

4.4 PROBLEM AREAS IN TOURISM CONSUMPTION – PACKAGE TOURS

- 4.4.1 There are continuing discussions relating to the extension of the TSA, for example to durable goods and capital investment. Even within the concept of tourism ‘current consumption’ there remain problem areas, as discussed below.
- 4.4.2 For package tours, operators combine two or more travel services such as transport accommodation and entertainment and sell them, either directly, or through third parties, to tourists. This raises serious issues for treatment within the TSA. The package tour can either be thought of as a new and complex product, and the individual elements then as inputs in the production process of this new product, or alternatively as a marketing procedure to sell the individual components of the tour.
- 4.4.3 It is the considered opinion of WTO (though not definitive) that the package tour should be considered as if the tourist had directly bought the components involved, with a margin then allocated to the agent/operator. This has the benefit of retaining the direct link between the purchase of the product, and the final consumer, particularly important as the intermediate stage in the process (the tour operator or agent) may not even be in the country where the product or service is produced and used.
- 4.4.4 This approach does raise some notable estimation issues. TSA construction must properly account for the margin of the tour operator, and properly value the mix of products embodied by the tour. These data issues are not easily resolved, particularly as packages are heterogeneous, and foreign tour operators unlikely to be easily accessed²².
- 4.4.5 Full details regarding how the package tour problems has been approached in the UK TSA framework are given in Section 6, and notes on the adequacy of data to address this issue are contained in Section 5.

4.5 PROBLEM AREAS IN TOURISM CONSUMPTION – SECOND HOMES

- 4.5.1 The other area which probably raises the most conceptual and data issues in terms of current tourism consumption is that of second homes, or housing services provided by second homes on own account or free of charge.

²² See TSA Recommended Methodological Framework, 2001, para 3.46 – 3.51 and 4.16 – 4.19

- 4.5.2 The presence of second homes provides a difficulty within national accounts. Their existence implies an economic supply of a product, and their use involves consumption of that product. Yet the payment for that product (whether rented or mortgaged) is not directly related to the duration or frequency of trips which utilise the facility; they are not, in essence paid for at the point of supply, but rather payment is apportioned over an extended period, and the cost has only a distant relationship with actual levels of use.
- 4.5.3 There is an added complication in that whilst homes might be rented out and result in an economic transaction, use by different members of the household (or extended family) free of charge constitutes a transfer of economic value which is very difficult to identify in national accounting frameworks.
- 4.5.4 To account for this activity in the TSA therefore requires imputation, i.e. an estimation of economic value based upon indirect measures. In this case, the rental market for similar properties would give an indication of the economic value of the service, assuming there is a well enough defined market to make such an estimate. Alternatively, where data are scarce, the value of the service can be set to the value of the costs of production (perhaps, in this case the level of the mortgage plus associated maintenance costs etc.).
- 4.5.5 The treatment of second homes is one area where international comparability is likely to be problematic, particularly as the importance of the service varies enormously between (and indeed within) countries (see Section 6.4).

4.6 PROBLEM AREAS: BUSINESS TOURISM

- 4.6.1 The expenditures of businesses for touristic purposes, whether directly or by employees, is problematic for TSA construction. Conceptual issues are related to treatment of such consumption as a final demand, or as intermediate purchases (i.e. as part of the production process of the purchasing company). There is also an issue regarding the production of 'business tourism characteristic products'.
- 4.6.2 There is adequate guidance in WTO:RMF and the EUROSTAT implementation manual to enable TSA construction. However, this complex issue is dealt with in full in McNicoll (2004).

4.7 SOME 'CHARACTERISTIC' TSA RESULTS

- 4.7.1 Figure 4.5 provides some indicative TSA results. Despite the differences in methodological approach and TSA structures between countries, Figure 4.5 shows how tourism differs in its broad characteristics internationally.

- 4.7.2 Immediately of policy relevance is the proportion of tourism receipts which arise from different types of tourism. For example, international arrivals ranged from around a fifth (22%) in Australia, to around a half in Switzerland and Austria. Moreover, estimates of the importance of ‘business’ tourism varied considerably, from under 5% of demand in New Zealand to almost a third in the USA.
- 4.7.3 Estimates of the contribution of tourism to Gross Value Added (GVA) ranges from just over 2% in Canada and USA (although with the latter not directly comparable), to over 7% in Austria. Estimates of employment also varied, ranging from 3.5% to 6.8% of the workforce. Here, however, the consequence of the international agencies’ continuing debate on the ‘employment module’ was evident. Some countries report in terms of ‘tourism jobs’, others in full time equivalents, leading to significant disparities in this heavily part-time sector. Moreover, some countries (including the USA) are unable to report on the self employed, restricting estimates to employees only.

Figure 4.5 TSA Headline Results - International Comparisons

	Canada	New Zealand	USA	Austria	Norway	Australia	Switzerland
	1998 \$CAN	1999 \$NZ	1997 \$US	1999 ATS	2000 NOK	1998 \$AUS	1998 CHF
Total tourism expenditure (millions)	45,886	12,078	291,500	302,161	76,417	58,200	30,610
<i>of which:</i>							
International tourism consumption	33.7%	23.3%	24.0%	53.5%	30.3%	22.0%	47.4%
Domestic household consumption	} 66.3%	72.5%	43.0%	37.0%**	46.3%	67.0%	34.2%**
Domestic business consumption		4.2%	29.0%	9.5%	23.4%	5.8%	
Government & other	n/a	0.1%	5.0%	n/a	n/a	} 11.0%	12.5%
Direct Value added (% of total industry contribution to Gross Value Added)	2.3%	4.6%	2.2%*	7.2%	3.8%	4.5%	
Tourism employment, 000s (direct)	533	87 FTE	1,452*	n/a	133	513	165 FTE
% of workforce	3.7%	5.6%	3.5%*	n/a	6.8%	6.0%	5.2%
Selected Tourism Product Ratios							
Accommodation services	0.64	0.94	0.80	} 0.88	n/a	n/a	0.76
Food and beverage	0.18	0.39	0.17		n/a	n/a	0.29

Notes:

*US accounts report for only 'tourism industries' - these figures are therefore likely to be slight under-estimates. BEA uses 3 different estimates; mid range reproduced here.

**Includes adjustment for expenditure while at second homes.

Although all countries TSAs are conceptually similar, definitions of 'usual environment' vary as does estimation methodology and data quality. Thus, figures reproduced for indicative purposes only. All accounts appear to include day-visitors. Figures used are most up-to-date 'final' results though more recent provisional/modelled results may also be available.

Only selected Tourism ratios shown due to discrepancies in classifications between countries.

Sources:

- www.bea.gov.uk
- www.statistik.at
- www.statcan.ca
- www.stats.govt.nz
- www.abs.gov.au
- www.statistik.admin.ch
- www.ssb.no

- 4.7.4 It is interesting to note that all countries reported in the table show that tourism accounts for a higher proportion of employment than value added within the economy. This reflects both the labour intensity of tourism compared to the ‘economy average’, and also (linked to this) the relatively low wages prevalent in many tourism occupations across different countries (compensation of employees is a significant portion of total value added).
- 4.7.5 The presentation of tourism industry ratios also makes interesting reading, with even accommodation services typically not completely tourism-dependent – for example, in Canada, only 64% of demand for accommodation services comes from tourists. Meanwhile, food and beverage sectors are generally far more dependent upon ‘routine’ resident demand than on tourism.
- 4.7.6 Examination of tourism ratios highlights the limitations inherent in comparisons between countries, even when each nominally adheres to WTO standards. The reliance here on a variety of established industrial classifications, including Standard Industrial Classifications (SIC) and North American Industry Classification System²³ (NAICS) means that individual industries can be difficult to compare on key variables such as industry tourism value added or tourism industry ratios. This is true even of central sectors such as accommodation and transport (Figure 4.5). The very recent introduction of NAICS means this situation is likely to continue for some time, although additional estimation can often obviate some of the problems associated with differing classification systems.
- 4.7.7 Differences in the results obtained in different countries illustrate that whilst international guidelines are well developed, and many conceptual issues agreed upon, there is some way to go before TSAs are truly internationally comparable (if this is indeed ever the case). A further example would be the definition of usual environment – crucial to the definition of a visitor. Some countries use a definition of usual environment which is distance-based (the USA and Canada included). Others, including the UK rely upon a definition which relates to the duration of the trip. For other countries the definition is not clear from available documentation (in English at least).
- 4.7.8 It is perfectly legitimate for different countries to adopt different definitions for this critical term; for example due to specific geographical or social characteristics. However, only definitive guidance from international bodies will encourage an internationally comparable definition of usual environment and thus the TSA more generally.

²³ Product classifications also vary between countries.

