The Impact of SADC regionalisation on intra-SADC trade

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Abstract

The subject of international trade is as old as the human race. Countries have always needed goods they were unable to produce either because of lack of resources, lack of skills or just cost related constraints. On the other hand,

countries have at one time or the other be
services than they can consume. This situ
services across national boundaries. As lo
they have been engaging in some form of trading.

As the world evolved through civilisation, countries continued to exchange goods and services across borders. Goods and services can be exchanged for a price between two countries, a few countries in a region, countries in a continent and even all countries in the world.

The world multilateral trading system celebrated 60 years in operation in 2006. By this time over 55% of world trade was happening through Regional Trade Agreements with the European Union leading the way. Over 70% of trade in the European Union happens within the region. In the meanwhile, the South African Development Community (SADC) only conducts about 9% of its total trade within the region.

Against this background, SADC agreed to a Trade Protocol in 2000 with the objective of deepening regional economic integration. Amongst the objectives of the SADC Trade Protocol was to increase levels of exports and imports within SADC. This study looks at the impact of these regional economic integration efforts on intra-SADC trade. The study examines if the SADC intra-regional trade behaves in a consistent manner with economic theory, global trade trends and other regional formations of economic integration.

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

11 November 2009

Dedication

I dedicate this work to my wife, Machoene, for her understanding and support throughout the two years of the MBA studies; to my 16 month old daughter, Nkateko, for the inspiration; and to my parents, Ndengeza & N'wa-Fese Xidumu-Hlungwane, for their foresight on the value of education despite never having been to school. Ndza khensa Tshika Misava na wena Munene wa Gwevani.

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I also wish to thank all my friends for the support before and during this period of my life. I thank all those that continue to believe in me. Thank you.

Lastly and most importantly, I wish to th my life. Your love, grace and mercy continue s. Thank you

Table of Contents

List of Tables

List of Figures

Chapter 1 Introduction to the research problem

1.1 Introduction

“It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than buy. The tailor does not attempt to make his own shoes, but buys them from the shoemaker. The shoemaker does not attempt to make his own clothes but employs a tailor. The farmer attempts to make neither the one nor the other, but employs those different artificers…what is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we can make it, better buy it of them with some part of the produce of our own industry, employed in a way we have some advantage” Adam Smith.

Despite continued questions about benefits of international trade within countries and

the power relations that are more tilted tc , there is an acceptance that international trade hel ut of the country, thereby helping countries to g e been generated internally (Sawyer & Sprinkle, 2006). International trade also helps countries to import goods and services, mostly at a cheaper cost than they would have had to make the goods and services; they are unable to produce internally for various reasons.

On 1 January 2008, the multilateral trading system as it is known today, celebrated sixty years in existence (World Trade Report, 2007). At the time of this celebration

trade flows within regions accounted for a higher share of world trade than flows between regions (International trade statistics report, 2008). This means that countries have moved more towards trading within regional agreements than the traditional multilateral agreements

According to the same International trade statistics report of 2008, intra regional trade accounted for fifty five to fifty eight percent of world trade from the year 2000 onwards. According to the WTO International trade statistics report of 2008, America and Asia show a relatively balanced growth between inter-and intra-regional trade whilst Europe's intra-trade is growing much faster than its external trade due to the deepening of its economic integration. The report indicates that the smaller economic regions of Central America, Africa, the Middle East and CIS have recorded higher growth in inter-regional exports than in intra-regional. Why is there this difference between international trade trends between these two sets of economies?

Against this background, it is necessary to understand how trends in international trade affect the balance of trade amongst countries and regions. More importantly for Southern Africa it is important to understand how intra regional trade in the Southern African region compares to trends in other regions of the world. How is the level of economic integration in Southern Africa and how has it influenced intra-regional trade?

The objective of this research report is to study the impact of economic integration, through the 2000 Southern African Development Community (SADC) Trade Protocol, on trade within SADC by analysing intra-SADC trade data before and after the installation of the SADC Trade Protocol in 2000.

1.2 Multilateralism and globalisation (multilateral trade)

Since World War II, integration of the world economy has developed at a rapid pace

(Urata, 2002). According to Sohn (2002) uences, the erosion of national boundaries and th s through regionalisation or regionalism. H egration spread through multilateral relations amongst countries, bilateral relations between countries and also regional relations amongst countries. Since the end of the Cold War, the proliferation of regional trading arrangements has led to a revival of regionalism in the world trading system (Urata, 2002).

In order to understand what regionalisation is, it is necessary to understand what multilateralism is, how it developed and how it relates to globalisation. At the most general level, McGrew (1992) defines globalisation as the forging of multiplicity of linkages and interconnections between the states and societies which make the modern world system.

He continues to say that globalisation refers to the processes by which events, decisions and activities in one part of the world can come to have significant consequences for individuals and communities in quite distant parts of the globe. This line of thinking looks at globalisation as processes that affect all countries and cannot be ignored irrespective of ideological differences on globalisation and its impact in the world order.

On the other hand, Oman (1994) focuses more on the economic meaning of globalisation. He describes it as something that extends to a broad range of issues that brings together the politics and economics of change today on a global scale. According to him, these issues include the viability of world trade and how that trade is conducted; the growing need for deep international policy integration; and maybe most importantly for countries and States to understand, the apparent decline of national economic policy autonomy.

Other issues that Oman (1994) touches on in his definition include the impact of technological revolution, the sources of long term economic and productive growth, and the importance of change in systems of corporate governance around globalisation. Whatever angle or perspective is used to look at globalisation, it can be agreed that globalisation happens within a framework of different kinds of agreements to exchange goods and services amongst countries. This is where the question of whether trade is done via multilateral, bilateral or regional agreements comes in.

Multilateralism refers to the World Trade Organisation (WTO) system of trade that takes place amongst WTO members. The basis of multilateralism in trade is the principle of the most favoured nation (MFN) (GATT, 1994). The principle means that each WTO member must grant each other member treatment as favourable as they would grant to any other member country. Within this context, Regional Trade Agreements (RTAs), though allowed under GATT article XXIV of 1994, violate this

principle since they allow members to di[illegible] e RTA and in favour of members of the RTA.

1.3 Regionalism (regionalisation)

Writing on the subject of globalisation, Cook and Kirkpatrick (1997) suggest that growth in international integration of economic activity has been uneven amongst participating countries. They suggest that an increasing proportion of trade flows occur within regional groups of countries. Given the fact that more 55% percent of world trade happens within regional trading blocks, countries cannot afford to ignore regional trade agreements (World Trade Organisation, 2009).

Cook and Kirkpatrick (1997, p. 56) states that, “interest in regional trade agreements – which can take the form of free trade areas, customs unions, common markets or economic unions-, has intensified in all regions of the globe”. They argue that there is a trend wherein governments enter into regional coalitions or blocks mainly so that they can obtain better negotiating power for trading of goods (Cook and Kirkpatrick, 1997). Cook and Kirkpatrick (1997, p. 57) further suggest that “the emphasis is on the potential economic gains from removing market imperfections and policy induced price distortions”.

Following the arguments advanced by Cook and Kirkpatrick, the increased economic gains as a result of deeper levels of regional economic integration should therefore be evident in increased levels of trade within the regions, thereby increasing levels of income and standards of living within the countries.

They further suggest that “attention is also given to the benefits of regional co-operation in the provision of public goods that allow for more efficient trade” (Cook and Kirkpatrick, 1997, p. 57). This means that regional economic integration should help countries develop infrastructure such as telecommunications and transportation, enabling them to facilitate trade more efficiently and reaping the economic benefits of those efficiencies.

Driven by the need to reap benefits associated with economic integration, the world has seen the coming together of many countries within regions to form different forms of economic participation or integration. Examples include regional formations of economic integration such as the European Community (EC), the North American Free Trade Association (NAFTA), the Southern Common Market (MERCOSUR), and the Southern African Development Community (SADC).

Despite the fact that intra-regional trade a[illegible]ıe world, there remains many detractors to the conduct of international trade through regional groupings. Thornton and Goglio (1997) argues that the relative merits of regional trade blocks are still being debated, in particular as to whether they promote regional trade at the expense of multilateral trade. According to the World Trade Report (2007), it is the impact of regional trade agreements (RTAs) on economic welfare rather than trade expansion which should be the proper criterion for evaluating such agreements.

The question of how countries measure the impact of Regional Trade Agreements on economic welfare is a cause for several studies within the academic fraternity as much as it is a head ache for decision makers within global trade.

Weidenbaum and Murray (1992) add the fact that although regionalisation promotes efficiency and productivity, it also leads to more insular commerce within such trade blocks. Given this and many other dissenting views on the economic merits of Regional Trade Agreements, the question of whether RTAs help or hinder the competitiveness of goods and services for the economic benefit of those countries is a valid one. Within this context, the role of individual states is diminishing, especially when looked at as a force in trade policy (Cook and Kirkpatrick, 1997).

It is reasonable to argue that despite the proliferation of Regional Trade Agreements and their influence in global trade patterns, there are still valid questions that remain in the minds of many policy makers and authorities in the world. There are questions about the economic benefits of the RTAs to the participating countries. There are questions about whether this practice hinders or helps the development of international trade. There are questions about the balance of power between economically powerful regions and poor regions.

Besides these valid questions, there are well over 200 RTAs registered with the WTO with only one member country (Mongolia) not being party to any RTA (World Trade Organisation, 2007). Based on the influence of these regional economic formations and the resources that countries commit to processes associated with the regionalism, countries have a responsibility to understand the economic impact of these agreements so as to make the right policy decisions. With the 2000 SADC Trade Protocol, which is meant to culminate into a Free Trade Agreement en route to deeper regional economic integration, it is critical that continuous studies are done on the impact of this regionalisation on intra-SADC trade. That is the basis of this study.

Chapter 2 Literature review

2.1 Introduction

The economic theory that underpins inter al trade increases welfare (and productivity) dates from a period when international trade relations were far less intensive than now (Jepma et al,1996). In economics, International trade theories can be traced to two broad theories, namely mercantilism and comparative costs theory (Jepma et al, 1996).

The earliest of these theories is mercantilism (Jepma et all, 1996). Jepma et al (1996) further argue that the most widely accepted of international trade theories is the comparative costs theory attributed to David Ricardo and Robert Torrens. The comparative cost theory of international trade developed by Ricardo is the basis upon which many international trade theories were built (Sawyer & Sprinkle, 2006). The brief review of these theories is meant to lay the basis for understanding how regionalisation develops out of international economics trade theory.

