# An analysis of tourism contribution to economic growth in SADC Countries

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# Abstract

The study how the tourism sector can be an engine of economic growth in SADC member countries. The paper found the contribution of tourism to GDP, employment, export receipts and investment is significant. Although this sector's contribution to the economy varies among SADC countries, the the study found that Seychelles and Mauritius rely heavily on tourism vis-à-vis its contribution to GDP, employment, export earnings and investment. In both Seychelles and Mauritius, tourism sector contributes about 50% and 30% to GDP; 60% and 28% to total employment; approximately 35% and 34% to export receipts; and 38% and 10% as percentage of GDP; respectively. Empirical evidence confirmed the importance of tourism to economic activities in SADC region, with a 1% increase in tourism receipt causing a 0.16% rise in GDP per capita. Similarly, a 1% rise in tourism related investment resulted in a 0.29% increase in GDP per capita.

**Keywords**: Tourism, export receipts, SADC Member Countries, Economic growth **JEL classification**: L83

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#### Introduction

Tourism<sup>9</sup> development is increasingly viewed as an important tool in promoting economic growth, alleviating poverty, and advancing food security (Richardson, 2012). A number of studies including United Nations World Travel Organization (UNWTO, 2002) have shown that tourism can play a significant role towards balanced sustainable development, and that it can be effectively harnessed to generate net benefits for the poor. The potential of the tourism sector as a development tool to positively contribute to economic growth and poverty reduction emanates from its several peculiar characteristics (UNWTO, 2002) including the following: (i) the industry represents an opportunity for economic diversification, (ii) tourism is the only export sector where the consumer travels to the exporting country thus providing opportunities for the poor to become exporters through the sale of goods and services to foreign tourists, (iii) the sector is labour-intensive and supports a diverse and versatile labour market; and (iv) finally, there are numerous indirect benefits of tourism for the poor.

Overall, statistical figures from the World Council of Travel and Tourism (WTTC) database shows that the average contribution of tourism sector to gross domestic product (GDP) of the Southern African Development Community (SADC) at regional level is around eight percent annual, with the contribution rising to 50% and 30% in the case of Seychelles, and Mauritius, respectively. The same shares (50% and 30%) are also accounted by the sector in terms of formal employment in the latter two countries.

Despite tourism's increasing importance in SADC economies, the sector has however attracted relatively limited attention in terms of scholarly research. Thus, this lack of research of the impact of tourism on economic growth in the SADC region is the major motivation of this study. Given the above brief background, the main objectives of this study are three-fold. First, the paper provides an account of the contribution of tourism sector to the economies of the Southern Africa Development Community (SADC)<sup>10</sup>. The contributions are categorized into four areas namely to GDP, employment, exports earnings and capital investment. Second, the study empirically investigates the contribution of tourism industry to the economy. Third and lastly, the research recommends possible strategic initiatives that tourism stakeholders can adopt and implement in an effort to buttress the potential of tourism as an engine for economic growth in the region. The period of analysis is 2000 to 2012 inclusively.

#### Overview of tourism trends in SADC member countries

Tourism contributes significantly to GDP, export earning, employment, human and physical capital investment of SADC countries. Global estimates show that tourism has the potential to contribute on average around 12% to a country's GDP. As will be shown later, the contribution of the tourism sector towards GDP in most SADC countries is above the global average, with the share of tourism in total economic activities being highest in Seychelles (above 50% of GDP) and followed by Mauritius (more than 25% of GDP).

<sup>&</sup>lt;sup>9</sup> Tourism is defined by the UNWTO as a stay of at least one night, but less than a year, away from one's 'normal environment', and thus includes business, conference, and other types of non-leisure travel, but not all forms of leisure or discretionary travel, for example not day trips or retirement to another country.

<sup>&</sup>lt;sup>10</sup> The current SADC Member States are: Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

### Trends in international arrivals

The region as a whole has witnessed a 74% growth in terms of international tourist's arrivals during the past 11 years from 2002 to 2012, where international arrivals rose from 13 million to 22.6 million as presented in Table 1. The top three countries which attracted a large number of tourists are South Africa, Botswana and Zimbabwe, with each of these three countries having received arrivals of more than one million per each year. South Africa however is the major regional destination of international arrivals, with arrivals having increased from the 2002 figure of 4.5 million to more than 9.7 million in 2012. At regional level, the rising trend of tourist arrivals is forecasted to reach 32.2 million by 2022.. Thus the potential of the sector to become an engine for economic growth and development in the region is cemented by this forecasted increase in tourist arrivals.

