

## **AN ANALYSIS OF THE REVEALED COMPARATIVE ADVANTAGE IN SOUTHERN AFRICAN DEVELOPMENT COMMUNITY MEMBER STATES**

Macleans Mzumara, Anna Chingarande and Roseline Karambakuwa

Departments of Economics, Bindura University of Science Education, Bindura, Zimbabwe

### **ABSTRACT**

The Southern African Development Community (SADC) has made substantial progress towards attainment of Free Trade Area (FTA). It is in the process of establishing its own customs union. This paper attempts to establish whether SADC member states have revealed comparative advantage or in the event of attaining a customs union and establishing a common external tariff (CET), they will replace low cost producers outside SADC in favour of high cost producers within SADC or they will replace high cost producers outside SADC in favour of low cost producers within SADC.

**Keywords:** Revealed comparative advantage, customs union, Southern African Development Community, common external tariff, free trade area, international trade

### **INTRODUCTION**

Regional integration is a phenomenon which allows countries to practice free trade domestically and internationally. Through regional integration, small markets are expanded. This leads to benefits accruing, other things being equal. However, the issue of comparative advantage is a separate issue that regional organizations have to deal with. It is not synonymous with regional integration. It is therefore essential that countries are examined to understand whether they possess comparative advantage. This paper attempts to establish whether the Southern African Development Community (SADC) member states have revealed comparative advantage individually.

### **BACKGROUND**

The Southern African Development Coordination Conference (SADCC) as it was known then, was established in April 1980 by the following countries: Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. The objectives of SADCC were: to reduce member states dependence on South Africa then; to implement programmes and projects with national and regional impact; to mobilize member states resources for achieving collective reliance; and to obtain international understanding and support (Africa Union, 2012).

Since its inception, SADCC operated without a Treaty with only a loose Memorandum of Understanding. SADCC was transformed in 1992 and became Southern Africa Development Community (SADC) with its own Treaty (Africa Union , 2012). It has the following member states Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia,

Zimbabwe, Namibia, Democratic Republic of Congo (DRC), Mauritius; South Africa, Seychelles and Madagascar. The following are the objectives of SADC: to achieve economic growth and development; reduce poverty; enhance standards of living and quality of life of its people; establish common political values, systems and institutions; promote and defend peace and security in the region; promote self reliance and development based on collective reliance and interdependence of member countries; achieve complementarity between national and regional strategies and programmes; promote and maximize output , employment and better utilization of endowments of the region; attain sustainable utilization of endowments and their production with protection of the environment; and strengthen and consolidate their historical, social and cultural linkages among its people (Africa Union, 2012). SADC's institutions includes: Summit of Heads of State and Government; The Troika; Council of Ministers; Integrated Committee of Ministers; Standing Committee of Officials; SADC National Committees; Secretariat; Organ on Defence, Politics and Security Cooperation; and Tribunal

SADC has a population totaling 257 million. It has an overall GDP amounting to US\$471.1 billion (SADC, 2010). The Free Trade Area became operational in 2009. SADC is expected to establish a Common Market by 2015 as well as a monetary union by 2016. SADC is further envisaging introducing a single currency by 2018 (Behar and Edward, 2011). There is currently a problem of duplication of activities of SADC, the Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC). The Heads of State of the three regional organizations have agreed in principle to merge them. They have mandated the three secretariats to work on a road map towards merger beginning with free movement of business people and joint implementation of infrastructure (Madakufamba, 2008; COMESA; EAC and SADC, 2011; Muwanga , 2011).

## **LITERATURE REVIEW**

The Classical Theory of Comparative Advantage alludes to the fact that benefits derived from exchanging goods enhance the welfare and lead to more free trade. This results in a better economic order of the world. However, there are variations within trade theories of what constitutes determinants of the comparative advantage. The Ricardian theory highlights costs and technological differences, however, Heckscher-Ohlin-Samuelson theory looks at factor prices differences. On the other hand the Neo-Factor-Proportion theory dwells on factor efficiency. The technological gap and product cycle theory makes emphasis on technological innovations and change incorporating learning by doing as driving comparative advantage differences (Bender & Li, 2002).

