



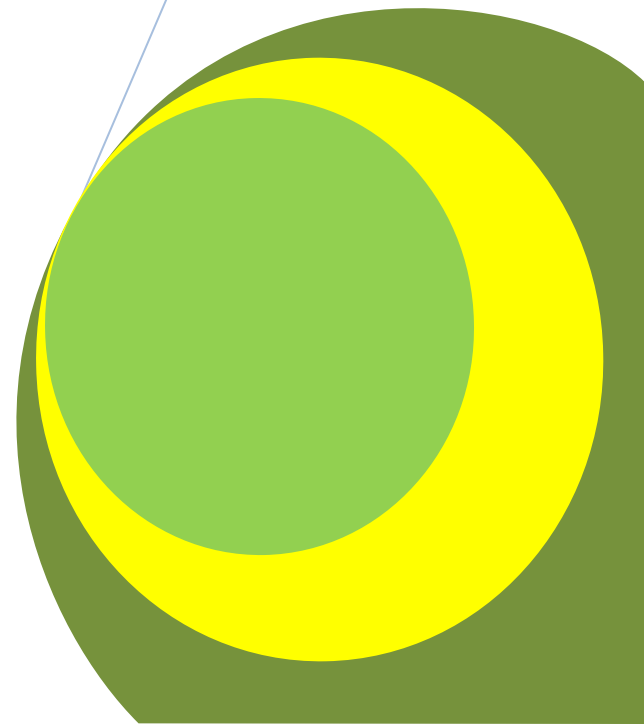
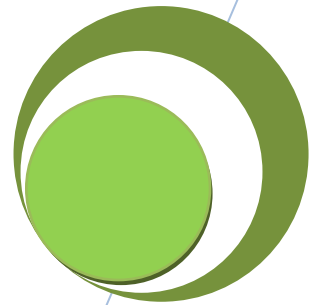
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Is South Africa Really a Giant of Sub-Saharan Africa in International Trade?

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Research Article

Is South Africa Really a Giant of Sub-Saharan Africa in International Trade?

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ABSTRACT

The study investigated the comparative advantage of South Africa and the role played by export promotion. South Africa was found to have comparative advantage in 824 product lines. The country was found to be a giant player in Sub-Saharan Africa to the extent of surpassing other African countries such as Egypt, Mozambique, Botswana and Zimbabwe. South Africa also surpassed countries such as Mexico and Canada. The Sub-Saharan country should continue to promote its exports in international markets.

Keywords: Comparative advantage, Revealed comparative advantage, Export promotion.

INTRODUCTION

South Africa collects all duties in the Southern Africa Customs Union (SACU) and distributes to itself and its fellow members in the customs union. It has considerable influence in the affairs of this customs union. It is a member of the Southern African Development Community (SADC) and the strongest economy in the grouping. It is the largest trading partner of most of individual SADC member states. South Africa is also part of the recently launched Common Market for Eastern and Southern Africa (COMESA) - East Africa Community (EAC)- Southern African Development Community (SADC) Tripartite Free Trade Agreement. South Africa is trying hard to play a leading role in the Africa Union (AU).

This paper investigates whether South Africa has comparative advantage and the role played by export promotion in any given country.

Background

South Africa ended apartheid with democratic elections which took place in April 1994 (Mukherjee & Robinson, 1996). The country was rated at 134 out of 178 economies examined by World Bank 2008 Doing Business Report. The rating showed South Africa performed miserably on the indicators (South African Institute of International Affairs, 2008). The report focused mainly on the number of document, cost and time of import and export (South African Institute of International Affairs, 2008). According to Rashad (2007), South Africa trade policy has undergone several changes. These include reductions in tariffs and subsidies arising from World Trade Organizations commitments. The European Union- South Africa Free Trade Agreement became operational in January 2000, while Southern African Development Community (SADC) trade protocol was completed in 1996. South Africa has largely followed import substitution strategy as a strategy for development. South Africa's exports composition has over the years changed tremendously. In the 1900s mineral export accounted for over 80% of the country's global exports by South Africa. Gold exports in the 1960s accounted for 40% of global exports. South Africa's trade composition has significantly changed with Gold accounting for 15% of its global exports. Agriculture contributes very little at 10%. Manufacturing is being focused but the challenges associated with diversification are still haunting South Africa.