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Angola	,000,	100	130	200	220	120	200	300	375	420	430	456
	% share	-	30.0	53.8	10.0	-45.5	66.7	50.0	25.0	12.0	2.4	6.0
Botswana	,000,	1400	1500	1600	1500	1400	1800	2100	2100	2200	2300	2374
	% share	-	7.1	6.7	-6.3	-6.7	28.6	16.7	0.0	4.8	4.5	3.2
Lesotho	,000,	130	140	135	130	350	300	290	330	420	370	382
	% share	-	7.7	-3.6	-3.7	169.2	-14.3	-3.3	13.8	27.3	-11.9	3.2
Madagascar	,000,	70	130	230	280	310	350	370	155	180	210	232
	% share	-	85.7	76.9	21.7	10.7	12.9	5.7	-58.1	16.1	16.7	10.5
Malawi	,000,	400	440	445	450	650	750	753	760	755	600	537
	% share	-	10.0	1.1	1.1	44.4	15.4	0.4	0.9	-0.7	-20.5	-10.5
Mauritius	,000,	670	680	700	790	800	900	910	895	910	994	997
	% share	-	1.5	2.9	12.9	1.3	12.5	1.1	-1.6	1.7	9.2	0.3
Mozambique	,000,	600	500	600	650	700	800	1900	2300	1600	1700	1811
	% share	-	-16.7	20.0	8.3	7.7	14.3	137.5	21.1	-30.4	6.3	6.5
Namibia	,000,	600	650	700	750	810	900	810	710	800	850	1106
	% share	-	8.3	7.7	7.1	8.0	11.1	-10.0	-12.3	12.7	6.3	30.1
Seychelles	,000,	130	125	125	130	140	170	165	160	175	195	188
	% share	-	-3.8	0.0	4.0	7.7	21.4	-2.9	-3.0	9.4	11.4	-3.6
South Africa	,000,	4500	4500	4550	5000	6000	6900	7000	7100	8200	8300	9718
	% share	-	0.0	1.1	9.9	20.0	15.0	1.4	1.4	15.5	1.2	17.1
Swaziland	,000,	250	450	450	840	880	880	750	900	880	875	795
	% share	-	80.0	0.0	86.7	4.8	0.0	-14.8	20.0	-2.2	-0.6	-9.1
Tanzania	,000,	530	530	580	600	610	700	740	710	800	865	872
	% share	-	0.0	9.4	3.4	1.7	14.8	5.7	-4.1	12.7	8.1	0.8
Zambia	,000,	590	400	550	680	770	890	800	720	810	860	895
	% share	-	-32.2	37.5	23.6	13.2	15.6	-10.1	-10.0	12.5	6.2	4.1
Zimbabwe	'000'	2000	2200	1700	1500	2115	2250	1800	1850	2100	2200	2258
	% share	-	10.0	-22.7	-11.8	41.0	6.4	-20.0	2.8	13.5	4.8	2.6
SADC (mn)	,000,	13	13.5	14	14.5	15	17	18	19	20	21	22.6
	% share	-	3.8	3.7	3.6	3.4	13.3	5.9	5.6	5.3	5.0	7.6

Source: WTTC database

### **Tourism contribution to GDP**

Table 2 provides a 13-years trend of tourism's contribution to SADC economies as measured by contribution to gross domestic product (GDP). Overall, the average contribution of tourism to GDP at regional level is around eight percent. In value terms, the sector contributed a total US\$54.2 billion in 2011 and US\$56.6 billion in 2012 and is forecasted to add US\$89.8 billion by 2022 to regional GDP. Thus an increase of around 58.7% is expected in terms of value contribution of tourism between 2012 and 2022 to SADC economic activities.