According to Widgren (2005), the Heckscher-Ohlin theorem explains a particular country's advantage or disadvantage. The determinant being factor endowments. A nation possesses comparative advantage in those industries which utilize most intensively the factors which are in abundant in a particular country. This leads to cross-country trade patterns being determined as a result of differences in the actual comparative advantage. Ultimately, a nation will export products which utilizes its abundant factors very intensively and then be able to import those products that could have utilized scarce factors. The above is also alluded to by Mzumara (2006) who explains that the Heckscher-Ohlin theorem is an extension of David Ricardo's principle of comparative advantage. It is based on the international differences in costs as a result of differences in factor endowments. Accordingly, a country which has abundant labour endowments will export goods which has its abundant factor most intensively and import products which uses its scarce factors less intensively and in this case capital.

Mzumara (2006) explains further that the much celebrated theorem was almost demolished by Leontief who did his research and found out that the United States which according to Hecksher-Ohlin theorem should have been exporting capital intensive products was in fact exporting labour intensive products a factor that was in fact less abundant in the United States. This came to be known in international trade as Lontief Paradox. However Mzumara (2006) asserts that the principle of comparative advantage and its extension still remains relevant in explaining countries' specialization. The modern treatment and the corner stone with substantive empirical work can be traced from the Hecksher-Ohlin model. In this model international division of labour is based on factor endowments, which will always be different for each country. The two factors involved are labour and capital. The hypothesis of the model is such that there is immobility of factors of production in inter-country and that such factors are employed in various combinations in order to produce varieties of products (Goldin, 1990).

The comparative advantage premises are sometimes not explicit in their explanation of development and hence lead to much debate regarding trade and competitiveness (Goldin, 1990). The foundation that has been discussed now leads us to the discussions of the revealed comparative advantage (RCA).

The revealed comparative advantage (RCA) is a measure that nations can obtain from the current output and existing trading pattern. They are utilized as predictions of sectoral impacts of trade liberalization for a particular nation (Barry & Hannan, 2001). According Widgren (2005) the logic of using RCA is to assess comparative advantage of a given country's specialization in exports in relation to some reference group. The RCA focuses on trade performance of specific countries in specific products. It is based on the assumption that the product pattern of trade is a clear proof of the international differences in their relative costs including non-price factors used in their production. Such differences in fact "reveal" comparative advantage of the trading nation. The factors which assist in boosting RCA include changes in the structure, increased world demand of such commodities and specialization (Batra & Khan, 2005).

Bender & Li (2002) argued that even though the RCA as a measure may not account the difference between the impact of factor endowment and the impact brought by sound trade policy, RCA as a measure still provides accurate indication on the movement of East Asian economies' comparative advantage. The reality on the ground was that in spite of high export performance experienced by the region's (East Asian Economies) economies in fact have been on the side of losing their comparative advantage to economies which were initially at the bottom such as South East Asia and Latin America. Lutz (1987) and Chow (1990) distinguish between complementary effect and substitution effect in the manufacturing sector and trade and argue strongly that there could be no charges in comparative advantage as a result of manufactured exports emanating from countries previously at the bottom as exports act as supplementary rather than being substitute to each other.

A number of studies have been done using the RCA. Richardson and Zhang (1999) also used the RCA to analyse the United States economy for variation of patterns across time, industries and states. According to the Commission European Communities (1990) and Barry and Hunan (2001), the European Commission depended extensively on RCA analysis in evaluating sectoral impact when it was preparing to introduce a single market. The analysis influenced their evaluation of how benefits and losses were distributed amongst member states.