4.8 EXTENSIONS OF THE TSA: DEVELOPMENT OF TIMELY INDICATORS

- 4.8.1 As has been noted in earlier sections, the development of a full TSA is limited by access to underlying national accounting data. With such data likely to refer to a period at best several years in the past, and with TSA construction itself a time consuming and difficult process, it is not surprising that the TSA reference year may be five years or more prior to its publication date.
- 4.8.2 This causes significant problems for policymakers and the industry, who require timely information to aid decision making. Results for a reference year some way in the past may somewhat reduce their value, but there is no easy way to produce a TSA more quickly.
- 4.8.3 This problem has led to several countries adopting a partial update of the TSA based upon information which is more readily available for more recent periods. This would typically include information on visitor consumption, or business turnover (perhaps proxied, for example, by occupancy rates) which can then be used to update the relevant portions of the TSA.
- 4.8.4 The use of such techniques does invite some potential error. For example, these estimations assume that key relationships within the TSA, including tourism ratios and production techniques have not changed since the reference year. However, assuming the update of the TSA does not cover an extended period, the errors which occur due to such ‘hidden’ changes in the tourism economy are likely to count far less than the benefits consequent on a more timely estimate of key indicators.
- 4.8.5 As implied above, a relatively simple way to estimate the changes in tourism for more recent years is to apply tourism consumption totals to the established TSA structures for the reference year. This is the approach adopted, for example, by Australia, Austria and New Zealand. Here, Input-Output Tables²⁴ are supplemented by visitor and household consumption data for 2000 and 2001 (Australia/Austria) and 2000-2002 (New Zealand).
- 4.8.6 This method provides an indication of the likely trends in industry growth over periods subsequent to the TSA reference year, and additionally provides an estimate of the significance of tourism within the wider economy for these years (assuming that GVA figures are available for the economy as a whole in the absence of full Input-Output Tables). A similar method can be used to estimate changes in tourism employment, providing useful information to user groups (see Figure 4.6 for an example).
- 4.8.7 What is generally not possible without a full update of the TSA is providing, for later years, the level of ‘fine detail’ – for example information on the tourism GVA of specific industries may be unreliable due to the estimation methods used.

²⁴ NZ 1999; Australia 1997-8. In the Austrian case the base Input-Output Tables themselves are older, and re-estimated for 1999.

Figure 4.6 – TSA Based Indicators, Gross Value Added 2000-2002, New Zealand

Item	Year ended March				Annual percentage change		
	1999 ⁽¹⁾	2000	2001	2002	2000	2001	2002
	\$(million)				Percent		
Published GDP	101,959	107,068	113,778	122,241	5.0	6.3	7.4
Less GST, import duties and other taxes on production	7,472	7,978	8,314	8,846	6.8	4.2	6.4
Gives contribution to GDP from production	94,487	99,090	105,464	113,395	4.9	6.4	7.5
Tourism output of tourism characteristic industries	6,241	6,863	7,487	7,577	10.0	9.1	1.2
Less tourism intermediate consumption of tourism characteristic industries	3,896	4,306	4,927	4,855	10.5	14.4	-1.5
Gives direct tourism value added of tourism characteristic industries	2,345	2,556	2,560	2,722	9.0	0.2	6.3
Plus direct tourism value added of all other industries	2,005	2,233	2,203	2,342	11.3	-1.3	6.3
Gives total direct tourism value added	4,351	4,789	4,763	5,064	10.1	-0.5	6.3
Direct tourism value added as a percentage of total industry contribution to GDP	4.6%	4.8%	4.5%	4.5%			

(1) The 1999 figures were published in December 2002.

NB: GST – Goods and Services Tax.

Source: Statistics New Zealand, 2004

- 4.8.8 The incorporation of more recent annual data to supplement full TSA results is a useful exercise. A small number of countries have indicators which are available quarterly, and which are extremely timely, further increasing the ability of the country to monitor very subtle changes in the tourism economy. Primary amongst these nations is Canada, with its comprehensive set of National Tourism Indicators (NTI)²⁵.
- 4.8.9 Canada required a more dynamic view of tourism, and, since 1996 has published a set of quarterly and annual ‘snapshots’ covering many of the components of the TSA. Indeed the full set of time series runs to over 300 variables, comprising both domestic and international tourism; demand, supply and employment.
- 4.8.10 The provision of quarterly data benchmarked to the TSA brings significant policy benefits. For example, based on a study using NTI data for a ten-year period (first quarter 1986 to fourth quarter 1996), Statistics Canada was able to demonstrate that over this time period:
- tourism was a growth industry, as tourism spending rose faster than Canada’s gross domestic product;
 - job creation in the tourism industry was higher than in the business sector as a whole;
 - tourism experienced spectacular ups and downs both cyclically and seasonally;
 - many tourism goods and services were very sensitive to cyclical fluctuations in the country’s GDP, especially in the air transportation, recreation and entertainment, travel agency, and food and beverage service industries;
 - cyclical variation in Canada’s GDP accounted for a very small part of the variation in non-resident demand, which depended primarily on the economic situation in other countries, the value of the Canadian dollar, and specific events²⁶.

²⁵ Meis (1999)

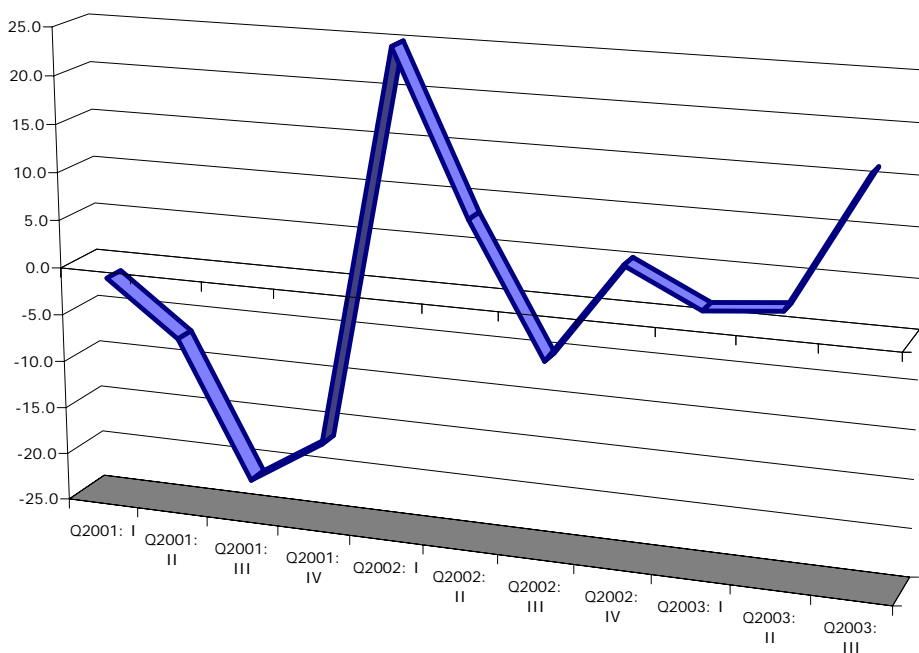
²⁶ Wilton, D (1998)

4.8.11 Whilst some of the above may have been intuitively obvious without the development of the NTIs, the impact of seasonal trends in arrivals on important variables such as employment, and the strength of a number of economic relationships could be estimated for the first time. Meanwhile provision of data on a quarterly basis enables very detailed examination of the effects of different events; for example the dip and then recovery in tourism since September 11th 2001 can be charted, and the impacts on GVA estimated with a degree of accuracy otherwise impossible.

4.8.12 The United States Bureau of Economic Analysis has a similar approach to producing timely indicators of tourism activity benchmarked to the Travel and Tourism Satellite Account for 1996/7. Although these are not as comprehensive as the Canadian suite of variables, largely concentrating on sales of product, they are still of great policy interest, as Figure 4.7 shows.

4.8.13 The production of quarterly indicators of tourist-related activity is no small undertaking, and requires significant resource investment. In Canada, the indicators are produced by a partnership involving the Canadian Tourism Commission and Statistics Canada, whilst in the US it is the responsibility of the Bureau of Economic Analysis, part of the Department of Commerce which has responsibility for most federal-level US national economic accounting. It is difficult to imagine any system of timely indicators being compiled without the full involvement of the responsible national accountants.

Figure 4.7 - US Tourism Industries Tourism-Related Sales, 2001-2003



5 TSA RELEVANT DATA IN THE UK: COVERAGE, QUALITY AND SUITABILITY

5.1 INTRODUCTION

- 5.1.1 The aim of this section is to outline the data review process and to discuss the main data issues relating to each constructed TSA table. The section relates only to those TSA tables identified for estimation in the First Steps project, that is Tables 1, 2, 3, 5, 7 (4 and 6 being largely amalgams of other tables). The structure of Table 10, non-monetary indicators, remains to be determined (and will necessarily be dependent upon what quality information exists to be used).
- 5.1.2 Appendix II of this report provides full details on the nature and coverage of datasets which might be of use in TSA cons

5.2 THE DATA REVIEW PROCESS

- 5.2.1 The TSA table structure provided the framework for the data review. Hence each TSA table was considered in turn together with an analysis of the pre-existing data that could be used to populate the cells in these tables. One result of this process is that in some cases data reviewed for one table is also relevant for others. In these cases, or where there are other data relationships between sources these have been cross referenced in Appendix II.
- 5.2.2 Each data source has been reviewed to a common template. This includes a description of data source, the key variables or focus which is relevant to the specified TSA table, the survey type and reliability issues, spatial coverage, details of the commissioning body and then other comments.

5.3 THE TSA TABLES – TABLE 1

- 5.3.1 TSA Table 1 estimates Inbound Tourism Consumption, by products and categories of visitors (visitor final consumption expenditure in cash). Inbound tourism refers to those tourists entering the UK from overseas. The number of tourist categories is determined by the quality of data and estimation was possible for Holiday, Business and Visiting Friends or Relatives/Miscellaneous purposes, the latter two aggregated to enhance reliability and provide congruence with other tables.
- 5.3.2 In Table 1, (as with Tables 2 through to 4), tourism expenditure is analysed by product category. Again the number of products into which expenditure can be categorised depends essentially on the quality and detail of the original data.

