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The sources of comparative advantage in tourism

Leon du Toit and Johan Fourie
 Bureau for Economic Research and Stellenbosch University

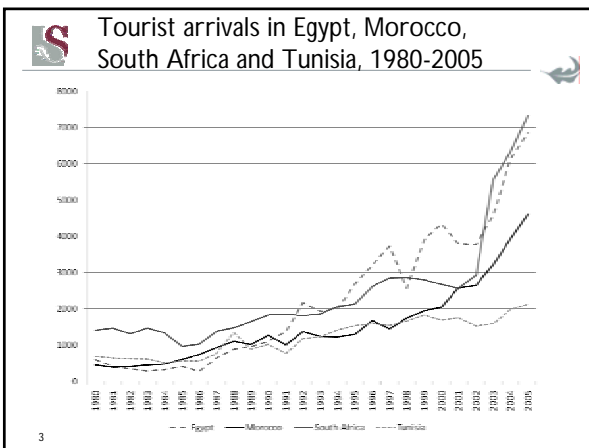
ESSA Conference
 Port Elizabeth
 September 8, 2009

Department of Economics
 Faculty of Economic and Management Sciences

Introduction

- Travel services one of the fastest growing export sectors in the world economy
- Africa is the fastest growing region since 2000
 - 5.7% in 2008, compared to 3% annually
- Growth not only in leading markets (Egypt, Morocco, South Africa and Tunisia)
 - Botswana, Cape Verde, Ethiopia, Ghana, Libya, Mali, Niger, Rwanda, Sudan and Uganda

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Theoretical background and hypothesis

- Trade theories (neoclassical and new) based on supply-side factors
 - Comparative advantage, Heckscher-Ohlin, imperfect competition, intra-industry trade
- Tourism modeling (and forecasting) based on demand-side factors
 - Linder (1961), Lim (1997)
 - For (South) Africa: Naudé and Saayman (2005), Saayman and Saayman (2008)
- Which countries have a comparative advantage in travel service exports? Why?

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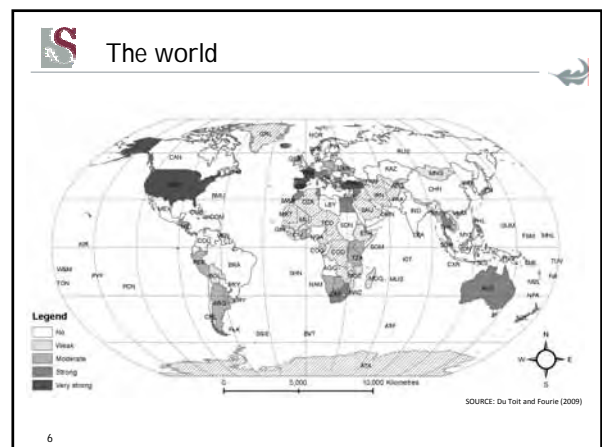
Methodology and data

- Revealed comparative advantage
 - Balassa (1965) index

$$RCA_{ij} = \frac{X_{ij} / \sum_i X_{ij}}{\sum_j X_{ij} / \sum_i \sum_j X_{ij}}$$
 - < 1, no revealed comparative advantage
 - > 1, revealed comparative advantage
 - Yu, Cai and Leung (2009) index

$$NRCA_{ij} = \frac{X_{ij}}{\sum_i \sum_j X_{ij}} - \frac{(\sum_i X_{ij})(\sum_j X_{ij})}{(\sum_i \sum_j X_{ij})^2}$$
 - < 0, no revealed comparative advantage
 - > 0, revealed comparative advantage
- UNCTAD Handbook of Statistics 2007
 - 147 countries in 2005
 - Africa: 36 countries with 2004/2005 data, 17 with older

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Countries with strong NRCA

Rank	Country	Code	CA	NRCA
1	USA	USA	Very strong	0.0026102
2	Spain	ESP	Very strong	0.0025692
3	Turkey	TUR	Very strong	0.0010222
4	France	FRA	Very strong	0.0010083
5	Greece	GRC	Strong	0.0008405
6	Italy	ITA	Strong	0.0008342
7	Australia	AUS	Strong	0.0007564
8	China, Macao SAR	MAC	Strong	0.0005861
9	Croatia	HRV	Strong	0.0005053
10	Austria	AUT	Strong	0.0004746
11	Egypt	EGY	Strong	0.0004306
12	Lebanon	LBN	Strong	0.0003828
13	Portugal	PRT	Strong	0.000382
14	South Africa	ZAF	Strong	0.0003151
15	Morocco	MAR	Strong	0.0002865
16	New Zealand	NZL	Strong	0.0002589
17	Dominican Republic	DOM	Strong	0.0002364
18	Thailand	THA	Strong	0.0002056
19	Bahamas	BHS	Strong	0.0001514
20	Cyprus	CYP	Strong	0.0001508
21	Switzerland	CHE	Strong	0.000142
22	Syrian Arab Republic	SYR	Strong	0.0001314
23	Bulgaria	BGR	Strong	0.0001227
24	Tunisia	TUN	Strong	0.0001069
25	Jamaica	JAM	Strong	0.0001063

SOURCE: UNCTAD (2007), own calculations

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- What drives a country's comparative advantage in travel service exports?



The determinants of comparative advantage – world

	Constant	-0.84	-0.82	0.16	0.00	0.83	0.18	-0.86	0.09	-0.26	-0.35	-0.87	-0.13
GFCF	1458-13	2196-13	2126-13	2208-13	2220-13	2338-13	2448-13	2476-13	2416-13	2140-13	1908-13	2396-13	
Population	-946E-10												
Labour force		-513E-10	-485E-10	-546E-10	-599E-10	-525E-10	-506E-10	-488E-10	-426E-10	-531E-10	-411E-10	-495E-10	
Surface area	-185E-07	-115E-07	-124E-07	-119E-07	-115E-07	-128E-07	-123E-07	-123E-07	-114E-07	-16E-07	-16E-07	-12E-07	
Natural Resources	0.17	0.15	0.16	0.15	0.15	0.16	0.16	0.16	0.15	0.15	0.16	0.16	
Cultural Resources	-0.004	-0.01	-0.008	-0.009	-0.01	-0.008	-0.009	-0.01	-0.02	-0.01	-0.008	-0.01	
Human Capital													
Interact													
Immobilization													
Policy Rules													
Air transport													
Price competitiveness													
Tourism infrastructure													
Prioritization													
Affinity for M&E													
Regulatory environment													
Required	0.185	0.1331	0.1514	0.1381	0.1372	0.1542	0.1489	0.1502	0.1498	0.1601	0.1707	0.1493	
Number of obs	113	109	86	107	105	86	86	86	86	86	86	86	

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Africa

- North African countries
- Island economies
- Longitudinal band, SA to Ethiopia
- Latitudinal band, Sahel countries
- Other countries
- Limitations
 - Data queries



SOURCE: Fourie (2009b)

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The determinants of comparative advantage

- Preliminary evidence
 1. Seems that travel service exports is natural resource intensive (not labour, capital)
 2. Prioritization of tourism
 - Not really
 3. Tourism infrastructure
 - Yes, but endogenous
 4. Local demand important
 - Yes, support for Linder theory?
 5. Regionalisation/agglomeration
 - Especially in Africa
 6. Air infrastructure over sea infrastructure
 - May point to possible policy implications for landlocked countries

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Thank you. Questions, comments?

JOHAN FOURIE
johanf@sun.ac.za

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