

The Department for Culture, Media and Sport

A FEASIBILITY STUDY FOR COMPILING A TOURISM SATELLITE ACCOUNT FOR THE UK

Foreword

Tourism satellite accounts are being compiled in a number of countries as a way of measuring the economic importance of tourism, which is not revealed by the existing statistics on tourism spending or by data on tourism related industries. In fact, tourism satellite accounts can meet a wide range of purposes. The Organisation for Economic Cooperation and Development (OECD) is developing a manual on tourism satellite accounts and identifies a wide range of purposes, which are listed in paragraph 1.2.4 of this study.

The Department for Culture, Media and Sport and the British Tourist Authority commissioned Cambridge Policy Consultants and Geoff Broom Associates to undertake a study into the feasibility of compiling a tourism satellite account for the UK. We are pleased to publish the report of the feasibility study as part of the process of deciding whether or not to build a tourism satellite account for the UK. No decision has yet been taken on this. We are examining the need for an account and the value of having one, compared with the substantial investment (and maintenance) costs that would have to be met and which have been outlined in the feasibility study.

Readers of the feasibility study may know that two international official organisations - the UN World Tourism Organisation (WTO) as well as the OECD - are each developing a manual on tourism satellite accounts. Both of these manuals are still under development and discussion, including to move to a convergence of the two approaches. The WTO and OECD documents used by our consultants were the draft versions of the manuals available in early 1998. Both manuals continue to be revised. Note in particular, that later versions of the WTO manual treat consumer durables as an optional extension, not part of the core (compared with the position at the time of our feasibility study, see paragraph 1.4.7).

For some time the World Travel and Tourism Council (WTTC) has produced travel and tourism satellite accounts for a number of countries. There are several differences between the WTTC approach and that of the WTO and OECD, beyond those noted at paragraph 1.4.9 below. For example, the WTTC include indirect and induced effects on their global estimates. They include intermediate demand of business travel in their estimates. They also include extra-economy exports that become imports to tourism economic activities in other economies.

To clarify paragraph 4.2.1 below, the WTTC and WTO are not partners in the WTO project to development a generic standard conceptual framework for the tourism satellite account. WTTC along with a number of organisations were members of an ad-hoc experts' committee that provided initial input to the WTO project.

The feasibility study suggests (in paragraph 6.2.18) an eventual goal of producing annual tourism satellite accounts. Experience now gained from other countries suggests that this goal may be unrealistic, given the amount of intensive detailed and specialised work involved in compiling an account, as well as the nature of the data in the account. The Canadian Tourism Commission, for example, has found that a more realistic goal is to re-benchmark the account every 4 - 6 years. The tourism satellite account can also be supplemented with tourism indicators based on elements in the account, in order to meet the requirement for relevant current information that is more timely than that from a satellite account.

I hope that you find the feasibility study of interest and I look forward to receiving any comments on it.

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Contents

1. INTRODUCTION

- 1.1. The purpose of the study
- 1.2. The purpose of tourism accounts
- 1.3. Previous work
- 1.4. TEAs and TSAs

2. SURVEY DATA IN THE UK

- 2.1. Introduction
- 2.2. Demand side information
- 2.3. Supply side information
- 2.4. Summary of information availability concerns

3. METHODOLOGICAL ISSUES AND PROBLEMS

- 3.1. The definition of tourism
- 3.2. Tourist expenditures
- 3.3. The supply of goods and services for tourists - 'a tourism industry'?
- 3.4. Tourism-characteristic use and supply activities
- 3.5. Tourism Economic Accounts (TEAs) and Tourist Satellite Accounts (TSAs)

4. TOURISM ECONOMIC ACCOUNTS (TEA)

- 4.1. Introduction
- 4.2. The OECD templates for TEAs
- 4.3. Overview

5. TOURISM SATELLITE ACCOUNTS (TSA)

- 5.1. Introduction and background
- 5.2. Feasibility of developing TSAs for the UK
- 5.3. Overview

6. OPTIONS FOR THE WAY FORWARD

- 6.1. Introduction
- 6.2. The proposed options
- 6.3. Overview

ANNEX A: SOURCES AND AVAILABLE INFORMATION

- Summary of Main Statistical Sources
- Summary of Tourism Expenditure Information

Introduction

The purpose of the study

This study is intended to investigate the feasibility of compiling a Tourism Satellite Account (TSA) for the United Kingdom to provide an informed basis to assist the Department of Culture, Media and Sport and the British Tourist Authority in coming to a decision on the viability of commissioning a full TSA or alternative options en route to such a conclusion.

Tourism differs from many economic activities in that it makes use of a diverse range of facilities across a large number of industrial sectors. As a result it is not possible to identify tourism as a single "industry" in the national accounts, so that its value to the economy is not revealed. Tourism is not entirely unique in this respect in that there are other aspects of the economy which are inadequately identified or in some instances completely ignored. Apart from tourism, health and transportation also fall into the former category while the environment and unpaid work are examples of the latter.

The development of "satellite" accounts is an attempt to provide a clearer view of the relative importance of tourism as an economic activity and to trace its interrelationship with traditional industry sectors contained within the national accounts.

The purpose of tourism accounts

Insofar as tourism is an economic phenomenon, it is already embodied in the national accounts. The commodities purchased by visitors and produced by the suppliers are all part of the structure of the core accounts as is the formation of fixed capital. However, they are not readily apparent because tourism is not identified as a separate activity and so all the commodities that are produced and consumed in meeting tourism demand are buried in some other element of the core accounts.

A Tourism Satellite Account provides a means by which these economic aspects of tourism can be drawn out and analysed separately but where they are still embodied in the main accounts and can still be related to them. By clarifying the role of tourism and its linkages within the economy, a much stronger base can be provided for analysing the potential impact of policy decisions in the public sector. Currently the information that does exist is fragmentary and incomplete so that decisions are taken in a degree of ignorance about the likely impact.

A TSA can also be broader in the scope of activity included by including activities which are not normally included in the national accounting framework. One example is volunteer work. However, most existing proposals for TSAs abide by the international standards set for national accounting principles.

The OECD has suggested that TSAs can:

provide a set of comparable international accounts, working within national accounting principles, to examine tourism as an economic phenomenon;

offer national policy makers insights into tourism and the roles it performs in their economies (in current prices and also in volume measures (constant prices));

indicate the production function of tourism industries and their inter-relatedness with the rest of the economy;

offer a framework from which impact models of tourism on economic activity and employment can be calculated;

provide detailed information on employment in tourism industries and the role that tourism plays in job creation, especially for new entrants to the workforce;

identify the size of tourism capital investment, and provide the means to analyse its link with tourism supply and job creation in industries producing the capital;

identify the capital base of tourism industries;

help in defining the scope of tourism and the economic significance of the tourism industries;

help to study the behaviour of tourism-characteristic industries both in time and in comparison with other economic activities;

make a structural analysis of tourism-characteristic industries;

measure productivity within tourism and compare it with other industries.

While the use of TSAs is therefore potentially wide, there are a number of significant issues which need to be resolved before such purposes can be achieved. These issues include such matters as:

the definition of tourism activity and consumption;

the measurement of the various activities to generate the necessary accounts.

Not surprisingly, differences of opinion have emerged on these issues between the main international and national bodies with an interest in developing the approach. These differences may well be resolved as discussions between the various groups continue, but clearly until there is a clear consensus on the construction of TSAs internationally, some of the purposes identified above, notably international comparison, will be constrained.

Previous work

Tourism has proved very difficult to define and measure, but the attempt to improve our understanding of its scope and impact have grown in importance, with the substantial growth of tourism as an economic and social phenomenon. A number of countries including France and Canada, and organisations, including the OECD, the WTTC and the WTO, began work in the 1980s to provide a more systematic and internationally acceptable standard and approach. One outcome of this earlier phase of work was the development of the Tourism Economic Account to provide a means of capturing certain economic and social aspects of tourism.

Since the beginning of the 1990s, the pace of discussion and development has increased. Milestones along the way have included:

the publication of the Manual on Tourism Economic Accounts by the OECD in April 1991;

the presentation by Statistics Canada of a draft proposal on TSAs to the Ottawa Conference on Tourism in June 1991;

the publication of the 1993 System of National Accounts which included a chapter on satellite accounts including references to tourism;

the publication of the first results of the Statistics Canada TSA in August 1994;

the publication of Principles for Travel and Tourism National Satellite Accounting by WTTC in 1996;

the publication of draft proposals by the WTO in 1995, with further drafts in 1996 and 1997;

the publication of OECD Tourism Statistics: Design and Application for Policy in 1996;

a draft Tourism Satellite Account for OECD countries published by OECD for consultation in October 1997.

TEAs and TSAs

Tourism Economic Accounts

The concept of Tourism Economic Accounts was developed by the OECD as an attempt at capturing the major aspects of tourism as an economic phenomenon. It comprises five basic tables, using standard international classifications thereby allowing international comparability. The five tables are:

Supply and use of commodities characteristic of tourism industries at market prices

Derivations of value added in tourism industries at market prices

Consumption expenditure of visitors according to types of goods and services

Gross fixed capital formation by tourism industries

Employment in tourism industries

The TEA however only provides a partial picture of tourism. Except for table 3, all the tables relate to "tourism characteristic" industries, which may be loosely defined as those industrial sectors where tourism use is perceived to be the primary and majority source of demand. It is therefore restricted to hotels and restaurants; land, water and air transport, supporting and auxiliary transport activities, and recreational, cultural and sporting activities. In practice, the definition of "tourism characteristic" sectors involves the setting of pragmatic cut-off points in a situation where the proportion of demand arising in each sector from tourism is very variable. Thus a significant proportion of restaurant, land transport and recreation, cultural and sporting

activity will be due to local resident activity and not tourism as commonly defined. Retailing which receives a significant part of tourism expenditure is excluded.

The TEA tables have always been cast as a half way house to a more comprehensive approach, and have been driven by perceived availability of information as much as principle.

Tourism Satellite Accounts

Tourism Satellite Accounts use the basic framework of the national accounts, and modify it to bring out those features of tourism that are inadequately covered or not covered at all in the national accounts. However as noted above, there is no single answer to what a satellite account should be, and currently four versions of TSAs have been drafted. These are;

the Statistics Canada version;

the WTO version;

the OECD version;

the WTTC version.

All four versions have a substantial body of data in common, but contain some significant differences.

The **Statistics Canada** version uses as a basic building block the standard national accounts supply and use tables from which the input-output tables are derived and modifies them to highlight tourism. Commodities purchased by tourists are identified by survey, and the industries providing services or products can then also be identified. Those industries where the supply of tourism products or services are minimal (such as mining), are excluded from the analysis. For those industries identified as supplying goods or services to tourists, the ratio of production absorbed by tourists is then calculated by expressing the tourism demand as a proportion of total domestic demand. This process then allows a more accurate estimation to be made of the tourism GDP than with the TEA approach. It also provides a measure of total tourism demand by commodity in which all tourism purchases are included whether by business, government, households or non-residents.

The basic approach of the **WTO** version is not dissimilar to the approach adopted by Statistics Canada and the OECD in that the supply and use tables are used as the basic building block. There are however some differences. The major difference concerns the treatment of consumer durables which are included in the WTO version but excluded from the other two versions. There are other differences including variations in the treatment of second homes, of support services by General Government and regarding the use of sector accounts, financial accounts and balance sheets.