Yue (2001) used the RCA index to show China altered its exports pattern in line with its comparative advantage. As a result there are clear differences in export patterns from those of coastal areas and those of inland China. Wu and Chen (2004) have said that the RCA is the best tool used in the dynamic competitive market economy. It is based on the fact that a nation's economy factor endowment moves in line with its economic development. Mirzaei, Yazidani, Mostafari and Gharahdaghi (2004) used RCA to examine the comparative advantage of chicken meat export of Iran to the Middle East. Batra and Khan (2005) utilized the RCA to analyse comparative advantage of India and China.

Krugell and Matthee (2009) used RCA in measuring export capability of South African regions. Mzumara (2011a) utilized RCA to assess whether Zimbabwe was competitive in international trade 2000-2009 and concluded it is. Mzumara (2011b) further used RCA to evaluate performance of Mozambique.

## **METHODOLOGY**

This paper uses RCA developed by Balassa (1965) where:

$$RCA = (X_{i,j} / X_{w,j}) / (X_{i,tot} / X_{w,tot})$$

Where  $X_{i,j}$  denoting country i's export of product j

$X_{i,tot}$  denoting country i's total exports

$X_{w,j}$  denoting world's export product j; and

$X_{w,tot}$  denoting total exports in the world.

An  $RCA \geq 1$  demonstrates that a country has revealed comparative advantage in the production of the product. An RCA index of  $\leq 1$  shows that a country has no revealed comparative advantage in the production of the product.

The paper used export data of individual member states of SADC and the world export data for 2010. This was the latest data in which all the member states data was up to date. The paper used Hs 6-digit level export data, that is the most accepted international classification. The data was obtained from the International Trade Centre's (ITC's) Trademap.

## **PRESENTATION OF RESULTS**

South Africa was found to have revealed comparative advantage (RCA) in 727 product lines. Table 1 shows top 10 products with the highest RCA in South Africa.

**Table 1: Top ten products in South Africa with the highest RCA**

Rank	Hs- 6 digit code	Product Description	RCA Index
1	200 960	Grape juice (including grape must) unfermented and unspirited whether/not sugar/sweet	3 844 533
2	681 250	Asbestos, clothing accessories, footwear and headgear	1 107 292
3	902 119	Orthopedic or fracture appliances, nes	345 816
4	900 620	Cameras of a kind used for recording doc on microfilm or other microforms	319 549.7
5	580 390	Gauze or other textile material	147 768.2
6	732 183	Household or camping appliances, i/s for heating and buildings, nes for solid fuel	71 987.22
7	741 600	Springs, copper	65 257.85
8	551 439	Woven fabrics of other synthetic staple fibre< 85% mixed with cotton > 170g/m <sup>2</sup> yarn dyed	52 433.92
9	080 530	Lemons and limes, fresh or dried	43 399.9
10	852 039	Magnetic tape recorders incorporating sound reproducing apparatus, nes	38 851.18

Zimbabwe was found to have revealed comparative advantage (RCA) in 533 product lines. Table 2 shows top 10 products with highest RCA in Zimbabwe.

**Table 2: Top 10 products in Zimbabwe with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	500 310	Silk waste, not carded or combed	720 782
2	330 122	Essential oils of jasmin	643 556
3	551 439	Woven fabric > 85% syntheses plus cotton > 170g/m <sup>2</sup>	561 724
4	120 760	Safflower seeds	193 147
5	140 300	Vegetable materials, such as broom-corn, piassava, couch-grass and ist	104 300
6	370 220	Instant print film in rolls, sensitized unexposed	38 761.3
7	283 323	Chromium sulphates	24 379.3
8	441 021	Oriented strand board and waferboard of wood unworked or not further	22 191.6
9	090 920	Coriander seeds	17 399.6
10	551 592	Woven fabric synthetic staple fibres, nes	16 872

Botswana was found to have revealed comparative advantage (RCA) in 279 product lines. Table 3 shows top 10 products with highest RCA in Botswana.

