

ACCOMMODATION AND BORDER SURVEY STATISTICS IN SWEDEN

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Abstract: In December 1999, the Swedish Tourist Authority commissioned Statistics Sweden to carry out a border survey on incoming tourism.

In Sweden, as in many European countries, the first attempt to measure tourism was made through accommodation statistics. Since 1978 data has been collected from the service supply side: hotels, motels, youth hostels, campsites etc. The limitations are obvious, as far from all tourists stay in such establishments.

We honestly believe that the experience has been extraordinarily positive both for the STA and for Statistics Sweden, although their responsibility for the design and execution of the survey has involved them in combating a number of problems which are described below.

Index

Presentation

Designing surveys for analysing tourist activity

Experience of the Swedish border survey 2000/2003

- Background
- Aims
- Measures
- Scope of study
- Data collection procedure
- Data collection instrument
- Presentation of results
- Problems and experiences
 - Length of interview
 - Language difficulties
 - Practical circumstances
 - Long land borders
 - Small sample of foreigners
 - Conclusions

Technical description

- Population
- Sampling
- Evaluation

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PRESENTATION

The origin of this article has to do with the decision of the Swedish Tourist Authority (STA), a governmental office charged with developing strategies, keeping statistics and co-ordinating tourism, to entrust Statistics Sweden with the design of a border survey developed during the period 2000/2003 as an complement to estimating the number of visitors to Sweden from an accommodation survey. This decision meant a change in the way statistics had previously been reported, as can be seen in the following table:

SWEDEN

Basic Indicators	1999	2000	2001
INBOUND TOURISM			
Arrivals *			
Visitors	14.721
Tourists (overnight visitors)	2.595	2.746	7.431
Same-day visitors	7.290
Cruise passengers
Arrivals by region *			
Africa	37
Americas	546
Europe	6.437
East Asia and the Pacific	411
South Asia
Middle East
Arrivals by mode of transport *			
Air	3.083
Rail	579
Road	1.553
Sea	2.221
Arrivals by purpose of visit *			
Leisure, recreation and holidays	3.188
Business and professional	2.781
Other	1.463

* in thousands

The abrupt change in the figures for non-resident tourists is due to a change in the source of our information: instead of data from accommodation surveys we have carried out interviews at border points, allowing us to increase results to 2.7 times the previous level, and also to estimate the number of visitors per day, as well as to classify the flow according to some basic characteristics (country of residence, means of transport and purpose of visit).

As so clearly stated in the guidelines prepared by the Director of the IMF Statistics Department, Ms. Carol Carson and two collaborators (S. Khawaja and T. Morrison): "The time has come to bring revisions more fully out in the open and to draw on statistical experience from around the world to work towards identifying a set of good practices. This good practice makes up what we can call revisions policy. Revisions policy should be recognised as an important aspect of good governance in statistics. Good governance in statistics, in turn, is part of public sector transparency and accountability more broadly."

We believe that if the Swedish experience can be described as good practice, it is in some measure because this initiative coincides with a World Tourism Organization (WTO) project to design a model border survey as part of its strategy for dealing with tourist statistics. After three years of collaboration with the WTO and other bodies (CTC in Canada and IET in Madrid), it is obvious that more and more countries are switching to surveys of this type, sometimes at the instigation of their respective central banks).

DESIGNING SURVEYS FOR ANALYSING TOURIST ACTIVITY

In December 1999, the Swedish Tourist Authority commissioned Statistics Sweden to carry out a border survey on incoming tourism.

In Sweden, as in many European countries, the first attempt to measure tourism was made through accommodation statistics. Since 1978 data has been collected from the service supply side: hotels, motels, youth hostels, campsites etc. The limitations are obvious, as far from all tourists stay in such establishments.

Besides wishing to complement accommodation statistics, the STA was eager to design a survey covering basic aspects of inbound tourism in Sweden for the purpose of analysing this market.

- It was suspected that underestimating the numbers of visitors and the time they spent here was a consequence of the nature of the Swedish tourist market, which has an important rural component. We thought that the weighting of certain types of accommodation (privately rented cabins; lodging with friends and relatives) according to normal statistical practice was giving seriously flawed results.
- As a consequence, we turned to the only reasonable statistical alternative available: estimating the flow of visitors by recording the relative frequency of the means of transport used. We were aware that private cars would pose a challenge. Not only were they likely to be the most important means of transport, but in Sweden many come in on ferries and the opening of a bridge with Denmark in the middle of the period we are studying further complicated matters. National frontiers are extensive and the police are not authorised to stop cars.
- We also thought that a border survey would be fundamental to recording tourist behaviour and measuring the economic impact of money spent on visits. Since we had indications of the importance of both business tourism and day trippers, we determined that these groups too should be investigated. Accordingly we arranged for a financial consortium to back the Border Survey Project 2000/2003, and agreed to provide each member with a CD containing the database of over 40,000 interviews we planned to conduct, so that they could carry out their own analysis.