The **OECD** model is similar in many respects to the Statistics Canada approach and represents a substantial advance beyond the TEA, not least in the number of tables incorporated in the approach. A number of significant differences with the WTO version are set out above.

The **WTTC** version also uses the national accounts as the basis of its analytical framework, but focuses on tourism demand as a percentage of expenditure based GDP as the important variable with a lesser degree of importance being attached to an analysis of tourism industry GDP. Like the OECD and Statistics Canada approaches, the WTTC uses only final demand as part of this measure so that intermediate demand is not included. The main differences between WTTC and the other versions rests in its broader definition of tourism demand. Thus

the WTTC approach argues that since an individual uses his car for holiday or business travel, a proportion of the capital cost of the car should be allocated to tourism as well as the actual costs incurred in the trip.

The TSA concept continues to be the subject of discussion and consultation, and there are likely to be further refinements in the approaches, and a narrowing of differences between at least the OECD and WTO versions. There is however likely to be continuing differences with the broad definitions used by WTTC which may not be so easily resolved.

Survey Data in the UK

Introduction

In order to construct a TEA or a TSA, information is required on both the demand side of tourism and on the supply side. Information is available for both, albeit of varying quality and coverage.

Demand side information

Information on tourism demand is collected in a number of national surveys. The main sources are:

United Kingdom Tourism Survey (UKTS);

International Passenger Survey (IPS);

United Kingdom Day Visits Survey (UKDVS).

In addition, there are a number of other regular and adhoc surveys focused on particular types or areas of tourism, as for example, the BTA Overseas Visitor Survey, BTA British National Travel Survey (focused on holiday taking by British residents) and surveys of Conference and Exhibition activity.

United Kingdom Tourism Survey

The UKTS is jointly commissioned by the national tourist boards, ie the English Tourist Board (ETB), Northern Ireland Tourist Board (NITB), the Scottish Tourist Board (STB) and the Wales Tourist Board (WTB). It was first conducted in 1989, and replaced the earlier British Home Tourism Survey (BHTS).

The survey collects information on tourism activity by United Kingdom residents involving trips which included a stay of over 24 hours away from home. The survey is conducted each month on a continuous basis, of a sample of face to face interviews with a fresh representative sample of UK adults aged 15 years or more. The sample used is a two stage stratified probability sample. From 564 sampling points consisting of the 540 separate parliamentary constituencies in Great Britain and 24 wards in Northern Ireland, every 15th elector recorded on the electoral list is selected for interview. No substitutes are used in the survey, and non-electors are also included where they are encountered to ensure a representative sample.

In 1996, a total of 74,924 interviews were conducted collecting information on 29,371 trips. In each interview, information is sought on all trips taken in the previous two months, thereby minimising the risk of poor reporting due to failing memory. The results are weighted to a constant profile of adults in the UK each month. The interviews are conducted using Computer Assisted Personal Interviewing which aids greater speed of delivery of results and improved accuracy in the data collected.

A wide range of data is collected in the survey to allow analysis by trips, nights and spending, and includes:

purpose of trip including holiday, business, visits to friends and relatives, and other purposes;

accommodation used;

main mode of transport used;

organisation of trip;

type of location stayed in;

month trip started;

duration of trip;

incidence of touring;

activities pursued as main purpose of holiday;

activities pursued on holiday (main purpose or not);

socio economic group;

age;

children;

lifecycle;

main location of trip, including an analysis to county level.

Information on expenditure on the whole trip is allocated proportionately to the location stayed in. Not all expenditure will necessarily take place at that location, eg travel spending will often take place at the origin point rather than the destination. Data is collected for nine categories, comprising of:

package trip;

accommodation (non-package trip);

travel;

services or advice;

buying clothes;

eating or drinking;

other shopping;

entertainment;

other expenditure.

In collecting the data, respondents are encouraged to include all spending associated with the trip, including any purchases made before the trip which relate directly to it. Thus purchase of suntan oils in advance for a specific trip would be included, but items purchased for more than one trip such as luggage would be excluded. However the definition of such items is left to the respondent rather than specifically identified in the survey questionnaire.

While in principle it would be possible to collect more detailed data on the spending breakdown, the quality and accuracy of the response is likely to deteriorate. There is some concern that the current data collected may underestimate spend because people's recall of spending is often partial, particularly where credit card expenditure is involved.

The survey data is held on a database allowing flexible analysis of the data. Although the information is published to a standard format, it is therefore relatively easy to abstract customised analysis to meet TSA requirements.

International Passenger Survey

The IPS is carried out by the Office for National Statistics and collects information from passengers as they enter or leave the United Kingdom. The survey is based on face to face interviews with a sample of passengers coming via the principal air and sea routes or the Channel Tunnel.

The sample is stratified to ensure it is representative by mode of travel (air, sea or tunnel), port or route and time of day. The sampling scheme used is multi stage, and is carried out separately for air, sea and tunnel routes, with interviews being carried out throughout the year. In 1995, 248,000 interviews were carried out, representing about 0.2% of all travellers. However, information from overseas visitors is only collected from those on the return leg of their journey, amounting to around 50,000 interviews in 1995. The same practice in reverse is applied to UK residents travelling abroad, when 48,000 interviews were carried out in the same year.

There are some gaps in the IPS survey which are filled by using information from other sources in generating overall figures. The additional information is needed in respect of smaller air and seaports where the flows are too small to justify interviewing; for travel to and from the Irish Republic which are not covered by the IPS; UK residents on cruises departing or arriving from UK shores; Channel Islands expenditure and receipts from tourism; and rail fares purchased in advance before the start of the visit. The information collected is then used by ONS, along with other sources of information, to produce overall national estimates of the numbers and types of travellers.

Information collected in the survey covers the following main variables:

quarter, month and date of the interviews;

flow of arrivals and departures by UK residents, and arrivals and departures by overseas residents by air and sea;

nationality;

country visited;

residence by country, with more detailed information by state is collected for a sample of four countries each year;

purpose of visit;

length of stay;

expenditure excluding fares;

UK air or seaport;

overseas port travelling directly to or from;

the final (or starting overseas) air or seaport;

flight origin;

mileage travelled;

carrier for first leg of journey;

carrier on second leg of journey;

class of travel;

type of flight, ie scheduled or charter;

fares;

vehicle type;

number of people travelling in vehicle;

age;

sex;

up to 5 towns stayed in overnight in UK (overseas visitors only);

number of nights spent in each town (spend is then imputed by length of stay);

accommodation stayed in the towns;

package or independent;

money spent by UK residents on alcohol and tobacco.

A detailed breakdown of spending by overseas visitors is not normally undertaken. However, additional information is collected from a sub sample from time to time, including 1992/93 and

in 1996/97 (the latter analysis is not yet publicly available but has now been completed). The sub sample is around 3,000 interviews. In the 1992/93 survey, information was collected in respect of some 16 categories, namely:

- accommodation;
- meals out;
- alcohol included with meals;
- alcohol not with meals;
- taxi/car hire;
- public transport/petrol;
- clothing/fabrics;
- food from retail shops;
- souvenirs/gifts;
- books/newspapers;
- entertainment and admissions;
- medical services;
- hair and beauty treatments;
- telephone/fax/postage services;
- other services;
- other items.

This represents a more detailed breakdown than that used in the UKTS, but the results are normally published in a consolidated mode to be broadly comparable with the former breakdown.

The data are capable of manipulation using SPSS through the ONS or its appointed agents.

United Kingdom Day Visitor Survey

The UKDVS is jointly sponsored by a range of Government Departments and Agencies with the Countryside Commission acting as commissioning agency. The survey was piloted in the summer of 1993, and conducted on a full year basis in 1994, repeated in 1996 and being undertaken again in 1998.

The survey is based upon a multi-stage random sample. In the latest design, postal districts are selected by first stratifying by 9 'Regions', plus Scotland and Wales. There is a further stratification by region in Scotland and county in Wales. The sampling frame is then stratified by density of population, after which the 168 postal districts are sampled. There are about 10

postal districts per region. The procedure is then to select addresses, then to identify all households at multi-household addresses and finally, to select one person to interview in each household. There are at least 4 recalls, sometimes more, and the survey has achieved a response rate of about 70%. Information was gathered for 25,675 trips in Great Britain, of which approximately half related to England and a quarter each in Wales and Scotland. Separate surveys have been conducted in Northern Ireland, albeit using different contractors and questionnaires in different years.

The survey seeks information on day visits over the last 2 weeks and then asks for recall over the last year. The survey collects detailed data on the following aspects:

- month and day of visit;
- main activity on the trip;
- other activities undertaken on the trip;
- location of destination of trip, ie town, coast or countryside, and forest or canal;
- regular or irregular trip;
- total duration of the trip;
- total distance travelled;
- main form of transport used;
- destination of trip;
- party characteristics;
- expenditure on the trip;
- frequency of trips;
- reasons for not making trips.

The 1994 survey included leisure day trips from home, leisure trips from holiday accommodation and business day trips. The last two categories were dropped from the 1996 survey because of budgetary restraints.

Expenditure information was broken down into eleven categories, namely:

- purchase of petrol/diesel used on the trip;
- fares on bus/coach/train;
- parking charges;
- admission tickets including tickets bought in advance;
- tolls;
- alcoholic drinks;

meals/snacks and non-alcoholic drinks;

gifts/souvenirs;

hire of equipment/facilities;

clothes;

anything else.

The UKDVS includes all leisure trips away from home. However, not all such trips are regarded as tourism day trips, but rather a majority are local trips made by residents. A tourism day trip can be defined as a trip taken away from a person's usual environment, and therefore should exclude these local trips. Non-local trips can be defined in various ways, but the preferred definition is those trips which last longer than 3 hours and are irregular. Only 5,785 trips out of the 25,700 total trips captured in the survey fall within this category, representing 22.5% of the weighted total.

The 1994 survey also included business day trips, primarily to attend exhibitions or conferences. The survey recorded 336 such trips compared with almost 24,000 leisure day trips from home.

The survey data is held on a database which can be manipulated to derive cross tabulations.

Other data sources

None of the other surveys providing demand information attempts to be so comprehensive in coverage as the three main national surveys. Examples include:

the British National Travel Survey which focuses on British residents holidays at home and abroad, and more specifically those lasting more than 4 nights. The survey is funded by subscription, and collects data on origin and destination of trips, accommodation used, timing and duration of trip, transport used and expenditure. No breakdown of expenditure is available. The survey is the longest running of any of the national surveys;

The BTA Overseas Visitor Survey has until this year collected information from a representative sample of overseas visitors. The visitors were approached across a total of 83 locations in Great Britain including 2 in Wales and 6 in Scotland. The locations were allocated to tourist board regions in numbers proportional to the number of overseas visitor nights spent there as determined by the IPS. Visitors were given a questionnaire which they were asked to complete and return at the end of their visit. The response rate was around 55%, with the 1995 survey collecting some 2,600 responses. The purpose of the survey is to collect information about overseas visitors to Britain that is either beyond the scope of or not currently available from the IPS. No data on expenditure is normally collected in the survey. The survey has now been discontinued.

The national and regional boards also collect information from accommodation establishments on the occupancy levels of their establishments, and a breakdown by overseas and British visitors. The survey has recently been strengthened to meet the requirements of the EU Tourism Statistics directive, but does not provide data on purpose of visit or expenditure, and is not comprehensive across all types of commercial accommodation across all areas.