- 5.3.3 A core data source, crucial to the construction of Table 1, is the International Passenger Survey (IPS), which is commissioned by the ONS. Interviews are conducted each year as travellers (both UK resident and international) leave the UK. Data collection is stratified to reflect different transport modes.
- 5.3.4 The ONS has conducted a number of expenditure trailers in order to gather additional information on the spending of overseas residents within the UK. The 1997 trailer used 16 categories of expenditure, ranging from accommodation, food, alcohol, transport, clothing, food and other consumables. Hence, the general nature of these expenditure survey questions constrains allocation of expenditure to the different product groups which appear in Tables 1-4. A new expenditure trailer may take place in 2006.
- 5.3.5 Detailed IPS data is presented in *Travel Trends* including numbers of visits, nights and spending by purpose and area of visit. There are four categories of visit i.e. Holiday, Visiting friends and relatives, Business and Other, and area of visit is broken down to county level. Summary data is released monthly.
- 5.3.6 While the IPS provided the core data for the construction of Table 1, other sources were helpful in building up a more accurate overseas visitor 'profile'. The UK Supply and Use Tables (Table 4) contains one vector of information within the analysis of household final consumption on non-resident household expenditure in the UK by product group. This is mainly derived from the IPS and includes all expenditure by private visitors except that incurred on transport to the UK. Also included are estimates of private expenditures by US Forces stationed in the UK, foreign diplomats and foreign journalists living in the UK, meaning the measure is *not* identical to tourism consumption. This was, however, a key source for disaggregating broad expenditure totals by type of visitor across product groups. Another similar source is the Input-Output Tables for Scotland. These tables provide a product breakdown of expenditure by tourists into Scotland. Hence including the rest of the UK as well as overseas visitors. As with the UK source, no analysis by type of visitor is available.
- 5.3.7 The UK Occupancy Survey data is sourced from the National Tourist Boards and Regional Tourist Boards in England. It follows that there is also a large number of local occupancy surveys, using the same broad framework as the UK Survey. This information will have some use in informing the development of regional accounting frameworks. Coverage of this survey is different across the UK, with Scotland including non-serviced accommodation and the rest of the UK restricted to serviced accommodation only.

5.4 THE TSA TABLES – TABLE 2

- 5.4.1 TSA Table 2 refers to the expenditures of domestic (UK resident) tourism, which may occur within the UK either as UK residents travel within this country for a number of purposes or make expenditures in the UK for purposes which take them abroad. This latter element was difficult to ascertain, but investigation of supply side sources to estimate travel agents' margins together with household survey data provided an indication of how much expenditure was made within the UK.
- 5.4.2 The information requirements for Table 2 are then similar to those of Table 1, but depend on the exploitation of different data sources.
- 5.4.3 TSA Table 2 depends heavily on the United Kingdom Tourism Survey (UKTS) for which data is available for 2002. This national consumer survey is carried out annually and uses a stratified random sample. In 2000, 55,000 interviews were conducted.
- 5.4.4 The work is jointly sponsored by VisitBritain, VisitScotland, the Wales Tourist Board and the Northern Ireland Tourist Board, and is available on the StarUK website. Customised analyses can be undertaken.
- 5.4.5 The survey measures trips away from home by UK residents lasting one night or more. The purpose of such trips are categorised as either holidays, visits to friends and relatives, business and conferences or any other purpose.
- 5.4.6 Among the data collected are number of nights, accommodation and transport used, activities undertaken, and location by type. Hence UK resident tourism is measured in terms of volume (trips taken and nights away from home) and value (spending). There are, however, a number of caveats related to the data. First, expenditure data is analysed to nine categories which restricts the accuracy with which spending can be allocated between the product categories referred to with reference to TSA Table 1.
- 5.4.7 As with the IPS, sampling error increases as markedly for regional or sub-regional analysis. Hence the suitability of the data for regional accounting frameworks is questionable (although there is currently no suitable alternative). From 2000 onwards, data is gathered from telephone interviews, using random direct dialling, and conducted by the British Market Research Bureau (BMRB). Response rates can be very low – as little as 30%.
- 5.4.8 As the *Review of Tourism Statistics*²⁷ states, problems with the UKTS are twofold. Firstly, statistical reliability is problematic particularly for sub-UK analysis and in respect of expenditure. Secondly, a recall methodology based essentially on 'cold (telephone) calling' which requires respondents to recall detail of manifold trips undertaken in the prior two months is far from ideal.

²⁷ DCMS, 2004

- 5.4.9 Using the UKTS for TSA construction purposes assumes the accuracy and representativeness of these expenditure-related responses, which come towards the end of a wide ranging and long questionnaire. There is the potential for significant error to be introduced to the estimation process here.
- 5.4.10 The new methodology does mean that longer time is allowed to make contact with consumers. For example, it may better capture frequent travellers who are away from home for long periods and hence reduce the under-estimation that had been identified in the old survey. On the other hand, as with any consumer survey, there are serious issues related to the quality of personal recollection which reflects then on the accuracy of recovered data. Other nations, in recognising the crucial contribution of good quality expenditure data to tourism accounting, have introduced incentivised diarising as a method of recovering accurate spending data. The collection of expenditure data using recall methods and as part of a general attitudinal visitor survey, is not the most appropriate to support TSA development, irrespective of sample size issues.
- 5.4.11 Day visits are an important component of tourism, not within scope of the UKTS. Up to 1998 information regarding day visitors came from the UK Day Visits Survey, which measured participation in leisure day visits by the adult population (aged 15 and over). Data covered the types of activities undertaken, transport methods, distances, and destinations in addition to the value of those visits.
- 5.4.12 The survey was commissioned by a broad consortium of organisations including the DCMS, UK tourist boards, Countryside Agency, Forestry Commission and the Environment Agency, and undertaken by the National Centre for Social Research in 1994, 1996 and 1998. Day visitor information was related to destinations and not residence of day visitors.
- 5.4.13 The above survey has been replaced by the GB Day Visits Survey 2002-2003. It was sponsored by the organisations named above. The survey used a random sample of GB residents (aged 16 and over); 6,600 people were interviewed resulting in a 43% response rate. The survey only covers home-based leisure visits. Business day trips are not included, as with previous surveys. Twelve expenditure categories were used. Data coverage is similar to the survey it replaces, but excludes day trips by GB residents to Northern Ireland. N.B. Very few leisure day trips between Northern Ireland and Great Britain were recorded in previous surveys.
- 5.4.14 Sources of error include response errors where difficulties may have arisen from poor recollection of detail, or result from questionnaire design. Non-response errors were also deemed possible from refusals to be interviewed, failure to make contact or where non-respondents differ from respondents. Sampling errors are also significant, particularly for sub-national figures.
- 5.4.15 The GB Day Visits Survey is the core data resource for the estimation of the relevant portion of the TSA.

5.4.16 As with Table 1, there are difficulties in allocating expenditures from broad categories to specified product groups. As noted in 1.3.9 above, Input-Output Tables for Scotland contain a detailed analysis of tourism expenditure (combining UK and overseas tourists). A further data source is the Expenditure and Food Survey. This survey contains some categories of expenditure which are of direct relevance to domestic tourism, and many others that may be of indirect relevance. This source is used to estimate consumer expenditure for the UK. Hence domestic tourism is included within this vector (which can be found within the UK Combined Use Matrix), but is not separately identifiable.

5.5 THE TSA TABLES – TABLE 3

- 5.5.1 Table 3 requires information on outbound tourism consumption by product and category of visitor. Whilst there is no single source that can be used to fully populate the cells in Table 3, there are a number of useful surveys and other data which can guide the required estimates. For example, the UKTS provides an analysis by purpose and duration of trip.
- 5.5.2 Broad expenditure data is also available from the IPS, and this is occasionally supplemented by more detailed expenditure analysis (the next expenditure trailer is expected in 2006).
- 5.5.3 Detailed expenditure information on some elements of outbound tourism consumption is however available from within the UK Supply and Use Tables. This data is partly compiled from IPS and other information. However no analysis on type or purpose of trip is available from this source.
- 5.5.4 There are substantial differences in the gross expenditure of UK residents abroad reported by the three principal sources above; and particularly between the UKTS and IPS and the UK Supply and Use Tables (Table 4).
- 5.5.5 The UKTS measures spending on all trips by all tourists to UK and non-UK destinations, which in the case of non-UK spending includes expenditure incurred in the UK with respect to visiting abroad. Hence the UKTS typically reports the largest non-UK expenditure by UK residents.
- 5.5.6 Meanwhile, the IPS also captures expenditures made by UK residents in the UK in relation to their trip, if booked through a travel agent or tour operator but then deducts estimated travel commissions and fares to and from the destination. Only expenditures incurred abroad are included in the final reported estimates.

- 5.5.7 The IPS is used to produce both tourism spending estimates as reported in *Travel Trends* and MQ6, and to produce estimates for National Accounts, feeding into the UK Supply and Use Matrix. In the first context the UK definition includes England, Scotland, Wales and Northern Ireland in addition to the Isle of Man and the Channel Islands. In the context of National Accounts, the Channel Islands and the Isle of Man are considered as overseas.
- 5.5.8 Other differences between the IPS data reported in *Travel Trends* and its use in national accounts arise, for example, from differing treatments of long term students, for example, who are included in national accounts but do not qualify as tourists in *Travel Trends*.
- 5.5.9 When combining all available information to derive cell values for Table 3, these differences may be responsible for the introduction of errors which, while not substantial, do demonstrate some of the challenges faced in the estimation process.

