

USING MIRROR STATISTICS IN SOUTH AFRICA

DR S. UBOMBA-JASWA
Health and Vital Statistics
Statistics South Africa

Presentation to the UNWTO Capacity Building Workshop
on Tourism Statistics for Africa

Birchwood Hotel, Kempton Park

25th - 27th August 2010

- Introduction
- Issues with mirror statistics
- An example: South Africa residents
and New Zealand residents
- Conclusion

What is mirror statistics?

- ' Mirror statistics is a statistical procedure that has been proposed in order to **increase the quality** of the data regarding basically international statistics. It takes into consideration the fact that the import of a country is necessarily the export of another that an outbound visitor for country A is necessarily an inbound visitor for the country visited.'

(Ciller, T and M. Librero 2004: Measuring European intra-regional tourism flows)

1. Concepts and definition

▪ Tourists

- overnight visitors (i.e. separated them from same-day visitors)?
- visitors (including overnight and same-day) but excluding workers, migrants, etc?
- foreign arrivals (visitors and non-visitors)

- **Country of residence**

- country of current residence
- country of previous residence
- country of citizenship / nationality of travel document
- country of birth

2. Methodology

- **Sources of data**

- administrative data (border statistics from immigration records)
- survey data (travel & tourism surveys usually collected at the ports of entry / exit)

Immigration data

- **Data collection methods**

- arrival / departure cards or forms
- electronic (scanning and direct capturing of information from travel documents)
- both methods

- **Data processing**

- Total count (all collected cases are analysed)
- A sample (if so what percentage and reason for sampling)
- Variables (are all collected variables analysed; if not reasons)
- Time frame used (weekly, monthly, quarterly, annual)

3. Dissemination of results

- Organisation responsible for publication of results (Immigration, Statistics, Tourism)
- Format of results (hardcopy, database: CD, online; analysed, unit records; meta-data)
- Access (cost; free)
- Info share laws, rules and regulations (variables, acquisition, acknowledgement)

South Africa New Zealand Example

Mirror statistics on:

South Africa residents departure from South Africa to New Zealand

South Africa residents arrivals in New Zealand

New Zealand residents departure from New Zealand to South Africa

New Zealand residents arrivals in South Africa

Concepts

Tourists: Visitors

Country of residence: Current

Methodology

Sources of data

South Africa: Departure Form and border stats
(immigration data from ports of entry/exit)

New Zealand: Border stats (immigration data from ports
of entry/exit)

South Africa

A comprehensive presentation on the **Departure Form** was made during the November 2009 workshop.

A few reminders:

- Data collected (self-declared) only on South Africa residents
- Data collection only at three airports: ORT, Cape Town and Durban (old) now King Shaka
- Last publication in 2003

G.P.-S. 017-9465


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**DEPARTMENT: HOME AFFAIRS
 REPUBLIC OF SOUTH AFRICA
 DEPARTURE FORM**

**[Section 7(1)(g) read with section 9(3)(e); Regulation 6(3)(d)] of the
 Immigration Act, 2002 (Act No. 13 of 2002)**

(Only to be completed by citizens and permanent residents)

Flight No.	Train No.	Ship's name	Vehicle Reg. No.							
Surname:										
Forenames:										
Date of birth:			Y	Y	Y	Y	M	M	D	D
Purpose of departure:	Holiday	Business	Study		Emigration		Other (specify)			
Occupation:			Gender:		Male		Female			
Nationality:										
Country of final destination:										
Children included in passport accompanying traveller:			M	Number		Age				
			F							
I declare that the above-mentioned information is correct to the best of my knowledge.			 Departure Stamp							
Signature:										

Data processing

Total count - all cases analysed

Variables: all analysed except name and information on type of transport used

Time frame:

Monthly - Tourism and Migration Statistical release and

Annually - Tourism

Dissemination

Organisation: Stats SA

Data from border statistics and departure form

Format of results: hardcopy, database; analysed data and some unit records

Access: free - downloads from StatsSA website

Info-share laws, rules and regulations on variables (confidentiality); acknowledgement (e.g. Stats SA)