2.2 The two international trade broad theories

2.2.1 Mercantilism

This is the earliest theory that dominated thinking and practice in international trade in the earliest centuries (Jepma et al, 1996). The philosophy behind this theory was that trade is a zero sum game, implying that one country's gain meant another country's

loss (Jepma et al, 1996). Jepma et al (1996) argue that the primary focus of this theory was the international payments that arose out of trade between countries.

The theory espoused that if a country imported more than it exported, there was a net outflow of gold to other countries. This was seen as weakening the country's national power and wealth. The flaw in the theory was that it did not take into consideration the potential incremental capacity and production that the country could gain as a result of that net outflow of gold. The theory was severely criticised in the 19th century by economists such as Hume, Smith and Ricardo (Jepma et al, 1996). According to these economists, the theory could not apply to current international trade trends because countries sometimes import machinery that generate more productive value than the actual net outflow of capital as a result of the importation of the machinery.

2.2.2 Comparative cost theory

According to this classical theory of inte plaining the existence and pattern of international Gandolfo (2004) further argues that as a ion of certain goods, countries are able to produce certain goods cheaper than other countries. A lot of literature in international trade theory develops out of comparative cost theory (Jepma et al, 1996). The theory suggests that countries will produce and export goods that comparatively cost them lower than other countries to produce the same goods (Jepma et al, 1996). It further suggests that countries will import goods whose unit of production is higher for them than the countries they can import from.

According to the Heccksher-Ohlin theory, developed from the comparative cost theory, each country exports the commodity which uses the country's more abundant resources intensively (Gandolfo, 2004). The theory in itself is not so much different from what Ricardo proposes in that it only adds that a country will export whatever uses its abundant resources more, in other words, where the cost of production is comparatively lower as well.

2.3 Region Trade Agreements (RTAs)

Regional Trade Agreements is the term used by the World Trade Organization to refer to Free Trade Agreements (FTAs) and other regional preferential trading arrangements amongst countries (Urata, 2002). Urata (2002) argues that the trend towards regionalisation gained momentum over the years. In this regard, Free Trade Agreements (FTAs) have played a big role in the trend towards regional integration.

Urata (2002, p. 22) suggests that "one of the objectives of regional integration is to stimulate trade between the countries party to the agreement (intra-regional trade) by removing trade barriers between them". From this objective, one can define intra-regional trade as trade between countries party to a Regional Trade Agreement. Urata (2002) indicates that by the end of September 2001, 239 regional trade agreements (RTAs) had been reported to the World Trade Organization (WTO). He argues that some of the Regional Trade Agreements formed have had no significant impact in both intra and inter regional trade. It is therefore important to continuously measure the impact of these regional economic agreements on both inters- and intra- regional trade for the countries party to the agreements. Urata (2002) adds that some of the

RTAs do not last long and by end of 2002, only 162 agreements remained operational and relevant to global trade.

2.4 Categories of regional integration

A free trade agreement is an agreement b
agreement to remove trade barriers such
02). In the same article, Urata (2002) notes that Free Trade Agreements are recognised by the WTO in the General Agreement on Tariffs and Trade (GATT) Article 24 and Article 5 of the General Agreement on Trade in Services (GATS) and are exempt from the most favoured (MFN) rule.

Urata (2002) categorises different types of regional integration according to a stage of development, which focuses on the degree of integration in the region. According to the WTO, parties to Regional Trade Agreements (RTA) can notify several types of RTAs.

2.4.1 Free Trade Agreement (FTA)

Parties to a Free Trade Agreement agree on a Free Trade Area. As defined in paragraph 8b of Article XXIV of GATT 1994, a Free Trade Area shall be understood to mean a group of two or more customs territories in which the duties and other restrictive regulations of commerce (except where necessary for health reasons or any other pre-defined reasons) are eliminated on substantially between the constituent territories in products originating in such territories. This is a second level regional agreement.

In other words, a free trade agreement is an agreement between the countries party to that agreement to remove trade barriers such as tariffs and import quotas (Urata, 2002). In the same article, Urata further notes that FTAs are recognised by the WTO in the General Agreement on Tariffs and Trade (GATT) Article 24 and Article 5 of the General Agreement on Trade in Services (GATS) and are exempt from the most favoured (MFN) rule.

2.4.2 Customs Unions

According to paragraph 8a of Article XXIV of GATT of 1994, a customs union will be understood to mean the substitution of a single customs territory for two or more customs territories so that :

. Duties and other restrictive regulations of commerce (except where necessary) are eliminated with respect to substantially all the trade between the constituent territories of the union or at least with respect to substantially all the trade in products originating in such territories, and,
. Substantially the same duties and other regulations in commerce are applied by

each of the members of the union to the union.

2.4.3 Common Market

This is an agreement on the part of a set of countries to eliminate trade restrictions amongst themselves, to adopt a common external tariff, and to allow free movement of labour and physical capital amongst member countries (Windows On The World Economy, 2005).

2.4.4 Preferential Trade Agreement

This is an agreement on the part of a set of countries to reduce but not to eliminate trade restrictions among themselves. This is the first level and weakest form of regional economic integration because the countries party to it do not fully eliminate trade barriers amongst them (GATT, 1994).

Examples of FTAs would include the North American Free Trade Agreement (NAFTA) and also the South East Asian Nations (ASEAN). Examples of customs unions would include organisations such as Southern Common Market (MERCUSUR) and the Southern African Customs Union (SACU). An example of a common market would be the Common Market for Eastern and Southern Africa (Comesa).

2.5 Characteristics of Free Trade Agreements

In his 2002 paper titled Globalisation and the Growth in Free Trade Agreements, Professor Shujiro Urata of the School of Social Sciences at Waseda University and of the Research of Institute for Economy, Trade and Industry, gives a few characteristics of the growth in the Free Trade Agreements since the mid-1990s. Founded in Ricardo's two goods-two countries model, when looked at analytically, these characteristics conform to Ricardo's theory of specialization.

The first characteristic of these FTAs cited by Urata (2002) is that they are getting bigger and are beginning to go beyond the logic of geographical proximity to economic and political conformity. Urata (2002) argues that the logic behind this is the ability to

bargain in global trade but also to enjoy l ıcies and productivity.

In a world where globalisation has eroded national boundaries and new economic borders are being created by the force of globalisation, countries continue to be attracted to bigger regional economic formations. Not only does size give the regions bargaining power, it also creates a decent big market where countries within these regions have access to goods and services at cheaper prices than they would have outside the region (Cook & Kirkpatrick, 1997).

The second characteristic cited by Urata (2002) is the increasing depth of these agreements. Urata (2002) argues that although many of them begin as common markets, they evolve through customs unions into complete economic integration. This

allows countries involved to benefit out of the comparative cost theory by focussing on those things that they do best and produce cheaply whilst depending on intra regional trade to obtain those goods and services that they are unable to produce inexpensively.

Built around Ricardo's comparative cost theory amongst the countries, the depth of the economic integration within the regions allows countries to produce goods and services that they have comparative advantage at, whilst purchasing at reasonable prices goods and services that they do not have comparative advantage at. This allows countries within regions to develop capabilities that would allow for them to better compete in the global market.

According to Urata (2002), the third characteristic of the FTAs is the willingness by countries that previously ignored the FTAs to begin to get involved as a result of the influence of these FTAs. He argues that trade is slowly and surely beginning to be driven by these regional trading blocks than the multilateral institutions.

This is partly due to the fact that multilateral institutions such as the WTO are so big and diverse they make decision making a very complex exercise. The fact that empirical evidence from the EU, NAFTA and some of the economic regional formations from Asia (World Trade Organisation, 2007) shows that significant levels of trade is conducted within these regions is providing the necessary impetus for many geographical regions to organise themselves economically.

The fourth characteristic is the trend towards informal regional frameworks which defy any form of classification. However for the purposes of this study, this characteristic

will not be explored at length.

In trying to understand the growth of international trade through the RTAs, Urata (2002) attributes this growth to a complex mix of external and internal factors. He argues that external factors such as securing markets and providing export opportunities for domestic companies might be partly behind this surge in international trade through RTAs.

He also suggests that securing markets as a motive for participating in RTAs has even become greater as regionalism has expanded. The reason for this is that "the greater tendency towards regionalism means that the potential loss of market opportunity as a result of being excluded from regional agreement has become an increasingly serious issue" (Urata, 2005). As a result of this thinking, countries do not want to be left outside as countries generate more economic activities within their regions.

Internal factors for this sudden surge include economic growth from increased efficiency due to greater competition as a result of markets being opened (Cook & Kirkpatrick, 1997). So in understanding the impact of these agreements on intra-SADC trade, we also would have to see the circular link between regionalisation, regional economic growth and intra-SADC trade. In Urata (2002)'s words, strengthening competition pushed inefficient companies out of the market, while at the same time creating the opportunity for companies with latent competitive forces to realize their potential.

2.6 Economic effects of Free Trade Agreements

In one form or the other, many authors have written about the economic effects of Regional Trade Agreements. These economic effects are very important to understand and measure given need to appropriate resources against equally important competing priorities within governments. This need is even more important in developing and poor countries given the limited resources available for governments.

Urata (2002) lists different economic effects of Free Trade Agreements. Knowing ad understanding these effects will help SADC to understand the trends in Southern African intra-regional trade and how these may be applying to Southern Africa's current situation. Alan Winters (1991) states that economic effects of FTAs can be divided into static and dynamic effects.

2.6.1 Trade creation effect

Quoting Winters (1991), Urata (2002) mentions one of the static effects as the trade creation effect. This effect is defined as the effect whereby trade is created between the members of the group by lifting the trade barriers between them. Cook and Kirkpatrick (1997) suggest that the trade creation effect is one of the main drivers behind the growing proliferation of Regional Trade Agreements. Urata (2002) also suggests that countries fear being left out of this economic windfall to regions that happens through this trade effect concept.

An example of this is when members switch imports from a high-cost source to a low cost source (Windows on the World Economy, 2005).

2.6.2 Trade diversion effect

The trade diversion effect is the effect whereby trade is diverted away from more efficient non-members towards members that maybe less efficient. An example of this is when members switch imports from a low-cost source to a high cost source (Windows On The economy, 2005).

Measurement of the impact of the Trade Agreements on intra-regional trade is also significant because it can also lead to the opposite of the trade creation effect, the trade diversion effect. Legislating the buying of goods and services within the region might have the negative impact of trade diversion when the markets within the economic region are inefficient.

2.6.3 Market expansion and the competitive effect

The dynamic effects would refer to the market expansion effect and the competition effect. Market expansion effect refers to the achievement of economies of scale. This is consistent with the fact that trade creation and the efficiencies created by the improved number of competitors would enlarge the market. .