At country level, although the contribution in most countries in terms of percentage share to GDP is relatively low, two countries stand to be mentioned. Seychelles and Mauritius are the two countries where tourism is contributing well above the global average showing the sector's importance to the economies of these countries. In the former country, tourism contributes more than half of the country's GDP annually, while in the latter country it contributes around a quarter of the economic activities annually. Namibia, Lesotho, Madagascar, Tanzania and Zimbabwe are the second tier group of countries where the sector's contribution to GDP has been increasing over the years to such an extent that by 2012 more than 10 percent of GDP in each of these countries was generated in this sector.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Angolo	US\$	1.2	1.6	1.6	1.6	2.1	2.4	2.5	3.1	3.1	3.9	3.3	3.2	3.2
Angola	% share	3.5	4.7	4	4	4.6	4.4	3.8	4	3.6	4.4	3.7	3.4	3.2
Dotewana	US\$	0.7	0.7	0.9	1.2	1.2	1.3	1.3	1.3	1.1	1.2	1.2	1.3	1.4
Dotswalla	% share	6.5	6.4	7.1	9.3	8.4	9.1	8.7	8.2	7.5	6.2	6.3	6.4	6.8
DPC	US\$	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.4
DKC	% share	2.1	2	1.8	2.5	2.5	2.9	2.3	2.1	2.6	3.2	2.3	2.2	2.1
Losotho	US\$	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Lesotiio	% share	13.9	12.6	15.7	15.4	14.1	10.2	11.3	11	10.8	13.6	15	14.2	15.4
Madagasaan	US\$	0.5	0.6	0.5	0.5	0.9	0.9	1.1	1.4	1.4	1.3	1.4	1.5	1.7
Wauagascar	% share	6.4	7	7	5.8	10.3	10.5	12.6	14	13.7	13.6	13.9	14.8	16.1
Molowi	US\$	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	% share	7.4	7.9	6.6	5.3	5.7	7.1	6.9	6.4	6.1	6.2	5.9	6	6.1
Mauritius	US\$	2.0	2.3	2.2	2.4	2.7	2.8	2.9	3.5	3.5	3.0	3.3	3.4	3.6
	% share	26.4	28.7	27.8	27.8	30	31.1	30.9	35.7	33.3	27.6	29	28.5	29.7
Maramhierra	US\$	0.2	0.3	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.9	0.9	0.9	0.9
Wiozanibique	% share	4.3	4.2	4.3	4.9	5	6.9	6.9	7.3	7.6	8.1	7.3	6.9	6.7
Namihia	US\$	0.5	0.7	0.8	1.0	0.9	1.0	1.4	2.1	1.8	1.7	2.1	2.3	2.4
	% share	7	9.9	11.3	13.6	11.9	12.5	16.7	22.2	18.3	16.4	19.2	20.3	20.4
Sovebollos	US\$	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Seyenenes	% share	50.1	36	53.7	49	50.4	53.9	57.9	67.2	70.3	69.6	61.7	60.7	57.8
South Africa	US\$	19.9	22.2	25.9	26.7	27.8	31.4	35.8	38.0	37.8	37.4	35.6	34.7	36.1
South An ica	% share	7.1	7.7	8.7	8.7	8.6	9.3	10	10.1	9.7	9.7	9	8.5	8.6
Swaziland	US\$	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Swaznanu	% share	5.2	5.2	7.9	7	6.8	5.1	5.4	3.9	4.7	3.9	4.2	4	3.8
Tanzania	US\$	1.0	1.5	1.7	1.8	2.2	2.4	2.8	3.1	2.9	3.1	3.2	3.4	3.6
	% share	8.4	11.5	11.9	12.3	13.5	13.8	15.4	15.9	13.5	13.9	13.2	13.3	13.3
Zambia	US\$	0.6	0.8	0.8	0.8	0.8	0.9	0.7	0.9	0.9	0.9	0.9	0.9	1.0
	% share	6.5	7.7	7	7	6.4	6.9	5.5	6.2	6.2	5.9	5.5	5	5
Zimbabwe	US\$	0.7	0.6	0.6	0.5	0.8	0.5	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Limbabwe	% share	7.8	6.9	7.9	7	11.4	7.4	14.1	12.9	14.9	14.3	12.2	11.7	11.7

 Table 2: Total tourism contribution to GDP (2011 US\$ bn)

Source: www.wttc.org

#### Tourism's contribution towards employment

Unemployment is one of the social ills of most, if not all SADC counties, and any potential employment opportunities offered by any sector will help to alleviate this social problem. WTTC figures indicates that total contribution of travel and tourism (T&T) to employment (including wider effects from investment, the supply chain and induced income impacts) in the region was 4,676,000 jobs in 2011, and this figure accounted for around 7.2% of total employment. The sector's contribution slightly rose to 4,819,500 jobs in 2012, again accounting for the same share 7.2% of total employment. The WTTC's 10-year forecast indicates that tourism's contribution to total employment in SADC will rise by 2.2% and it will provide 6,000,000 jobs or 7.1% of total employment by 2022.