**Table 3: Top 10 products in Botswana with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	251 319	Pumice stone, worked	697 316.2
2	290 890	Derivatives of phenols or phenol alcohol	56 632.86
3	900 930	thermo-copying apparatus	34 783.26
4	852 452	Recorded magnetic tape	22 895.31
5	851 929	Recorded player with loud speaker, nes	14 382.95
6	441 029	Oriented strand board & waferboard of wood excl. of 441 021	12 328.24
7	740 120	Cement copper	13 316.83
8	441 021	Oriented strand board & waferboard of wood unworked/ not further worked	12 328.24
9	630 621	Tents of cotton	11 379.92
10	681 250	Asbestos clothing accessories foot and headgear	7 448.313

Mozambique was found to have revealed comparative advantage (RCA) in 162 product lines. Table 4 shows top 10 products with highest RCA in Mozambique.

**Table 4: Top 10 products in Mozambique with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	500 100	Silk worms cocoons suitable for reeling	5 705.3
2	530 410	Sisal and agava, raw	4 189
3	290 362	Hexachlorobenzene and DDT	20 744
4	530 390	Jute and other bast fibres, not spun, nes, tow, waste	565.3
5	760 110	Aluminium unwrought	297
6	530 290	True hemp fibre otherwise processed but not spun	205.6
7	071 339	Beans dries, shelled, nes	185.7
8	080 131	Cashew nuts, in shell	174
9	440 610	Ties, railway or tramway, wood not impregnated	167.1
10	440 729	Lumber, tropical wood, nes	162

Namibia was found to have revealed comparative advantage (RCA) in 117 product lines. Table 5 shows top 10 products with highest RCA in Namibia.



**Table 5: Top 10 products in Namibia with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	410 310	Goat or kid hides and skins, raw, nes	13 567 004
2	741 490	Copper wire cloth, grill, netling, expanded metal, nes	231 032.5
3	950 100	Rideable wheeled toys, dolls carriage	129 445
4	900 620	Cameras for recording microfilm etc	20 089.8
5	200 590	Vegnes, mixes, prepared/ preserved not frozen vinegar	15 785
6	481 960	Office box files, letter trays etc of paper	8 794
7	880 190	Ballons, devigible, non-powered aircraft nes	5 022
8	900 930	Thermo-copying apparatus	3 587
9	800 600	Tin pipes or tubes and pipe fittings	1 944
10	071 331	Urd, mung, black or green gram beans dried shelled	1847

Zambia was found to have revealed comparative advantage (RCA) in 267 product lines. Table 6 shows top 10 products with highest RCA in Zambia.

**Table 6: Top 10 products in Zambia with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	681 250	Asbestos clothing, accessories, foot and head wear	852 289
2	851 939	Tumtables, without record changers	674 247.7
3	851 730	Telephonic or telegraphic switching apparatus	319 037.9
4	230 220	Rice bran, sharps, other residues	94 653
5	844 329	Letter press printing machinery nes except flexographic	40 910.7
6	920 300	Harmoniums, pipe organs	40 178.6
7	850 920	Domestic floor polishers	38 169.7
8	900 620	Cameras for recording microfilm	24 107
9	846 930	Typewriters, non electric	16 294.7
10	285 100	Inorganic compounds, liquid/ compressed air, amalgams, nes	15 601

Malawi was found to have revealed comparative advantage (RCA) in 102 product lines. Table 7 shows top 10 products with highest RCA in Malawi.

**Table 7: Top 10 products in Malawi with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	261 210	Uranium ores and concentrates	701.7
2	240 110	Tobacco, unmanufactured not stemmed or stripped	331
3	240 120	Tobacco, unmanufactured stemmed or stripped	125.7
4	240 130	Tobacco refuse	110.9
5	842 389	Weighing machinery	85
6	071 390	Leguminous vegetables dried and shelled	84.8
7	090 240	Tea, black (fermented or partly) in packages 73kg	76
8	520 299	Cotton waste, except garneted, stock	44.6
9	090 190	Coffee husks and skins	41
10	381 300	Preparations and charges for fire-extinguishers	38

Swaziland was found to have revealed comparative advantage (RCA) in 123 product lines. Table 8 shows top 10 products with highest RCA in Swaziland.