2.7 Market imperfections and policy-induced price distortions

In their paper titled Globalisation, Regionalisation and Third World Development; Cook and Kirkpatrick (1997), argues that the attractiveness of regionalisation and its growth in the 1990s, is the potential economic gains that accrue to countries from removing market imperfections and policy-induced price distortions. They further argue that regional integration leads to the provision of public goods that allow more efficient trade in the region.

2.8 Regional Comparative Advantage

In his paper titled Regionalisation and Specialisation: A Theoretical Contribution, Dr. Charbel M. Macdissi (2004), presents and analyses the specific determinants of Regional Comparative Advantage (RCA) and their role in the explanation of regional exchange and regional integration. In this analysis, he analyses the specific role of what he calls the non-traditional determinants in the RCA and the intra and inter regional exchanges.

Macdissi (2004) identifies what he calls the dimensional and proximity approaches in explaining the phenomenon of regional trade agreements in international trade. Within the institutional approach, Dr. Macdissi (2004) refers to the institutional dimension as one that is driven mainly by institutions in the respective countries. In this case, regional integration is led firstly from an institutional dimension rather than form political agreements. In this project, we shall test if this kind of institutionally-driven international trade applies to Southern African integration

Secondly, Dr. Macdissi (2004) refers to regional integration as largely driven as a result of political affinities between the States. On this dimension he makes a point that regional conflicts and non-existence of political affinity between two or more countries of a given area reduce the exchanges between these countries and risk to impact negatively on intra-regional exchanges as whole. Placed within the context of Southern Africa, we shall see if the conflicts experienced in countries such as Zimbabwe and the Democratic Republic of Congo, for example, have had any significant impact on intra-regional trade in SADC.

Thirdly, Dr. Macdissi (2004) refers to the concept of demographic and geographic

dimension. With this dimension, he says e must find a correlation between the size of the ial balance.

Under the proximity dimension, Dr. Macdissi (2004) suggests that the level of intra-regional trade within RTAs is affected by what he calls the geographic proximity, the level of life proximity and finally what he calls the cultural and linguistic proximity. Once again in trying to understand the impact of regionalisation on intra regional trade, we shall seek to understand if the levels of intra regional trade can be explained by the proximity dimension in as far as it pertains to geography, level of life, culture and language.

Chapter 3 Research questions

We have seen that by 2005, intra regional trade within the SADC region was 9% of total regional trade (The Economic Intelligence Unit Limited, 2005). This means that member countries' trade with each other only accounted for 9% of total regional trade. The balance was other countries from outside the region trading with SADC's member countries.

Intra-European (Intra regional trade in Europe) trade was 67.5% in 2004 whilst intra-north America trade was 39.5% in the same period (Macdissi, 2004). Added to the fact that the significance of regional trade agreements has skyrocketed in terms of their contributions to global trade (World Trade Organisation, 2008), the impact of SADC regionalisation on intra-SADC trade has become even more critical to understand.

The objective of this research was to understand the impact of regionalisation, in particular the SADC Trade Protocol of 2000, on intra regional trade within the Southern African Development Community (SADC). Economic theory and empirical evidence in other regions in the world suggest a positive relationship between the different types of regional economic integration agreements and levels of intra-regional trade within regions. In the meanwhile since the year 2000, trade flows within regions account for fifty five to fifty eight percent of world trade, more than trade between regions (World Trade Organisation, 2008).

Given this background, understanding whether the SADC area intra trade behaves in a manner that is consistent with economic theory and global trends is critical for policy

and decision makers in SADC and its member countries. The key question for Southern Africa to answer is whether levels of intra-regional trade can be explained through the degree of regional economic integration and if not, what factors really explain those levels of intra-regional trade.

In this regard, the questions that were asl 

3.1 Question 1

What is the level of regional economic integration in SADC?

It is important to understand the level of regional economic integration in SADC when comparing economic theory and the practical situation within SADC. It is also important to understand how SADC compares to other regions in terms of progress in economic integration and how expectations with respect to the perceived impact on the SADC economy in general and intra-SADC trade in particular should be adjusted.

3.2 Question 2

What is the impact of regionalisation on intra-regional trade in SADC?

Having understood the specific level of regional integration in SADC, the question of how that should impact on intra-SADC trade and how it actually does becomes very critical for policy makers and decision makers.

3.3 Question 3

What factors explain the levels of intra-regional trade in Southern Africa?

Having looked at the impact of regionalisation on intra-SADC trade, there is a need to analyse the results with respect to how they relate to economic theory based on the view points studied, global trade trends and the performance of other regional economic formations

3.4 Question 4

What can SADC do to positively influence increase intra-SADC trade?

Given the economic benefits that many scholars and trade practitioners expect to follow economic integration efforts and how that translates to the economic benefit to the lay man, this reports concludes by looking at issues that SADC can look at to

derive appropriate benefits from the regio

Chapter 4 Research Methodology

4.1 Research design

In his book titled Business Research Methods, William G. Zikmund (2003) describes descriptive research as research designed to describe characteristics of a population or phenomenon. Similarly this study sought to describe characteristics of a phenomenon called regionalisation and on how it impacts RTA members when measured through intra-regional trade.

The study sought to understand whether the 2000 SADC Trade protocol and its intention to install a Free Trade Agreement in SADC in 2008 has had any impact on levels of intra-SADC trade when measured in dollar terms for the six years (2000-2006) This was done first by looking first at the two different organisations of regional economic integration in SADC, the Southern African Customs Union (SACU) and the Southern African Development Community (SADC).

SADC was used for purposes of this study because it covers a bigger portion of the southern African countries than SACU. The fourteen members of SADC are Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe (The economist Intelligence Unit Limited, 2005). The five members of SACU are Botswana, Lesotho, Namibia, Swaziland and South Africa.

Since the study was about the impact of regionalisation, in particular the SADC Trade Protocol signed in 2000 and the intention to create a Free Trade Agreement in 2008,

on intra-SADC trade; a study of the different levels of regional economic integration was carried through. The different levels of regional economic integration are a Preferential Trade Agreement, a Free Trade Agreement, a Customs Union and a Common Market. A study of how Regional Trade Agreements (FTAs) should work according to the World Trade Organisation was conducted and economic theory was conducted. This was then contrasted with the SADC Free Agreement to see if it displayed similar behaviour as expected from the literature review.

Data that showed intra-SADC trade in US Dollars was collected and taken through a

regression analysis to see if levels of intr ough the SADC Trade Protocol or to see if the SA ct aligned with economic theory on the intr that were looked at were total SADC trade in US dollars, total SADC GDP in US dollars and total South African GDP in US dollars. The regression analysis reports were then analysed against the literature review and findings were made with respect to what factors best can explain the levels of intra-SADC trade.

4.2 The nature of the data

This research report looked at the degree of regionalisation in Southern Africa by understanding the types and intensity of trade agreements within the region. The degree of regionalisation was assessed based on the different categories of free trade agreements as suggested by Urata (2002) and the World Trade Organisation Statutes. Urata (2002) suggests that the different levels of regionalisation can be categorised into Free Trade Agreements, Customs Unions, Common Markets and

Economic Unions. He further suggests that the level of regionalisation can affect intra regional trade.

Both the degree of regionalisation and levels of intra-regional trade in Southern Africa were analysed in terms of the different theories discussed through the literature review. A comprehensive analysis of the depth of regionalisation along with the corresponding levels intra-regional trade as a percentage of total trade was done. This analysis looked at the relationship between regionalisation and intra-SADC trade and how this relationship could be explained by international trade theory.

4.3 Data collection

Secondary data was collected through multilateral institutions such as the World Trade Organization (WTO), the World Bank, and the United Nations (UN). The United Nations Conference on Trade and Development (UNCTAD) was a key resource for collecting data. Data was also collected using regional organisations such as the Southern African Customs Union (SACU), Southern African Development Community (SADC) and the New Partnership for African Development (NEPAD).

It was also collected using South African Government departments such as the Department of Trade and Industry, the Department of International Relations and Cooperation, and the Department of Finance. Private institutions such as the Economist Intelligence Unit, and Trade and Industrial Policy Strategies (TIPS) were also used.

The actual data collected was intra-SADC trade data in US dollars, total SADC trade data in US dollars, total SADC GDP in US dollars and total South African GDP data in US dollars. Annual data was collected for all these variables starting for 37 data points representing the period from 1970 to 2006.

4.4 Population and unit of analysis

The population can be defined as the individuals, groups, organizations, human products and events about whom we wish to draw conclusion (Zikmund, 2003). The population used in the analysis was the fourteen members of SADC as a unit and unit of analysis was the SADC Trade Protocol of 2000.. Although SADC comprises fourteen members the SADC Trade Protocol was signed by twelve members with Angola and the Seychelles meant to join at a later stage.

4.5 Secondary data

Again in his book, Zikmund (2003) defines secondary data as data that have been previously collected or some project other than the one at hand. On the other primary data is data gathered and assembled specifically for the research project at hand. For this project, secondary data that was previously not collected for purposes of this analysis was used. The actual data collected was intra-SADC trade data in US dollars, total SADC trade data in US dollars, total SADC GDP in US dollars and total South African GDP data in US dollars.

4.6 Research limitations

Data availability and the quality of data from a South African perspective was not a problem since South Africa has world class institutions that generally adhere to world class standards. Given the lower levels of institutional development in some of SADC member States, both availability and quality of data directly from these countries were an issue. Although all countries in SADC and many of the regional and multilateral institutions that were used for the collection of data had data reporting levels of trade for the SADC countries over the years, intra-SADC data was difficult to find.

Although the United Nations Conference on Trade and Development (UNCTAD)

handbook of statistics online had data tha no other database that had data that went as y of the UNCTAD, intra-SADC data that goe rm of verification since SADC was not born by then. This form of verification was not available to the researcher.

4.7 Data analysis

In order to understand the impact of regionalisation on intra-SADC trade, a multiple regression analysis was done with intra-SADC data as the dependent variable and the dependent variables as SADC GDP in dollars, SADC total trade, the 2000 SADC Trade Protocol and the South African GDP. The data was normalised for stationarity and then different possible models were run based on theory. The modes were checked to see which model was the most statistically significant one and how the

model compares to literature review and trends observed in other regional economic formations.

Chapter 5 Results

The results of this research have been organised according to the research questions asked in chapter three of this report. This section of the report looks at question 1 and 2 with respect to the results found during the analysis performed.

5.1 What is the level of regionalisation in Southern Africa?

There are two regional organizations of economic integration in Southern Africa (The Economic Intelligence Unit Limited, 2005). These include the Southern African Customs Union (SACU) and the Southern African Development Community (SADC). I will give a brief overview of the Southern African Customs Union and its relative importance in Southern Africa. The focus of this report will however be the bigger SADC.