Results

Data: volume of visitors from 1997 to 2003 are presented

South Africa

New Zealand

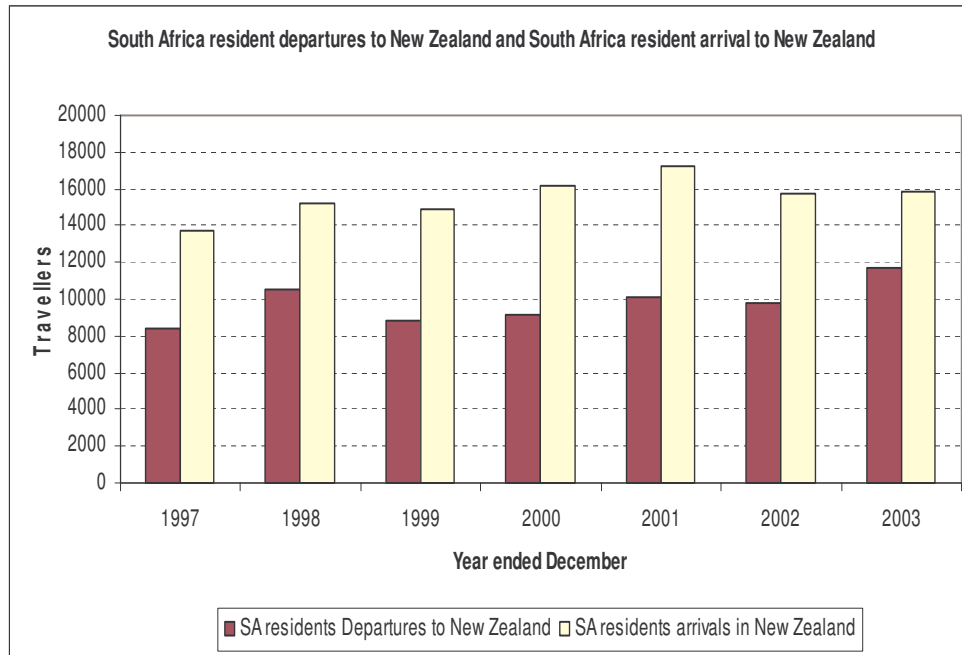
Table 1: South Africa resident departures to New Zealand

Year	SA residents departures to New Zealand	Annual change	% change
1997	8 391		
1998	10 546	2 155	25.7
1999	8 863	-1 683	-16.0
2000	9 149	286	3.2
2001	10 077	928	10.1
2002	9 775	-302	-3.0
2003	11 690	1 915	19.6

Table 2: South Africa resident arrivals in New Zealand

Year	SA resident arrivals in New Zealand	Annual change	% change
1997	13 705		
1998	15 264	1 559	11.4
1999	14 896	-368	-2.4
2000	16 200	1 304	8.8
2001	17 229	1 029	6.4
2002	15 790	-1 439	-8.4
2003	15 818	28	0.2

Fig. 1



A comparison of data in Table 1, Table 2 and Fig 1 show that:

- Throughout the period 1997 to 2003, there were fewer South Africa resident departures from South Africa to New Zealand than South Africa resident arrivals in New Zealand
- About half to three-quarters of South Africa resident arrivals in New Zealand were from South Africa. The value for the whole period 1997-2003 is 62,9%.

Both data series show fluctuating patterns:

- **Annual Volumes:**

SA departures - ranging from 8 391 to 11 690

SA arrivals - ranging from 13 705 to 17 229

- **Annual growth rate:**

SA departures - highest (25,7%) between 1997 and 1998 and lowest (-16,0%) between 1998 and 1999

SA arrivals - highest (11,4%) between 1997 and 1998 and lowest (-8,4%) between 2001 and 2002