- Between July 2000 and June 2003, the survey “Incoming Visitors to Sweden” was made at several crossing-points on the Swedish border. This paper summarises the underlying intentions of the survey, its structure and some experiences along the road.
- Lastly, we would point out that a subsidiary objective of developing the border survey was to -support the development of the STA and to compare with the Central Bank of Sweden its utility in forecasting the effects of Sweden’s adherence to the Euro zone (always assuming a favourable result from any future referendum).

We honestly believe that the experience has been extraordinarily positive both for the STA and for Statistics Sweden, although their responsibility for the design and execution of the survey has involved them in combating a number of problems which are described below.

A first reading of the data obtained in the last three years has allowed us to contrast and define our conjectures on several matters.

- The importance of private accommodation:
 - ▶ Cabin-type accommodation accounted for 31.4% of the total number of “foreign guest nights by home country and type of accommodation.”
- The importance of private cars:
 - ▶ Cars and ferries account for 23.0% and 34.3% respectively of all “foreign overnight visitors by home country and mode of travel to Sweden.”
 - ▶ Identifies private vehicles as the main means of transport for incoming tourists.
- The relevance of business tourism as a market segment:
 - ▶ Business trips account for 32.4% of all “foreign overnight visitors by home country and purpose of the trip.”
 - ▶ This share rises to 57.5% if we focus on overnight visitors coming by air.

Also, we have been able to record other aspects of the behaviour of non-resident visitors:

- Figures of foreign tourists visiting Sweden in 2002 reveal that a substantial number – 2.7 million – came from neighbouring Nordic countries. More than 3.9 million came from other European countries. The rest, some 0.8 million visitors, came from other parts of the world. Of the latter, almost half came from North America (five out of six of these were visitors from the USA).
- More than one third of foreign tourists arrived in Sweden by air – almost two thirds of them were on business trips, while around one third of all foreign visitors were business tourists. Only a minor part (one out of five) of those on leisure trips came by air.

- Regardless of purpose, more than seventy per cent chose to visit Sweden's three city areas (Stockholm, Gothenburg and Malmö). Of course, this pattern was particularly evident among business travellers. However, a majority of those who visited Småland and the neighbouring islands, as well as much of north and central Sweden were "leisure" travellers.
- Visitors who travelled by car in Sweden covered on average 567 kilometres; those on leisure trips drove further – on average 837 kilometres. Dutch and Germans travelled particularly far – 1,078 and 1,028 kilometres respectively.
- Most visitors stayed in Sweden for just a short time – on average eight overnight stays, but those from far away and those who stated their purpose of visit as "visiting relatives/friends" stayed on longer. A little less than three out of four did not stay for longer than a week. Of course, those who stated their purpose of visit as "study" stayed longer.
- The typical foreign visitor had daily expenses of 200 – 500 SEK. Mean daily expenses were higher, 624 SEK, which might be attributed to the fact that business travellers on average spent 1,044 SEK daily. Lowest expenses were returned, as one might expect, by those who visited relatives or friends (410 SEK).
- The educational level of the visitors was high – some eight out of ten had passed exams from secondary school or higher.

EXPERIENCE OF THE SWEDISH BORDER SURVEY 2000/2003

Background

In Sweden, as in many European countries, the first attempt to measure tourism was made through accommodation statistics. Since 1978 data has been collected from the supply side: hotels, motels, youth hostels, campsites etc. The limitations are obvious, as far from all tourists stay in such establishments. Those staying with friends and relatives in private rented or privately owned houses or flats are not included. Also this kind of statistics does not measure the total number of arrivals in Sweden. Its advantages are the rather simple procedure for collecting data and the tourism industry's prime interest in the commercial side of tourism.

Over the years, added information about domestic tourism in Sweden has been collected in different travel and tourism surveys from samples of the Swedish population. However, even though the proportion of incoming tourism to Sweden is only about 20 per cent, questions about this sector have been put forward more frequently during the last decade and come from policy makers as well as from the tourism industry itself. In December 1999, the Swedish Tourist Authority commissioned Statistics Sweden to carry out a border survey on incoming tourism.

Aims

The aim of the border survey was to get a better basis for the estimation and analysis of incoming tourism, primarily to supply the industry with a sounder base for decisions but also to allow more accurate calculations of the economic impact of tourism and to make economic comparisons between different categories of tourists possible.

Measures

Through the border survey, estimates of the total number of foreign visitors to Sweden were made and information obtained from visitors on

- country of residence
- main reason for visit
- main destination
- duration of visit
- type of accommodation
- means of transport
- expenditure
- background information: age/sex/education/level of income was also collected.

Scope of study

The study was carried out during a three-year period, starting July 2000, with a total of approximately 45,000 interviews at Swedish borders.

Data collection procedure

Data was collected through interviews at border crossing-points when the visitor was leaving Sweden. Which crossing points – airports, harbours, roads – the survey should cover was decided from external information on the greatest flows of foreign tourists and on crossing-points especially used by tourists of certain nationalities.