Summary of demand information sources

Substantial amounts of information exists on the volume and value of tourism expenditure by UK residents and overseas visitors to the UK, and on UK residents travelling abroad. However, there are a number of discrepancies and gaps in the information base.

The main discrepancies of significance for TSAs appear to be:

variations in the questions used to solicit information on the breakdown of expenditure between the different surveys;

the depth of information on expenditure breakdown available;

the inconsistent treatment of Northern Ireland between the different surveys;

the limited data on day business trips, with the limited information collected in the 1994 survey focused on conference and exhibition visits rather than business travel and meetings generally.

The sample size used in each of the national surveys is robust enough for most purposes at national level, but could raise problems if subject to significant detailed breakdown.

Apart from the limited information on day business trips, the main omissions from the information base provided by the national surveys would appear to be:

data on expenditure by tourists on consumer durables which is not related to a specific trip such as items of leisure clothing, luggage, cameras and other equipment used on multiple trips, and transport which is partly used for tourist trips;

accommodation such as second homes where there is capital investment and/or maintenance and service costs not dependent on a specific trip. Such accommodation includes not only permanent dwellings used as second homes but also touring and static caravans, tents and boats. Partial data is available from manufacturers in respect of a number of these items, but not often in a form which allows disaggregation between tourist and non-tourist use;

expenditure by public bodies on tourism infrastructure, management and marketing which is not reflected in spending by visitors;

investment in new tourism facilities and capacity by the private sector.

The cost of removing discrepancies between the data collected by the national surveys, or at least ameliorating those discrepancies would appear to be feasible at a reasonable level of additional cost. Collection of information on the gaps is likely to involve considerable expenditure to establish estimates on a comprehensive basis.

Supply side information

Data collection on the supply side of tourism is less satisfactory. In compiling national accounts, ONS have access to a range of sources not only for expenditures, such as those discussed above, but also for output estimates. The input-output tables utilise a wide range of sources, many of which ONS carry out themselves. Although those inquiries include a retailing inquiry, a catering and allied trades inquiry and service trades inquiries, the classifications used do not allow for substantial differentiation amongst tourism activities. The robustness of the estimates will depend on how well tourism can be identified in each of the individual surveys. Such analysis as is needed to complete the accounts for service activities are drawn from a variety of sources with varying degrees of quality and coverage.

No fully comprehensive information base exists on the supply of tourism facilities, while there are differences of opinion as to what should be included in such a listing. The main components are discussed below:

Accommodation

Apart from Northern Ireland, where accommodation registration is compulsory, no accurate listings of accommodation provision and capacity exists for the United Kingdom and its constituent parts. The Regional and National Boards collect information on registered, classified and graded establishments. However, since these schemes outside Northern Ireland are voluntary, and usually involve some payment by the individual establishment, they are less than comprehensive in coverage.

The Boards also maintain lists of "known" stock accommodation where the presence, type and capacity of an establishment has been recorded in the past. However these lists are subject to an unknown degree of error. Many of the entries may be inaccurate or out of date, while there will also be a gap between known and unknown stock whose presence has never been noted by the Boards. The significance of the errors however may not be great, given that it is likely that the main errors are likely to be in relation to small establishments, particularly those which are informal and move in and out of the marketplace, such as casual B&B provision, and second homes let intermittently as self catering holiday lets. Nevertheless, in some tourist board regions such as London, the overall error could be significant.

A more serious gap in the known stock record arises in the case of second homes and owner occupied static caravans. No specific records exist in relation to the former, while the Regional Boards have eschewed recording sites catering for the latter on the grounds that the accommodation is not available to the public.

Finally a fundamental difficulty with the known stock base is that it is not maintained in a database format, but rather on a continuously updated listing. The degree of and timing of any weeding out of old or duplicate entries is not known, and comparisons between dates are therefore fraught with uncertainty.

An alternative source of information is provided by the Rating register where different commercial premises are identified, including hotels, boarding house, guest houses, caravan parks and various forms of entertainment and attractions. However, the rating register does not provide any indication of capacity. It is also unlikely to include much of the casual B&B or holiday cottage/second home accommodation, while establishments defined as boarding houses may include hostels and long stay establishments outside the normal definition of tourism use.

In addition to the lack of a comprehensive listing, there is no regular collection of investment in new provision, although there has been a substantial number of new hotels and other accommodation built over the last decade, matched in part by other stock moving out of the tourism business.

In practice, the provision and turnover of tourist accommodation will be related to tourist use and expenditure.

Attractions

The BTA and National Boards do collect and collate information on tourism attractions, through an annual survey sent to known establishments. The data collected is used partly for marketing and information purposes, but is also the basis for two annual publications on Sightseeing and Tourist Attractions.

Information sought in the survey includes:

- type of attraction;
- ownership and management;
- charging policy;
- visitor numbers over the year;
- number of days when capacity is reached;
- number and nature of employment at the site including voluntary labour;
- capital investment in improvements or extensions;
- average days open;
- proportion of overseas visitors;
- proportion of children;
- sources of revenue from admissions, catering and retailing;
- factors affecting visitor numbers.

Attractions are normally classified into five general categories, namely historic properties, gardens, museums, wildlife sites and other. However, sub categories are used for appropriate information including country parks, leisure parks, cathedrals and churches, steam railways, visitor centres and industrial attractions.

Apart from the difficulty that the total universe of attractions is not known, expenditure in the supply and maintenance of attractions will not match tourist expenditure, given that a proportion of attractions are free of charge, and many are in effect subsidised by the public sector or by voluntary effort.

Local authorities report their involvement and expenditures in tourism as part of their reporting for 'Leisure and Recreation Statistics' compiled by CIPFA. There are a large number of headings which suggest considerable detail. However, on closer inspection of each authority's reporting, there is a strong suspicion that there is little harmonisation in the way in which activities are reported under the headings.

Finally, attractions are visited by local residents as well as tourists, so that there is a further problem of identifying the proportion of supply which is due to the former as opposed to the latter. The only way of establishing the ratio is through visitor surveys.

Entertainment

A significant proportion of entertainment provision from night clubs, theatres and cinemas to sports halls and conference centres is also related to tourism activity. Information on provision is collected by different organisations for different purposes, and in many cases is likely to be far from comprehensive.

Tourism infrastructure

Tourism infrastructure covers a wide range of activity from public transport and roads to tourist information centres, car parks, parks and other amenities. Although a proportion of these will be in the private sector, as for instance car hire, taxis, air, train and bus operators, much of the physical infrastructure is provided by a small number of major operators many of which are in receipt of an element of public funding, and /or in the public sector.

Public Accounts provide information on the expenditures of Departments and the grants/subsidies to the Agencies responsible to them. There are reports on Agencies such as BTA, ETB, Sport Council, Arts Council, Countryside Commission, Rural Development Commission, etc, all of whom support activities which are used by tourists.

Data on provision is however fragmented, and the problem of identifying the ratio of tourist to other use arises in many cases.

Summary of supply side information

Unlike the information available on the demand side, there are no independent authoritative sources of turnover and expenditure on the different sectors that make up the tourism supply side. The data that is available on the supply side is more fragmented and less comprehensive than for the demand side. There are also problems of identifying the proportion of tourism use as opposed to non-tourism use in many cases.

While there are opportunities to use existing regular surveys and contacts to collect additional data particularly for attractions and to a lesser extent accommodation, substantial improvement in data collection across the supply side as a whole is likely to be expensive. Therefore information on the supply side will need to be drawn from other sources of national data, as for instance company accounts and tax returns to inform the supply side and the

sectoral surveys undertaken by ONS and others which are used for national accounts purposes.

However, it is important to note that expenditure on the demand side associated with tourism expenditure does not encompass all tourism related provision on the supply side, particularly with regard to the use and provision of infrastructure support for tourism suppliers and physical infrastructure and services which are used by tourists.

Summary of information availability concerns

The review of tourism and other relevant sources has indicated that there is a substantial volume of information available which could provide an initial basis for the preparation of a TEA and/or TSA for the United Kingdom. Equally however, there are deficiencies in the information base, some of which will need to be addressed in order to progress to a full TSA. In particular, there are major gaps in the data, weaknesses in the comprehensiveness of otherwise useful sources, and variations in definitions and methodology between survey sources.

Gaps in the information base

The main gaps include both actual areas where information is not collected, and more often the absence of data on the tourism share of overall spend on a particular category. Thus information on overall retail demand is collected from the retail sector by ONS but the survey does not distinguish between visitor and resident demand. The main areas of weakness include:

expenditure by tourists on consumer durables which is not related to a specific trip such as items of leisure clothing, luggage, cameras and other equipment used on multiple trips, and transport which is partly used for tourist trips;

capital investment and/or maintenance and service costs on accommodation such as second homes which is not dependent on a specific trip. Such accommodation includes not only permanent dwellings used as second homes but also touring and static caravans, tents and boats. Partial data is available from manufacturers in respect of a number of these items, but not often in a form which allows disaggregation between tourist and non-tourist use;

revenue expenditure by public bodies on visitor management and tourism marketing which is not reflected in spending by visitors; some information is collected through annual surveys of Local Authority spending but tourism is often narrowly defined and often identified in different ways by reporting authorities;

revenue expenditure by Central Government on tourism related activities which benefit tourism, as for example sport and the arts; direct tourism expenditure in support of tourism such as grant in aid to national tourist boards is available;

capital investment in new tourism facilities and capacity by the private sector;

capital investment in tourism infrastructure such as airports, railways, roads and other facilities by the public and private sectors;

expenditure by UK residents on goods for use on holiday abroad;

expenditure by UK and overseas carriers in the UK re outward and inward tourism movements

accurate figures on the supply of accommodation and other tourism facilities.

Discrepancies and variations between surveys

There are a number of discrepancies and variations between the main survey sources on tourist spending. The most significant include:

variations in the questions used to solicit information on the breakdown of expenditure between the different surveys;

the depth of information on expenditure breakdown available;

the inconsistent treatment of Northern Ireland between the different surveys;

the very limited data on day business trips, with the information collected in the 1994 survey focused on conference and exhibition visits rather than business travel and meetings generally;

differences in the survey techniques used, with the UKTS and UKDVS soliciting information at varying intervals after the completion of trips, while IPS seeks to gather information at the departure point at the end of the trip. The difference in timing is likely to affect the degree to which reasonably accurate information on a more detailed breakdown of visitor spending can be collected.

Methodological Issues and Problems

The definition of tourism

The UN and WTO definition of tourism is:

"Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business or other purposes."

An important caveat on this is that the main purpose of the trip is not an activity which will be remunerated from the place(s) to which the trip is made. That means that the decision to travel is taken by the traveller (or an employer) and the expenditure on the trip is financed out of personal (or company) resources. (It makes an interesting distinction between a conference participant who pays for himself - and is therefore a tourist - and one who is paid for by the conference organisers who is thereby not a tourist.)

