary resources needed to enrich the economies and the lives of its people; however, all these resources do so little for the Africans. For a long time, African economies have been facing a slow economic growth due to political unrests and exploitative trade that exploits weaker states. This is because west and European countries have been and continue dominating, swallowing and exploiting Africa's valuable minerals for their own amelioration. The $21^{\text {st }}$ century emanated with a lot of affirmative transformation for African countries due to trade that is developing African economies. BRICS economies have played a pivotal role in diversifying innovation in Africa. ${ }^{375}$ The BRICS countries' quest to bring innovative industrial development in numerous African countries has been seen as good investment. The BRICS member states and their financial institutions must ensure that they encourage and support African enterprises and invest in their mineral process and agricultural process. ${ }^{376}$

Combining Africa's advantage in resources with BRICS capital and technology, proficiency can assist in ensuring that Africa's industrial development and progress impacts African economies growth and development massively since numerous African economies are small; some are often unfeasible on their own. ${ }^{377}$ Moreover, this partnership could help African industries to turn made-in-China and made-in-India products to made-in-Africa. This might improve the value of African products and assist Africa in setting up its own industrial system to have more to export which undoubtedly boosts Africa's contribution to the world markets. Furthermore, pooling African economies together with BRICS alliance influence on the course of developing industrial innovation in Africa could bring larger economies and markets, thus creating the potential to expand both production and demand of Africa enterprise on a global structure.

[^113]The 2013 BRICS summit that was held in Durban SA came with strategies of renewing Africa's position in the world. African development was also at the centre of the summit as Africa was the theme of the summit. The role played by SA was to safeguard African resources that they are not exploited by the other four countries in the coalition and that Africa's growth continues to bring good investment. The industrial development of Africa would bring enormous change to the continent future .The emergence of the potent BRICS member states helped open up the policy space for African countries to come up with independent economic policies. ${ }^{378}$ However, Africa now needs better economic policies that would make it achieve the policy objectives of industrial development and poverty reduction in the continent.

Since African integration organizations achieved little success in the past in view of production cooperation, BRICS alliance must use their influence in recommending powerful enterprises to look into the market and regulations of African member states in customs unions and free trade areas, and then choose specific countries to build cement plants, glass plants and metal refineries and so on to ensure a viable development. ${ }^{379}$ In order to lay a good foundation for long-term cooperation with the host country, investment must enter Africa in a flexible way that would support African development. In addition, the BRICS should pace up technology transfer and employee training so to create more jobs for the development.

### 6.9. CONCLUSION

This chapter attempted to analyse trade among the BRICS member states with the internal to bring out the influences of BRICS in world trade, BRICS role, position and challenges in international trade and lastly the influence of BRICS in Africa development cooperation. Trade between the BRICS countries has undoubtedly played a huge role in maintaining a stable growth in their individual economies. The BRICS economies have shown resilience when it comes to world markets. With all the criticism that they have faced their trade influence has remarkably shown growth. Since the beginning of the new millennium, the BRICS economies have increased their influence on the structure of world economy. Their role in the global arena, from an economic and political perspective has shift the balance of power and hegemony in the world. The BRICS countries influence in Africa has been viewed

[^114]as an opportunity to enhance cooperation with other developing countries, playing a significant role in the economic and social development of the region. ${ }^{380}$

The renewed and increased global economic interest in Africa has seen the continent striving with opportunities. Opportunities of economic growth, infrastructure etc. these new opportunities for the continent will undoubtedly contribute to African economies spiral growth in the near future , moreover cooperation between BRICS countries and Africa should not be exploitative and should not be skewed

[^115]
## GENERAL CONCLUSION

The South African economy has slowed in recent years, from growing by almost 6 per cent prior to the global financial crisis, to a mere 1, 3 per cent in 2015. In the first quarter of 2016, growth contracted by 1,2 per cent. South Africa has been buffeted by a number of negative developments, namely, the slowdown in China and reduction in commodity prices; weak demand in advanced and emerging market economies, as well the deterioration in growth prospects for the Sub-Saharan Africa region; policy uncertainty; and suffering one of the worst droughts on record during 2015/2016. ${ }^{381}$ According to the SARB's most recent forecast, the economy would only grow by a meagre 0.6 per cent in 2016.

Nonetheless, with the new measures, the Medium Term Budget Policy Statement safeguards the decline in the deficit from a revised 4.1 percent of GDP in 2014/15 to 2.5 percent of GDP in 2017/18, which is expected to stabilize the gross debt burden at around 49.8 percent of GDP in 2017/18. ${ }^{382}$ The package contains a combination of spending cuts and yet to be announced tax increases that would raise 0.6 percent of GDP a year in the next two fiscal years. ${ }^{383}$ Even so, the fiscal targets remain subject to downside risks from possible shortfalls in real GDP growth, rising borrowing costs, and contingent liabilities related to the finances of state-owned enterprises. ${ }^{384}$

Though BRICS inflow and outflow percentage of gross domestic product (GDP) fluctuated substantially in recent years, it tended to decrease through 1997-2016 period ending at 1.63 $\%$ in 2016. ${ }^{385}$ A plethora of economists share the notion that South Africa as a member of BRICS has not shown much growth after joining the group. Through South Africa's economic analysis, its GDP has not shown much growth that was anticipated; however, one is entitled to analyse the South African case as a special one, meaning that South Africa even though is compared to other BRICS nations, has a small population which also contributes to the GDP and GNP of the country. This makes it a challenge for South Africa to grow in a fast

[^116]pace like its BRICS alliances. South Africa's role in world trade has expanded. This is because trade amongst South Africa and the BRICS has accelerated sharply and largely in the last few years. If trade between South Africa and the group continue on this propensity in the near future, the group might find themselves compelled to adjust their foreign exchange policies. South Africa's influence in the world markets has indeed been noteworthy.