5.6 PRODUCTION ACCOUNTS OF TOURISM INDUSTRIES – TABLE 5

- 5.6.1 The key data sources for Table 5 are the UK Supply and Use Tables (SU Tables 1, 2 and 3) and the Annual Business Inquiry (ABI). Further inference on the allocation of products to individual industries was drawn from TSAs constructed elsewhere.
- 5.6.2 The upper half of Table 5 shows the allocation of tourism products by industry. For this part of the table, reference was made to the UK Supply and Use Tables (Table 1 and 2). Information available from these sources includes ‘principal product as a percentage of industry output’ for 123 product/industry groups. This then guides the estimate of how much of the hotels, restaurants and bars *industry* output is comprised of hotels, restaurants and bar *products*. However no information is provided on the allocation of the remaining product output to other industries. Some guidance on this allocation can be obtained from the 1990 Input-Output Tables for the UK (from the ‘Make’ Matrix), although this uses a different Standard Industrial Classification (SIC80) and is unlikely to adequately represent current activity in service sectors.
- 5.6.3 The difficulty with these data sources in relation to TSA Table 5 is the industry aggregation scheme. For example, hotels and restaurants etc are represented by just one industry/product. This reflects the more general problem in UK National accounts, where there are far fewer service sectors separately reported than for manufacturing, despite the service dominated nature of the UK economy.
- 5.6.4 In order to allocate tourism product by industry reference was made to TSAs for other countries, particularly those for the USA, Canada and New Zealand. Information on distributors’ trading margins and imports by product was derived from the UK Supply and Use Tables (Table 2).

- 5.6.5 The UK Combined Use Matrix (SU Table 3) of the UK Supply and Use Tables, (which itself is constructed using ABI, Purchases Inquiry and other data) provides production accounts for all industries of the economy, and is used to construct the lower half of TSA Table 5. This matrix also divides the economy into 123 different industries.
- 5.6.6 The derived TSA Table 5 further disaggregates the ‘hotels, catering, pubs etc.’ industry into two sub-groups (accommodation services and restaurants/bars), whilst travel agencies and tour operators are separately identifiable from transport and transport services. As part of the First Steps Project, it was necessary to define the minimum number of sub-groups which would be of policy usefulness. ABI data is used for the disaggregation of industries in the lower half of Table 5. The ABI data provides information of the key dimensions of the sub-sectors, i.e. such as employees, total output, compensation of employees, gross value added and purchases. However, this is supplemented by other data to identify the product analysis of purchases. This other data includes the draft TSA for Wales, which identified production accounts for a number of sub-sectors.
- 5.6.7 One important information gap relates to mixed income. Within the UK Combined Use Matrix, this is included within gross operating surpluses. However the separate identification of this income would be desirable for TSA Table 5 (and indeed Table 7), due to the significance of self-employment within tourism industries. An estimate of mixed income for tourism industries could be made by reference to Labour Force Survey, Inland Revenue statistics, and company accounts data, but would still require assumptions to be made on, for example, average self employed income per full-time worker by industry, as none of these data sources provides suitable detail on income from self-employment.
- 5.6.8 Outside of accommodation and catering, some tourism sectors are more tightly defined within the Supply and Use Tables. In the future it may be desirable to disaggregate some of the sectors to look more specifically at particular tourism industries. For example, visitor attractions (and other cultural services) are included within ‘recreational services’ in the UK Input-Output Tables. If expenditure data in the Survey of Visits to Attractions (SVVA) or similar surveys was included or greatly improved, the economic scale of the sector might be assessed. However the Review of Tourism Statistics recommended that these surveys move away from collecting financial information. Also the purchases by product of such sub-sectors would have to be estimated from other sources.
- 5.6.9 Information for the compilation of Table 7 is readily available and reliable at the UK level. The key sources are the ABI(2) and Labour Force Survey (LFS), which contains data on the self-employed, and the latter on hours worked – both of which are of importance in a tourism context. Categories within Table 7 include the analysis of jobs by gender, and on occupational structure, and information on status of employment (e.g. employees and other). However some of this information is only available with access to the raw LFS data, and thus will not tally to published (and adjusted) totals. The full detail regarding data sources and issues in TSA construction is laid out, table by table, in Appendix II.

6 METHODOLOGY

6.1 TOWARDS A UK TOURISM SATELLITE ACCOUNT

- 6.1.1 As has been made clear from earlier sections, the construction of a Satellite Account is crucially dependent upon the System of National Accounts. The SNA contributes to the TSA conceptual framework, numerous methodological processes and much of the data underpinning the TSA. However, the SNA alone is usually inadequate for the construction of a TSA (hence the very need for the latter).
- 6.1.2 This situation is true in the UK. The estimation of the pilot TSA for the UK adjusts established UK National Accounting structures largely through targeted disaggregation (and re-aggregation) of existing vectors and consequent reporting of tourism-related activity separately from other activity. In addition, data is often inadequate to enable a purely ‘mechanical’ allocation to appropriate cells. Here, there is a requirement for a process of adjustment and allocation based upon a variety of published statistical sources outside of National Accounts, and drawing inference indirect from appropriate data (for example, perhaps on tourism volumes). It is in this considered reconciliation of demand and supply that the TSA adds real value.
- 6.1.3 The methodology used to move from UK Input Output to a pilot TSA is complex, involving a number of data sources and estimation methods. Additionally, the level of reliance on National Accounting (rather than other) data sources will vary for different TSA tables, and indeed different parts of individual tables. Moreover, as Section 5 shows, at pilot stage the accuracy and reliability of the tables will vary due to data quality and suitability.
- 6.1.4 The following sections illustrate in broad terms the methodologies used to estimate the different parts of the Tourism Satellite Account. This section is intended to be reasonably transparent and understandable for a non-technical audience, and thus details of the estimation process for individual cells and vectors have been restricted to notes on TSA data screening tables and detailed discussions on key estimations (Appendix III & IV).
- 6.1.5 The remainder of this section is presented in the following order. The next two sections outline the methodology used to estimate total tourism supply and tourism demand in the UK. An illustration is given in each case of which TSA tables are dependent upon the relevant estimations.
- 6.1.6 The latter sections of the methodology section expand upon a selection of ‘special issues’ and cases which are important to the construction of the TSA and which must be specifically and separately addressed to overcome conceptual and data problems. Again, the parts of the TSA consequently affected are noted.

6.2 ESTIMATING THE SUPPLY SIDE

- 6.2.1 In estimating the overall level of tourism product supply in the UK, the UK Input-Output supply tables are a crucial resource (ONS, 2002). There is, however a complication as UK annual supply tables do not distinguish between domestic supply and imports for individual product groups. That is to say, within these tables one cannot readily estimate what proportion of a given tourism product was supplied from UK as opposed to overseas sources.
- 6.2.2 Such information is crucial to the derivation of other Input-Output (and TSA) tables and hence the derivation or acquisition of a UK make matrix is the first step towards the construction of TSA Table 5 supply of tourism products in the UK. The UK make matrix reported in the Supply and Use Tables is not adequate to inform TSA Table 5, being by broad industry/product groups only.
- 6.2.3 Guidance from the ONS was sought to ascertain the most appropriate derivation of a UK ‘make matrix’ for year 2000 (see Section 5). For a number of tourism-characteristic products, the pattern of tourist-related supply will follow that for the product as a whole (i.e. where there is no *a priori* expectation that tourist-related economic supply activity will differ from product average).
- 6.2.4 Where industry and product are not closely matched, more careful consideration is required. For example, whilst, according to UK Supply Tables, some 25% of hotel products used by UK companies and residents are ‘imported’ (i.e. are foreign hotels), the expectation would be that all, or almost all hotel services demanded in the UK by *visitors* will be supplied from within the UK.
- 6.2.5 Thus, total imports of goods and services (a separate and crucial column in TSA Table 6) are abstracted directly from UK Supply and Use Tables, with the exception of the products noted above. There is also a separate treatment of (outbound) travel agents’ margins, and this is dealt with in detail elsewhere.
- 6.2.6 Following discussions with ONS it was initially decided that the most appropriate method would likely involve updating from the 1990 UK Analytical Input-Output Tables to construct a year 2000 ‘make’ matrix and associated tables. Comparable work has already been undertaken in the South West in support of the Regional Observatory-sponsored Input-Output project, and this work informed the construction of the necessary UK Input-Output structures.

- 6.2.7 Creation of a make matrix for the UK was not fully adequate to create a reliable impression of tourism product supply in the UK (due for example to the non-distinction between accommodation and food services). TSA tables which had been appropriately constructed from national accounting structures in other countries were consulted to gain an impression of the nature of the supply of specific tourism products in broadly similar (i.e. developed) economies. Particularly crucial is an understanding of how this might differ between economies, and whether any noted differences were a result primarily of measurement differences, or real differences in the tourism sector.
- 6.2.8 Even at the 123-product level, there is inadequate detail to fully illustrate the nature of the UK tourism economy²⁸. For example, there is limited practical use in the publication of tourism ratios for accommodation, restaurants and bars as tourism dependence will vary widely within this group. The same might be true of Input-Output product groups such as recreational services.
- 6.2.9 To aid usefulness, the construction of the make matrix for tourism therefore requires the estimation of product-by-industry output for sub-divisions of UK Input-Output product groups. This is an extremely resource-intensive process due to the range of data to be considered, the need for informed judgement when stepping ‘below’ the SNA and the requirement that demand and supply be balanced for each newly reported product. Such sub-divisions were therefore kept to a minimum.