The three important elements of the definition are:

'outside their usual environment'

'not more than one year'

'leisure, business and other purposes'

The first is straightforward for tourism outside the country of origin, but less tangible for domestic tourism. Staying away at least one night from home conforms but, for a day trip, 'usual environment' could be spatial (distance from home) or habitual (a frequent activity). Day trips begin when a person leaves their property and can be for any length of time or distance within 24 hours. Rural dwellers have a high threshold of time and distance for activities undertaken in urban areas and urban dwellers face the reverse threshold but for different activities. Furthermore the frequency of and time given to an activity will be related to its availability, in terms either of frequency or accessibility. Given the diversity of possible 'day trips' that exist, an arbitrary choice is inevitable and its impact on the scope of tourism trips will vary by the country or local area to which it is applied because of differences of opportunity and culture.

In the absence of a conceptual basis for defining 'day trips', the choice can be governed by availability of data. The recent Day Visitor surveys for the UK include all trips from home and these can be analysed by time, distance and frequency (regularity). DCMS use a definition of irregular trips of 3 hours or more duration. This, together with trips involving overnight stays away from home, define a tourist trip for purposes within the definition of tourism.

The second element draws an internationally accepted line for differentiating between a trip and migration (cross-border change of residence) by which international travel can be classified.

The third element covers all civilian trips meeting the conditions of the first two elements. Purposes included are:

leisure, recreation and holidays;

visiting friends and relatives;

business and professional travel;

health treatment;

religious trips and pilgrimages;

study trips.

The last purpose is included in the IPS but is excluded by some international definitions, although it is difficult to see why participants in foreign language courses should be excluded. Students attending universities are often considered temporary residents and would be excluded.

Tourist expenditures

Given a definition of a tourist, the expenditures made by tourists associated with their trip provides the basis for establishing their contribution to an economy of an area in which tourism takes place and the output supported by the associated provision of goods and services.

What expenditures should be included as being incurred because of the tourist trip? Conventionally, all expenditures which are incurred during the trip or paid in advance for goods and services provided during the trip are included and this is what in general survey data cover.

There are three additional components of expenditure which have been considered as part of the expenditure associated with a trip in the context of the wider tourism impact on economies. One is expenditure on goods and services in preparation for the trip which will be consumed (but not supplied) during the trip. These could include, for example, photographic materials (films, etc), food and drink for the outward journey and private/independent travel insurance. Another is expenditure on consumer durables which will be used but neither supplied nor wholly consumed during the trip. These include photographic equipment (e.g. cameras), luggage containers, cars, second homes, etc. For these, the usual approach to measuring the relevant expenditure is to estimate an imputed cost of the use. The third is investment in fixed capital by businesses supplying goods and services to tourists.

All of the current expenditures which are made within the period of accounting would be included in national accounts for that period and therefore in principle could be separated and included as part of tourist expenditures and the output associated with them could also be identified.

The treatment of consumer durables and investment goods is not so straightforward. Imputed values are derived to estimate the current consumption arising from the purchase of consumer durables which were not necessarily made in the current accounting period and, therefore, for which there would not be a corresponding output. Similarly, investment goods are used in periods other than those in which they were purchased. Accounting conventions allow for capital expenditure to be included in final demand as gross fixed capital formation and as output in the investment goods sector. If, however, imputed values are introduced into current expenditures that incorporate capital consumption, the conventions are undermined. Both approaches are possible, but it is necessary to ensure that they are not mixed.

The discussions in the preceding sections indicate that the definition of a tourist and the definition of a tourist's expenditure significantly affect the scale and nature of the demand and supply associated with tourism. They therefore need careful consideration, not only in terms of data available but also in terms of how far concepts coincide with conventional national accounting practices.

The supply of goods and services for tourists - 'a tourism industry'?

National Accounts are based on three concepts, output (supply of goods and services), income (remuneration for capital and current inputs) and expenditure (demand for - or use of - goods and services). Domestic output is the value added by producers and suppliers and more or less equates to the business turnover less their direct imports and purchases from other businesses (intermediate purchases). Domestic income comprises mainly gross wages and profits. Domestic expenditure is final demand (purchases by the end users) of the goods and services, and distinguishes between consumers expenditure, government current expenditure, fixed capital investment, the increase in stocks and exports, less imports. Apart from the different price definitions (factor cost or market prices), these all equate to each other.

How do the expenditures and associated output and incomes resulting from tourists' activities fit with the three concepts of national accounts? Tourism is unambiguously a category of final expenditure for individuals and households. If it is domestic, it is consumers expenditure. It is the consumption of goods and services provided in the UK and thus there is corresponding output produced (and income generated) in the UK. If the expenditure is outside the UK, it is an import, because it is the consumption of goods and services provided by another country's suppliers and there is no corresponding output in the UK. For non-residents visiting the UK, their tourism is a UK export, because it is (like domestic tourism) the consumption of the output of UK suppliers and associated output (and income) is generated in the UK. However, for business tourism, it is not a final expenditure but expenditure on intermediate consumption (or an import if outside the UK). This intermediate consumption is undertaken in the course of producing other goods and services for final consumption. Thus the output supplying business tourism is associated with another final expenditure.

Because goods and services have to be produced before they are consumed, there is output produced which tourists then consume in the course of their tourism 'activities'. Just as there is a classification of expenditure for national accounting, so there is a classification for output. The output side of national accounting is based on 'activities' which produce and supply goods and services. The crux of the problem of defining a tourism industry is the following question - "what is the correspondence between 'tourism activities' and the 'output activities'?" The answer is 'very little' because tourism is demand-driven and not supply-driven - it is not like farming, forestry, fishing, quarrying, manufacturing, constructing, distributing, retailing, etc, for which the outcome is the production of a good or a service. The output corresponding to tourism activities is the provision of a range of services, none of which could have a 'tourism trip' defined as its end use.

Conceptually, accommodation providers have a direct match between the relevant tourism activity and the relevant output activity. However, among these, there are some who diversify their activities and sell to non-tourists. Some attractions, for example theme parks, may sell all of their output to tourists. But there are too few examples to justify a separate category in an output classification for tourism or to claim any of the existing categories as wholly tourism. The tourism 'product', i.e. that combination of the supply of tourist activities which fulfils the requirements of a tourist's trip, is not uniquely defined: the suppliers of the tourism activities are conceptually 'intermediate' to the supply of a 'commodity' for final consumption.

Hence, tourism does not sit comfortably with either the expenditure side or the output side of the national accounting framework. Business tourism complicates the expenditure side, while the mix of tourist and non-tourist consumers in the sales of businesses complicates the output side. It is possible to identify where tourism contributes to the expenditure and the output account but in each account it contributes to more than one of the conventional classification categories.

On this basis, tourism demand and a tourism industry can in principle be established from the expenditure side. Given a definition of a tourist, this is how much tourists spend in order to undertake relevant trips and this is the output that has met the derived demand. Tourism

demand comprises consumers expenditure, investment, exports and imports. The tourism industry comprises outputs from a wide variety of different industry activities.

The upshot of this is that tourism is being measured as a share of national accounting expenditure and output classification categories, and the nature and scale of tourism is defined by the sum of the parts, either for expenditure or for output.

Tourism-characteristic use and supply activities

(a) what is 'characteristic'?

The use of, and therefore expenditure on, tourist activities is characterised by visitor purpose and conforms to the definition of a tourist. Expenditure is disaggregated by the commodities purchased. Thus, how well use can be linked to supply through expenditures on commodities is dependent on the detailed disaggregation of visitor expenditure. Matching this to the supply of the commodities gives the tourism share of supply.

The supply of tourism activities or commodities is usually distinguished between those which are a key feature of tourism for which tourist demand is likely to be a major share of the supply, those which are used by tourists but where demand is not so important to the sector and the output that is generated in those suppliers who provide inputs to the supply of these other commodities, known as intermediate suppliers.

In practice, there is some ambiguity about how to establish tourism-characteristic activities or commodities. An obvious feature is that the output is dominated by the supply to tourists through the estimation of the tourism share. In practice, this would include very few sectors/commodities since tourism shares rarely exceed 50% except at extremely fine levels of disaggregation. At best, this includes accommodation, coach transport, travel agents, skiing, cruises and, where appropriate, second homes. But other commodities, such as food services, transport (rail, taxis, car rental) and entertainment, museums, etc, are also included because they are an essential part of a tourist trip, despite the fact that the tourist component may form a much smaller part of the total output of the commodity. This means a flexible division between characteristic and non-characteristic commodities which is likely to be affected by the composition of use by trip purpose.

In fact, the distinction appears to have little value. It mixes supply activities 'mostly selling to tourists' with demand activities 'crucially required for a trip'. Hence, if the tourism product is the complementary package of activities required to complete a tourism trip, the tourism industry is defined as the supply of all those supply activities (commodities) which are purchased by tourists as end users.

Given that businesses in general cannot distinguish tourists from their other customers, the only way to adopt a supply side approach would be to identify supplier activities at a sufficient level of disaggregation that separates those activities which supply only tourists. That is, a similar approach to the 'principal product' approach could be applied as is used to allocate establishments to existing sector classifications, which would be based on customer rather than product share. This however still would not overcome the problem of having an activity which forms a large part of trip expenditure (and therefore is of major importance to the tourism 'industry') which does not represent a large of any defined sector in the output classification. The logical path to follow would be to disaggregate the output classification further - but, while some activities like cruises can be (and are) isolated at an establishment level, the majority of 'expenditure-defined' activities, such as restaurants and leisure facilities, which are an important part of a tourism trip, cannot be distinguished at an establishment level and hence allocated to an output category.

The tourism ratio method can only be made obsolete by defining tourism commodities so that expenditure categories can be aligned with establishments for which the commodity supply for tourists is the principal product. Where that cannot be achieved, the tourism share is, with all its weaknesses, the only approach. The boundary is fixed by the structure and organisation of production and an immutable obstacle to eliminating the need for a tourism ratio approach for at least some expenditure categories.

(b) non-commercial supply

Not all of the supply of tourist commodities is associated with visitors expenditure directly because the commodity is provided free or at a subsidised price. It therefore does not contribute to business turnover and an output in the private sector. Some of the supply is provided by public sector expenditure and some by providing activities using volunteer staff.

The public sector makes direct provision in the form of capital investment in buildings and their maintenance and refurbishment and by current revenue expenditures to operate a variety of attractions and public facilities that may be used by tourists. Direct provision is for facilities such as libraries, museums, art galleries, local heritage sites and craft workshops, public swimming pools and other recreational facilities. Where such facilities are provided free of charge or with subsidised admissions charges, user expenditures at the sites will not correctly reflect the output associated with the supply.

The public sector, both central and local government, provide services to both visitors and suppliers through the support given to national and regional Tourist Boards and Tourist Information Centres. These services are generally provided free, using grant-in-aid, but some costs are recovered by charges or by related sales of publications, etc.

A much more grey area is the provision of transport infrastructure. Large parts of the UK transport network are used by tourists as an essential part of their trip. However, local and other non-tourist users frequently dominate the usage. Other aspects of transport infrastructure provision including car parks and coach parks - why they are provided often depends on location and the associated trip purpose which in some locations will be predominantly tourists.

Hence the public sector is contributing to the supply through both direct provision and by transfers/subsidies. Care is therefore required in assessing the nature of the difference between expenditures and output. How much is direct provision, that is that part which would have no private sector (output) counterpart, and how much is a subsidy which would be included in the private sector output and accounted for in the difference between market prices and factor cost.