An analysis of tourism's contribution towards employment at country level, as presented in Table 3 shows that Seychelles, Mauritius and Namibia are the three countries where the sector contributes highly. In the case of Seychelles, more than half of the country's recorded employment is in the tourism sector, while for Mauritius and Namibia (since 2006), around a quarter of employment was in the tourism sector. On the other hand, in DRC, the contribution of tourism towards employment is still very small, accounting for less than 2.5 percent of total employment for the tabulated period.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	'000	195	137	121	124	150	147	133	144	133	169	146	140	134
Angola	% share	6.1	4.1	3.5	3.5	4	3.8	3.4	3.6	3.2	3.9	3.3	3	2.8
<b>D</b> 4	'000'	43	50	47	52	57	58	52	50	51	40	43	45	49
Botswana	% share	9.6	11	10.3	11.3	10	10.2	9.4	9.1	8.9	7.3	7.4	7.6	8
DBC	,000	203	195	186	262	269	317	267	245	314	397	293	291	280
DRU	% share	1.8	1.7	1.6	2.2	2.2	2.5	2	1.8	2.2	2.7	1.9	1.9	1.7
Lagatha	<b>'</b> 000 <b>'</b>	55	51	66	66	63	46	52	51	51	66	74	71	79
Lesotho	% share	12	10.8	13.5	13.2	12.1	8.8	9.7	9.4	9.3	11.7	12.9	12.2	13.2
Madagagaan	,000	185	206	214	184	336	353	440	505	508	524	534	577	642
Madagascar	% share	5.6	6	6.1	5	8.9	9.1	10.9	12.2	11.8	11.8	11.8	12.5	13.5
Malauri	,000	145	159	137	114	125	160	159	153	150	158	154	162	170
Malawi	% share	6.4	6.8	5.7	4.6	4.9	6.1	5.9	5.6	5.3	5.4	5.1	5.2	5.3
Mouniting	<b>'</b> 000'	118	130	127	128	140	147	148	174	169	141	153	152	160
Mauritius	% share	24.2	26.4	25.6	25.6	27.8	28.8	28.7	33.2	31.1	25.8	27.3	26.9	28
Mozombiquo	'000	274	274	285	333	346	467	476	533	589	629	582	562	558
wiozanibique	% share	3.7	3.7	3.7	4.2	4.3	5.9	5.9	6.4	6.6	7	6.3	6.1	6
Nomihio	'000	43	56	57	62	57	63	96	127	105	92	108	116	120
INaliliula	% share	9.9	13.2	14	15.6	14.8	15.9	23.9	30.8	25.3	22.5	25.9	27	27
Savahallas	·000	16	12	18	16	16	18	21	26	29	27	25	25	24
Seychenes	% share	49.1	35.3	51.8	47.4	48.6	51.9	56.3	66.1	69.5	66.4	59.6	59.8	57.8
South Africa	·000	922	982	1,093	1,081	1,092	1,229	1,380	1,411	1,428	1,361	1,243	1,188	1,226
South Africa	% share	7.4	8.2	9.2	9.2	9.2	9.8	10.5	10.7	10.4	10.2	9.5	9	9.2
Swaziland	·000	13	13	20	18	18	14	15	11	14	12	13	13	12
Swaziialiu	% share	4.6	4.6	7	6.2	6	4.5	4.8	3.4	4.2	3.4	3.7	3.5	3.4
Tanzania	,000	546	772	819	878	995	1,045	1,191	1,264	1,106	1,167	1,143	1,182	1,209
Tanzania	% share	7.3	10	10.3	10.7	11.8	12	13.3	13.8	11.7	12	11.4	11.5	11.5
Zambia	,000	43	52	49	56	57	61	56	58	60	62	60	58	59
Zallivia	% share	3.4	3.9	3.7	4.1	4.1	4.3	3.9	4	4	4	3.9	3.6	3.6
Zimbabwe	,000	84	72	74	58	90	57	106	93	102	102	92	93	97
Zimbabwe	% share	6.8	6	6.9	6.1	9.9	6.4	12.2	11.1	12.8	11.9	9.7	9.1	8.7

Table 3: Total tourism contribution to employment

Source: www.wttc.org

### Tourism's contribution towards exports receipts

In this analysis, foreign visitor exports represents the amount spent by foreign visitors (tourists) in the destination country. This includes, but not limited to expenditure purchases on such things as accommodation, car hire as well on curios etc. The region received US\$18.1 billion in visitor exports in 2011 and the figure is forecasted to increase to US\$30.8 billion in 2022.

Table 4 shows that Seychelles, Mauritius, Madagascar and Tanzania are the four countries in which foreign visitor exports' share as percentage of total exports are very much significant. For the first three countries, more than 25 percent of total export revenue on annual basis comes from foreign visitor exports, while in Tanzania the share is around 20 percent. DRC lead the group of countries where tourism's contribution to export receipts is still minimal, with the sector contributing even less than one percent towards DRC's export revenues on annual basis. Overall these shares indicate the extent to which tourism activities are an important part of most SADC economies. Given the paucity of foreign currency in most SADC countries to import capital inputs like machinery and medical ancillaries, among others, tourism plays an important role in providing foreign currency to import these vital inputs and/or necessities.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Angolo	US\$bn	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.7	0.8	0.7	0.7
Aligoia	% share	0.4	0.5	0.5	0.6	0.5	0.4	0.2	0.5	0.4	1.4	1.4	1.2	1.3
Potowono	US\$bn	0.5	0.5	0.7	0.8	1.0	1.0	1.2	1.3	1.1	1.1	1.0	1.0	1.1
Dotswalia	% share	8.1	8.8	11.7	14.5	16.1	13	13.9	13.1	12	15.1	15.3	15.3	15.2
DBC	US\$bn	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
DKC	% share	0.2	0.5	0.7	0.7	0.7	0.7	0.6	0.3	0.3	0.4	0.2	0.2	0.2
Locotho	US\$bn	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
Lesotiio	% share	6.6	4.3	3.3	3.6	3.8	4.1	3.9	3.6	3.3	3.7	3.7	2.5	2.4
Madagagaan	US\$bn	0.3	0.3	0.2	0.2	0.4	0.5	0.6	0.7	0.7	0.6	0.6	0.7	0.8
Madagascar	% share	12.7	11.2	15.4	10	15.5	20.3	23.4	22.6	24.7	24.1	23	26.5	26.4
Malawi	US\$bn	0.06	0.07	0.05	0.05	0.05	0.06	0.05	0.05	0.04	0.03	0.04	0.04	0.04
Malawi	% share	6.7	8.3	8	5.4	5.5	6.4	6.1	4.8	3.6	2.8	2.8	2.7	2.6
Mouniting	US\$bn	1.2	1.4	1.4	1.4	1.6	1.6	1.8	2.1	2.0	1.7	1.8	1.8	2.0
Mauritius	% share	25.6	26.1	27.7	29.4	32.9	31	32	36.8	35.7	32.1	31	34.7	36.4
M	US\$bn	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Mozamoique	% share	13.4	7.3	6.2	8.6	5.5	6.8	6.7	7.3	7.1	8	9.9	9	8.4
Nomibio	US\$bn	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.8
Naimula	% share	15.7	15.5	15.8	16.3	16.7	15.9	13.8	12.1	9.3	8	9.2	9.9	10
Sovabollos	US\$bn	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Seychenes	% share	47.4	43.2	44.5	41.7	40.2	35.6	35.9	45.6	39.9	38.1	34.9	33.2	33.2
South Africa	US\$bn	6.9	7.8	9.7	11.9	10.9	11.6	12.3	13.2	12.8	11.5	11.0	10.3	11.3
South An Ica	% share	8.8	9	9.9	14	12.8	12.5	11.5	11.1	9.2	10.9	10.2	8.6	8.5
Swaziland	US\$bn	0.05	0.05	0.12	0.13	0.11	0.11	0.09	0.04	0.02	0.04	0.04	0.04	0.04
Swaziialiu	% share	1.9	1.8	3.7	3.6	3.6	3.3	3.2	1.2	1	1.6	2	1.8	1.6
Tanzania	US\$bn	0.5	0.8	0.8	0.8	0.9	1.0	1.3	1.4	1.3	1.2	1.3	1.4	1.5
	% share	27.9	35.4	33.6	30.1	30.2	28.3	30.4	29.7	24.8	22	19	17.7	19.5
Zambia	US\$bn	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Lampia	% share	9.5	9.6	7.3	8.3	5.3	5.1	3.4	3.6	3.5	3.1	2.3	1.9	1.8
Zimbahwa	US\$bn	0.2	0.1	0.0	0.1	0.3	0.2	0.5	0.4	0.5	0.5	0.4	0.4	0.4
Linnanwe	% share	6.9	3.9	4.4	3.8	11.4	6	19.3	15.8	18.8	21.6	10.7	9.1	9.3