According to Erasmus (2011), South Africa established Industrial Development Zones (IDZs) on 1st of December 2000 via Manufacturing Development Act. The objective of the Act is to promote manufacturing growth via the provision of incentives or concessions under the economic framework of South Africa. South Africa has a market access of its major trading partners through generalized systems of preference (GSP), the African Growth

and Opportunity Act, the free trade agreement with the European Union, the European Free Trade Association and the Southern African Development Community. South Africa developed a comparative advantage in capital-intensive primary and manufactured products due to its endowment and through protection mechanism (Edwards & Lawrence, 2006).

Export Promotion

Majority of the countries desire to expand foreign trade so that their economies can experience growth. Increased export earnings assist countries to adjust smoothly and reduces debt burden and are able to import too. Increased exports and imports help nations gain from foreign trade. These include ideas, technology, competition, economies of scale and establishment of domestic industries to meet the needs of new markets (Thomas & Nash, 1991; Mzumara, 2012b). Import protection affects a country very negatively through erosion of exporters' confidence by increasing the cost of inputs and erosion of incentives of producing exportable goods (Mah, 2010; Mzumara, 2012b). Increasing exports through policy reforms in developing nations remains a big problem (Thomas & Nash, 1991). In developing countries, particularly in Africa a decision to encourage investment in production of exportable products is the most significant one. Such countries however, face a problem to identify constraints which may affect export performance (Bacchetta, 2007; Mzumara, 2012b). Exports constraints are classified in two groups namely those caused by supply bottlenecks and those caused by failure to promote exports and attract foreign direct investment (FDI) (Martincus & Carballo, 2007; Ahmed et al. 2008; Mzumara, 2012b).

According to Thomsen (1996) and Mzumara (2012b), export promotion is the major feasible development option for sustainable economic growth. The export promotion activities can be done through export promotion agencies (EPAs). The goals of an EPA are to help exporters and potential exporters to identify markets for their goods. The EPAs render services such as nation image building, export support services, marketing and market research (Laderman et al. 2006; Mzumara, 2012b).

According to McNiven (1991), export promotion activities are very wide ranging. They range from providing help for trade mission, securing exhibition space in trade fair to provision of intern programmes by local universities which seek to promote exports. Export promotion agencies assist firms in a country to overcome an environment of inadequate information. Firms regularly meet challenges in penetrating new markets (Martincus & Carballon, 2007; Mzumara, 2012b).

Comparative Advantage

Comparative advantage defines a tendency for nations to export those products which they are able to produce efficiently in comparison to the rest of the world (Serin & Civan, 2008). According to Widgren (2005), Heckscher-Ohlin theorem provides that the source of comparative advantage is factor endowment. This is supported by Mzumara (2006) that factor endowment determines comparative advantage. According to Khatibi (2008), the Ricardian theorem attributes comparative advantage to arise from the differences amongst countries based on factor scarcity. According to Mzumara et al (2012), this is not a correct position. Mzumara (2006) explains that factor endowment determines comparative advantage. This is supported by Widgren (2005). According to Mzumara (2006) a country with an abundant factor will use that factor intensively to produce products and export them. It will in turn import products which uses its scarce factor. The result will be emergency of specialization in products in which a country has comparative advantage in order to devote resources where it has comparative advantage. So a country that uses labour intensively will export labour intensive products and import capital intensive product as it will not be endowed with capital resources. So Khatibi (2008) assertion of giving importance to relative scarcity falls away as disadvantage has no role to play.

It is not the absolute advantage which is necessary. A country simply needs to have a comparative advantage in order to benefit from international trade. No matter how small the country is, it will have some products in which it is efficient and competent to produce. According to Neary (2002), comparative advantage determines the direction of trade. A country possesses a comparative advantage in producing a given product only if it is endowed with inputs utilized to produce a given product more intensively (Case & Fair, 2002). The source of comparative advantage is basically through factor endowment which constitutes labour, land and natural resources of a country (Case & Fair, 2002).