Whilst the public sector supply aspect is an issue of how to distinguish tourism within national accounts in which the relevant transactions are included, volunteer staffing is outside the national accounting framework. There is no expenditure on the activities they supply, nor any income or measured output derived from it. To include them requires an extension of the national accounting framework. However, this would be required to be done for the whole economy, not only for tourist activities, if the purpose of the identification of a tourism contribution is to be valid, that is, comparing like with like when computing a share for tourism in the total. Although volunteering is significant in some tourist attractions, the main incidence of volunteer work is in the advice, caring and personal services sectors where the information is relatively weak. Furthermore, the recent developments in promoting local partnerships has increased the involvement of the voluntary sector in local activity.

Essentially the same issue arises for the treatment of consumer durables and other 'commodities' that may be purchased in periods other than the current accounting. Any

exercise outside conventional national accounting proposed for tourism would have to be repeated for the whole economy.

Tourism Economic Accounts (TEAs) and Tourist Satellite Accounts (TSAs)

The purpose of this study is to assess the feasibility of compiling a set of TEAs for the UK and point to the issues which would be involved in developing a set of TSAs. The subsequent two chapters of the report address the TEAs first and then consider the TSAs.

The common underlying principle for both TEAs and TSAs is that they should be constructed by methods that conform to national accounting principles for the definitions of concepts of expenditure, output and income on the one hand and final expenditures and input/output frameworks on the other. The essential difference between the two is how they relate to national accounting practices (rather than principles). TEAs are a 'slice' of the national accounts using the existing definitions of what constitutes supply and demand for tourism that are used for compiling the overall standard national accounts. TSAs may extend beyond those definitions to include other commodities which are not measured at all or in the same form in the standard national accounts.

(a) TEAs

Tourism Economic Accounts, as set out by the OECD, comprise five core tables:

supply and use of commodities characteristic of tourism industries at market prices;

derivation of value added in tourism industries at market prices;

consumption expenditure of tourists according to the type of goods and services;

gross fixed capital formation in tourism industries;

employment in tourism industries.

In method, the procedure is transparent. Tourist expenditures, which are an outcome of activities demanded (and supplied), are separated from other expenditures within the analysis of final demand as the consumption of tourism commodities in the UK, incorporating domestic and overseas visitor (export) expenditure. For each of the defined commodities, the tourism component (defined by the expenditures) is expressed as a share of the total supply of those commodities in the economy which is identifiable through the supply tables of the national accounts. This is generally called the 'tourism ratio'.

For any aspect of the national accounts other than consumers expenditure, the proportion which is 'dependent' on tourist expenditures is taken to be the tourism ratio defined above. Hence tables can be derived for gross fixed capital formation and employment, using a classification by commodity supply of each that corresponds to those for which the tourism ratio has been calculated

What is not included in the construction of TEAs is the output (value added) which derives from the supply chains feeding the suppliers of tourism activities. That is, the tourism industry

is limited by the expenditures made by tourists as end users and the output/value added is that which is generated in the businesses which supply those end users.

(b) TSAs

Tourism Satellite Accounts can differ from the TEA tables in a number of ways:

the principal way in which they differ is the inclusion of the value added generated in the domestic businesses supplying the businesses providing the services to the end users;

reproducing the TEA tables, but using expanded definitions of commodities and supply, such as consumer durables, second homes and volunteering;

adding new tables, covering aspects of accounting, such as Balance of Payments Accounts, Financial Flows, etc;

expanding the detail of the accounts, for example, by providing separate accounts for domestic and overseas tourism, inbound and outbound tourism, sources of inputs, etc.

The first three can be mainly achieved using much the same method based on the 'tourism ratio' derived from the analysis of commodity supply. The principal restriction will be the availability of data.

The last one, however, would seek to move away from the strict 'tourism ratio' allocation of stocks and flows in the national accounts and improve elements of the 'make' matrix to enhance the understanding and measurement of the link between expenditures on specific commodities and their supply. In particular, this could be quite significant if different tourism ratios were found to be necessary for each commodity supply when differentiating between, say domestic and overseas tourists, or between staying and day visitors.

Thus, the most important aspects of the differences between TSAs and TEAs that needs to be assessed is the evidence available on the supply chains and the robustness of the 'tourism ratio' approach. If this is shown to be a likely source of significant variation, say for the supply chains, investment or employment effects, it would still be worth pursuing this without going on to complete a full set of TSAs.

Tourism Economic Accounts (TEA)

Introduction

The discussion of methodological issues in Chapter 3 highlighted that, although the main tourism expenditures and the corresponding supplies of goods and services to tourists are encapsulated within the UK national accounts, they are not separately identified. In the national accounts sectoral classification, there is not a tourism sector because tourists consume a variety of goods and services produced by a wide range of sectors. Moreover, many firms supplying tourists do not know, and could not find out, the extent to which their goods and services are purchased by tourists as opposed to businesses and residents. Hence the building of national accounts estimates for tourism from the supply side would not be feasible.

The Tourism Economic Accounts (TEAs) as developed by OECD attempt to find a way around this problem by identifying that part of consumers domestic expenditure and that part of exports which is generated by tourists and deriving an expenditure share, commonly referred to as the 'tourism ratio', to slice out a wedge from the aggregate national accounting variables, such as output, investment and employment, which can be 'attributed' to tourism activity.

The OECD templates for TEAs

Confronted with conceptual, definitional and methodological difficulties, together with data limitations, the OECD (and WTTC/WTO), as a first step to achieving some analysis of tourism and its international comparability, put together five tables constituting the TEAs. All the tables relate only to what is described as 'tourism characteristic' industries. The OECD countries which have attempted to construct TEAs (Canada, Austria and Spain - see "OECD Tourism Statistics: Design and Application for Policy", OECD 1996) have included as 'tourism characteristic' industries the following:

Hotels and accommodation;

Restaurants and other catering;

Transport (with sub-sectors - air, rail, other land, sea and auxiliary);

Recreational, cultural and sporting activities.

As so far developed, the estimates for tourism are likely to be seriously underestimated because they leave out of account:

aspects of tourist expenditures may not be included because of data limitations;

the value added generated in non-characteristic sectors in supplying inputs to the characteristic industries.

In considering below how TEAs might be developed, consideration should be given to adding these two components in order to produce more realistic estimates without having to develop a full set of TSAs.

We discuss each of the OECD TEA tables in sequence, commenting on their relation to national accounts and how far they could be implemented in the context of currently available UK data.

(a) Table 1: Supply and Use

Table 1 of the TEA is entitled "Supply and Use of commodities characteristic of tourist industries, at market prices". In this table, the tourism part of the total supply of the tourism characteristic industries is broken down by non-residents, government and business travel and households. In UK parlance, these would be described as overseas visitors, business travel and UK domestic tourism, respectively. The purpose of this table is to relate the sources of expenditure identified to components of final demand (exports, government and business intermediate expenditure and domestic consumers expenditure).

The first column of table 1 shows the tourism ratio for each tourism characteristic commodity and its supply. The tourism ratio is the percentage of total supply of the commodity (measured at market prices) that is attributable to tourism demand. This based on the identified tourist expenditure from tourist survey data as a share of national accounts total supply of that commodity. These tourism ratios remain constant throughout all of the TEA tables and are used to give a broad estimate of the impact tourism has on other economic variables.

The feasibility of replicating table 1 for the UK is high but is subject to the extent to which tourist expenditures can be disaggregated to fit the OECD commodity/sectoral classification. For example, expenditure on transport is not sufficiently disaggregated to cover all individual types of transport options. But, apart from this, estimates could be produced for the UK for 1996.

(b) Table 2: Derivation of value added

Table 2 is entitled "Derivation of value added in tourism characteristic industries at market prices". In this table, the tourism ratio is applied to the total industry GDP at market prices to obtain the implied industry tourism GDP. Indirect taxes less subsidies are also shown, as is the split of GDP (at factor cost) between gross operating surplus and compensation of employees.

Our assessment is that table 2 could also be constructed for the UK using existing data sources, with the same proviso on the sector disaggregation which applies to table 1. If the total output of a sector/commodity is known, then national accounts will have derived a GDP and therefore the tourism share can be calculated.

(c) Table 3: Consumption expenditures

Table 3 is entitled "Consumption expenditure of tourists according to types of goods and services". This provides details on all tourism expenditures, not just on those which were included in previous tables as characteristic commodities. Expenditures are also shown disaggregated by households, government, business and non-residents, together with a total for each commodities final demand. Package tours are dealt with either on a gross or net basis - that is, as a separate commodity or broken out into its separate parts. The purpose of the table is to highlight differences in expenditure patterns by visitor origin and/or type.

Subject to the normal disaggregation limitations, this table could also be produced for the UK, using existing data.

(d) Table 4: Gross fixed capital formation

Table 4 is entitled "Gross Fixed Capital Formation by Tourism characteristic industries". Table 4 uses the same industry detail as tables 1 and 2 and records gross fixed capital formation for each of the industries. The tourism ratio is then applied to obtain a broad estimate that may be related to tourism demand. The relationship is acknowledged to be "not strong" and the results should be treated "with some caution".

It is feasible to reproduce this table for the UK, again subject to the same sectoral limitations.

(e) Table 5: Employment

Table 5 is entitled "Employment in tourism characteristic industries", which gives numbers employed as well as proprietors and others engaged and these data, together with the tourism ratios from table 1, permits estimates of the level of employment that is attributable to tourism demand. Average compensation of employees in tourism industries is also shown.

The estimates of remuneration and employment derived for this table are likely to be particularly broad-brush and misleading because the numerator (remuneration) and the denominator (employees) are both derived using the same tourism expenditure-based ratio. Hence the overall average for tourism is only a weighted average of remuneration rates in the sectors supplying tourism commodities and therefore does not have any specific relation to tourism supply.

This can be done for the UK, both for employment and for compensation. The sectoral disaggregation at national level is available for compensation using the New Earnings Survey. This source is likely to give a more accurate picture of incomes in the tourism sector than can be derived from table 5.

Overview

In reviewing the TEA approach and specifically the five tables, two main categories of findings have emerged. One group relates to the limitations of the TEA approach and the strengths and weaknesses of the five tables. The second group relate to the feasibility of reproducing the five TEA tables for the UK.

The main points on TEA approach are summarised as follows:

whilst the TEA tables produce useful information on tourism characteristic sectors, these sectors do not represent the whole contribution of tourism to the economy. They do not, for instance, include the contribution through value added generated in retailing or other sectors for which the tourist is an end user;

in addition, the tourism industries make purchases from other sectors in the economy and these suppliers create value

added which is generated by tourism but not included in the TEA tables;

taken together, these mean that the TEA estimates underestimate the importance of tourism;

the five TEA tables are not sufficiently integrated with each other or with other parts of the economy to be able to do more than serve as broad indicators for the tourism characteristic sectors;

the TEA tables do not make use of detailed supply and use tables but only a tourism expenditure ratio for broad sectors. The latter is only likely to be reliable for those sectors which supply close to 100% of the commodity;

the assumed constancy of the tourism ratio across the five tables to other sources of distortion. For example, where the tourism ratio is significantly less than 100%, the share of investment or GDP may not be the same. This is of particular concern with regard to employee remuneration.

OECD acknowledge that TEAs were only a stepping stone towards developing TSAs. The methodological weaknesses and other limitations discussed above are so serious as to suggest that it is not worthwhile investing substantial amounts of time just to prepare the TEAs alone. This is because they do not adequately reflect the importance of tourism activities to the economy as a whole. The only reason to pursue them is to estimate the broad order of magnitude of the core tourism activities across countries.