6.3 ESTIMATING THE DEMAND SIDE –TOURISM CONSUMPTION IN THE UK

- 6.3.1 Perhaps more complex, conceptually, than the above is the estimation of how tourists’ expenditure translates to ‘final demand’ for UK industry products. Of every £1 spent by a tourist in the UK, some will accrue to the exchequer as tax, and some will be used to purchase imported goods. Only the remainder will increase demand for domestic products. Vital therefore to an accurate estimation of tourism consumption demand in an Input-Output context was
- The estimation of gross expenditure by product/industry and tourist type, as appropriate and achievable;
 - The discounting of that portion of expenditure which is taken in sales tax and excise duty, and its suitable re-allocation;
 - The discounting of that portion of expenditure which is attributable to non-UK products or services (spent in the UK, or prior to the trip).
- 6.3.2 There are a number of sources of expenditure data which can support the above estimation. However, each has limitations when used in support of TSA construction. Section 5 gives full detail on the appropriate data sources and the associated problems in their use.

²⁸ Despite accounting for over 80% of UK GVA, service industries account for under a third of reported Input-Output groups. This lack of detail on services has a particular impact upon the ability to ‘see’ tourism related activity in the SNA.

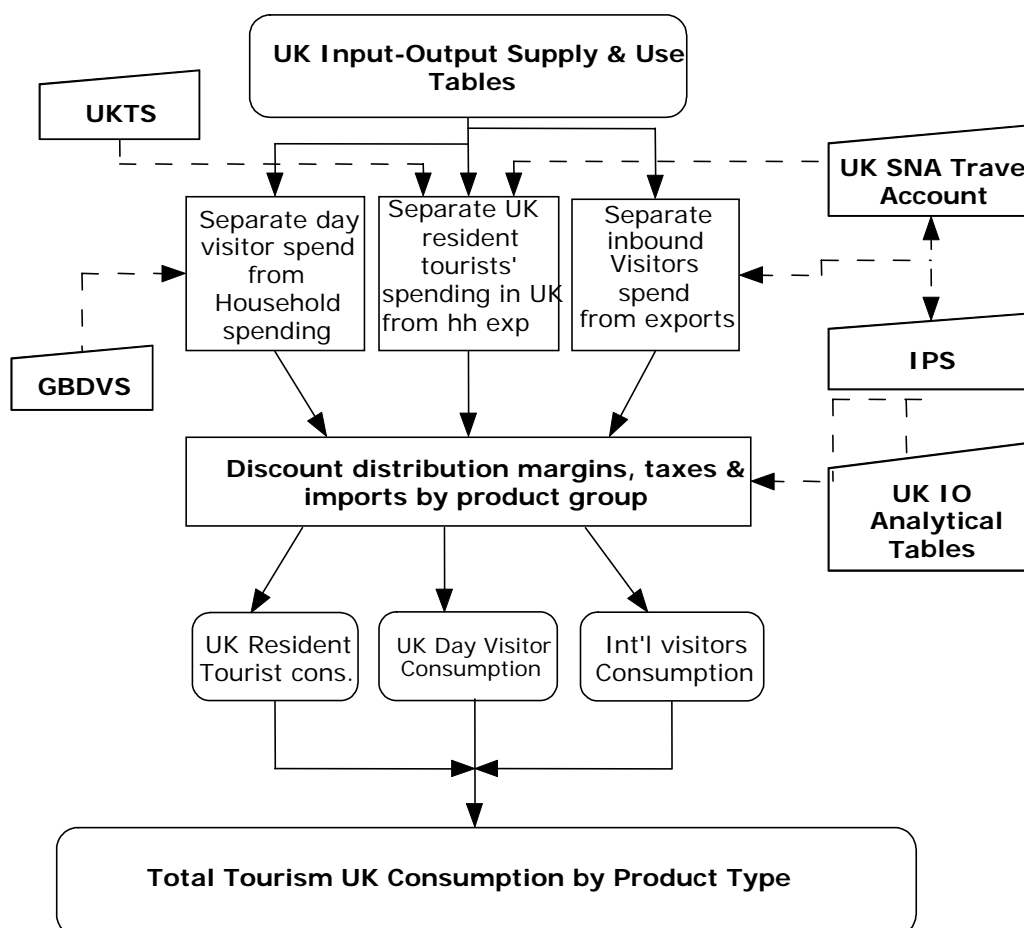
- 6.3.3 A key problem to be overcome in the above process was that of expenditure disaggregation. Typically, information from published tourism surveys is only available for 7-8 broad groups. This must be further refined to reflect the product or classifications which will aid policy usefulness. However, the published expenditure categories do not easily allow disaggregation. For example, food and drink purchases reported in tourism statistics may accrue to one or other Input-Output group depending on where and how they are purchased. Moreover, tourists' demand will impact across all industries, and estimating tourists' consumption of, for example, financial services or sewage services, requires extra analysis.
- 6.3.4 UK Supply and Use Tables estimate the demand for products by non-UK resident households. This information is sourced from the UK Travel account, itself in part drawn from the International Passenger Survey. It is provided for 123 product groups. *Almost* all expenditure so estimated would be classified as visitor/tourist expenditure under WTO criteria. Thus, this information is of central use in estimating tourism demand for individual products by international visitors. However, due to differences in the definitions (e.g. diplomats, armed forces) the constraining total for total export consumption (i.e. inbound tourists' expenditure) was based on the IPS total, suitably amended for conceptual differences involved in TSA construction.
- 6.3.5 A parallel vector details UK households' expenditure overseas. Combined with data drawn from the UKTS, this is a main source of information for the estimation of TSA Table 3, (outbound tourist expenditure).
- 6.3.6 Whilst the UK Supply and Use Tables provide reasonably good information, due to the need for a reliable estimate of the UK Balance of Payments, the situation is less clear for domestic tourism. There is no requirement for ONS to report related expenditures separately to the household account in UK Supply and Use Tables, and indeed they do not.
- 6.3.7 Given the above the research team estimated UK domestic tourism expenditures using a number of sources including:
- The UKTS for (2000 and subsequent years);
 - The Family Expenditure Survey;
 - The UK travel account as reported in UK Supply & Use Tables;
 - Household expenditure as reported in UK Supply & Use Tables.
- 6.3.8 The key problem involved the disaggregation of the seven broad expenditure groups reported in UKTS to those suitable for reporting in TSA form. Here, information from the other data sources which report on purchases of individual products, was used to disaggregate information from the UKTS. Information related to a population (UK resident households) of which the target group was a subset (UK resident households engaged in tourism in the UK). Care was taken in the disaggregation process to give full consideration to how far individual product purchases might reflect touristic or non-touristic activities – for example households purchase motor fuel for both purposes. Cross-examination between datasets, and reference to UKTS product groups, provided some guidance here.

6.3.9 Undertaking the above process does not obviate any concerns regarding the quality of the data used. The quality of the original datasets in terms of reporting structure, methodology and sample coverage are more important to the reliability of TSA estimation than the processes which convert that data to a ‘TSA-friendly’ format.

6.3.10 A broadly similar process to the above was undertaken to estimate the expenditure of touristic day visitors in the UK. Here, the GB Leisure Day Visits Survey was the primary data source, suitably amended to reflect expenditure on specific products.

6.3.11 Figure 6.2 following provides a graphic representation of the broad steps necessary to arrive at an estimate of tourism demand in the UK by individual products, then used to inform the construction of TSA Tables 1, 2 and 4.

Figure 6.2 - Estimating Tourism Final Consumption in the UK



6.4 SPECIAL ISSUES: SECOND HOMES

- 6.4.1 Within ESA95 national accounting frameworks it is the convention that the existence of an abode comprises the provision of housing services ‘on own account’. That is to say that there is essentially an economic transaction where a household purchases housing services from itself. This is true no matter whether the abode is rented or owner-occupied (with or without a mortgage; see Section 4.5).
- 6.4.2 There is an additional challenge in estimating the value of an economic transaction that is usually only notional. Thus, in UK Supply & Use Tables, purchases of housing services by households are imputed. That is to say the entry in the Input-Output balances is based upon secondary information. In this case, the figure relates to how much annual rent would be needed to secure the property in question.
- 6.4.3 Given the wide variation in rents across the UK and by type of property, and indeed the complete lack of any housing rental market in many localities, this figure should be considered only as an indicative estimate of the ‘worth’ of housing services in the UK. Nevertheless, to ensure congruity, a Tourism Satellite Account must account for housing services on own account which are used in connection with tourist activities. This then relates to second homes used for holidays. To ensure comparability with the rest of the household account, the value of services associated with second homes was imputed using details of the number of such properties in the UK from the 2001 Census of Population.
- 6.4.4 This treatment implicitly assumes that second homes are wholly ‘tourist’ in function. This is not always the case. For example city apartments kept close to the workplace and used in lieu of commuting are not primarily tourist-connected although they may be used for tourism visits by the owner, family or friends (remunerated or otherwise). However, information regarding the use of second homes is largely not available. The research team has allocated only part of the imputed total ‘housing services on own account in second homes’ to tourism, based partially upon location criteria. A more thorough treatment would require improved data sources.

6.5 SPECIAL ISSUES: PACKAGE TOURS

- 6.5.1 As has been noted earlier, package tourism raises particular conceptual issues within the TSA. WTO guidance suggests such purchases are treated as if the tourist bought the accommodation, travel and entertainment services involved at point of consumption, with any additional margins reallocated to the agent in the reference (i.e. ‘home’) economy.
- 6.5.2 Conceptually this is straightforward. However, the lamentable lack of data both in the UK and globally regarding the composition of packages, and of the level of margins raises serious estimation issues. Added to this, there are conceptual differences between how core data sources treat with package and tour commodities.