Table 4: Foreign visitor exports in total exports (2011 US\$ bn)

Source: www.wttc.org

# Tourism's contribution towards capital investment

The future potential of any economy to have sustained growth is, among others, premised on its current capital and/or development investment. In SADC, capital investments are generally low, and as such the contribution of tourism sector towards investment will go a long way. According to WTTC figures, travel and tourism (T&T) is assumed to have attracted capital investment of US\$8.5bn in 2011 to SADC. This contribution is forecasted to increase by 3.7% on annual basis and is expected to be US\$12.5bn in 2022.Table 5 shows that the sector's annual average contribution to capital investment as percentage of the region's GDP was around 7.3%.

Regional countries in which tourism's contribution to capital investment has consistently been above 10 percent of GDP especially since 2008 are Seychelles, Namibia, Tanzania and Madagascar. In the case of Seychelles, it is very clear that the country's investments are largely dependent on tourism sector, with around 40% of national capital investments coming from this sector alone. Namibia follows, with around 10 percent of national investment being contributed by tourism.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Angola	5.4	7.1	6.9	7.4	6.6	5.2	2.5	3.1	2.8	2.7	2.6
Botswana	4.9	4.9	4.9	4.9	4.9	5.5	6	6.1	6.1	6.2	6.2
Lesotho	5.8	6.0	5.0	7.0	6.5	7.5	8.0	8.9	8.2	8.2	9.1
Madagascar	5.0	4.8	4.0	5.5	7.2	8.1	8.38	8.6	15.9	15.8	16
Malawi	8.1	5.4	5.5	6.4	6.1	4.8	3.5	2.9	2.9	2.8	2.8
Mauritius	9.2	10.0	8.2	7.8	10.8	12.3	12.0	7.2	6.2	6.3	6.5
Mozambique	1.6	1.7	2.1	2.5	3.8	5.0	5.4	5.6	6.1	6.0	6.0
Namibia	10.4	11.0	10.4	10.3	11.0	10.4	10.3	9.9	11.4	11.7	11.0
Seychelles	25	29	23	26	30	37.5	42	39	36	38	37
South Africa	6.2	6.4	6.8	8.8	9.4	10	9.3	9.0	8.0	7.9	7.8
Swaziland	5.9	5.9	6.0	6.5	6.3	6.4	6.0	6.1	5.1	4.9	5.4
Tanzania	5.5	7.0	8.2	8.1	8.0	8.8	10.3	11.0	10.5	10.5	10.4
Zambia	2.0	1.6	1.3	1.3	1.4	1.6	1.8	1.9	2.2	1.8	1.7
Zimbabwe	2.8	1.9	1.8	3.2	4.2	6.8	9.8	8.0	6.2	6.1	6.0
SADC	5.8	6.2	6.8	7.9	8.5	8.9	8.1	7.9	7.1	7.0	6.9

 Table 5: Capital investment in travel & tourism as % of GDP

Source: www.wttc.org

# Literature review

The analysis by Fayissa et al (2007) used a panel data of 42 African countries for the years that span from 1995 to 2004 to explore the potential contribution of tourism to economic growth and development within the conventional neoclassical framework. The study found that receipts from the tourism industry significantly contributed both to the current level of gross domestic product and the economic growth of Sub-Saharan African countries as do investments in physical and human capital. The study recommended that African economies could enhance their short-run economic growth by strategically strengthening their tourism industries.