The main points on the feasibility of preparing TEA tables for the UK are:

firstly, it is perfectly feasible to compile a set of TEA tables using available tourism and national accounts data;

the main limitations of constructing TEAs for the UK are:

the expenditure categories in the UK tourism surveys are few in number and this gives rise to a more aggregated list of core tourism sectors than appears to be available for some other countries

UK tourism surveys also have the limitations of a lack of harmonisation of expenditure categories and comparability of GB/UK where NI has separate data

These shortcomings do not destroy the feasibility of constructing TEAs and they could be overcome by increasing sample sizes/adding more details to questions to allow more cross-tabulation between expenditure and trip purpose, travel type, etc.

Tourism Satellite Accounts (TSA)

Introduction and background

Satellite Accounts are sets of accounts based on national accounting principles but they are quite separate from the national accounts as such. A tourism satellite account would take its place amongst a growing list of other satellite accounts envisaged or being developed for other areas of public policy, such as the environment (Green Accounts), domestic work, education, health and crime. These accounts also seek to measure aspects of activity which are not currently covered by national accounts.

The TSAs have to be satellite accounts because tourism transactions, although embodied in the national accounting system, are not separately identified as relating to tourism. Another reason for developing TSAs is to include aspects of tourism impact which are not currently included in national accounts, for example volunteering.

The development of a TSA can be said to have commenced whenever the scope and detail of the accounting framework moves beyond that embodied in the TEAs. WTTC/WTO and OECD are currently engaged in exploring the issues that would require to be resolved to develop 'ideal/mature' TSAs. In practice, some of these issues could only be resolved over a long period of development. However, as yet, there appears to be no unanimous view of what the ideal set of accounts would cover, and few countries have got beyond the early stages of quantification. Countries such as Sweden and Canada are leading the field. The pace of the development process is constrained by the paucity of tourism data in many countries and the high costs of supplementing it.

In the light of this, there should be some point in the development process from TEAs towards an ideal TSA at which it is judged to have been a value for money exercise: that is, one which goes a long way towards providing the information needed at an acceptable cost.

Both WTO and OECD consider that the underlying definition of the tourism industry for the purposes of TSAs is to include only those transactions where the supplier of the goods or services is in direct contact with the individual tourist. This approach seems to lead to some inconsistencies, such as a willingness to include capital investment where the producer is not in direct contact with the user but to exclude the manufacture of a tee-shirt for a tourist shop. There is a strong case however to abolish the inconsistent ring-fencing and treat each component of direct and indirect impacts on its own merits.

Feasibility of developing TSAs for the UK

We discuss below the issues which have to be resolved in developing an ideal set of TSAs. These were identified and discussed in Chapter 3, and are summarised below as:

the scope of the tourism expenditures which are included, thereby defining the scope of the sector/industry, such as retail and other purchases during the trip excluded from TEAs, pre/post trip expenditures, consumer durables, second homes, package tours, travel agents, etc;

the incorporation of the intermediate suppliers;

the treatment of fixed capital formation;

the treatment of public sector provision and non-market activities which tourists do not wholly pay for and other non-market services;

use of price indices/deflators to provide constant price estimates;

the collation of supporting tables increasing the amount of detail, such as separate tables for inbound and outbound tourism (Balance of Payments), resident and business tourism, capital stock (for capital consumption), etc.

In this section, we discuss each of these issues in turn, along with their measurement problems, and comment on the feasibility of their inclusion in the UK context.

(a) the scope of tourism expenditures

The scope of the expenditures defines the scope of the tourism industry, that is those activities/commodities that included as tourism sectors. In relation to TEAs, there are expenditures recorded in most tourism surveys that have not been included in TEAs. The most notable examples are retail purchases, such as clothing, souvenirs and gifts, postage/telephone and other consumer services such as hairdressing, etc. The first step towards a TSA should be to include all sectors which supply commodities that tourists purchase on their trip as a tourism sector. This could be done without the collection of further information, although additional disaggregation of on-trip expenditures in existing surveys would be desirable in the interests of robustness.

additional known expenditures excluded from TEAs

There are additional expenditures which could be easily included if the information were to be collected and related to the tourists' trips. These are expenditures made before the trip is begun or after it is ended. An example is the purchase of photographic films before departure and the processing of those and other films after return. The pre-trip purchases may be significant, including private holiday insurance, provisions for self-caterers, new/replacement holiday clothing, etc. Questions could be included in surveys of tourists but probably at the cost of other questions foregone. Post-trip purchases, such film processing, dry cleaning, etc could not be collected in the same way and is probably of a magnitude that would not justify a specific survey.

consumer durables

A difficult issue for TSAs is the treatment of consumer durables, which although used on the trip may be used at other times and may have been produced in another accounting year. One approach to this issue, as suggested by OECD, is to include as tourism pre-trip expenditure smaller consumer durables, such as cameras and luggage, which may have been purchased for the purposes of a trip (whether or not subsequently re-used for another trip) and to leave out of account durables the purchases of which may be unrelated to the trip and whose use on the trip is incidental. A good example is the family motor car. A third category of consumer durables, intermediate between these two, relates to durables whose primary purpose is for tourism use but which are used for many trips and have a long life. Examples of these are skiing equipment, camping equipment, caravans and sailing craft.

The WTO position is that they would like to follow national accounting principles and attribute a percentage of the cost of consumer durables for tourism use, but acknowledge the measurement difficulties in achieving this ideal and therefore in the first stage fall back to the OECD position of excluding altogether expensive consumer durables which are used only incidentally for tourism.

Our own assessment is similar to that of the WTO position. We see no reason why a tourism ratio should not be calculated for the 'normal' or average tourism use of a consumer durable. Saying that 10% of the use of a car is for tourism use is, in aggregate and in principle, no different from that 10% of retail sales of cars are to tourists (and therefore for 100% tourism use). Hence, we favour this treatment, recognising that this potentially as the same failings as an expenditure-based tourism ratio approach. In this example, the ratio of expenditure on petrol for domestic tourism trips to total people consumption by households would be a possible method (to be more precise, it would be better to use mileage rather petrol, but this is not identified in survey evidence).

second homes

Second homes are accepted by both OECD and WTO as appropriate commodities, the use of which is part of the tourism industry. They proposed treatment and measurement follows national accounting principles. The measurement is based on either an established market rent (eg where the property is also let to others) or an imputed rent based on comparable properties used for tourism purposes.

In the UK, relatively little is known about the ownership and personal use of second homes. For timeshare properties, information is in principle more accessible because the sale and transfer of properties is organised through businesses who also hold records of occupancy. However, there is no record of the stock of properties used as second homes for tourism purposes, other than through Inland Revenue and Local Authorities for Council Tax registers where tourism use cannot be separately identified.

In principle, second homes, along with consumer durables, ought to be included within the scope of a TSA. Incorporating them in a UK version requires a significant amount of empirical work since the measurement is complex and the evidence patchy.

package tours and travel agents

Everyone agrees that the margins of tour operators and travel agents and their purchases in the UK should be included in the TSA. There are some practical measurement difficulties in analysing the total expenditures through travel agencies and tour operator businesses, especially as between the incidence of the expenditures on UK and foreign operators/agents and for different elements of the packages. In the UK, there is general agreement as to how these are incorporated into the national accounts framework and these are based on some evidence and assumptions concerning the composition of packages and the operators/agents margin.

There are some general issues regarding how much of expenditure on inbound and outbound travel can be attributed to UK airlines and shipping companies (both cruises and ferries) and those which are foreign-owned and operated. Moreover, crews may be significantly staffed by residents of other countries, so that the remuneration is not received in the UK.

A significant amount of additional work would be required to accommodate all ramifications of package tours and travel agent operations within in the TSA. This would need to build out from the existing treatment within the national accounts framework.

concluding remarks on the scope of tourism expenditures

Despite all of these lengthy discussions and deliberations about the principles of including or not including various items of tourism expenditure within the TSA, the tourism ratio approach will provide a means for accommodating all of them. The tourism ratio approach, although necessary for the construction of TSAs, is consistent with national accounting principles when applied to national accounting concepts and magnitudes. The concept of a tourism ratio should not be limited to dividing expenditures between different elements of final expenditure and between end users but should also be seen as a tool for allocating supply within sectors between establishments and distinguishing between commodity use for tourism (for consumer durables) as against alternative uses. If the tourism ratio is applied consistently across tourism expenditures, the issue becomes a practical one of weighing up the benefits of accuracy of the TSA against the costs of undertaking the additional work.

The other lesson to highlight from this review is that any line drawn to divide expenditures, suppliers or any other national accounting variable between tourist characteristic and other activities is inevitably arbitrary and misleading to the extent it acknowledges that the accounts are partial rather than complete. Again, it is a pragmatic issue whether obtaining the extra coverage of those activities with very small tourism ratios would be a value for money exercise.

(b) intermediary suppliers

OECD consider that the estimation of value added in intermediate suppliers generated by purchases by businesses serving tourists directly is not part of the TSA as such and not much emphasis is placed on securing these 'indirect impacts' compared with the sources of direct tourism demand. They concede however that the TSA provides the means to make the calculations of indirect effects but does not produce them as such - the implication being that they could well be done if there are national input-output tables to facilitate the calculations.

WTO also give these linkages or supply effects very low priority and veer towards the conclusion that "it will only be recommended for countries with a reliable experience in detailed Input-Output tables". One justification given for the low priority is "that this indicator does not allow to compare validly tourism to other activities, because the GDP of other economic activities is not compiled that way". This statement fails to recognise the nature and purpose of a Satellite Account, since the whole purpose of the TSA approach is to go beyond the TEAs which do focus only on direct effects. This is likely an unsound 'technical' justification for countries who do not have a set of input-output tables.

Previous work undertaken by the consultants using survey and input-output data suggest that these indirect supply side linkage effects are quantitatively significant and often well over 20% of the total contribution of tourism to national GDP.

Since ONS in the UK produce a regular series of input-output tables, a UK TSA could and should compute these indirect effects. The accuracy of the estimates would however be constrained by the fact that the tourism expenditures and the industry sectors of the input-output tables do not provide the detailed sectoral disaggregations that are ideally desirable. We have such limitations as regards producing TSAs in the UK elsewhere in this report. This however does not constitute sufficient reason for ignoring these indirect effects because, without them, the estimates would seriously underestimate the total impact of tourism on the economy - even a rough estimate is eminently preferable to having no estimate at all.

(c) gross fixed capital formation

Both WTO and OECD recommend that tables for Gross Domestic Fixed Capital Formation (GDFCF) are created. The method used is to apply the tourism expenditure ratios for the tourism characteristic sectors to the data on the investment expenditures made by those sectors. These resulting proportions of investment are the output of industries such as construction, plant and machinery and vehicles. This approach is consistent with national accounting conventions, specifically in relation the treatment of capital investment which is regarded as a final output consumed on purchase. This corresponds to the most commonly used measure of Gross Domestic Product. National Accounting practices do allow for translating these investments into annual consumption flows by estimating capital consumption and then deriving national income (net domestic product).

It is recognised that this practice is not the ideal, but is justified by the expectation that owners will invest on a replacement cycle that means (in steady state) that annual investment is equal to annual consumption, irrespective of the life of the asset. The limitation is that the consumption is underestimated in periods when owners defer replacement and overstated when they bring replacement forward.