6.5.3 The practice of ONS (IPS Section) has been followed in assuming the level of margins associated with package tourism. However, this area is extremely problematic and calls for further detailed attention in future TSA development. Appendix IV provides details of this estimation process.

6.6 THE EMPLOYMENT MODULE

6.6.1 Arriving at a reliable estimate of tourism-dependent employment has historically been very difficult. This has been due to a number of factors including:

- Lack of information regarding tourism-dependence of industries' output;
- Poor information on the extent of self-employment and owners' labour, particularly by industry;
- Poor information on the nature of tourism employment including part and full time, seasonality etc.

6.6.2 Because of the above, even estimates of employment in 'tourism-related industries' have only been partial. The construction of the pilot UK TSA enables a better estimate of tourism-dependent employment (TSA Table 7). Importantly, the development of a TSA delivers information regarding how much of an industry's output is tourism-dependent. Making the assumption that there is no difference in labour intensity between tourism and non-tourism related output for that industry means it is then possible to divide industry employment into tourism and non-tourism dependent employment.

6.6.3 Unfortunately it is not possible to extract from UK Input-Output structures any information on income from self employment (which might then inform an estimate of self-employed totals for industries). Thus, reference to other data sources is necessary to make this estimate.

6.6.4 Raw returns from the Local Labour Force Survey are now available at www.data-archive.ac.uk. This data source provides information on a wide range of labour force characteristics, including employment status, income, occupation and industry, hours worked. Analysis of the raw data set enabled a comprehensive understanding of the nature of employment in tourism industries (TSA Table 7). Analysis of employment type by industry was used to inform the estimate of self employment by industry

6.6.5 Further detail regarding the construction of TSA Table 7 (the employment module) will be available separately in McNicoll and McLellan (2004).

6.7 BUSINESS TOURISM IN THE TSA

6.7.1 The treatment of business tourism in the Satellite Account is rather complex. Business Tourism consists of two distinct components; a final demand, which comprises expenditures made by or for business visitors; and a supply of business tourism products including trade fairs and conferences.

- 6.7.2 There is much left unclear within WTO and EUROSTAT guidelines on the proper treatment of the supply of business tourism products within the TSA. However, treating business tourism as a demand only activity raises some problems within TSA Recommended Methodological Framework.
- 6.7.3 Given the lack of clarity on the treatment of the supply side, and the general lack of supply side data, it is self evident that for business tourism, equating supply to demand will be fraught. For example, the business visitor to London uses a hotel in a way indistinguishable from a leisure visitor and to classify such a service as a business or leisure tourism product could be misleading.
- 6.7.4 The primary source for demand data was the UKTS and IPS which include the expenditures of business tourists (though not without raising conceptual and data issues). Meanwhile, current structures make a full evaluation of the supply side difficult. Thus, in common with other TSAs business tourism is treated essentially as a demand side phenomenon within the Tables, whilst accepting that this has conceptual limitations. An extensive rendering of the conceptual and data issues involved in a measure of business tourism is available in McNicoll (2004).

6.8 THE 'INFORMAL' ECONOMY

- 6.8.1 Systems of National Accounts constructed under ESA95 make explicit note regarding the 'informal' economy, which covers unrecorded labour use, for example cash-in-hand or family members' unpaid efforts. It is evident on reflection that accounts do record some such activities inasmuch as the output of the reporting company will include the efforts of undeclared workers, unless the transactions are completely cash-in-hand.
- 6.8.2 It is also evident however, that such transactions, often illegal, are largely impossible to measure and very difficult to estimate. Thus, SNAs notionally include an element for the illicit economy although no explicit estimates.
- 6.8.3 This situation is replicated in the TSA. However, there may be an *a priori* assumption that tourism industries featuring small-scale production and casual and seasonal labour. No explicit attempt has been made in the UK TSA to estimate the scale of this activity, and thus the TSA follows established international guidelines and adheres to SNA concepts.

7 THE UNITED KINGDOM TOURISM SATELLITE ACCOUNT: RESULTS

7.1 INTRODUCTION

- 7.1.1 This section presents a summary of the results of the First Steps TSA construction process. It should be stressed that the data limitations referred to throughout this report mean that all the following tables and results are indicative and illustrative only.
- 7.1.2 In summary, the TSA as constructed adheres (where appropriate and subject to conceptual adjustments) to the core tourism data sources, including UKTS, GB Day Visits Survey and International Passenger Survey. However this does not imply that these sources are adequate for TSA construction purposes, simply that they are the best (or only) available. For further information on data quality, readers are directed to Section 5 and Appendix II of this report, and particularly to the first report of the DCMS *Review of Tourism Statistics*.
- 7.1.3 Compilation of a robust and accurate TSA for the UK will depend upon the development of much improved data sources, particularly with regard to tourists' expenditure. Recommendations on these aspects are listed in Section 8.
- 7.1.4 The TSA tables are reported in full as Appendix I to this report. Meanwhile, Appendix III contains the screening details for TSA Tables 1,2,3 and 5. Screening tables provide details of sources and estimation methodologies for individual table cells.

7.2 TABLE STRUCTURE AND ADHERENCE TO WTO/EUROSTAT

- 7.2.1 The aim of this research was to remain as congruent as possible to the TSA Table structures and tourism characteristic products and industries as outlined in the WTO TSA Recommended Methodological Framework. However, due to data limitations this has not always been possible. Figure 7.1 outlines where there has been divergence from the TSA:RMF, and gives the reason for the differences in structure.
- 7.2.2 The differences between the table structure adopted in the UK and those suggested are minor and will have little or no impact upon the estimation of key variables.

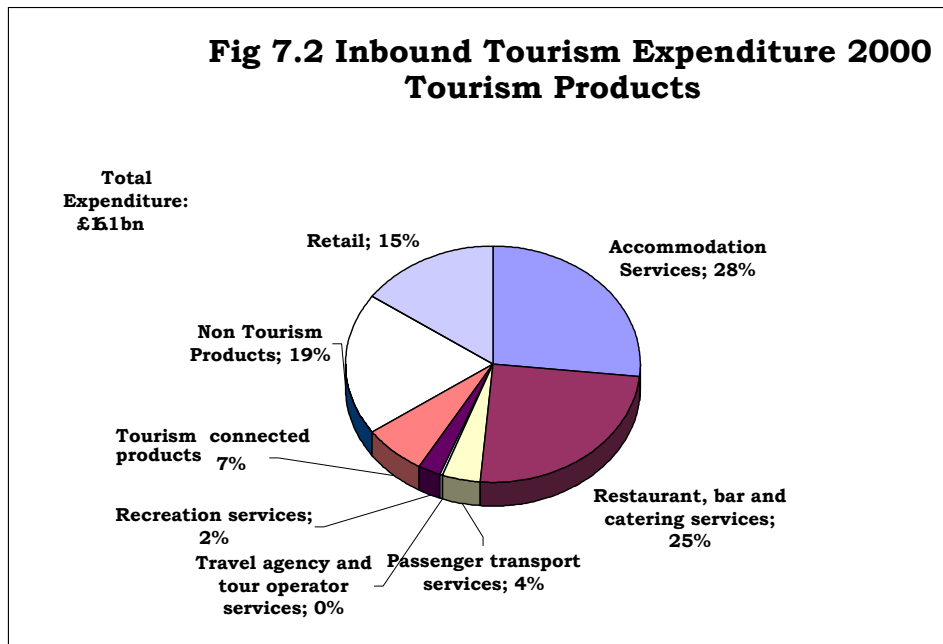
Figure 7.1 – Structure of the UK TSA & Divergence from WTO:RMF

Tables	Difference	Rationale
All relevant	More aggregated product groups in UK	Unable to disentangle both tourism expenditure and product supply in specific areas, notably entertainment (for example splitting cultural, sporting & other entertainment services. Recreation thus reported in aggregate for UK, as are tour operators & travel agents.
5, 6	Distribution margins reported in aggregate for all products	Distribution margins in RMF on tourism 'goods' are only notional, as all tourism products yet defined are services & therefore not subject to margins. Thus reported as a single row in UK TSA
6	Tourism share for each industry product output not reported	For purposes of clarity and brevity only. Tourism share of output for each product by industry can be calculated by multiplying industry output of that product by tourism ratio on supply. For that product. Estimation of Tourism GVA is undertaken using the full product by industry matrix.

NB. Differences also occur in Tables 7 and 10 between the UK and RMF approaches, but here the RMF is intended only as a guide on these Tables rather than being definitive

7.3 TOURISM CONSUMPTION IN THE UK

- 7.3.1 As can be seen from Figure 7.2 below, a total of £16.1bn was attributable to inbound tourism in the year 2000. The total was split almost equally between holiday visitors (£5.5bn), business (£4.9bn) and Visiting friends and relatives/other (£5.6bn)
- 7.3.2 Of total expenditure, over half was shared between accommodation services (28%) and eating and drinking out (25%). Retail margins accounted for 15%.
- 7.3.3 Tourism connected products (miscellaneous services) accounted for 7% of all expenditure. These services, separately identified as they are of importance in terms of tourists' expenditure, comprise post and telecoms, financial and insurance services, rental services (including car rental which is included with renting of other goods not transport services in UK Input Output) and health services.
- 7.3.4 It is important to note that health services includes only those market health services which are actually paid for by tourists and not publicly supplied. Thus, this expenditure can be thought of as an UK export rather than foreign nationals travelling to the UK to take advantage of NHS provision.
- 7.3.5 Meanwhile, almost a fifth was spent on non-tourism connected goods and services highlighting the wide range of activities upon which tourism impacts.