**Table 8: Top 10 products in Swaziland with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	910 112	Wrist watch, precious metal, battery, opto/ electric	935
2	741 700	Copper cooking, heating apparatus, non electric part	575.9
3	846 930	Typewriters, non electric	342.5
4	470 411	Chem. Wood pulp, sulphite, noniferous unbleached	119.7
5	630 641	Premautic mattresses of cotton	106.3
6	842 389	Weighing machinery nes	83
7	681 190	Articles nes, asbestos or cellulose fibre cement	45.6
8	080 540	Grapefruit, fresh or dried	45.5
9	200 830	Citrus fruits, otherwise prepared or preserved	42.5
10	330 210	Mixed odoriferivus substances- food and drink industries	34.8

Seychelles was found to have revealed comparative advantage (RCA) in 21 product lines. Table 9 shows top 10 products with highest RCA in Seychelles.

**Table 9: Top 10 products in Seychelles with highest RCA**

Rank	Hs- 6 digit code	Product Description	RCA Index
1	030 344	Bigeya tunas (thunnus obesus), frozen (excl. fillets/ other fish meat of 03.0....	196
2	160 414	Tuna, skipjack, bonito, prepared/ preserved not mince	119
3	030 342	Tunas (yellowfin) frozen, whole	104.6
4	030 343	Skipjack, stripe-bellied bonito, frozen, whole	88
5	030 349	Tunas nes, frozen, whole	61
6	030 341	Tunas (albacore, longfin) frozen, whole	22
7	920 890	Musical instruments	18.9
8	845 380	Machinery for leather, skin goods making except sewin	16
9	090 920	Coriander seeds	14
10	890 200	Fishing vessels and factory ships	12.6

Madagascar was found to have revealed comparative advantage (RCA) in 247 product lines. Table 10 shows top 10 products with highest RCA in Madagascar.

**Table 10: Top 10 products in Madagascar with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	252 530	Mica waste	789.6
2	090 700	Cloves (whole fruit cloves and stems)	603
3	090 500	Vanilla beans	400
4	081 290	Fruits and nuts provisional preserved	325.7
5	621 390	Handkerchiefs of material, nes, not knit	190
6	140 190	Vegetable material nes, used primarily for plating	188.5
7	621 410	Shawl, scarves, etc of silk etc, not knit	134.9
8	200 559	Beans nes, prepared or preserved, not frozen/ vinegar	116.9
9	710 310	Precious, semi precious stones unworked, partly worked	114.7
10	261 400	Titanium ores and concentrates	104.6

Mauritius was found to have revealed comparative advantage (RCA) in 299 product lines. Table 11 shows top 10 products with highest RCA in Mauritius.

**Table 11: Top 10 products in Mauritius with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	010 611	Live primates	663.5
2	550 520	Waste of artificial fibres	311.9
3	701 590	Clock or watch glassed etc not optically worked	182.9
4	160 414	Tuna, skipjack, bonito prepared/ preserved, not mince	144
5	911 430	Clock or watch dials	114
6	510 610	Yarn of carded wool > 85% wool, not retail	104.8
7	600 121	Looped pile knit or crotchet fabric, of cotton	101
8	170 310	Cane molasses	86
9	620 819	Women's girls' slippers etc of manmade fibre, not knit	75
10	530 290	True hemp fibre otherwise processed but not spun	73.7

Lesotho was found to have revealed comparative advantage (RCA) in 38 product lines. Table 12 shows top 10 products with highest RCA in Lesotho.