This practice of including investment in the OECD and WTO approaches seems contradictory to the position that they take on intermediate suppliers. Both expenditures in fact generate GDP which is derived from the activities of tourists in sectors defined within the existing national accounting framework.

(d) the incorporation of the public sector and other non-market activities

The public sector makes expenditures which are used to provide goods and services for tourists for which the tourists do not pay directly or indirectly a full market price or even no price at all. The support can take a number of forms, such as a National Tourism Organisation (e.g. BTA, ETB and RTBs in the UK) which provide information to tourists and support to the industry, tourist information services (provided overseas and domestically by the NTO), and support for cultural, recreation, sporting and entertainment/attractions activities. This support/subsidy is provided both by Central Government (often working through national agencies) and by local authorities.

OECD and WTO agree that this component of public expenditure conceptually fits within the TSA framework and can be seen as the government stepping in to buy some goods and services on behalf of the tourist from itself. This is quite in line with national accounting principles. The only obstacles to its inclusion, therefore, are ones of practical measurement.

The expenditures are a mixture of current and capital grants, government current expenditure and subsidy and the tourism part of these is not identified separately in national accounts. They are included in the national accounts aggregates and, at least for Central Government, much could be identified in the accounts of various publicly-accountable agencies (e.g. the Arts Council, Sports Council, Countryside Commission, BTA, etc). However, there is a considerable task of disentangling the tourism elements and the use of the expenditures, especially with regard to local authorities.

In national accounting, charges and other receipts from services are netted off the expenditures to identify the appropriate final expenditure by general government. The output associated with this is measured most commonly by changes in employment (by grade to account for differential productivity) plus allowances for capital consumption, together with the costs of operation, repair and maintenance and any costs of sales. However, another point is that the subsidy component of the public sector has to be separated out to measure expenditure at market prices and output at factor cost.

If TSAs are to be constructed for the UK, it would be important to include this public sector component which would involve a significant amount of further work to obtain sufficient information to make a reasonably robust estimate.

There are some incidental expenditures by non-market suppliers, especially government, which are difficult to identify and attribute to tourism. An example is the use of health services by tourists during their trip. These transactions are likely to be few in number and can safely be left out of a TSA.

Where tourism services are provided by unpaid volunteer workers, neither the imputed expenditure or the associated output are included in the accounts. Examples are volunteer staff in museums, volunteering in Preservation Societies, agencies such as the National Trust, etc. In principle if the volumes of such activity were known to be significant, an (equal) addition could be made to the expenditures and the output (income).

(e) tourism deflators and constant price estimates

The OECD TSA document looks forward to the time when TSA accounts will be completed for two or three years or more where it would be appropriate to compute TSA accounts in constant prices using tourist expenditure price deflators to observe real changes in the volume and composition of tourism activity and its contribution to the economy. Indeed, six of the thirteen templates suggested are dedicated to constant price versions of other tables.

The WTO also foresees the value of developing constant price series using volume and price indices in the long term.

For the UK, this is clearly a medium-term rather than a short-term issue. If the decision to prepare TSAs was taken at all, and even if accounts were to be prepared annually, it would be at least three years before the value of measurement at constant prices could be judged separately from the value of preparing regular TSAs.

Moreover, price indices and expenditure deflators have not been prepared specifically for tourist expenditures and tourism sector outputs. Using the larger items, such as hotels and restaurants, ONS will have an implicit deflator already in use within the national accounts preparation.

An alternative approach would be to carry out some development work to re-weight the prices in the Retail Price Index by the expenditures on the individual categories in the basket of tourism commodities to construct a proxy price index for the tourism expenditures and sectors. This could then be compared empirically (and econometrically) with the economy-wide Retail Price Index. Then the exercise could be carried forward to examine the relationship with the GDP implicit deflator to see if there was any regularity in the relationship between them that might provide a short cut to converting TSA GDP estimates to a volume indicator of tourism GDP.

For these reasons, the development of constant price series is likely to be a very later stage of the development of TSAs in the UK.

(f) guidelines for additional tables

The WTO's document "A Satellite Account for Tourism" (WTO, 3rd Draft, October 1997) contains templates for 15 tables. The OECD's document "A Tourism Satellite Account for

OECD Countries" (Statistical Working Party, OECD Tourism Committee, October 1997) contains templates for 13 tables.

Broadly speaking, the majority of each set of templates are either one of the five TEA tables, with more detail, or tables supporting them with the finer detail. A rough summary is:

Table 5.1: TEA templates and the TSA templates

TEA Template	WTO TSA Templates	OECD TSA Templates
Tab 1 Supply and Use	13 (7,8)	1
Tab 2 Derivation of VA/GDP	9 (14,15)	3
Tab 3 Consumers Exp	5 (1-4,6)	2 (5)
Tab 4 GDFCF	10	6
Tab 5 Employment	11 ⁽¹⁾	4

(1) covers four pages.

There is only one substantially additional WTO template (table 12). This provides a Balance of Payments account. However, insofar as the other templates are providing greater detail by which to understand the TEA tables, they are both valuable and exceptionally demanding in terms of their data requirements. Existing data would hardly stretch far enough to make other than very broad estimates and therefore represent something of a wish-list of additional data collection.

It is interesting that the additional table should be for the Balance of Payments. This is certainly valuable for looking at the benefit that overseas inbound tourism brings in terms of its contribution and hence the vulnerability of domestic industries to changes in competitiveness, real incomes and exchange rate movements. It is clearly possible, at least for the UK, as demonstrated by Chandra Sonpal's recent paper (Balance of Payments and Travel Account - Is it in surplus or deficit?) to attempt a balance of payments table for the UK.

The OECD adds one extra table which is table 7 for showing estimates of the capital stock. This is also potentially useful insofar as the data could be capable of demonstrating investment relative to capital consumption to take a view of whether sectors were improving quality or not.

There are in the OECD templates, apart from a summary table 8 to show some key variables and ratios, five other tables (9 to 13) which provide constant price estimates for the current price series contained in tables 1, 2, 3, 6 & 7. As we have discussed above, these would be useful but it could be several years before there was sufficient confidence to undertake the necessary work.

Overall, the two extra tables added, for Balance of Payments and Capital Stock, would be useful additions, and probably would not add greatly to the burden of developing the other tables proposed for the TEA. Where the main obstacle lies is in the detail required in the TSA specifications, which are more demanding in requiring a higher degree of disaggregation of expenditures (for example, by visitor type/purpose, domestic/overseas, etc) cross-classified by activities (for which most surveys are too small to provide robust estimates) which then must be matched on the supply side of the accounts, and hence much more demanding of the output measurement framework and the input- output data.

(g) the feasibility of TSAs for the UK regions

During the course of this study, we have briefly assessed the feasibility of constructing TSA tables for the UK regions. The conclusion is that regional TSA tables are much less feasible for UK regions than for the UK as a whole. There are three basic reasons why this is so:

on the demand side, large volumes of tourists are crossing regional boundaries during the course of their holidays or day trips and, although in some cases the different regions visited can be identified, the survey data do not distinguish the expenditures on the same basis. This information would be almost impossible to collect without a diary method of collecting the data;

although there have been studies which have sought to develop input-output tables for some of the UK regions, notably for Scotland and Wales, these have more limited sectoral disaggregation relative to the UK national tables and are not updated so frequently, making it more exacting to identify the tourism supply sectors;

although there are estimates made for regional accounts, those for GDP are compiled as the sum of factor incomes (i.e. incomes earned by residents, whether corporate or individual, from the production of goods and services). The method distinguishes between income from employment, income from self-employment, profits and surpluses and rent. Disaggregating these to sectors places heavy demands on the data surveys.

The main obstacles therefore are that the demand side of tourism, measured by expenditures, cannot with the available data be allocated to the regions and that the supply sectors could not be adequately identified to calculate tourism ratios. As a result, only the very crudest of estimates could be produced for the English regions. Because of the existence of input-output tables, and the limited boundaries with other regions, less crude estimates could be attempted for England as a whole, Scotland, Wales and Northern Ireland.

Overview

This chapter has examined the feasibility of moving from the very limited estimation of TEAs towards a much wider approach embodied within the TSA approach. The review highlighted a number of specific issues which have to be resolved in deciding the feasibility of moving through stages to a full set of TSAs. These issues included:

fuller coverage of expenditure by tourists to include all items on which expenditure was made during the trip;

the treatment of consumer durables and second homes;

the inclusion of intermediate suppliers;

extent of existing sectoral disaggregation, both on the demand and the supply side;

issues surrounding capital formation;

deflators and constant price estimates;

estimates of capital stock;

balance of payments tables.

Our review concluded that a number of these could be addressed in the UK and easily resolved using largely existing data without insuperable methodological hurdles, subject to the normal caveat that the disaggregation of existing data is not as fine as would be desirable or fully reconcilable between the demand and supply sides.

However, other issues are subject to methodological barriers and/or acute data limitations and the review concluded that these were much better left to a much latter stage. The included the compilation of tables relating to the capital stock, the balance of payments and tourism deflators for constant price series.

Finally, and purely in relation to tourism data, the review concluded that there was a case for initially harmonising survey questions across the three surveys and for disaggregating the expenditure questions. Subsequently, there may also be a case for supplementing sample sizes to increase the robustness of detailed estimates, especially for the UKTS.

To summarise, therefore, it is a feasible proposition for the UK to develop now, using existing data, a set of core TSA accounting tables which go well beyond the scope of the TEAs. It is also possible to produce cruder estimates for England, Scotland, Wales and Northern Ireland, but not for the English regions.

Options for the Way forward

Introduction

In considering the way forward, we have defined seven possible options which to some extent also define the stages of work which we think would be appropriate to underpin the compilation of a full set of TSAs. We have attached our view of indicative costs to these options, on the assumption that the work would be undertaken by outside consultants. One possibility is that ONS might take on and co-ordinate the whole exercise, in conjunction with DCMS. In this case, all of the costs would be in-house costs and we are not able to estimate.

Even if most of the work is carried out outside the civil service and their agencies, ONS and the relevant agencies would need to play a supporting role. Much of this would exploring in greater detail the ways in which ONS surveys and other primary data incorporate the turnover and other aspects of tourism and other relevant businesses. However, some of the options require improvements to existing surveys, where the supporting in-house work and extra survey charges would make up the bulk of the costs.

The seven options could be described as follows:

(i) options using existing data

The 'do nothing' option;

Preparation of five TEA tables only;

TEA tables plus TSA 'core' tables, using existing data;

Development work on further TSA tables, using existing data;

(ii) options developing and using extra data

Harmonisation of survey questionnaires and further commodity disaggregation of expenditure questions;

Boosting survey sizes;

Full set of TSA tables, using output of options 5 and 6 (assuming options 3 and 4 have been completed).

The proposed options

(a) Option 1

The 'do nothing' is attractive from the perspective of zero financial cost but there are other costs involved in not co-operating with international bodies and in foregoing the benefits that a tourism TSA could provide. Some of these are listed in the brief and in chapter 1 above, including:

boosting our knowledge of tourism as an economic phenomenon;

its inter-relatedness with the rest of the economy;

the implications for employment and productivity;

the implications for capital investment;

providing insights into the policy priorities.