5.1.1 The Southern African Customs Union (SACU)

The Southern African Customs Union (SACU) is the oldest regional economic

grouping in Southern Africa with its orig ist Intelligence Unit Limited, 2005). SACU Lesotho (the "BLNS" states) and South Africa (T ed, 2005). Historically, the union was administered by South Africa. The customs union gathered excise duties on local production and customs duties on members' states imports from outside the SACU area (The Economist Intelligence Unit Limited, 2005). These were then paid to all member states in quarterly instalments using an agreed revenue sharing formula.

The Economic Intelligence Unit Limited (2005) regional overview states that the BLNS states still depend on South Africa for most of their imports. They further state that the problem with the old revenue sharing formula was that it was biased towards South Africa. This led to a need to reform SACU and this was completed in 2002.

According the regional overview, the new agreement contains the following features:

. Customs and excise duties are treated separately
. 80% of the excise pool will be distributed in proportion to the five countries share of SACU GDP whilst the remaining 15% will be allocated on the basis of the development component, which means that the countries with the lower income per head will receive more.
. South Africa will contribute 95% of the excise pool and get back 80%.
. South Africa will continue to manage the common excise revenue pool for the time period.

SACU is the smaller organisation of the two and is not the focus of this study since it only impacts on five countries within Southern Africa.

5.1.2 The Southern African Development Community (SADC)

The Southern African Development Community (SADC) is a Southern African regional body that comprises of South Africa, Mauritius, the Democratic Republic of Congo, Madagascar, Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia and Zimbabwe (The Economic Intelligence Unit Limited, 2005). According to this same publication, the organization in its current form was founded in 1992, replacing the

Southern African Development Co-ordination Conference (SADCC), which was formed in 1980. SADC's founding members were Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe. The previous organization was formed by the other Southern African states as an attempt to reduce the economic region's dependence on white-ruled South Africa (The Economic Unit

Intelligence Limited, 2005).

This publication further states that in an attempt to modernise and make SADC relevant, SADC created four directorates within SADC, namely:

. Trade, industry, finance and Investment
. Food, agriculture and natural resources
. Infrastructure and services
. Social, human development and special programmes.

The same review published in 2005 states that before the admission of South Africa in 1994, members' trade within the community (intra regional trade) was only 4% of total regional trade.

5.1.3 The SADC market

By January 2008 the total SADC market comprised of about 240 million people across the fourteen countries with a total GDP of 430 US Dollars (The Economist Intelligence Unit Limited, 2008). The largest country in terms of population is the Democratic Republic of Congo with a population of about 61 million people. Table 1 below shows the composition of the SADC economy with reference to Gross National Income per Capita, Gross Domestic Product, Country Gross Domestic Product as a percentage of SADC Gross Domestic Product and Gross Domestic Growth from 1990 to 2005 over five year periods.

Table 1: SADC GNI per capita, GDP and GDP growth per annum.

Source: World Development Indicators, World Bank

As can be seen from table 1 above, Angola and South Africa contributed about 84 percent of the entire Southern African countries GDP with Tanzania and Botswana contributing the next levels of GDP at 3.4% and 2.2% respectively. All other countries

contribute less than 1.5 percent each to total SADC GDP. Despite its relatively large contribution to the SADC GDP, Angola's economy remains undiversified with oil contributing at least seventy percent to their total gross national income (The Economist Intelligence Unit Limited, 2006). South Africa is the most developed and diversifies economy with sources of income spread across mining, services, manufacturing and agriculture.

5.1.4 The 2000 Trade Protocol and the move towards a Free Trade Agreement

The twelve member countries that established the Free Trade Area under the protocol on trade are Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe (The Economist Intelligence Unit Limited, 2005). The legal basis for the steps towards a Free Trade Agreement is the protocol on Trade which was signed in 1996 and came in effect in 2000 (SADC Free Trade Area Handbook, 2008). The FTA is formed not as an end on itself but a step along the path towards deeper economic integration, which is the key to the strategy and tactics of SADC (SADC Free trade Area Handbook, 2008).

According to the Regional Indicative Strategic Development Plan (RISDP) approved by the SADC summit in 2003, the following targets were agreed to with respect to regional economic integration:

. Within the Free Trade Area, 85% of trade in goods were to be free by 2008. This should significantly increase intra-SADC trade.
. Completion of negotiations of the SADC Customs Union by 2010
. Completion of the SADC Common Market by 2015
. SADC Monetary Union and SADC Central Bank by 2016

. Launch of regional currency by 2018

Implementation of the FTA began in 2000 following the signing of the SADC protocol on Trade. The liberalisation of the tariffs took place at different rates with South Africa and other SACU countries removing most tariffs in 2000(SADC Free Trade Area Handbook, 2008) Middle income countries such as Mauritius have gradually reduced their tariffs each year between 2000 and 2008 (SADC Free Trade Area Handbook, 2008). Least developed countries such as Mozambique and Zambia have introduced tariff reductions during the 2007/8 years. These FTA reductions are referred to as tariff phase downs.

The SADC protocol on Trade expects the following economic benefits for the SADC region:

. Increased domestic production
. Greater business opportunities
. Higher regional imports and exports
. Access to cheaper inputs and consumer goods (trade creation)
. Greater employment

. More foreign investment and joint vent
. The creation of regional value chains

Table 2: SADC exports, 1995 & 2005

Source: Trade and Industrial Policy Strategies, 2007.

Table 3: SADC Imports, 1995 & 2005

Source: Trade and Industrial Policy Strategies, 2007.

5.2 What is the impact of regionalisation on intra-regional trade in Southern Africa?

This section looks at the data and presents it in different formats. The first part of analysis is the basic one of the data whilst the second part of the analysis focuses on regression modelling to establish the fitness of the independent variables to explain the dependent variable. The independent variables being looked at are SADC total

trade in US dollars over 27 years, SADC DC
Trade Protocol to deepen economic integ US
dollars. The data is analysed over 37 yea

5.2.1 Data

The data set contains annual time series observed from 1970 to 2006 all sourced from the United Nations Conference on Trade and Development Handbook of statistics for 2008. The data comprises of intra-SADC trade in US dollars for the period covered; intra-SADC trade as a percentage of total SADC trade in US dollars; total SADC trade US dollars; and total SADC GDP in US dollars.

The period of analysis was chosen because it comprises enough data to observe trends in the behaviour of international trade in SADC. Dummy variables were used to divide the period between pre-Trade Agreement and the actual time when the SADC Trade Protocol was instituted. The full untransformed data is presented in table 1 below.

Table 4: Intra-SADC trade as a percentage of total trade, Intra-SADC exports, Total SADC trade, Total SADC GDP

Source: United Nations Conference on Trade and Development

Year

Intra-SADC trade as a percentage of total trade

Intra-SADC US dollar value

Regionalisation

Dummy variables

Annual Percentage Intra-SADC growth

Total SADC trade in US

dollars

Annual
Percentage
total growth

SADC

Variable Y

Variable X

1970

4.1

252.7

P-FTA

0

9.1

6,149.6

1.1

32,458.6

1971

2.2

116.2

P-FTA

0

-54.0

5,290.1

-14.0

35,403.7

1972

5.6

392.3

P-FTA

0

237.7

6,957.8

31.5

38,185.5

1973

5.6

562.8

P-FTA

0

43.5

10,005.5

43.8

49,833.5

1974

5.0

707.1

P-FTA

0

25.6

14,139.0

41.3

60,619.3

1975

1.0

119.8

P-FTA

0

-83.1

11,953.6

-15.5

61,949.6

1976

0.5

60.6

P-FTA

0

-49.4

11,031.0

-7.7

60,344.3

1977

0.7

93.1

P-FTA

0

53.7

13,481.3

22.2

66,596.2

1978

0.4

60.7

P-FTA

0

-34.8

16,070.0

19.2

77,108.6

1979

0.4

92.9

P-FTA

0

53.2

22,560.2

40.4

91,290.0

1980

0.4

106.3

P-FTA

0

14.4

30,139.4

33.6

121,579.2

1981

2.2

573.6

P-FTA

0

439.7

26,643.0

-11.6

124,288.2

1982

2.0

458.4

P-FTA

0

-20.1

23,157.9

-13.1

117,772.0

1983

1.8

443.2

P-FTA

0

-3.3

24,808.1

7.1

124,824.5

1984

1.8

420.3

P-FTA

0

-5.2

23,471.5

-5.4

111,447.8

1985

1.4

314.2

P-FTA

0

-25.2

22,305.4

-5.0

95,481.0

1986

1.5

354.5

P-FTA

0

12.8

24,363.0

9.2

102,828.0

1987

1.4

398.4

P-FTA

0

12.4

28,283.6

16.1

121,928.8

1988

1.7

498.3

P-FTA

0

25.1

29,841.2

5.5

133,151.2

1989

1.7

517.7

P-FTA

0

3.9

30,599.2

2.5

140,368.4

1990

3.1

1,069.6

P-FTA

0

106.6

34,623.9

13.2

165,297.4

1991

3.8

1,457.1

P-FTA

0

36.2

37,966.9

9.7

176,018.0

1992

7.2

2,395.9

P-FTA

0

64.4

33,383.4

-12.1

186,105.6

1993

7.5

2,466.2

P-FTA

0

2.9

33,031.5

-1.1

184,596.9

1994

8.5

2,993.6

P-FTA

0

21.4

35,188.6

6.5

186,170.0

1995

10.7

4,189.7

P-FTA

0

40.0

39,218.4

11.5

198,918.0

1996

11.3

4,760.7

P-FTA

0

13.6

42,243.9

7.7

197,631.2

1997

11.0

4,768.0

P-FTA

0

0.2

43,201.9

2.3

207,034.1

1998

10.6

3,958.3

P-FTA

0

-17.0

37,399.1

-13.4

189,182.3

1999

12.1

4,306.2

P-FTA

0

8.8

35,704.9

-4.5

186,997.6

2000

9.4

4,382.8

FTA

1

1.8

46,691.2

30.8

190,049.5

2001

8.9

3,913.9

FTA

1

-10.7

44,120.8

-5.5

176,247.6

2002

9.6

4,393.7

FTA

1

12.3

45,629.7

3.4

172,239.3

2003

10.1

5,609.5

FTA

1

27.7

55,281.6

21.2

238,554.4

2004

9.7

6,590.3

FTA

1

17.5

67,955.2

22.9

299,636.1

2005

9.2

7,668.1

FTA

1

16.4

83,289.0

22.6

344,171.5

2006

9.1

8,570.7

FTA

1

11.8

94,662.4

13.7

374,831.0

5.2.2 Tests for Stationarity

Empirical work based on time series data assumes that the underlying time series is stationary (Gujarati, 2003). Tests of stationarity were done and the data was found to be non-stationary. The data was then reduced to stationarity in order to avoid spurious or fake regression results. Data plots on line graphs show upward trends. The mean is not constant and changes at every period, indicating that the data is non-stationary. See graphs bellow on intra-SADC trade in US dollars, total SADC GDP in US dollars and total SADC trade in US dollars.