- 7.3.6 Unsurprisingly, expenditure by category varied considerably by type of tourist. For example, business visitors spent the highest proportion on accommodation at around 37% and the least on recreation. Full details on the consumption of inbound tourists are available in Appendix I, TSA Table 1.
- 7.3.7 Turning to domestic (i.e. UK resident) tourism expenditure in the UK (TSA Table 2), this comprises two major categories; spending by residents who travel only within the UK, and spending by tourists whose destination is overseas, but who make purchases in the UK before or after their trip. The former category can be further divided into those who stay overnight on a tourism visit, and those who are day visitors.
- 7.3.8 As can be seen from Figure 7.3, day visitors were the most important element of domestic tourism demand, comprising £31.7bn or 44%. Meanwhile, spending by overnighting visitors in the UK totalled just over £26bn. UK residents travelling abroad spent around £14.7bn on travel costs and travel agents' margins before they departed.
- 7.3.9 The importance of day visitors (and the inclusion of domestic purchases of those travelling abroad) in overall tourists' expenditure means that the largest portion of expenditure was transport (24%) closely followed by eating out (20.5%). Indeed accommodation accounted for only 7.7% of gross expenditure (Figure 7.4).

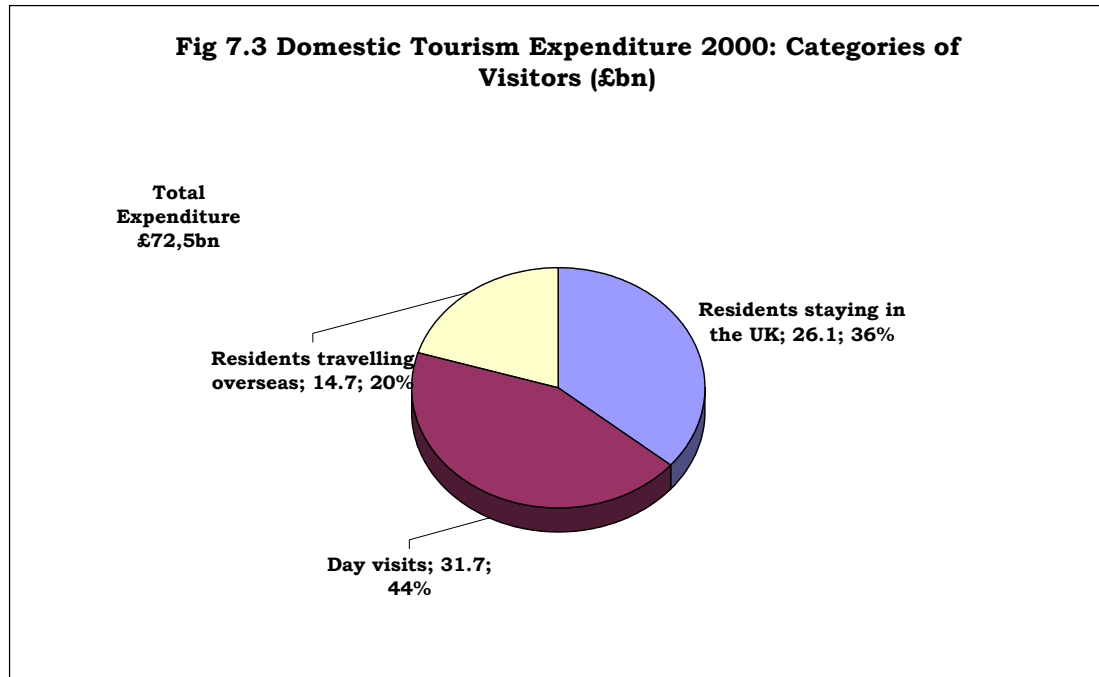


Figure 7.4 Domestic Tourism Consumption, 2000 – Tourism Products

	£m	Percent
Accommodation services	5,630	7.7%
Restaurant, bar and catering services	14,860	20.5%
Passenger transport services	17,415	24.0%
Travel agency and tour operator services	2,080	2.9%
Recreation services	4,980	6.9%
Miscellaneous tourism services	1,435	2.0%
Non Tourism connected products	15,095	20.8%
Retail and distribution inc. fuel	11,150	15.3%
Total Expenditure	72,645	100.0%

Note: Totals may not sum due to rounding

7.3.10 Accommodation services meanwhile account for around a fifth of the expenditure of domestic travellers overnighing in the UK, and full details of expenditure by category and different types of travellers is contained in TSA Table 2 (Appendix I).

7.3.11 As can be shown then from the co-presentation of TSA Tables 1 and 2, domestic tourism expenditure is considerably higher than inbound tourism consumption for the UK (£12.6bn compared to £72.6bn). Indeed, each individual element of domestic resident spending; day visitors, UK residents travelling in the UK and UK residents travelling abroad, has a higher expenditure total than that for inbound.

7.3.12 Additional to the elements noted above, which relate to expenditures in cash, to remain consistent with UK national accounts tourism consumption also includes an imputed total for tourism-related second home services (see Section 6.4). This was estimated at around £890m in 2000, making a grand total of **£89.6bn** of tourism consumption in the UK for that year (shown in TSA Table 4).

7.3.13 This £89.6bn of tourism consumption comprised around 4% of all final demand in the UK economy, and 2.2% of total demand for products²⁹. Meanwhile, the £16.1bn attributable to inbound tourism demand comprises 6% of all export demand in the UK for year 2000.

7.4 UK RESIDENTS TRAVELLING OVERSEAS

7.4.1 TSA Table 3 estimates the consumption of UK residents who travel overseas for tourism purposes. Estimation, whilst conceptually similar to Tables 1 and 2 is perhaps even more problematic, particularly due to the importance of package tourism and the lack of data regarding the elements which make up a typical package tour.

7.4.2 Despite these difficulties, the construction of Table 3 provides a broad indication of UK residents' spending overseas. In 2000 this was estimated at £24.3bn, indicating a tourism 'balance of trade' deficit with the rest of the world, inbound tourists consuming around £16bn.

7.4.3 Once travel agents' and tour operators' margins have been reallocated to UK and overseas companies as required, the biggest elements of outbound demand are restaurant and beverage services (£7bn), accommodation (£6.3bn) and recreation, entertainment and cultural services (£3.2bn). Details are reproduced in TSA Table 3.

7.5 TSA KEY INDICATORS – TOURISM DEMAND AND SUPPLY IN THE UK

7.5.1 Tourism products are necessarily supplied by industries, domestic or overseas. However, there is far from a 'one-to-one' relationship between products and industries. There is therefore an element of judgement involved in defining industries which are tourism specific. Some statistical agencies (for example in New Zealand) make a judgement based on the ratio of tourism demand on supply.

7.5.2 The WTO Recommended Methodological Framework has been followed as far as data and statistical structures allow. The defined industries are therefore as replicated in Figure 7.5 below.

7.5.3 The identification of an industry as tourism related does not mean that industry is particularly dependent upon tourists as a facet of demand; rather than the products of that industry attract an important portion of tourists' expenditure. The production accounts of these industries are replicated in TSA Table 5 in Appendix I.

²⁹ Final demand refers to those elements of demand for products which are 'final use', including households, government, exports and investment. Tourism is an element of final demand. Total demand additionally includes demand for products to be used by industry as inputs into the production of other products.

Figure 7.5 Tourism Industries in the UK

<i>Industry</i>	<i>SIC92</i>
1 Hotels and accommodation	55.1, 55.2
2 Second home and caravan ownership (imputed)	70.2 (pt)
3 Restaurant, bars and canteens	55.3 – 55.5
4 Railways	60.1
5 Other land transport	60.2, 60.3
6 Water Transport	61
7 Air Transport	62
8 Other transport services	63 (except 63.3)
9 Travel agency and tour operators	63.3
10 Recreation services	92
11 Renting of moveables	71

- 7.5.4 The accounting of production for these industries enables an enumeration of the supply of tourism products in the UK. The supply of individual products, through domestic industries and imports must equate to the demand from tourists and non-tourists. This is the remit of TSA Table 6 where demand and supply are equated. The construction of Table 6 also enables the computation of key TSA indicators, including tourism ratios and tourism gross value added³⁰.
- 7.5.5 Figure 7.6 reveals that tourism ratios vary widely for identified ‘tourism products’. For example, tourism second homes are, by definition in the latter case, wholly dependent upon tourism for demand. Meanwhile, the accommodation sector has a ratio on supply of 69.5%, and somewhat under half of the output of restaurants, bars and canteens is demanded by tourists, be they day visitors, UK tourists or those from overseas.
- 7.5.6 Air transport is the discrete transport product most highly dependent upon tourism demand (63%) and ancillary transport services the least. Full information is replicated in Figure 7.6 below.
- 7.5.7 Even following the construction of a TSA, the estimation of total tourism value added involves a number of assumptions, most notably that the supply of products by an industry is productively the same whether it be to tourists or non-tourists. Then the ratio of tourism demand on supply for each product can be multiplied by each individual industry’s output of that product to obtain, through summation of all products, total tourism-related industry output (for each tourism industry and non-tourism industries in aggregate).
- 7.5.8 To obtain an estimate of tourism value added, the ratio of tourism-related output to total output is applied to total gross value added for each industry.