METHODOLOGY

Using Balassa, (1965):

$$RCA = \left(\frac{X_{i,j}}{X_{w,j}} \right) / \left(\frac{X_{i,tot}}{X_{w,tot}} \right)$$

With:

$X_{i,j}$ denoting country i 's exports of product j ;

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

$X_{w,j}$ denoting the world's (all countries) export of product j ; and

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

An RCA of equal and greater than 1 demonstrates that the country has Revealed Comparative Advantage. In other words, the exporting country is relatively specialized in producing and exporting the product code. An RCA of less than 1 demonstrates that the country has no Revealed Comparative Advantage and is not specialized in the product code (Balassa, 1965; Krugell & Matthee, 2009).

The authors have used the export data for South Africa for 2008, 2009 and 2010 obtained from the International Trade Centre (ITC)'s TradeMap. The export data for the world for the same period was also obtained from the same source. The data was obtained on 6-digit level, the most acceptable dis-aggregative international product classification.

RESULTS AND DISCUSSION

South Africa has 824 product lines with an RCA equal or greater than 1. That means South Africa has comparative advantage in the production of such products. South Africa is specialized in these products. Table 1 below shows top 50 products in which South Africa has the highest RCA.

Table 1: Top 50 products in which South Africa has the highest RCA

Product code	Product description	RCA 2008	RCA 2009	RCA 2010	Average RCA
711039	Rhodium in semi-manufactured form	203.0357	214.0747	192.8537	203.3214
711019	Platinum in semi-manufactured form	113.8857	120.1697	126.7232	120.2595
261590	Niobium, tantalum and vanadium ores and concentrates	73.49905	134.8016	114.9777	107.7595
261400	Titanium ores and concentrates	104.2123	126.3092	86.4459	105.6558
261790	Ores and concentrates	18.12654	153.0822	144.5147	105.2411
720241	Ferro-chromium, >4% carbon	95.48695	116.3572	97.16413	103.0028
293991	Cocaine, ecgonine, levometamfetamine metamfetamine	110.5687	84.89725	84.07054	93.17882
320120	Wattle tanning extracts	86.52148	95.5541	93.75252	91.94314
250850	Andalusite, kyanite and sillimanite	79.1809	100.791	89.68816	89.8867
750610	Plates, sheet, trip and foil, nickel alloy	93.75941	57.76272	100.2124	83.9115
261000	Chromium ores and concentrates	70.66874	92.25563	82.38215	81.76884
720211	Ferro-manganese, >2% carbon	71.54378	79.16923	83.73852	78.15045
010632	Live birds including parrots/parakeets	67.23145	96.61131	70.44619	78.09632
711031	Rhodium unwrought or in powder form	59.68504	84.99906	71.13765	71.94058
261510	Zirconium ores and concentrates	74.64255	65.91589	71.56919	70.70921