Figure 1: Intra SADC trade in US dollars

Source: United Nations Conference on Trade and Development

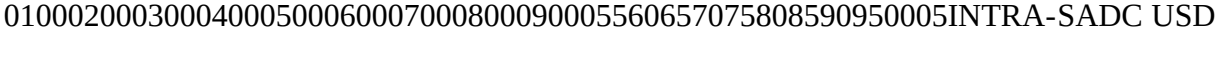

Figure 2: Total SADC Trade in US dollars

Source: United Nations Conference on Trade and Development

020000400006000080000100000556065 IN USD

Figure 3: SADC GDP in US dollars

Source: United Nations Trade Conference on Trade and Development

05000010000015000020000025000030000035000040000019701975198019851990199520002005SADCGDP

A unit root test was performed to test for stationarity using the Augmented-Dickey Fuller and the Phillips-Perron tests. See table 2 below for the results.

Table 5: Unit root test for stationarity

Unit Root

Augmented-Dickey Fuller

Phillips-Perron

Stationary

Intra-Sadc trade percentage of Total

Y

Y

First Difference

Intra-Sadc Trade USD

Y

Y

First Difference

FTA (Dummy)

-

-

-

Intra-Sadc growth

N

N

level

Total trade in USD

Y

Y

First Difference

Total growth

N

N

level

GDP

Y

Y

The tests proved that the data was non-stationary and needed to be transformed for statitonarity before any regression were run.

The table below shows the data transformed for non stationarity. Having transformed the data, a proper regression analysis can be performed that will reflect appropriate statistical dimensions to interpret the significance of the model to explain the chosen variable.

Table 6: Transformed data

YEAR	SADC GDP	Intra-SADC a a percentage of total trade	Intra-SADC trade	FTA	intragr	Total SADC GDP	Total SADC Trade
1970	32,458.64	4.11	252.66	0.00	9.08	6,149.64	1.11

1971

35,403.72

2.20

116.18

0.00

-54.02

5,290.11

-13.98

1972

38,185.48

5.64

392.29

0.00

237.66

6,957.80

31.52

1973

49,833.49

5.62

562.81

0.00

43.47

10,005.54

43.80

1974

60,619.30

5.00

707.15

0.00

25.65

14,139.04

41.31

1975

61,949.59

1.00

119.79

0.00

-83.06

11,953.55

-15.46

1976

60,344.26

0.55

60.56

0.00

-49.44

11,031.02

-7.72

1977

66,596.24

0.69

93.06

0.00

53.66

13,481.30

22.21

1978

77,108.65

0.38

60.67

0.00

-34.81

16,069.98

19.20

1979

91,289.99

0.41

92.93

0.00

53.18

22,560.21

40.39

1980

121,579.18

0.35

106.29

0.00

14.38

30,139.43

33.60

1981

124,288.19

2.15

573.62

0.00

439.66

26,642.97

-11.60

1982

117,772.03

1.98

458.39

0.00

-20.09

23,157.94

-13.08

1983

124,824.54

1.79

443.22

0.00

-3.31

24,808.11

7.13

1984

111,447.79

1.79

420.27

0.00

-5.18

23,471.49

-5.39

1985

95,480.96

1.41

314.21

0.00

-25.24

22,305.42

-4.97

1986

102,827.98

1.46

354.53

0.00

12.83

24,363.05

9.22

1987

121,928.77

1.41

398.41

0.00

12.38

28,283.57

16.09

1988

133,151.20

1.67

498.29

0.00

25.07

29,841.23

5.51

1989

140,368.45

1.69

517.70

0.00

3.90

30,599.21

2.54

1990

165,297.42

3.09

1,069.58

0.00

106.60

34,623.90

13.15

1991

176,018.04

3.84

1,457.08

0.00

36.23

37,966.86

9.66

1992

186,105.62

7.18

2,395.88

0.00

64.43

33,383.44

-12.07

1993

184,596.88

7.47

2,466.21

0.00

2.94

33,031.45

-1.05

1994

186,169.98

8.51

2,993.62

0.00

21.39

35,188.56

6.53

1995

198,917.95

10.68

4,189.74

0.00

39.96

39,218.36

11.45

1996

197,631.15

11.27

4,760.66

0.00

13.63

42,243.92

7.71

1997

207,034.14

11.04

4,768.02

0.00

0.15

43,201.91

2.27

1998

189,182.25

10.58

3,958.35

0.00

-16.98

37,399.07

-13.43

1999

186,997.59

12.06

4,306.25

0.00

8.79

35,704.94

-4.53

2000

190,049.48

9.39

4,382.77

1.00

1.78

46,691.19

30.77

2001

176,247.63

8.87

3,913.91

1.00

-10.70

44,120.77

-5.51

2002

172,239.31

9.63

4,393.74

1.00

12.26

45,629.74

3.42

2003

238,554.40

10.15

5,609.48

1.00

27.67

55,281.59

21.15

2004

299,636.12

9.70

6,590.28

1.00

17.48

67,955.25

22.93

2005

344,171.51

9.21

7,668.06

1.00

16.35

83,288.99

22.56

2006

374,830.99

9.05

8,570.73

1.00

11.77

94,662.38

13.66

5.2.3 Descriptive statistics

Given that this is time series data, the interest on descriptive statistics is around the mean. A stochastic process is said to be stationary if its mean and variance are constant over time and the value of the covariance between the two time periods depends only on the distance or gap or lag between the two time periods and not the actual time at which the covariance is computed (Gujarati, 2003). The upward trend

nature of the data indicates that the mean elements of non-stationary.

5.2.4 Correlation matrix

A correlation coefficient is a value that indicates whether there is a linear relationship between two variables (Gujarati, 2003). Problems occur in regression analysis when a function is specified that has multiple independent variables that are highly correlated. Looking at the correlation matrix below, levels of correlation are not that high amongst the independent variables although there are certain variables such as SADC GDP and total SADC trade in US dollars show very high levels of correlation.

Table 7: Correlation matrix

	Intra-SADC trade as a percentage of total trade	Intra-SADC US dollar value	Annual Percentage Intra-SADC growth	Total SADC trade in US dollars	Annual Percentage total growth	SADC
Intra-SADC trade as a percentage of total trade	1					

Intra-SADC US
dollar value

0.861287726

1

Annual Percentage
Intra-SADC growth

-0.029148381

-0.091306022

1

Total SADC trade in
US dollars

0.627439186

0.913037055

-0.044667086

1

Annual Percentage
total growth

0.010881297

0.059222458

0.121733039

0.09512471

1

SADC GDP

0.682401826

0.918703625

-0.04081394

0.980977643

0.016921559

1

5.2.5 First regression model

The objective of this study was to assess the impact of regionalisation on intra-SADC trade. In understanding regionalisation the impact of the SADC Trade Protocol on intra SADC trade was looked at. To assess the impact, three kinds of regression models were run.

The first regression equation was a simple regression with a dummy variable 0 for the P-FTA (period before the SADC Trade Protocol) and dummy variable 1 for the FTA (period after the installation of the SADC Protocol). This regression tested the significance of the FTA along with the first difference total SADC trade in US dollars to explain the levels of intra-SADC trade. This tested whether the two variables of the first difference total SADC trade in US dollars and of Pre-SADC Trade Protocol and the period after the SADC Trade Protocol could explain levels of intra-SADC trade and

if so by how much. The results of the reg

v.

Table 8: Regression results on the impact of the SADC Trade Protocol and the total SADC trade in on intra SADC trade

Dependent Variable: D(INTRATOT)

Method: Least Squares

Date: 10/31/09 Time: 16:58

Sample (adjusted): 1952 2006

Included observations: 55 after adjustments

Variable

Coefficient

Std. Error

t-Statistic

Prob.

D(TTRADE)

0.053439

0.013808

3.870032

0.0003

FTA

112.2731

168.9099

0.664692

0.5092

C

46.85254

47.75540

0.981094

0.3311

R-squared

0.373545

Mean dependent var

151.3043

Adjusted R-squared

0.349450

S.D. dependent var

401.5938

S.E. of regression

323.9122

Akaike info criterion

14.45182

Sum squared resid

5455794.

Schwarz criterion

14.56131

Log likelihood

-394.4251

F-statistic

15.50336

Durbin-Watson stat

1.573947

Prob(F-statistic)

0.000005

5.2.5.1 The t-statistic

The t statistics in the first model with the dummy variables and first difference total trade as dependent variables indicate that the actual values of the parameters are not zero since they are relatively large figures. Although the t-statistic for the parameter FTA is the lowest of the other variable and the constant, indicating that potential impact of the FTA on intra-SADC trade is lower.

5.2.5.2 The probability of the t statistic

The probability of statistic value measures the probability of obtaining the estimated value of the parameter if the actual parameter value is zero (Gujarati, 2003). The smaller the value of the probability, the more significant the parameter and the less likely that the actual parameter value is zero. In all the parameters of the first regression model run, the probability numbers are very small. This means that the parameters are significant and less likely to be zero.

5.2.5.3 The R-squared and adjusted R-squared

The R-squared indicates how better the n than just using the mean value of the depende usted R-squared is an r-squared statistic adjust e equation and the number of data observations. Both the R-squared and adjusted r-squared for the first regression are low at 0.37 and 0.35 respectively. This means that this model only predicts 37% and 34% of the dependent variable.

5.2.5.4 The Durbin-Watson Statistic

The Durbin-Watson test for autocorrelation is a statistic that indicates the likelihood that the deviation (error) values for the regression have a first-order auto-regression component (Gujarati, 2003). The regression models assume that the error deviations are uncorrelated. Small values of the Durbin-Watson statistic indicate the presence of autocorrelation. In this case a value of 0.8 indicates that autocorrelation is likely. In the first regression model, the Durbin-Watson statistic is 1.57 and it indicates that autocorrelation is highly unlikely.

5.2.5.5 The F-statistic and the probability of the F-statistic

The F-statistic and its probability test the significance of the regression model (Gujarati, 2003). The f-statistic value ranges from zero to an arbitrary large number. Academically, the value of the probability of the F-statistic is the probability that the null hypothesis for the model is true. That means that all the regression coefficients are zero. The smaller the number, the more likely that the regression coefficients are non-zero and that the regression equation does have some validity in fitting the data (Gujarati, 2003). In the first regression model, the probability of the F-statistic is 0.000005. This means that the regression model has some validity in fitting the data.