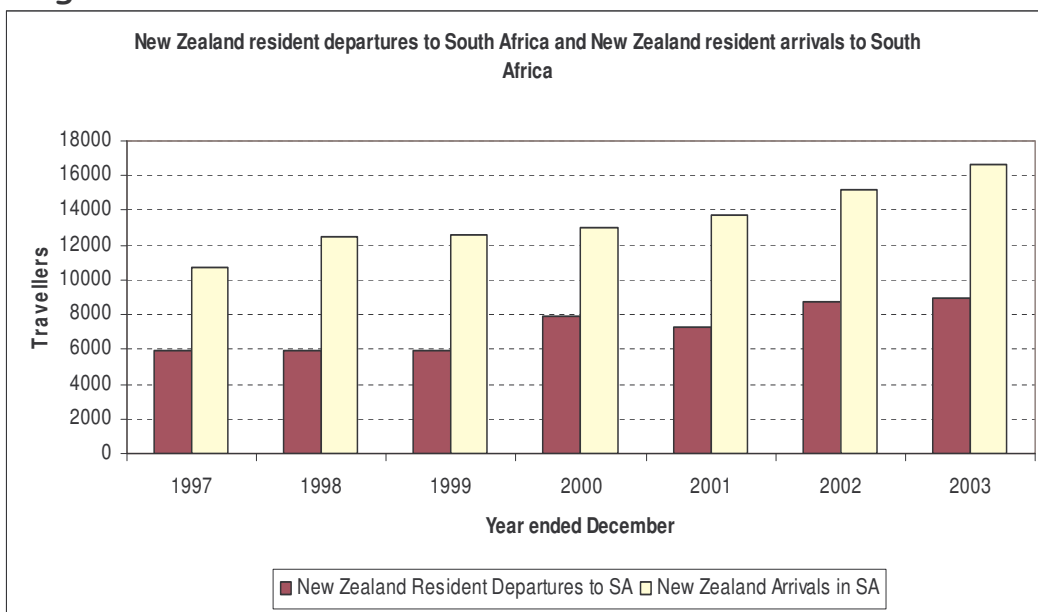
Table 3: New Zealand resident departures to South Africa

Year	New Zealand Resident Departures to SA	Annual change	% change
1997	5 945		
1998	5 888	-57	-1.0
1999	5 899	11	0.2
2000	7 933	2 034	34.5
2001	7 236	-697	-8.8
2002	8 730	1 494	20.6
2003	8 965	235	2.7

Table 4: New Zealand resident arrivals in South Africa

Year	New Zealand resident arrivals in SA	Annual change	% change
1997	10 744		
1998	12 501	1 757	16.4
1999	12 587	86	0.7
2000	13 035	448	3.6
2001	13 767	732	5.6
2002	15 213	1 446	10.5
2003	16 634	1 421	9.3

Fig. 2



A comparison of data in Table 3, Table 4 and Fig 2 show that:

- Throughout the period 1997 to 2003, there were fewer New Zealand resident departures from New Zealand to South Africa than New Zealand resident arrivals to South Africa
- Annually about 50,0% to 60,0% of New Zealand resident arrivals in South Africa were from New Zealand. The value for the whole period 1997-2003 is 53,6%.

Both data series show consistent positive growth with slight declines in the departure data between 1997 and 1998; 2000 and 2001

Annual Volumes:

NZ departures - ranging from 5 945 to 8 965

NZ arrivals - ranging from 10 744 to 16 634

Annual growth rates:

SA departures - highest (34,5%) between 1999 and 2000 and lowest (-8,8%) between 2000 and 2001

SA arrivals - highest (16,4%) between 1997 and 1998 and lowest (0,7%) between 1998 and 1999

Yes tourism mirror statistics is doable, useful and quite interesting but very complex and time consuming (be prepared!)

Sources of data

- Not all countries have good detailed inbound data; detailed data on outbound especially on residents are even less common. A country needs to know where its resident travel to before it goes to look for them in those countries.
- First examine the foreign arrivals data - look for countries with high volumes; neighbouring countries

- Which databases to search: websites of government statistical offices, department of immigration, tourism, etc; international organisations *e.g.* UNWTO - that collects information from different countries

Comparability

- Pay attention to the issues raised earlier in the presentation regarding concepts, methodology and dissemination

Relevance

- Resuming and strengthening data collection on departure of South Africa residents: Stats SA recommendation to DHA to include the relevant variables from the *Departure Form* in the data capturing system at the ports of entry/exit
- Mirror statistics are important inputs for various sectors (social, political, economic, etc) of national development as well as international cooperation (bi and multi national)

THANK YOU