On the other hand, some academics and economists advocate that South Africa is being used as gateway to Africa, as the BRICS has an agenda for African natural resources, and it is believed that South Africa is a strategic partner to achieve their agenda. Moreover, some commentators visualize great opportunity for South Africa whilst others perceive substantial dangers. ${ }^{386}$ South Africa’s engagement with the world plays a huge role in ensuring that trade relations are created in order to bring business to the country. South Africa is the leading economy in Africa and this boosts their position in the world markets. South Africa's trade policy played a huge role in ensuring an invitation to be part of the BRICS group, its role in world markets and their influence in Africa made South Africa the suitable candidate to be part of BRICS. ${ }^{387}$

Moreover, South Africa's trade and industry department (DTI) needs to ensure that trade policy is in line with the country's objective of prompting fair trade with its trading partners in Africa and the rest of the world. SA's position in the world plays a huge role in maintaining good trading relations with the world. In 2013 China was the leading recipient of FDI inflows amongst the BRICS which was estimated at USD 127 billion, followed by the Russian Federation with USD 94 billion, Brazil at USD 63 billion and India with USD 28 billion, South Africa was at USD 10 billion. South Africa outperformed its BRICS counterparts by recording the highest growth rate at $126 \%$, whilst Brazil's was the lowest $4 \%{ }^{388}$ Trade agreements between countries should benefit all parties. The WTO has in the past promoted trade that is non-exploitative.

[^117]
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## APPENDIX A: INTERVIEW SHEET

## INTERVIEW SHEET

(Bilateral trade flows between South Africa and BRICs member states)

Interview initiated and completed at:

Interviewee's name:

Interview date:

This interview is in respect of a study whose purpose is to delve into issues, views of trade relations between South Africa and its alliances the BRICs member states by crucially analyzing the role played by South Africa within BRICS and how will this relation enhance South Africa's economic growth and development. Trade relations are an important aspect of economic integration between BRICs member states and South Africa.

The study is to be conducted by Nokwazi Nombulelo Adora Mthembu of the History Department at the University of Zululand. Nokwazi Nombulelo Adora Mthembu is conducting this research towards a Master of Arts Degree. Different responses will help in the completion of this study.

You are asked to complete this interview form because you considered having knowledge about BRICS role in global governance, its trade agreements with South Africa and its main objectives in its goal to influence world economy. Participation in this research is voluntarily, no one is obliged to participate, but your participation would be of greater importance to the success of this research.

You are asked to treat every question objectively and to the best of your knowledge. There are no right and wrong answers. Every answer given will be held confidentially by the researcher.

Do you have any question before we begin?

## SECTION A

1. Province $\qquad$
2. Province of Residence $\qquad$
3. Sex:
Male $\square$
female $\square$
4. How old are you? $\qquad$
5. What is your highest level of education obtained?
A. Primary Education
B. High school
C. Collage
D. University
E. Other specify
6. What is your present occupation?
A. Farming
B. Civil servant
C. Trading
D. Business man/ woman
E. Other specify
7. What is your marital status?
A. Married
B. Single
C. Divorced
D. Widow

Other specify

## SECTION C

1. Who are the BRICS?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
-
2. Why did South Africa join the BRICs countries?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
3. What is the role of BRICS countries in global economic governance?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
-
4. Have bilateral trade flows between South Africa and BRICs nations benefited efficiently all parties?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
-
5. Do you think that South Africa's trade relations with BRICs member states will improve South Africa's economy

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
-
6. How does the downgrading of South Africa to an economic junk status in 2017 affect its relations with BRICs countries?

Answer:
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$\qquad$
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$\qquad$
$\qquad$ _.
7. In what way do you think South Africa's role in BRICs benefits the African continent?

Answer:
$\qquad$
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$\qquad$
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$\qquad$
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$\qquad$
$\qquad$ -
8. What is your assessment of trade flows between South Africa and the BRICs member states?

Answer:
$\qquad$
$\qquad$
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$\qquad$
$\qquad$
$\qquad$
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$\qquad$
9. Do you think BRICS countries are competent to influence world economy

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
10. What comparisons can be drawn between South Africa and other member states with regards to efficient implementation of economic strategies?

Answer:
$\qquad$
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$\qquad$
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$\qquad$ .
11. Why are trade flows, economic growth, exchange rate, and geographical distance among the BRICs economies and South Africa's economy significant?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
12. How important are determinants of trade flows between South Africa and BRICs countries, using gravity model framework and panel data estimation method?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
13. In what way could recent patterns of the above-mentioned components between South Africa and the BRICs nations, as well as the economic performance of each BRICs country best be understood?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
14. What is the composition and structure of trade flows in South Africa, particularly trade from individual BRICs countries?

Answer:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Thank you.

Mthembu Nokwazi Nombuleleo Adora
$\qquad$
Date:


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