5.2.6 The second regression model

The second regression model sought to assess whether levels of the intra-SADC trade could be explained by the two variables of total first difference SADC GDP, first

difference South African GDP and the pe[illegible]e Protocol.

Table 9: Regression results on the impact of the first difference total trade, first difference SADC GDP and the SADC Trade Protocol on intra-SADC trade.

Dependent Variable: D(INTRATOT)

Method: Least Squares

Date: 11/01/09 Time: 09:02

Sample (adjusted): 1952 2006

Included observations: 55 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(TTRADE)	0.054118	0.015080	3.588763	0.0007
FTA	118.9428	179.6342	0.662139	0.5109
D(GDP)	-0.000447			

0.003785

-0.118155

0.9064

C

52.90723

70.36021

0.751948

0.4555

R-squared

0.373716

Mean dependent var

151.3043

Adjusted R-squared

0.336876

S.D. dependent var

401.5938

S.E. of regression

327.0276

Akaike info criterion

14.48791

Sum squared resid

5454301.

Schwarz criterion

14.63390

Log likelihood

-394.4176

F-statistic

10.14424

Durbin-Watson stat

1.582625

Prob(F-statistic)

0.000024

5.2.6.6 The t-statistic

The t-statistics for the first difference total trade, the FTA and the constant are relatively high at 3.58, 0.67 and 0.75 respectively. This indicates that the actual values of the parameters are less likely to be zero. The t-statistic for the first difference South Africa GDP parameter is less than zero, indicating that the value of the parameter is close to zero.

5.2.6.7 The probability of the t statistic

The probability of statistic value measures the probability of obtaining the estimated value of the parameter if the actual parameter value is zero (Gujarati, 2003). The

smaller the value of the probability, the r less likely that the actual parameter value is z for the dummy variable FTA and the South Afri hat in this model the parameters are insignificant and it is more likely that the actual parameters are zero.

5.2.6.8 The R-squared and adjusted R-squared

The R-squared indicates how better the model predicts the dependent variable than just using the mean value of the dependent variable (Guajarati, 2003). The adjusted R-squared is an r-squared statistic adjusted for the number of parameters in the equation and the number of data observations. Both the R-squared and adjusted r-squared for the first regression ere low at 0.37 and 0.33 respectively. This means that

this model only predicts 37% and 33% of the dependent variable. This is almost a similar fit to the first regression model looked at.

5.2.6.9 The Durbin-Watson Statistic

The Durbin-Watson test for autocorrelation is a statistic that indicates the likelihood that the deviation (error) values for the regression have a first-order autoregression component (Gujarati, 2003). The regression models assume that the error deviations are uncorrelated. Small values of the Durbin-Watson statistic indicate the presence of autocorrelation. In this case a value of 0.8 indicates that autocorrelation is likely. In the second regression model, the Durbin-Watson statistic is 1.58 and it indicates that autocorrelation is highly unlikely.

5.2.6.10 The F-statistic and the probability of the F-statistic

The F-statistic and its probability test the significance of the regression model (Gujarati, 2003). The f-statistic value ranges from zero to an arbitrary large number. Academically, the value of the probability of the F-statistic is the probability that the null hypothesis for the model is true. That means all the regression coefficients are zero. The smaller the number, the more likely that the regression coefficients are non-zero and that the regression equation does have some validity in fitting the data (Gujarati, 2003). In the second regression model, the probability of the F-statistic is 0.000024. This means that the regression model has some validity in fitting the data.

5.2.7 The third regression model

The third regression model sought to assess whether levels of intra-SADC trade could be explained by the three variables of total SADC GDP, total SADC trade in dollars and the period before and after the SADC Trade Protocol. A regression model was run using first difference SADC GDP in US Dollars, first difference total SADC trade in US Dollars, and the dummy variables indicating the periods before and after the SADC Trade Protocol.

Table 10: Regression results on the impact of first difference SADC GDP, first difference total trade and the SADC Trade
Protocol on intra-SADC trade

Dependent Variable: D(INTRATOT)

Method: Least Squares

Date: 11/01/09 Time: 09:19

Sample (adjusted): 1971 2006

Included observations: 36 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SADCGDP)	0.015247	0.005421	2.812850	0.0083
D(TTRADE)	0.004149			

0.022775

0.182172

0.8566

FTA

110.8356

191.3146

0.579337

0.5664

C

54.29931

70.07891

0.774831

0.4441

R-squared

0.466761

Mean dependent var

231.0576

Adjusted R-squared

0.416770

S.D. dependent var

473.8006

S.E. of regression

361.8392

Akaike info criterion

14.72472

Sum squared resid

4189684.

Schwarz criterion

14.90066

Log likelihood

-261.0449

F-statistic

9.336867

Durbin-Watson stat

1.527518

Prob(F-statistic)

0.000139

5.2.7.11 The t-statistic

The larger the absolute value of the t-statistic, the less likely that the actual value of the parameter could be zero (Gujarati, 2003). The t statistics in the third regression model for the variables first difference SADC GDP, the dummy variables indicating the periods before and after the SADC Trade Protocol and the constant indicate that the actual parameters in this model are less likely to be zero since they are much higher

than zero. The t-statistic for the first diffe  UNIVERSITEIT VAN PRETORIA
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l8 and is closest to zero.

5.2.7.12 The probability of the t statistic

The probability of statistic value measures the probability of obtaining the estimated value of the parameter if the actual parameter value is zero (Gujarati, 2003). The smaller the value of the probability, the more significant the parameter and the less likely that the actual parameter value is zero. The probability of the t-statistic for the first difference total trade in US dollars is high at 0.86 and might indicate that the parameter might be insignificant in this model.

5.2.7.13 The R-squared and adjusted R-squared

The R-squared indicates how better the model predicts the dependent variable than just using the mean value of the dependent variable (Gujarati , 2003). The adjusted R-squared is an r-squared statistic adjusted for the number of parameters in the equation and the number of data observations. Both the R-squared and adjusted r-

squared for the third regression model are higher than the R-squared and adjusted R-squared for the first two models at 0.47 and 0.42 respectively. This means that this model only predicts 47% and 42% of the dependent variable.

5.2.7.14 The Durbin-Watson Statistic

The Durbin-Watson test for autocorrelation is a statistic that indicates the likelihood that the deviation (error) values for the regression have a first-order auto-regression component (Gujarati,2003). The regression models assume that the error deviations are uncorrelated. Small values of the Durbin-Watson statistic indicate the presence of autocorrelation. In this case a value of 0.8 indicates that autocorrelation is likely. In the first regression model, the Durbin-Watson statistic is 1.52 and it indicates that autocorrelation is highly unlikely.

5.2.7.15 The F-statistic and the probability of the F-statistic

The F-statistic and its probability test the significance of the regression model (Gujarati, 2003). The f-statistic value ranges from zero to an arbitrary large number.

Academically, the value of the probabilit ıat the null hypothesis for the model is true (i.e., zero. The smaller the number, the more likely ı-zero and that the regression equation does have some validity in fitting the data (Gujarati, DN. 2003). In the third regression model, the probability of the F-statistic is 0.000139. This means that the regression model has some validity in fitting the data.

Chapter 6 Discussion of results

6.1 Question 1

What is the level of regional economic integration in Southern Africa? This section looks at the level of regional economic integration in terms of how far it is in SADC, how it compares with other regions and how it compares with economic theory.

6.1.1 Introduction

As Urata (2002) says, there are different categories of regional economic integration as categorised by the World Trade Organisation (WTO). These include a Preferential Trade Agreement, a Free Trade Agreement (FTA), a Customs Union and a Common market. SADC initiated a Trade Protocol in 2000 with an intention to form a Free Trade Agreement in 2000 as a starting point towards a more integrated regional economy.

In this regard it is critical to look first at how does the SADC Trade Protocol performance and characteristics compare with economic theory and empirical evidence in other regions. Before the impact of the economic regional integration on intra regional trade is assessed, the stage and characteristics of the SADC trade agreement must be understood and contextualised.

6.1.2 The state of the SADC Trade Agreement

Urata (2002) describes a Free Trade Agreement as an agreement between countries party to that agreement to remove trade barriers such as tariffs and import quotas. Article XXIV of GATT 1994 defines a free Trade Area as something that shall be understood to mean a group of two or more customs territories in which the duties and other restrictive regulations of commerce are eliminated substantially between the constituent territories in products originating in such territories.

The SADC Trade Protocol makes reference to a phased approach in the removal of these tariffs and quotas. Under the SADC Trade Protocol, trade remains substantially not free between the constituent members. Tariffs and quotas are gradually being phased out and would result in 85% free trade in goods and services by 2008. This would definitely have an impact in terms of alignment between the expected results in terms of intra-SADC trade and the actual results.

6.1.3 FTA characteristics versus the SADC FTA

In his 2002 paper Urata defines the evolution of the Free Trade Agreements since the mid-1990s. He highlights that one of the first characteristics of the agreements is that they are getting bigger in size and are beginning beyond the logic of geographical proximity to economic and political conformity. The SADC FTA has not evolved to that point yet since it comprises of countries that are geographically located in the Southern African region but have a very small GDP compared to other regions. In this regard, they are limited in the ability to bargain in global trade because of the size of the SADC economy compared to other regions.

The second characteristic mentioned by Urata (2002) is the increasing depth of these agreements, starting first as preferential trade agreements and then evolving into complete economically integrated regions. With more than half of global trade happening through intra-regional bodies, trade agreements turn to gravitate towards complete integration. The SADC FTA intended to have 85 percent of goods and services exchanged within the FTA free of tariffs and quotas by 2008. Although this report looked into data up to 2006, this target has not been achieved by SADC. The slow pace of change within the FTA implies that countries still act as individuals in dealing with global trade.

6.1.4 Regional comparative advantage

In his paper titled regionalisation and specialisation: a theoretical contribution, Dr Charbel M. Macdisi (2004) presents and analyses the specific advantage of Regional Comparative Advantage (RCA) and the role they play in the explanation of regional integration. He talks about regional integration that is driven by institutions as opposed to one that is driven by political processes.

6.2 Question 2

Given the degree of regionalisation as per the analysis in question 1, what impact has it had on intra-regional trade in SADC?

6.2.1 Introduction

Many theories regarding the motivation towards increased regional trade agreements have to do with the impact of different categories of economic integration on the economies of the countries party to the agreements. The economic theories around trade creation, trade diversion, terms of trade, regional comparative advantage, country comparative advantage, market expansion effect, competition effect, and many other theories not touched in this report act as motivation to the mushrooming of regional economic integration agreements around the world.