The sample of respondents was made in several steps:

- “interviewing shifts” at different crossing-points were allocated in proportion to the number of passing foreign visitors
- the interviewers were instructed to use one of two sampling methods (noting which one)
 - a) starting randomly, then choosing passengers at fixed intervals, or
 - b) starting randomly, then waiting x minutes after every interview before picking the next passenger

Foreign visitors were interviewed, Swedes were recorded on a special non-response form, also used for noting (if possible) nationality, sex and age of non-respondents.

Data collection instrument

The questionnaire, which existed in twelve languages, was normally filled in by the interviewer. In the event of language problems, the questionnaire could be handed to the visitor for answering.

Presentation of results

Results were delivered to the members of the consortium of owners quarterly as a database on CD-ROM. An annual written report with data and a short technical description of the study was presented.

Problems and experiences

Length of interview

Considering the environment and the situation of the visitors to be interviewed, it is obvious that the interview had to be kept very short. This limited the number of areas to cover as well as the level of detail.

These restrictions were foreseen and the border survey therefore was supplemented by a similar but more detailed survey at accommodation establishments. This “establishment survey” was aimed at quality rather than quantity. Unfortunately the study had to be closed down after two years because efforts to find foreign visitors at the establishments were very time-consuming – and consequently expensive.

Language difficulties

In this study, staff from the Survey Unit of Statistics Sweden were used, preferably persons with knowledge of one or more widely used foreign languages like English, German or Spanish, but also neighbouring languages like Finnish or Polish. As mentioned before, the questionnaire was printed in several languages and could be used as a hand-over form. The languages were Swedish, Norwegian, Danish, Finnish, English, German, French, Spanish, Italian, Polish, Japanese and Russian.

During the study interviewers noticed that willingness among tourists to participate in the study, regardless of circumstances, seemed to vary between nationalities.

Practical circumstances

No airports look exactly the same, nor do ferry berths. This means that a considerable amount of time had to be used at the beginning of the study to try to find the best place for the interviewers to use. At some places permission from authorities (airports) or owners (ferry lines) was necessary, which took time and also restricted flexibility.

The bridge between Sweden and Denmark, Öresundsbron, was a problem in two ways. The personnel working on the bridge were instructed to help the interviewers by asking drivers passing the pay station to stop to answer some questions. This co-operation sometimes failed to work.

Another problem at the bridge was the working situation for the interviewers. From October to March weather conditions almost made it impossible to stand on the bridge for more than shorter periods at a time.

Long land borders

Even if Sweden has got most of its borders towards water, almost half of our borders are land borders with Norway and Finland.

Especially the long border towards Norway was difficult to cover. There are many roads crossing the border, everything from motorways to very small roads, and they could not all be covered.

Statistics Sweden had no authority to stop cars at the border. This restricted us to conducting the interviews with persons who happened to stop near the border. This was not an optimal solution and it became one of the largest problems during the study.

Small sample of foreigners

The number of foreigners among the travellers from Sweden varied between crossing-points and over the seasons. On average it is about 20 per cent. This small proportion sometimes made it difficult to find foreigners willing to be interviewed, which raised the price per interview to an unacceptable level. This was the main reason for the decision not to extend the survey beyond the initial three years.

Conclusions

Borders surveys are costly to conduct. To try to minimise the costs it is of great importance that the planning is done properly. The time spent on planning, preparations, testing and bench-marking will save even more time and money later on. Mistakes in this kind of study are expensive to repair.

The STA will approach mobile telephone operators in Scandinavia with a view to obtaining statistics that could indicate the number of non-residents making calls on their mobiles. this approach is being tried in France by the Observatoire National du Tourisme in order to measure regional flows of visitors.

TECHNICAL DESCRIPTION

Population

Foreigners (persons living abroad) consists of persons who lived outside Sweden the preceding 12 months. The category may contain Swedish citizens but not persons living in Sweden without Swedish citizenship. The population studied were all departures of foreigners from Sweden. Exceptions were:

- Departures outside normal departure points
- Transits within the same customs examination station, as at Arlanda, Stockholm.

Sampling

Interviews were made at the 11 main custom examination stations in Sweden. For each station a sample of interview periods were chosen, during which an interviewer would operate. Within the interview period in principle every n:th (e.g. every 20th) passenger was chosen. An alternative method was to make a break after each interview (of perhaps one minute) before starting the next interview.

The sample size is related to the total number of departing foreigners. However, the sampling rates differed between the 11 places. At airports a higher sampling rate was used and at road borders with Norway and Finland a lower rate. The reason was to increase the number of visitors from non-Scandinavian countries.

The instructions to the interviewers had to be modified locally according to the very different conditions at airports, docks, trains and road borders.

Evaluation

For evaluation purposes information on departing passengers was made available from all customs posts. Information was obtained from airport statistics, from shipping companies and from road measurements by the Swedish National Road Administration (Vägverket). However, the ratio of foreigners among the passengers had to be measured at the 11 places. For the ferry traffic, however, the shipping companies have delivered data, which were considered more reliable than the measurements regarding the ratio of foreigners among the passengers.

For each of the 11 places the population was calculated (number of departures of foreigners), and the sample (number of responding interviews). This ratio is known as the raising factor and is used to make inferences from the sample to the population.