262021	Leaded gasoline sludges & leaded anti-knock compound sludges	109.0193	97.48555	0.65912	69.05465
711029	Palladium in semi-manufactured form	59.87162	70.06298	56.44785	62.12748
720292	Ferro vanadium	57.38094	66.63211	56.73376	60.24894
370400	Photographic plate, film, paper expose undeveloped	62.86082	64.13078	48.14169	58.37776
260200	Manganese ores, concentrates, iron ores >20% manganese	64.97563	47.13326	58.29663	56.80184
021092	Meat & edible meat offal of whales/dolphins porpoises (order cetacean)	0	163.3601	0	54.45338
271091	Heavy furnace oil (heating or motor fuel) <1% sulphur	24.856669	133.2647	3.680727	53.93404
711041	Iridium, osmium and ruthenium, semi-manufactured	60.55213	50.72728	46.05341	52.44427
261690	Precious metal ores and concentrates except silver	80.44477	54.7457	19.40127	51.53058
282010	Manganese dioxide	54.43944	52.81015	46.53247	51.26069
284130	Sodium dichromate	44.49053	60.72892	44.64866	49.956604
711011	Platinum unwrought or in powder form	45.14424	40.68703	53.14097	46.32408
253010	Vermiculite, perlite and chlorites unexpanded	41.14203	53.69742	43.11004	45.98316
710590	Dust of precious, semi-precious stones except diamond	21.27253	11.10571	102.7535	45.04392
282530	Vanadium oxide and hydroxides	30.15392	47.61793	56.72005	44.24479
260112	Iron ore, concentrates, not iron pyrites agglomerated	29.39152	58.14401	42.19882	43.24479
720219	Ferro-manganese, < 2% carbon	43.42541	33.63018	52.5162	43.1906
470200	Chemical wood pulp dissolving grades	39.37499	42.80666	46.11747	42.89253
290129	Unsaturated acyclic hydrocarbons	37.37499	46.03843	38.76221	40.87458
711049	Iridium, osmium and ruthenium as sole precious metal	21.3885	46.03843	53.95838	40.46177
120890	Flour or meal of oil seed, fruit except mustard, soy	45.58108	35.58629	38.95243	40.03993
842139	Filtering or purifying machinery for gases	44.14091	31.01665	31.90936	35.68897
200850	Apricots, otherwise prepared preserved	30.73907	37.14769	37.69943	35.1954
200840	Pears, otherwise prepared or preserved	29.35476	32.2095	36.89637	32.82403
291413	4 methylpentan-2- one (methyl isobutyl ketone)	23.51753	31.48091	43.10984	32.70277

711021	Palladium unwrought or in powder form	30.25983	31.10206	35.57771	32.3132
261900	Waste, scale, dross, slag of iron or steel industry	35.98491	31.6298	25.66711	31.09394
270120	Coal briquettes, avoids, similar made solid fuels	34.31365	0.678871	55.75651	30.24968
380400	Residual lyes from the manufactured of wood pulp	26.50038	30.779	25.67231	27.65056
411390	Leather furth. Prepared after tanning/crusting/including parchment dressed leather	26.03538	29.8187	23.85145	26.56851
252230	Hydraulic lime	17.53042	32.75915	29.36111	26.55142
252922	Fluorspar, >97% calcium fluoride	23.52701	33.10863	22.4702	26.36861
410221	Sheep or lamb skins, pickled, without wool	22.04912	29.67907	26.03594	25.92138
200929	Grapefruit juice (excluding of 2009.21) unfermented & not containing added spirit	25.95932	26.92811	24.87126	25.91956
110313	Wheat meal	21.46729	30.23165	23.6005	25.09966

Source: Computed using data from Trade Map (2013).

South Africa has the highest index in the production of rhodium whose index is 203. This is followed by platinum with an index of 120. The third position is occupied by niobium with an index of 107. It is followed by titanium ores and concentrates with an index of 106. The fifth position is occupied by ores and concentrates with an index of 105.

Amongst the top 50 product lines in which South Africa has comparative advantage include manufactured products, semi-manufactured products and primary products.

South Africa surpasses Canada in the number of the products in which it has comparative advantage. Canada has only 814 product lines in which it has comparative advantage while South Africa has 824 product lines in which it has comparative advantage. South Africa also surpasses Mexico. Mexico has comparative advantage in 749 product lines while South Africa has comparative advantage in 824 product lines in which it has comparative advantage (Mzumara et al., 2012). South Africa also surpasses Egypt. Egypt has 733 product lines in which it has comparative advantage in, South Africa has 824 product lines in which it has comparative advantage (Mzumara, 2013). Mzumara (2011b) found that Mozambique has 222 product lines in which it has comparative advantage. This is well below South Africa. Mzumara (2011a) found Zimbabwe had 241 products in which it had comparative advantage in. However, the results were on 4-digit level product classification which is more aggregative than the internationally more accepted 6-digit level classification which South African results are based on. Mzumara (2012a) found Botswana has 244 product lines in which it has comparative advantage.

CONCLUSIONS AND RECOMMENDATION

South Africa has the highest number in which it has comparative advantage well above Egypt. There is no doubt that South Africa is really a giant of Africa as it is able to surpass some developed countries such as Canada. It also shows it's mighty in trade by having comparative advantage in manufactured and semi-manufactured products. South Africa should continue promoting its exports.

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