The SADC protocol on trade envisages the impact of the Free Trade Agreement to include increased domestic production; greater business opportunities; access to cheaper inputs and consumer goods; greater employment; and more foreign investment and joint ventures. It expects part of these benefits to come through higher regional imports and exports, and this is the focus of this study.

Given the successes enjoyed by regions such as NAFTA, the EU and some of the Asian regional agreements and how these successes have impacted the constituent countries economies; one understands the desire for SADC to push for deeper economic integration. The question is whether the SADC Trade Protocol of 2000 has

had any impact on trade and subsequently whether any economic benefits are being realised.

6.2.2 10 year average view from 1971

Before getting to any of the regression models run, a snap shot of the 10 year average intra-SADC trade as a percentage of total trade does not seem to show any immediate benefit to the region as a result of the SADC Trade Protocol.

Table 11: 10 year average intra-SADC trade as a percentage of trade

Decade	10 year average intra-SADC trade as a percentage of total trade
1971-1980	2.6%
1981-1990	1.8%
1991-2000	9.2%
2001-2006 (Six years)	9.3%

A look at table 11 above shows that there was actually a decline from the 1970s to the 1980s in intra-SADC trade as a percentage of total SADC trade. Before the SADC Trade Protocol came into operation in 2000, the decade of the 1990s shows a significant growth in terms of intra-SADC trade as a percentage of total SADC trade from 1.8% to 9.2%.This is the period of rampant globalisation in the world and the liberalisation of many economies.

The SADC Trade Protocol comes into effect in 2000 but for the six years thereafter, intra-SADC trade as a percentage of total trade did not increase during this period. Against empirical evidence elsewhere, SADC does not exhibit growth in intra-SADC trade as a percentage of total growth as a result of the SADC Trade Protocol. Although this means that the structure of regional trade has not changed in as far as the balance between intra- and inter-SADC trade is concerned, it does not mean that there was no trade creation effect within the region. In order to see that one might have to look at the actual absolute dollar figures to determine if there was no trade creation or not.

The table below shows the annual growth of intra-SADC trade as a percentage of total trade for the six years before and the six years after the SADC Trade Protocol. This is to see if there was any trend of growth in intra-SADC trade as a percentage of total trade.

Table 12: Intra-SADC trade annual grow

Year	Intra-SADC trade annual growth (%)	Year	Intra-SADC trade annual growth (%)
1995	40	2001	-10.7
1996	13	2002	12.3
1997	0.2	2003	27.7
1998	-17	2004	17.5
1999	8.8	2005	

16.4

2000

1.8

2006

11.8

A look at table 12 above shows no discernable trend in intra-SADC trade over the six years before the installation of the SADC Trade Protocol. There is a huge growth of 40% in 1995, maybe indicating the growing integration of the South African economy into SADC. In 1996 there is a normal growth of 13% in intra-regional trade in SADC. The 1997/8 financial crisis stops the trend and there is a 17% decline in 1998.

A year after the installation of the SADC Trade Protocol in 2000, intra-SADC trade takes a knock and declines by 10.7%. A correction happens in 2002 when there is 12.3% growth. After 2002, intra-SADC trade registers some significant growth levels for the years 2003 to 2006. It starts to grow by 27.7% in 2003.

It registers some significant growths of 17.5%, 16.4% and 11.8% for the next three years up to 2006. From 1999 to 2006, the actual intra-SADC trade grows from 4.3 billion US dollars to 8.6 billion US dollars. This represents hundred percent growth over eight years. This is despite the fact that the structure of the trade between intra- and inter-SADC trade remains unchanged at about 9% to 90% during the same period.

The question is how much of this growth can be attributed to the SADC Trade Protocol. In order to answer this question, three possible regression models were run. Given the suggestion by economists such as Alan Winters (1991) that one of the static effects of Free Trade Agreements is the trade creation effect, the first regression model sought to understand whether a SADC Trade Protocol would explain the growth levels of intra-SADC trade experienced since its inception in 2000. Intra-SADC trade

grew 100% in seven years from 4.3 billion US dollars in 1999 to 8.6 US billion dollars in 2006. Can this growth be explained trough the 2000 SADC Trade Protocol?

6.2.3 Regression model #1

The first regression model sought to see t  trade with the following variables.

Dependent variable:

Intra-SADC trade in US dollars

Independent variables

Total SADC trade in US dollars

Pre-SADC Trade Protocol and Trade Agreement as dummy variable 0 and Trade Agreement period as dummy variable 1

As explained in the results section, the t-statistic, the probability of the t-statistic and the F-statistic were found to be significant. Even the Durbin-Watson statistic indicated that there was no autocorrelation. The results were as follows:

Table 13: Regression results #1

Dependent Variable: D(INTRATOT)

Method: Least Squares

Date: 10/31/09 Time: 16:58

Sample (adjusted): 1952 2006

Included observations: 55 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(TTRADE)	0.053439	0.013808	3.870032	0.0003

FTA

112.2731

168.9099

0.664692

0.5092

C

46.85254

47.75540

0.981094

0.3311

R-squared

0.373545

Mean dependent var

151.3043

Adjusted R-squared

0.349450

S.D. dependent var

401.5938

S.E. of regression

323.9122

Akaike info criterion

14.45182

Sum squared resid

5455794.

Schwarz criterion

14.56131

Log likelihood

-394.4251

F-statistic

15.50336

Durbin-Watson stat

1.573947

Prob(F-statistic)

0.000005

What is significant though is that both th ed. They both indicate that the 100% growth in intra-SADC trade from 4.3 billion US dollars to 8.3 billion US dollars cannot be explained using the SADC Trade Protocol. The adjusted R-squared indicates that the SADC Trade Protocol and the total SADC trade can only explain 35% of intra-SADC trade in the period under review.

According to economic theory on regional economic integration, Free Trade Agreements can have trade creation effect and market expansion effect within the regions (Urata, 2002). Although intra-SADC trade grew hundred percent from 1999 to 2006, this model proves that this growth cannot be explained using the SADC Trade Protocol and total SADC trade. It is important to note again that intra-SADC trade as a percentage of total SADC trade remains around 9% for the period under review, which means in terms of intra-SADC trade as a percentage of total trade there has not been any improvement. Given the R-squared and adjusted R-squared, this model does very poorly in explaining intra-SADC trade.

6.2.4 Regression model #2

The second regression model sought to understand if intra-SADC trade in South Africa can be explained using total SADC trade, SADC economic integration before and after the FTA and the South African GDP over the same period. The South African GDP was included because South Africa contributes at least 45% of total

SADC GDP and would therefore theoretically be responsible for a huge chunk of the total SADC trade (Trade and Industrial Policy Strategies, 2007).

The results of the regression were as follows:

Table 14: Regression results #2

Dependent Variable: D(INTRATOT)

Method: Least Squares

Date: 11/01/09 Time: 09:02

Sample (adjusted): 1952 2006

Included observations: 55 after adjustments

Variable

Coefficient

Std. Error

t-Statistic

Prob.

D(TTRADE)

0.054118

0.015080

3.588763

0.0007

FTA

118.9428

179.6342

0.662139

0.5109

D(GDP)

-0.000447

0.003785

-0.118155

0.9064

C

52.90723

70.36021

0.751948

0.4555

R-squared

0.373716

Mean dependent var

151.3043

Adjusted R-squared

0.336876

S.D. dependent var

401.5938

S.E. of regression

327.0276

Akaike info criterion

14.48791

Sum squared resid

5454301.

Schwarz criterion

14.63390

Log likelihood

-394.4176

F-statistic

10.14424

Durbin-Watson stat

1.582625

Prob(F-statistic)

0.000024

The assumption that the 100% growth in intra-SADC GDP can be explained, albeit to a certain extent, through SADC's biggest country's GDP was not supported by the regression results. As seen in table 14 above, the t-value and the probability of the t-value were insignificant. This indicates that variable SADC GDP in US dollars is

unable to explain the growth in intra-SADC GDP before and after the installation of the SADC Trade Protocol.

This might probably speak to the misalignment between the composition of South Africa's exports and the composition of goods and services required by the SADC region. Given the fact that South Africa and Angola constitute over 80% of the SADC economy (Trade and Industrial Policy Strategies, 2007), there is most likely no market for the goods and services produced from the two countries. South Africa boosts the most diversified economy in the region (Intra-SADC trade performance review, 2007.Trade and Industrial Policy Strategies). This means further misalignment between what South Africa exports and what the rest of the region needs.

One of the key characteristics of the Regional Trade Agreements sighted by Urata (200) is the depth of these formations. It is a valid question then to ask how the different levels of economic development within the SADC affect intra-SADC trade. It is worth noting however that before South Africa joined SADC, intra-SADC trade hovered around five percent (Trade and Industrial Policy Strategies, 2007). Maybe the move to 9% maintained in the past 16 years represents an intra-SADC trade ceiling unless significant economic growth pushes up the other economies in the region.

Angola has not been party to the SADC Trade Protocol (SADC Free Trade Area Handbook, 2008) yet it is the biggest producer of oil in Africa (World Trade Organisation, 2008) and one wonders how its absence in the protocol hurts intra-SADC trade.

6.2.5 Regression model #3

The first regression model looked at whether a combination of the SADC Trade Protocol and total SADC trade would explain levels of intra-SADC trade. With an adjusted R-squared of not more than 35%, these variables do not explain the trends in intra-SADC trade. The second model looked at whether the biggest economy in SADC could explain the behaviour of intra-SADC trade. Issues of economic development misalignment within the region might also predict a very low ceiling on of intra-SADC trade as compared to other regions in the world.

The third regression model looked at whether a combination of the SADC Trade Protocol, total SADC GDP in US dollars and total SADC trade in US dollars could explain levels of intra-SADC trade. The logic behind the choice of variables is that the SADC Trade Protocol is expected to positively influence the levels of intra-SADC trade as explained in the literature review and consistent with empirical evidence in other groups of economic integration in other regions.

The second independent variable, total SADC GDP in US dollars has been chosen because an increase in growth domestic product should mean that countries are able to export more than before the increase (Sawyer & Sprinkle, 2006).

The third independent variable, total SADC trade in US dollars has been chosen because evidence in the data shows that there was a positive relationship between total SADC trade and intra-SADC trade. Given this economic logic in terms of the relationship between the dependent variable and independent variables, the third regression model sought to see if intra-SADC trade can be explained using SADC

GDP, total trade and the SADC Trade Protocol. The results are indicated in table 15 below.

Table 15: Regression results #3

Dependent Variable: D(INTRATOT)

Method: Least Squares

Date: 11/01/09 Time: 09:19

Sample (adjusted): 1971 2006

Included observations: 36 after adjustments

Variable

Coefficient

Std. Error

t-Statistic

Prob.