In a study investigating the impact of tourism on development in three southern African countries namely Mauritius, South Africa and Zimbabwe, Page (1999) interrogated data from the hotel sector and found that tourism was more labour intensive in low labour cost

countries. On average, the study indicated that number of employees per room was 3.3 in Africa, 0.5 in Europe, and 1.7 in Asia. Zeroing in on the extent to which the sector was labour-intensive sector, the study found that tourism's contribution to employment was second to agriculture sector in terms of contribution to employment in the case of South Africa. This higher contribution cements the developmental nature of the sector to the economy.

Wanhill (1983) conducted a co-integration and causality analysis between tourism and economic growth in Mauritius. The research found that tourism was one of the major contributors to the country's economic growth. Furthermore, the study claimed that tourism had a significant positive impact on Mauritian economic development. Using the convergence approach based on Barro and Sala-i-Martin (1992a) type analysis as the analytical framework, Proenca and Soukiazis (2005) examined the impact of tourism on the per capita income growth of Portuguese regions. The study concluded that tourism can be considered as an alternative solution for enhancing regional growth in Portugal, if the supply characteristics of this sector are improved.

In a comparative study in which the relative growth performance of 14 "tourism countries" within a sample of 143 countries was done, Brau, Lanza, and Pigliaru (2003) found that tourism countries grew faster than all the other sub-groups (OECD, Oil Exporting, LDC, Small). Many developing countries have thus started to consider tourism as an important and integral part of their economic growth and development strategies as it serves as a source of scarce financial resources, job creation, foreign exchange earnings, and technical assistance (Sinclair, 1998; Dieke, 2004).

# Channels through which tourism affect economic growth Analytical framework

To measure the total impact of tourism, the UNWTO supports the use of tourism satellite national accounts (TSA). Although TSA have their own limitations, the system add to total tourism spending (domestic and foreign tourists, leisure and business travellers) by the government which can be held to support tourism (on park or museum services and also on customs and immigration) and the investment necessary to support this. This gives what the organization call the travel and tourism industry. The organization further uses input-output tables to identify the inputs of other sectors, and this indirect impact plus the direct impact gives what it calls the travel and tourism economy. Given that TSA quantifies only the direct contribution of tourism and travel, the WTTC recognises that tourism and travel's total contribution is much greater, and as such its tourism impact data includes and captures both indirect and induced effects, over and above the direct impacts.

# Direct, indirect and induced contribution of tourism

The positive impacts of tourism activities on the economy are usually captured by the concept of "tourism multiplier" (jobs and income), which is the sum of direct, indirect and induced impacts (Figure 1).The WTTC considers the direct contribution of travel and tourism (T&T) to GDP as reflecting the 'internal' spending on T&T (total money spending by residents and non-residents for business and leisure purposes) as well as government "individual" spending by government on T&T services directly linked to visitors, such as cultural (eg museums) or recreational (eg national parks). Indirect impacts happen when, for instance, a hotel buys inputs (goods and services) from other businesses in the economy (Meyer, 2006). The 'induced' contribution measures the GDP, investments and jobs supported by the expenditure

of those who are directly or indirectly employed by the Travel & Tourism industry. In other words, induced impacts include all of the economic impacts that will result from the paying out of salaries and wages to people who are employed in the tourism sector (and/or tourism related) businesses. These additional salaries and wages lead to an increased demand for various consumable goods that need to be supplied by other economic sectors of the economy. Thus the total contribution of T&T includes its 'wider impacts' (i.e., the indirect and induced impacts) on the economy.

Cattaneo (2009) contends that the weaknesses of tourism driven growth are normally captured by the concept of "leakages" which are the percentage of the price of the holiday paid by the tourist that leaves a destination (e.g., imported inputs or profits remitted by foreign hotel groups) or that never reaches the destination, primarily because of the involvement of intermediaries (such as tour operators or transporters) often based in the developed nations. For instance, Jenner and Smith (1992) have estimated that up to 90% of gross tourist expenditure could be leaked in the case of Mauritius.

# Methodology

# Empirical model of economic growth with tourism

The study employed panel data econometrics to achieve its stated objectives and followed the approach used by Fayissa et al (2007). In their endeavour to provide advice on economic growth, scholars have, over the years, focused at the rate at which countries reduce and possibly eliminate the gap between their current lower economic positions and their desired long-run economic growth path (Fayissa et al, 2007). To empirically determine the responsiveness of income growth rate to tourism and other traditional sources of economic growth such as investment in physical and human capital, and measures of institutional factors among others, we first specify a simple double log-linear Cobb-Douglass production function as:

$$\ln(y_{ii}) = \beta_0 + \beta_1 \ln TRP_{ii} + \beta_2 \ln Tinv_{ii} + \beta_3 \ln EFI_{ii} + \beta_4 \ln Sch_{ii} + \beta_5 \ln FDI_{ii} + \beta_6 \ln Cons_{ii} + \mu_{ii}$$
(1)