**Table 12: Top 10 products in Lesotho with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	510 119	Greasy wool (cotton than shorn) not carded or combed	43.7
2	610 590	Mens, boys shirts, of material nes, knit	24
3	610 520	Men's, boys shirts of manmade fibres, knit	21
4	710 231	Diamonds (jewellery) unworked or simply sawn, cleaved	20.7
5	610 463	Women, girls trousers, shorts, synthetic fibres, knit	17
6	610 343	Mens, boys trousers, shorts of synthetic fibres, knit	16
7	610 462	Womens, girls trousers and shorts, of cotton, knit	14
8	620 342	Mens, boys trousers & shorts, of cotton, not knit	12
9	610 510	Mens, boys shirts of cotton, knit	10.7
10	610 892	Women/girl bathrobe dressing gown, knit manmade fibre	10.5

Angola was found to have revealed comparative advantage (RCA) in 17 product lines. Table 13 shows top 10 products with highest RCA in Angola.



**Table 13: Top 10 products in Angola with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	270 900	Petroleum oils, oils from bituminous minerals, crude	236
2	251 611	Granite crude or roughly trimmed	155.9
3	890 790	Buoys, beacons, coffer-dams, pantoons, floats, nes	52
4	271 112	Propane liquefied	47
5	840 590	Producer, water and acetylene gas generators parts	42
6	710 231	Diamonds (jewellery) unworked or simply sawn, cleaved	38
7	271 113	Butanes, liquefied	26.8
8	282 751	Bromides of sodium and potassium	27.7
9	730 810	Bridges and bridge sections, iron or steel	17
10	480 258	Paper & paperboard not containing fibres obtained by a mechanical/ chemical mechanic processed	15.8

Democratic Republic of Congo was found to have revealed comparative advantage (RCA) in 126 product lines. Table 14 shows top 10 products with highest RCA in Democratic Republic of Congo.

**Table 14: Top 10 products in Democratic Republic of Congo with highest RCA**

<b>Rank</b>	<b>Hs- 6 digit code</b>	<b>Product Description</b>	<b>RCA Index</b>
1	260 500	Cobalt ores and concentrates	4 180
2	282 200	Cobalt oxides and hydroxides	1 578.9
3	810 520	Cobalt matters and other intermediate products of cobalt metallurgy unwrought	1 240
4	740 200	Unrefined copper, copper anodes, electrolytic refined	379
5	710 221	Diamonds, industrial unworked or simply sawn cleave	357.6
6	293 949	Ephedrines and other salts	300
7	440 349	Logs, tropical woods, nes	219.9
8	740 311	Copper cathodes and sections of cathodes unwrought	121
9	841 011	Hydraulic turbines, water wheels, power < 1000kw	115
10	261 590	Niobium tantalum and vanadium ores & concentrates	111

Tanzania was found to have revealed comparative advantage (RCA) in 374 product lines. Table 15 shows top 10 products with highest RCA in Tanzania

**Table 15: Top 10 products in Tanzania with highest RCA**

Rank	Hs- 6 digit code	Product Description	RCA Index
1	430 190	Raw, furskin pieces (e.g heads, tails, paws)	1 830.6
2	050 710	Ivory, unworked or simply prepared, powder and waste	1 116.8
3	080 131	Cashew nuts, shelled dried	860.6
4	261 690	Precious metal ores and concentrates except silver	694.9
5	530 810	Coir yarn	533.7
6	090 190	Wheat except durum wheat, and meslin	451.5
7	560 729	Twine nes, cordage rope and cables of abaca etc	399.5
8	071 390	Leguminous vegetables, dried, shelled	299
9	310 229	Ammonium sulphate-nitrate mix doublesalts packs > 10kg	289.7
10	710 310	Precious, semi-precious stones, unworked, partly worked	286.8

## ANALYSIS OF RESULTS AND DISCUSSION

South Africa is leading with 727 product lines in which it has revealed comparative advantage. This means that South Africa is specialized in exporting such products. South Africa is followed by Zimbabwe. Zimbabwe has revealed comparative advantage in 533 product lines. Zimbabwe is therefore specialized in exporting such products. The third position is occupied by Tanzania with 374 product lines in which it has revealed comparative advantage. The fourth position is occupied by Mauritius with 299 product lines in which it has revealed comparative advantage. The fifth position is occupied by Botswana with 279 product lines in which it has revealed its comparative advantage. Surprising for Botswana, diamonds which have made it to be relatively wealthier do not feature amongst the top ten products it has the highest revealed comparative advantage.