D(SADCGDP)

0.015247

0.005421

2.812850

0.0083

D(TTRADE)

0.004149

0.022775

0.182172

0.8566

FTA

110.8356

191.3146

0.579337

0.5664

C

54.29931

70.07891

0.774831

0.4441

R-squared

0.466761

Mean dependent var

231.0576

Adjusted R-squared

0.416770

S.D. dependent var

473.8006

S.E. of regression

361.8392

Akaike info criterion

14.72472

Sum squared resid

4189684.

Schwarz criterion

14.90066

Log likelihood

-261.0449

F-statistic

9.336867

Durbin-Watson stat

1.527518

Prob(F-statistic)

0.000139

The above regression model indicated that the independent variables of first difference SADC GDP and the FTA are the only significant variables needed to explain a certain level of intra regional trade in SADC. The variable total trade in US dollars can is insignificant in the equation and does not necessarily increase the fitness of the model. The more fitting model to explain the variation in intra regional

trade appears to be total SADC GDP and the Free Trade protocol indicating the depth of regionalisation in the region.

Of the three models that have been looked at, consistent with economic theory and empirical evidence, the third regression model gave the best results in terms of statistical significance and the fitness of the model. While the first two models were also statistically significant, their adjusted R-squared figures indicating the fitness of the model to explain intra-SADC trade were too low. This is despite the fact that they were backed by economic theory. Whilst the third model does not really prove fitness of the model to the point of explaining the behaviour of the dependent variable more than fifty percent of the time, the R-squared of 46% makes logical sense given the dynamics within SADC.

Issues such as the different levels of economic development within SADC; issues relating to transport infrastructure; issues relating to the composition of import needs and export capabilities within the region; and issues relating to political alignment might be playing a bog role in influencing the level of intra-SADC trade and its development within SADC. These issues are discussed at length in chapter seven.

Chapter 7 Conclusion

7.1 Introduction

This chapter will highlight the findings of the research report and give recommendations in terms of future research and stakeholder imperatives on the subject. The chapter answers the following final two questions of the report:

Question 3: what factors explain levels of intra-SADC trade?

Question 4: what can SADC do to positively influence intra-regional trade?

7.2 Review of the research background and objectives

Given that more than fifty five percent of global trade happens through intra-regional trade (World Trade Organisation, 2007), the operations of Regional Trade Agreements continues to receive attention from both policy and decision makers. The World Trade Organisation reports that they have in their data base more than 200 Regional Trade Agreements registered with them in some form, with just one member country not party to any regional economic integration formation.

More than two-thirds of trade in the European Union is intra-regional trade whilst more than fifty percent of North American trade (NAFTA) is intra regional. There are a few Asian economic integration formations that also register reasonably high levels of intra-regional trade. For the past decade and slightly more, intra-SADC trade has hovered around 9% of total SADC trade (Trade and Industrial Policy Strategies, 2006).

Before South Africa joined SADC, intra-SADC trade was around five percent of total SADC trade.

Against this background, the SADC countries, with the exception of Angola and the Seychelles, instituted a Trade Protocol in 2000. The SADC Trade Protocol sought to drive SADC towards deeper economic integration, starting first with the phasing out of import tariffs and quotas towards an 85% Free Trade Area in 2008. This would then move through the Customs Union phase before moving into a fully integrated common market.

Given the initiatives and trends in other regional economic formations, it is important

for SADC to understand if the Trade Pro creasing intra-SADC trade. If it is having that des m value out of this effect? If it is not having the c t explain the status quo and what can be done to ensure that the Trade Protocol behaves in a way consistent with economic theory?

Consistent themes on economic literature around Regional Trade Agreements concentrate on the economic effects and the characteristics of these agreements. The economic effects touched on the literature review of this report include trade creation effect, trade diversion effect, market expansion effect and competition effect. The characteristics of Regional Trade Agreements include the size, the depth and the attitudes of countries towards these agreements.

With the evidence around the performance of other Regional Trade Agreements, evolving trends around the influence of these economic groupings on global trade, the SADC Trade protocol and the objectives, and economic theory as summarised in the above paragraph; this research report sought to understand the impact of the SADC's regionalisation effort on intra-SADC trade.

7.3 Findings

The method that was used to test the impact of the SADC Trade Protocol on intra-SADC trade was a multiple regression analysis. A regression analysis was done on the impact of the SADC Trade Protocol on intra-SADC trade. A few more variables were assessed alongside SADC Trade Protocol based on economic theory.

The independent variables looked at were the SADC total trade in USD dollars because of the positive relationship between total SADC growth and intra-SADC trade; total SADC GDP in US dollars because of the relationship between GDP growth in trade growth; the 2000 SADC Trade Protocol which aimed to increase levels of regional economic integration; and South African GDP in US dollars because of the dominant role South Africa plays in the SADC region.

Of these variables only SADC GDP and the SADC Trade Protocol were found to have some practical impact on the levels of intra-SADC trade. Although the model and its parameters were found to be statistically significant, the fitness of the model to describe the behaviour of intra-SADC trade as measured through the R-squared and adjusted R-squared was below 50%. With an R-squared and adjusted R-squared of

47% and 41% respectively, the model of the SADC Trade Protocol can only explain

just about 40-50% of intra-regional trade

With more than 55% of global trade being done through regional formations (WTO Report, 2008), SADC intra-regional trade as a percentage of total trade has been around 9% in the past 10 years. In the meanwhile, the European Union and NAFTA boost intra-regional trade that is well above 50 percent as a percentage of total trade, with the European Union's intra-regional trade as a percentage of total trade sitting at more than 70% (World Trade Organisation, 2008). With SADC's intra-regional trade as a percentage of total trade sitting at 9% of total SADC trade and that intra-SADC trade not being adequately credited to the SADC Trade Protocol initiative of economic integration, one must conclude that the impact of the SADC regionalisation initiatives is very low.

The SADC Trade Protocol initiatives on regional economic integration fail to display the trade creation and market expansion effects discussed in the literature review. The inability of the regionalisation effort to push intra-SADC trade raises a lot of questions for policy and decision makers in SADC. The fact that regionalisation efforts through the SADC Trade Protocol can only explain just over 40% of the low intra-SADC trade as a percentage of total trade is an even bigger challenge for policy and decision makers.

This reality shows that SADC's objectives of Increased domestic production, greater business opportunities, higher regional imports and exports, access to cheaper inputs and consumer goods (trade creation), greater employment, more foreign investment

and joint ventures and the creation of regional value chains under the SADC Trade Protocol are not being met.

7.4 Recommendations for SADC

In the analysis of economic theory pertaining to regional trade agreements and their influence on global trade, a few theories were looked at. These theories touched on characteristics of regional trade agreements in the last decades. Characteristics such as size, depth and openness of the regional trade agreements were looked at. The theories also looked at the economic effects of the trade agreements. Within the economic issues such as trade creation, trade diversion and market expansion effect were looked at.

The results of the analysis indicate that the ability of the SADC Trade Protocol to create these positive economic effects is very low and that the characteristics of the of the SADC Trade Protocol as far as size, depth and openness are concerned do not

help SADC's objectives of market expan . In order to help SADC grow intra-SADC trade by pansion effects, there are critical issues that have

The issues are:

. alignment of SADC economies,
. development of regional transport infrastructure,
. the structure of SADC's import needs and its export capabilities, and
. Political alignment.

7.4.1 Alignment of SADC economies

SADC comprises of different countries at different economic development levels. South Africa is the most developed, biggest and most diversified economy in SADC (World Trade Organisation, 2007). Angola is the second biggest economy in SADC. Angola and South Africa contribute more than 80% of SADC GDP (Trade and Industrial Policy Strategies, 2007) with Angola being the least diversified of the two. There are also a few middle income countries such as Mauritius, Botswana and Tanzania. Then there are the least developed countries such as Mozambique, Malawi and Zambia. SADC is one of the most economically misaligned regions in the world.

In contrast, the European Union with more than 70% of trade being done intra-Europe is one of the most economically aligned regions in the world. In order to have regionalisation in SADC having a greater impact on intra-regional trade, the SADC economies need to take issues of economic alignment such as the alignment of monetary and fiscal policies seriously. There must be concerted efforts to develop the regional individual economies concurrently.

7.4.2 Regional transport infrastructure

It is easier to move goods from Mozambique or Angola to Portugal, which is thousands of miles away, than it is to move goods from these countries to Zambia which is just a few miles away (The Economist Intelligence Unit Limited, 2003). In east Africa it is easier to move goods from Mombassa in Kenya to Europe than it is to move goods to central Africa or even to certain countries in East Africa (The Economist Intelligence Limited, 2003). It takes days to move goods from South Africa to

Zimbabwe but it takes a much shorter period to move from France to the United Kingdom.

Countries that have high intra-regional tr[illegible]icture. For SADC to increase levels of intra-regional trade, comprehensive efforts on building regional transport infrastructure have to be undertaken. Otherwise, this will continue to undermine regional economic integration efforts.

7.4.3 Misalignment of regional import needs and export capabilities

Most of the SADC exports are mainly raw materials such as gold, platinum, oil and copper (Intra-SADC Trade Performance Review, 2007). These are exported unprocessed since SADC rarely does any beneficiation on raw materials. Except for South Africa's growing motor vehicles exporting capability, the SADC exports picture remains largely the same over the past 10 years (Intra-SADC Trade Performance Review, 2007).

Over the ten years the top SADC export products were precious stones, iron & steel, mineral fuels & oils, copper and nuclear reactors and boilers. Meanwhile SADC top import products were vehicles, electrical machinery, plastics and nuclear reactors over the same period. This misalignment between SADC's import needs and export capabilities can only be corrected through deliberate & sound policy formulation and execution. For SADC to increase levels of intra-SADC trade, this misalignment must be addressed.

7.4.4 Political misalignment

Politics precede economics and any regional economic agreements only stand as long as there is political support and alignment. The power of SADC to enforce political alignment in the region has been under serious questions in the past decade. The Zimbabwe political quagmire has been a thorn in the SADC political economy for at least ten years without any meaningful resolution. The convergence of politics in other regions makes the process of regional policy formulation easy to deal with. Unless SADC is seen to have the capability to bring member countries to politically align, economic policy efforts such as the SADC Trade Protocol will suffer.

7.5 Recommendations for future research

Given the findings of this research report; the importance of intra-regional trade in global trade; intra-regional trade trends in other regions; the SADC Trade Protocol;

and SADC's ambitions around regionalis round regionalisation and its impact on intra-S/ ithin this context further research would have to b omic alignment, regional transport infrastructure, alignment of import needs and export capabilities, and political alignment on intra-SADC trade.

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