Where  $y_{ii}$  is the natural log of real GDP per capita and  $TRP_{ii}$  is log of tourist export receipts.  $Tinv_{ii}$  is the log of tourism related investment;  $EFI_{ii}$  is log of a measure of the economic freedom index. Scholars such as Owen (1987) and Sen (1999) argue that freedom (political, economic, social, transparency and security) is a necessary condition for economic growth and development in any society. To this end, the study includes the log of economic freedom index (EFI,) to capture the effect of this institutional factor. Obtained from the Heritage Foundation, economic freedom index is computed as a weighted average of fifty economic variables covering various economic, social, and governance characteristics such as stable monetary policy, market regulations and rigidities, and property rights. The index varies from 1 to 100; with countries having index close to 1 considered as "mostly un free" while those closer to 100 being "most free" economies. TRP, Tinv and EFI are all expected to positively affect economic activities. The intuition being that as TRP increases; it means that more money will be spent on direct, indirect and induced channels. Increase in any of these three channels will in turn result in increased economic activities (i.e., GDP). A rise in *Tinv* implies more physical and human capital which will all positively affect economic growth. On the other hand, as *EFI* improve or rise, it means SADC countries becoming more free with less corruption etc., thus creating a good environment for efficient production activities thus leading to economic growth.

 $Sch_{ii}$  is the average of secondary and tertiary school enrolment and is used as measure of investment in human capital; while  $FDI_{ii}$  is the log of foreign direct investment to capture the effect of external sources of investment on growth. These two variables are expected to positively affect economic growth. Literature on growth from human capital posits that increased schooling has a long run positive impact on economic activities as the production processes will be mannered by skilled people who are assumed to be more productive when compared to unskilled labourers. On the other hand, investment in general physical infrastructure like roads and telecommunication networks, among others will spur economic activities as bottlenecks in logistics will be reduced. Thus, FDI will positively affect economic growth.

Literature on economic growth shows that the impact of consumption expenditures ( $Cons_{it}$ ) on economic growth is controversial. For instance, neoclassical scholars such as Solow (1956); Kuznets (1966) and Todaro (2005) posits that higher household consumption expenditures tend to lower economic growth by lowering investment because of reduced savings. On the other hand, Myrdal (1969) has argued that increased household expenditures on health, nutrition, and education are actually economic growth-enhancing rather than growth-retarding, as healthy and educated households are more productive, contributing to economic growth. Supporting the positive impact of consumption on economic growth, Ranis (2004) argues that individual and household consumption can be important in increasing human development and may respond more closely with the real needs of the population than do government programs at the micro level. To this end, the effect of consumption expenditures ( $Cons_{it}$ ) on economic growth cannot be determined *a priori*.

In order to estimate the parameters corresponding to variables of interest from the data under consideration, the study employed a panel data estimation, an empirical exposition of which is provided in Equation (2):

$$Y_{it} = \alpha_i + \psi_t + (X_{it})\phi + v_{it}$$
<sup>(2)</sup>

In the above expression,  $Y_{it}$  is the natural logarithm of real GDP per capita in country *i* at year *t*, and  $X_{it}$  is a vector of the explanatory variables (tourism export receipts, tourism related investment, investment in physical and human capital, economic freedom index, and household consumption expenditures) for country i = 1, 2, ..., 15 and at time t = 1, 2, ..., 13,  $\phi$  a scalar vector of parameters of  $\beta_1, ..., \beta_6$ ;  $v_{it}$  is a classical stochastic disturbance term with  $E[v_{it}] = 0$  and var  $[v_{it}] = \sigma_t^2 \delta_i$  and  $\psi_t$  are country and time specific effects, respectively. Instead of *a priori* decision on the behaviour of  $\delta_i$  and  $\psi_t$ , different types of assumptions are separately imposed on the model and the one that gives robust estimates is chosen.

All the data used are annual variables. The sources of the data used in the study are as follows: GDP, years of schooling and consumption are from World Bank database, while *TRP* and *Tinv* are from WTT&C.

# **Empirical results and interpretation**

Table 6 shows the econometric results of the determinants of economic growth in SADC region. In an effort to check for robustness of the model results, the study estimated three different models in which some explanatory variables were removed in models 2 and 3. Overall, the results did not change significantly. In this section, the model in which all the variables were used is the one presented, while other two models (models 2 and 3) are presented in the Annex.

The estimated model generally fit the data as around two thirds of variation in the dependent variable is explained with the models.

The results from our model of choice, as shown in Table 6 indicate that tourism export receipts has a positive and statistically significant effect on GDP per capita at five percent level of significance. Thus, the study found that a 1% increase in the tourism export receipts of a typical SADC economy would result in a 0.16% increase in the average per capita income. This finding compares well with Fayissa et al (2007) findings in which found that a 10% increase in the tourism receipts of a typical African economy was estimated to result in a 0.3% rise in the average per capita income. Consistent with the findings of Barro (1990) and Sinclair (1998), among others, this research also found that investments in physical capital, as measured by tourism-related investment (in this study) have positive and statistically significant impact on the real GDP of the sampled SADC economies. Specifically, a 1% increase in tourism related investment will result in a 0.29% rise in economic activities of SADC member country as represented by GDP per capita.