Seychelles is the least specialized in SADC. It has revealed comparative advantage in only 21 product lines. It is followed by Lesotho in being less specialized. Lesotho has revealed comparative advantage in 38 product lines. Lesotho is followed by Angola in being less specialized in terms of the number of the products. Angola has revealed comparative advantage in 77 product lines. Although Angola is less specialized in terms of number of products, the few it has specialization in have high values and big demand world wide. Angola is highly specialized in the production of crude petroleum and diamonds. Angola exports crude oil which means it is refined elsewhere where the value is added instead of being done in Angola. Mozambique is highly specialized in the production of silk worm cocoons. Namibia is highly specialized in the production of goat and kid hides and skins. Zambia is highly specialized in the production of asbestos clothing, accessories and foot and head wear. South Africa is also specialized in producing the same product. It is however second amongst the top ten products of South Africa. Malawi is highly specialized in the production of uranium. It is followed by tobacco. Seychelles its specialisation is

concentrated in the fishing industry. The Democratic Republic of Congo is highly specialized in the production of cobalt ores and concentrates. It also specializes in the related products. Madagascar is highly specialized in the production of mica waste. Lesotho's specialization is concentrated in the textile sector. The top ten with very high RCA are mostly in the textile sector. Zambia and Swaziland are specialized in typewriters, non electric. These products may not have long future with the world moving towards electronic apparatus.

Generally the products in which SADC member states have revealed comparative advantage are mixed and include primary commodities and some manufactured products. South Africa is leading in the manufacturing products.

## **CONCLUSIONS AND RECOMMENDATIONS**

SADC member states have revealed comparative advantage. However, the base of the products is very narrow. In other words they have few products in which they have revealed comparative advantage. The likelihood in the event that SADC establishes the Customs Union and then enforces the common external tariff (CET) against non-members, the protected market will significantly benefit South Africa and to a lesser extent Zimbabwe. Because of the narrow base of the products, SADC member states have revealed comparative advantage in, SADC will shut many low cost producers outside SADC in favour of high cost producers within SADC. The actual gains and losses as a result of the establishment of the Customs Union will require a further detailed study.

SADC, COMESA and EAC are involved in the discussions of a possible merger. There are two possibilities which may happen should the organizations succeed to merge. One is that with the establishment of Customs Union and the merger taking place may reduce the losses. Alternatively the losses may worsen. It may be prudent to do a study about the impact of the merger in the context of a Customs Union with a common external tariff (CET) being levied on non-members. Further members of SADC, COMESA and EAC have signed Economic Partnership Agreements (EPAs) under the African Caribbean Pacific Nations (ACP)- European Union (EU) which calls for reciprocity of duty free in line with the requirements of the World Trade Organization (WTO). There is also a need of a study on what will be the implications, should the three regional organizations succeed to merge and create a customs union?

## **REFERENCES**

Africa Union. (2012). Southern African Development Community. Retrieved June 17,2012 from [www.Africa-union.org/root/au/recs/sad.htm](http://www.Africa-union.org/root/au/recs/sad.htm)

Balassa, B. (1965). *Trade Liberalisation and Revealed Comparative Advantage*. Newhaven: Yale University, Economic Growth Centre

Barry, F., & Hannan, A.(2001).FDI and the Predictive Powers of Revealed Comparative Advantage Indicators. Department of Economics and Institute for the Study of Social Change, University College of Dublin.

Batra, A., & Khan, Z.(2005). Revealed Comparative Advantage. An Analysis for India and China. Indian Council for Research on International Economic Relations, Working Paper No.168.