Doing this study, it has become evident that there is another important purpose for compiling a TSA, which is that TSAs would form a useful function in providing a framework for bringing together, and relating together, a large volume of disparate tourism statistics. TSAs would also provide the impetus for reviewing the collection of that data and harmonising and rationalising these data with data from survey and other sources. The costs of the three main national surveys alone (UKTS, IPS, UKDVS) must be of the order of £3-5mn every time they are undertaken, and yet the information they contain is not accessible through a single source and, because of very limited harmonisation in the past, the collective message is rather blurred and never provides the complete picture of tourism activity and its impact.

Given this position, there is a case for challenging the 'do nothing' option as the front runner.

(b) Option 2

The option of preparing five TEA tables only is feasible for the UK using existing data sources, but the sectoral disaggregation available from existing sources is restricted. This,

together with other limitations of coverage of the TEAs, reduces the attractiveness of adopting this option by itself. The estimates produced will underestimate the impact of tourism and, to that extent, may give a misleading headline figure which may prove to be very controversial.

The coverage is particularly restrictive because it excludes the indirect effects through supplier businesses which are conventionally included in tourism impact studies.

Although the cost of undertaking this option alone is low, between £15,000 and £25,000, to adopt this option would be to ignore a significant amount of information which is available and could be used as suggested in Option 3 to make progress towards a TSA. There is therefore a case for preparing the five TEA tables as a first stage of a wider exercise which is outlined in Option 3.

(c) Option 3

This option consists of the preparation of the five TEA tables plus some TSA 'core' tables, all using existing data. TSA 'core' tables will build on the five TEAs by including:

- wider coverage of tourist trip expenditure, including retailing;

- some preliminary treatment of consumer durables and second homes;

- a fuller sectoral coverage of fixed capital investment;

- first estimates of public sector contribution to the provision of tourism facilities;

- estimates of GDP impacts in intermediate supply sectors.

We estimate that the additional cost of preparing the 'core' TSA tables (over and above the costs of the five TEA tables alone) is £65,000 to £75,000. This includes the preparation of a guidance manual describing the compilation and sources of each estimate so that the exercise could be repeated in subsequent years, at a cost estimated at £25,000 to £35,000.

The full of Option, including TEA and core TSA tables, would be of the order of £80,000 to £90,000.

Option 3, like Option 2, would use only existing sources and therefore could be undertaken at any time. Option 3 represents the totality of what can be achieved using currently available data sources.

(d) Option 4

Option 4 consists of exploratory conceptual and empirical work concerned with aspects of the TSAs not covered in Option 3. These are notably:

- Balance of Payments tables;

- Capital Stock tables;

- tourism-weighted price indicators for constant price series;

disaggregation by origin/type of visitor (e.g. domestic/overseas, holiday/business).

The exploratory work would examine more precisely what could be done in these specialist areas using existing data not currently accessed for tourism information and would identify gaps that could only be filled by additional survey work.

The approximate cost of the development work for Option 4 is estimated to be of the order of £20,000 to £30,000 and it is envisaged that this option would only be worthwhile at a later stage when and if a decision to progress TSAs following the recommendations of Option 3 is taken. Constant price estimates will only be useful when the core tables had been prepared for more than one year and had achieved some operational credibility.

(e) Options 5 and 6

Options 5 and 6 are concerned with different aspects of ways in which different sources of existing information need to be improved in order to provide a basis for developing more sectorally disaggregated TSAs which are sectorally comprehensive and robust. Option 5 focuses on the degree of sectoral disaggregation in existing surveys of tourism demand and supply, and considers within those how survey questions could be amended to provide more detailed information and, as far as possible, harmonise between the main surveys. Option 6 focuses more on the sample coverage of the surveys and the appropriateness of adjusting sample sizes where necessary and the adoption of suitable additional sub-sampling for specific areas of questioning.

Options 5 and 6 are different from the other options in that the work involves changes to demand and supply side surveys which a number of Departments/Agencies are already undertaking. Investigative work for changes, although guided by ONS and others, would be sub-contracted out. There might also be opportunities for survey cost reductions if a degree of harmonisation and rationalisation could be achieved, particularly in the demand side surveys. Such reviews of data provision are not an integral part of TSAs, indeed in the normal course of events the issues are addressed in each year that the surveys are undertaken. But the decision to progress TSAs would add an extra dimension to the content of these options in that TSAs require a minimum degree of disaggregation and robustness if they are to become a permanent and well-used feature of tourism information.

To this extent, the decision to progress TSAs may enhance the case for a fuller review of tourism data sources with regard to the extent of disaggregation, the appropriateness of sample sizes and the harmonisation of survey questions to improve quality and usefulness of the aggregate of survey results. Any net costs of Options 5 and 6, although partly attributable to meeting the needs of TSAs, should be seen as part of the initiative in Central Government to harmonise statistics rather than for improving the quality of TSAs per se.

(f) Option 7

Option 7 looks forward to the time when development work for the TSAs might have been completed and represents the preparation of comprehensive TSAs, assuming that the other options 1-6 have been undertaken. Within this option, there will obviously be choices of what a complete set of TSAs are. Although OECD suggest 13 TSA tables and WTO suggest 15 TSA tables, there are big differences between all but the core tables, with the OECD putting more emphasis on constant price estimates. Even within the core tables, there are wide differences in the detailed content. Hopefully, some harmonisation towards a common set of templates for a set of Tourism Satellite Accounts (in much the same way as prepared for the internationally accepted System of National Accounts), by which time the UK will be well-

placed if it chooses to go down the road of developing TSAs. This option therefore looks forward several years to a time when comprehensive and robust TSAs could be produced. As a rough indicative guide, we suggest the cost of preparing an annual set of accounts would be of the order of £60,000 per year (at today's prices) plus the updating of a guidance manual on publication of the first official set

The table below summarises the main features of these options and the costs. Where costs are likely to be borne largely in-house or on additional survey costs (perhaps offset by other cost reductions), a tick is shown rather than an indicative cost.

Table 6.1: Options and costs for initial development

Option Description	Duration/timing of option	Survey work	Support by ONS and others	Consultancy costs (£000s)	
				stage	cumulative
1: Do nothing					
<i>Using existing data</i>					
2:TEAs only	short term		ü	15-25	15-25
3: TEAs & TSAs with expanded sector coverage ⁽¹⁾	short term		ü ü	65-75	80-100
4: TEAs & extra TSA topics	medium term		ü ü	20-30	100-130
<i>Adding to data development</i>					
5: Further sectoral disaggregation on demand & supply side	medium term	ü	ü ü ü	optional ⁽³⁾	
6: More survey work to increase robustness	medium term	ü	ü ü ü ⁽⁴⁾	optional ⁽³⁾	
<i>'Full' TSAs</i>					
7:TEAs & TSAs using the output of options 5 and 6 ⁽²⁾	long term		ü ü	60-70	160-200

Notes:

(1) annual cost of producing sets of accounts would be of the order of £25-35,000.

(2) for Option7, the annual cost would be £50-60,000.

(3) these costs are optional since most of work could be undertaken in-house.

(4) the costs of any necessary increases in sample sizes, both in the demand and supply side surveys could be substantial.

Overview

The options presented in this chapter are not mutually exclusive but rather represent options for a staged process of moving towards a full set of TSAs. The full development process could only be completed over several years and the process could be truncated or halted at any stage. If the decision were taken to move beyond the 'do nothing' option (Option 1), and to do what can be done with existing data, there is a good case for attempting Option 3. Implicit in this decision would be a conviction that the TSAs would be serving a useful purpose as a tool for tourism and Government policy. If this were not so, Option 2 would serve as a gesture towards the international community.

Depending on the outcome of these stages using existing data for the preparation of 'core' tables, the further development of TSAs could be halted. By this stage, enough would be known about the likely costs and benefits of going to Options 5 and 6 to add to and improve existing data sources. A rough value for money assessment at this point would then determine whether to develop and produce a full set of TSA tables. Only if the decision to do this in principle would undertaking Option 4 (development of further and more detailed tables) be worthwhile.

Even if the 'do nothing' option prevails, there is a case for considering Options 5 and 6 outside the process of developing TSAs, particularly in view of the potential benefits of harmonisation and bringing together the survey and other data on a consistent basis so that they become accessible and better use may be made of them. In this context, the TSA framework is in itself a useful one for assisting in this process.

ANNEX A: SOURCES AND AVAILABLE INFORMATION

Summary of main statistical sources

Data source	Focus of survey data	Relevant data	Comments
United Kingdom Tourism Survey	UK residents tourism in the UK UK residents tourism abroad	Expenditure by purpose of trip, disaggregated into 9 categories	Household based survey seeking information on trips in last two months
International Passenger Survey	UK residents tourism abroad Overseas residents tourism to the UK	Expenditure by purpose of trip disaggregated into 16 categories undertaken on occasional basis	Sample survey at air 7 seaports and channel tunnel. Data for Irish visitors, Channel Islands & UK cruise passengers derived from other sources
United Kingdom Day Visitors Survey	Day visits by British residents to Britain	Expenditure by location of leisure trip, disaggregated into 11 categories.	Household survey seeking information on trips in last two weeks. Does not include Northern Ireland. Limited data on business day trips in 1994.
British National Travel Survey	British residents holidays in Britain and abroad, primarily on long holidays of over 4 nights	Expenditure per trip. No breakdown available.	Funded by subscription. Longest running of any of the tourism surveys.
Tourist Board accommodation stock list	Location, capacity and type of known stock of accommodation	Accommodation supply	Known stock data contains substantial errors. Northern Ireland data is based on compulsory registration and therefore of greater accuracy.
Tourist Board Attractions records	Stock of attractions by location and broad type	Attractions supply. Some data on charging and expenditure on improvements	Collected on voluntary return basis by tourist boards. Not fully comprehensive.
Business rate register	Number of establishments in broad accommodation, attraction and entertainment categories.	Number of establishments. No capacity or spend data.	Will not include casual establishments. Definitions of categories varies from Tourist Board standard and may vary between areas.
CIPFA Leisure and Tourism Statistics	Expenditure by local authorities on tourism and leisure	Expenditure by main leisure categories	Definition by category not consistent between authorities
ONS sectoral	Activity by specific	Demand and supply	Surveys are not specific to

inquiries	sectors including retailing and catering and allied trades	characteristics of sector	tourism.
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Summary of tourism expenditure information

Expenditure item	UKTS	IPS	UKDVS	Comments
Purchases made in advance of the trip				Items such as travel and admission tickets relevant to trip may be included
Accommodation				
<i>Expenditure on food and drink</i>				
Eating and drinking				
Meals out				
Meals, snacks and non-alcoholic drinks				
Alcoholic drinks				
Alcohol included with meals				
Alcohol not with meals				
Admissions/entertainment				
<i>Retail expenditure on the trip</i>				
Buying clothes				
Buying gifts/souvenirs				
Food from retail shops				
Books and newspapers				
Other shopping				
<i>Travel and transport</i>				
Travel				
Taxi/car hire				
Public transport/petrol				
Petrol/diesel				
Fares				
Parking				
Tolls				

<i>Services and facilities</i>				
Services and advice				
Medical services				
Hair and beauty treatments				

Telephone/fax/postage services			
Other services			
Hire of equipment /facilities			
Other items			
Total trip spend			
Spend on consumer durables, eg cameras, sports equipment			Not measured.
Spend on second homes including caravans, boats			Not measured