Variable	Model 1
Tourism export receipts	0.16 (2.3)**
Tourism related investment	0.29 (3.3)***
School enrolment (Ave. secondary and tertiary)	1.02 (10.5)***
Economic Freedom Index (EFI)	0.60 (2.5)**
Final consumption	-0.25 (-3.2)**
Foreign direct investment	-0.04 (-2.6)**
Constant/ Intercept	8.85 (3.6)**
Observations	195
Adjusted R2	0.68
F – Statistics	68.7

 Table 6: Regression results (Dependent variable: GDP per capita)

Notes: [\*\*\*], [\*\*], [\*] significant at 1%, 5%, 10% level t-statistics in parenthesis

The impact of investment in human capital through increases in secondary and tertiary level school enrolment on GDP per capita was found to be positive, with a unit percentage increase in school enrolment<sup>11</sup> causing a 1.02%rise in GDP per capita. These findings are consistent with results of scholars such as Temple (1999), Dritsakis (2004), Durbarry (2004) and Fayissa et al (2007). For instance, the study of Fayissa et al (2007) found that a 10% increase in investment in human capital as a result of increases in secondary and tertiary levels school enrolment increased GDP per capita by 0.6%.

Looking at the institutional variable which is used to capture the effect of economic and political freedom, the economic freedom index (EFI), the tabulated results indicates that poor governance is an important bottleneck to the observed economic growth performances of SADC economies. Consistent with arguments made by such scholars as Sen (1990) and Owen (1987), the results presented in Table 6 indicate that a one percentage point improvement (an increase in the index of economic freedom towards values near 100) would lead to a 0.60% improvement in GDP per capita of a typical SADC economy.

<sup>&</sup>lt;sup>11</sup> The use of school enrolment is premised on the assumption that those who enrol will finish their studies.

The impact of final consumption as indicated earlier on can be positive or negative. In this study, tabulated coefficient shows a negative sign. Specifically, a 1% increase in final consumption results in a 0.25% decline in GDP per capita. This negative sign is very much expected and is supported by researchers such as Solow (1956); Kuznets (1966) and Todaro (2005) who postulated that higher household consumption expenditures tend to lower economic growth by lowering investment because of reduced savings. Furthermore, the negative sign on final consumption may emanate from the fact that a large portion of consumption goods in SADC region (with the exception of South Africa) are imported and hence not positively affecting local production through backward and forward linkages. Rather, the consumption of imported products or goods are leakages from the SADC economies; and leakages have negative effect on economic growth.

Finally, the coefficient on foreign direct investment (FID) though it is significant, it however has a wrong sign. The following may be the explanation for this negative sign. Inclusion of both tourism related investment and FDI in the same equation may have resulted in multicollinearity given that a big portion of tourism related investment maybe be part of FDI. As such, this might have resulted in the negative sign on FDI.

#### Conclusion

Tourism is an important sector in most SADC countries. As found by this study, tourism sector contributes meaningfully to individual regional economies in terms of GDP, employment, export receipts and investment. Although this sector's impact on countries varies, overall the study found that Seychelles and Mauritius rely heavily on tourism when it comes to economic activities (i.e., GDP), employment, export receipts and investment. In both Seychelles and Mauritius, tourism sector contributes about 50% and 30% towards GDP; 60% and 28% towards total employment; approximately 35% and 34% towards export receipts; and 38% and 10% capital investment as percentage of GDP; respectively. Empirical estimates confirmed the importance of tourism to economic activities in SADC region, with a 1% increase in tourism receipt causing a 0.16% rise in GDP per capita. Similarly, a 1% rise in tourism related investment resulted in a 0.29% increase in GDP per capita.

A major policy implication which emanates from this study is that SADC countries can improve their economic growth performance, not only by investing on the traditional sources of growth such as investment in general physical and human capital, trade, and foreign direct investment, but also by strategically harnessing the economic contributions from the tourism industry in terms of its contributions to, among other things, employment, foreign exchange earnings, GDP and physical capital investments.



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Variable	Model 2	Model 3
	0.16 (2.2)**	
Tourism export receipts	0.10 (2.3)***	0.15 (1.9)*
Tourism related investment	0.26 (3.0)***	0.12 (1.7)*
School enrolment (Ave. secondary and tertiary)	1.04 (10.7)***	1.16 (13.1)***
Economic Freedom Index (EFI)	0.58 (2.3)**	0.74 (3.0)***
Final consumption	-0.24 (-3.1)***	
Foreign direct investment		-0.04 (-2.5)**
Constant/ Intercept	7.96 (3.2)***	1.75 (1.7)*
Observations	195	195
Adjusted R <sup>2</sup>	0.67	0.66
F – Statistics	78.5	79

 Table A1: Regression results (Dep variable: GDP per capita)

Notes: [\*\*\*], [\*\*], [\*] significant at 1%, 5%, 10% level