Behar A.,& Edward, L. (2011). How integrated is SADC? Trends in intral-regional and extra-regional trade flows and Policy. World Bank Policy research Working Paper 5625.

- Bender, S., & Li, K.(2002). The Changing Trade and Revealed Comparative Advantage of Asian and Latin American Manufacture Exports. Yale University, Economic Growth Center. Center Discussion paper No.843
- Chow, P.C.Y.(1990).*The Revealed Comparative Advantage of the East Asian NICs*. The International Trade Journal, 5(2), 235-262
- COMESA, EAC & SADC.(2011). Communique of the Second COMESA-EAC-SADC Tripartite Summit Johannesburg, South Africa, 15 June
- Commission of the European Communities.(1990). *The Impact of the Internal Market by industrial sector the challenge for the Member State*. European Economy/Social Europe, Special Issue
- Goldin, I. (1990). Comparative Advantage: Theory and application to developing Country Agriculture. OECD Development Centre Working Paper No.16.
- Krugell, W. & Matthee, M. (2009). *Measuring the Export Capability of South African Regions*. Development Southern Africa, 26(3), 459-476
- Lutz, J.M. (1987). *Shifting Comparative Advantage*. The NICs and the Development Countries. The International Trade Journal, 5(2), 339-358
- Madakufamba, M.(2008). *Grand Step Toward a Single SADC-COMESA-EAC Market*. The Southern African Development Today, 11(3)
- Mirzaei, F., Yazidani,S., Motsafavi, M., & Gharadaghi,A.A.(2004). The Survey on Comparative Advantageof Iran’s Chicken Meat Export in the Middle East. Animal Science Research Institute.
- Muwangu, D.(2011). COMESA, EAC,SADC Start Merger Negotiations Business Digest. Retrieved June 17, 2012 from <http://www.businessweek.com/11/the-eac-issue/eac-news/1215-COMESA-eac-sad-start-merger—negotiation>
- Mzumara, M. (2006). *The Theory of Money and Banking in Modern Times*. Mustang : Tate Publishing LCC
- Mzumara, M. (2011b). *Mozambique from Marxist – Leninist to Capitalism: Has the Country Performed Well Economically?* International Journal of Business Management and Economic Research, 2(6), 359-370
- Mzumara, M.(2011a). *Was Zimbabwe Competitive in International Trade 200 – 2009?* International Journal of Economics and Research, 2(6), 200-221
- Richardson, D. J., &Zhang, C. (1999).Revealing Comparative Advantage: Chaotic or Coherent Pattern Across Time and Sector and the US Trading Partner ? National Bureau of Economic Research, Working Paper 7212
- SADC.(2010). Investment Promotion Strategy to Promote sustainable Investment into the SADC Region During the 2010 CAF African Cup of Nations (10-31 January 2010) & the 2010 FIFA World Cup (11 June-11 June17, July 2010)Retrieved June 17, 2012
- Serin, V. & Civan, A. (2008). *Revealed Comparative Advantage and Competitiveness : A Case Study for Turkey towards the EU*. Journal of Economic and Social Research, 10(2), 25-41
- Widgren, M. (2005).Revealed Comparative Advantage in the Market. Turku School of Economics, The Research Institute of Finish Economy (ETLA), CEPR and CESifo
- Wu, H.L., & Chen, C. H. (2004).*Changes in the Foreign Market Competitiveness of East Asian Export*. Journal of Contemporary Asia, 34(4), 505-522
- Yue, C.(2001). Comparative Advantage, Exchange Rate and Exports in China. Paper prepared for the International Conference on Chinese economy, CERDI, France

## **ABOUT THE AUTHORS**

**Macleans Mzumara** is affiliated with the Departments of Economics, Bindura University of Science Education, Zimbabwe.

**Anna Chingarande** is affiliated with the Departments of Economics, Bindura University of Science Education, Zimbabwe.

**Roseline Karambakuwa** is affiliated with the Departments of Economics, Bindura University of Science Education, Zimbabwe.