³⁰ For more information on tourism ratios and tourism value added see Chapter 4.

Figure 7.6 - Tourism Ratios on Supply: tourism products

All Tourism Characteristic Products	25.3%
1 Accommodation Services	71.5%
1.1 Hotels and lodging services	69.5%
1.2 Second homes services on own account	100.0%
2 Restaurant, bar and catering services	42.9%
3 Passenger transport services	18.9%
3.1 Railway transport services	15.6%
3.2 Other land transport services	8.2%
3.3 Water transport services	33.2%
3.4 Air transport services	62.6%
3.5 Ancillary transport services	1.9%
4 Travel agency and tour operator services	99.6%
5 Recreation, cultural and other entertainment services	9.9%
6 Tourism Connected Products	0.8%
6.1 Post & telecoms services	1.4%
6.2 Financial and Insurance Services	0.7%
6.3 Rental services	2.0%
6.4 Market Health services	0.3%

7.5.9 Undertaking this exercise for the UK reveals a tourism value added of approximately £32bn for year 2000. This is equivalent to 3.8% of gross value added in the UK for the same year. As Figure 7.7 shows, the largest portion of tourism value added was from Restaurants and bars (accounting for £8.7bn of value added). Non-tourism industries accounted for £6.4bn in total (including the GVA associated with retail margins), illustrating the wide ranging nature of tourism economic impact.

Figure 7.7 Tourism Value Added by Industry

£m	Tourism GVA
1 Hotels and accommodation	£6,250
2 Second home and caravan ownership (imputed)	£770
3 Restaurant, bars and canteens	£8,670
4 Railways	£395
5 Other land transport	£1,415
6 Water Transport	£575
7 Air Transport	£3,440
8 Other transport services	£255
9 Travel agency and tour operators	£1,465
10 Recreation services	£2,250
11 Renting of moveables	£180
<i>Sub-total: tourism industries</i>	<i>£25,665</i>
Non-tourism industries	£6350
Total	£32,010
As percent of UK GVA	3.8%

Note: totals may not sum due to rounding

7.6 TOURISM EMPLOYMENT IN THE UK: BACKGROUND ISSUES

- 7.6.1 Additional to the six ‘core’ TSA Tables, plus Table 10 (non-monetary indicators), the WTO:RMF suggests that it is possible, and may be appropriate to compile an employment module as TSA Table 7, detailing the nature of employment in tourism industries.
- 7.6.2 It is important to note that Table 7 is not a core TSA Table in the same way as Tables 1-6. This is conceptually because employment is not usually reported in SNAs and thus this essential link is (in most cases) broken in the estimation of employment and labour in tourism industries. Additionally, making the (extremely policy-useful) step from a ‘headcount’ of employment in tourism industries, to an estimate of tourism dependent employment requires the assumption that, for each industry, the delivery of tourist-demanded products is productively identical to the supply of non-tourist demanded products³¹.
- 7.6.3 In part because of the above, the structure of Table 7 is only *suggested* in the methodological and implementation documentation. This suggested structure includes an estimate of employment by status (employee or self employed/owner), and by full and part-time. Some developed TSAs report tourism ‘jobs’, some Full Time Equivalents (FTES) and some both. For tourism, the issue is further complicated by the prevalence of seasonal employment which must be properly accounted in the FTE calculation.
- 7.6.4 The TSA First Steps project will include an estimated Table 7. In the interests of clarity, the conceptual and estimation issues involved in compiling Table 7 will be reported separately and in full detail in McNicoll and McLellan (2004).

7.7 TOURISM EMPLOYMENT IN THE UK: RESULTS

- 7.7.1 Tourism employment figures are scheduled for release later in the year.

³¹ A similar assumption must also of course be made for the estimation of Tourism GVA

7.8 TOURISM ECONOMIC ACTIVITY SINCE 2000

- 7.8.1 It is widely recognised that a major drawback of the TSA as a policy tool is the often long delay between the reference year and the actual production of the TSA. The First Steps TSA, referring to a period four years earlier than publication date is far from unusual. Indeed, estimates for many cells in the TSA may be based on data that are far older (for example the Austrian Input-Output Tables for 1990 form the basis for part of that TSA).
- 7.8.2 Policymakers and industry are unlikely to feel an accurate picture of tourism activity several years ago serves policy needs. There have therefore been a number of moves to construct variables using TSA relationships for benchmarking, which provide more timely indications of activity. These variables include both a mechanical updating of key TSA variables to later reference years, and also the production of quarterly indicators based on tourism consumption or industry supply which can then be very timely.
- 7.8.3 The ideal solution to a more timely accounting of tourism activity would involve an up to date estimate of product supply and similarly timely estimate of tourism consumption by commodity - in essence to create a new TSA for a later year. This is self evidently not possible due to data and resource constraints. Thus, more timely indicators will always involve a methodological and conceptual compromise.
- 7.8.4 Whilst these efforts are outside the scope of the TSA itself, we have nevertheless provided an indication of tourism gross value added for the years 2001 to 2003, benchmarked to the year 2000 TSA. In the UK, three methodologies for estimation suggest themselves, each with their own strengths and weaknesses (Figure 7.11)

Figure 7.11 Estimation of Tourism GVA following reference year

Method	Notes
(a) <u>Tourism Consumption Method</u> - Examining patterns of tourism consumption for time periods later than 2000, then using changes since 2000 to amend GVA estimate to reflect 2001 and 2002 consumption.	This method is appealing because it retains the link between consumption and production of tourism products (as with all three methods we assume tourism ratios do not change over time). However, there are concerns over the methodologies of the UK Tourism Survey and the Leisure Day Visits Survey. Thus the forward estimates would be subject to revision in the future if the new methodologies are introduced as recommended in the Review of Tourism Statistics.
(b) <u>Tourism industry employment method</u> - basing changes in GVA upon changes in employment by industry since the reference year.	This is, purely from a data perspective, an attractive methodology. Employment headcounts by industry are reasonably timely and likely in general to be of good accuracy. However, in data terms variations in the supply of products (or industry output) are likely to be reflected in some measure upon the use of seasonal employees and unpaid family workers, and upon average hourage of staff. Few of these elements are estimated in published employment surveys. Additionally, the fact that employment does not form part of the SNA means that its use to construct more recent indicators is conceptually problematic.

<p>(c) <u>GVA of Tourism Industries</u> - Changes in the approx. GVA of identified tourism industries after the reference year can be applied to the reference year estimate of industry tourism GVA to provide tourism industry GVA for 2001 and 2002. Industry totals are then summed in the usual way to estimate Tourism GVA for these years.</p>	<p>As with methods (a) and (b), this is a compromise, again assuming no change in tourism ratios. Also, output data for some tourism industries is likely to suffer some quality and coverage problems and is not as timely as that for employment. Nevertheless, as GVA is an industry measure, basing estimates of TGVA on supply-side data is more theoretically satisfying. Additionally GVA data for industries has recently become available for 2002. However, the link to tourism consumption is broken, meaning identifiable changes in consumption totals may not be reflected in estimates of GVA for later than benchmark year.</p>
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7.8.5 Following the above discussion it was decided to estimate TGVA for 2001 to 2003 using method (a), based on identifiable changes in tourism consumption. This consumption is available for 2001 and 2002 for the following components;

- Inbound – From IPS summed monthly totals
- Domestic – from UKTS for 2001, 2002 and 2003 totals for UK spending
- Day Visitors – from GB Leisure Day Visits Survey, with interim and forward years spending estimated by DCMS
- Outbound pre/post-trip expenditure – based on TSA estimate, project by forward trend in outbound spend

7.8.6 The percentage change in expenditure, 2000-2001, 2001-2002, and 2002-2003 for these identifiable portions of expenditure in aggregate was applied to total tourism GVA obtained for 2000 from the TSA. This total for GVA can then be divided by total UK gross value added (from the UK National Accounts) to achieve an estimate of tourism value added as a percentage of all-economy value added.

7.8.7 Following the estimation process outlined in (c) above, TGVA was reckoned to have decreased from £32bn in 2000 to £31.5bn in 2001, and increased to £32.6bn in 2003 (all current £). This comprised a decrease of 1.5% from 2000-2001 followed by increases in 2002 and 2003 (Figure 7.12).

Figure 7.12 Tourism Gross Value Added, 2000 – 2003

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
TGVA (£current)	£32.0bn	£31.5bn	£32.2bn	£32.6bn
Percentage change	-	-1.5%	2.1%	1.9%
As percent of UK GVA	3.8%	3.6%	3.5%	3.4%

7.8.8 When examined as a proportion of overall gross value added for the UK economy, Tourism GVA fell from 3.8% to 3.6% of UK value added from 2000-2001 as tourism consumption fell while nominal UK overall GVA increased by around 5%. There was a far less pronounced decline from 2001-2002 and 2002-2003, when tourism consumption (and hence the estimate of GVA) showed small nominal increases, but not enough to match UK GVA which again grew by around 5%.

7.9 TSA FIRST STEPS: ASSESSMENT OF THE RESULTS

7.9.1 Section 5 provides full details of the data issues which hindered an accurate and reliable estimation of a tourism satellite account for the UK. However, it is worth perusing the results in comparison with those from other TSAs worldwide to inform judgement on the likely level of accuracy of the final outputs.

7.9.2 In summary, the results from the First Steps UK project might perhaps be characterised as appearing ‘reasonable but high’. For example, the other G7 economies which have completed a TSA to comparable standard, Canada and the USA report tourism value added at between 2 and 3 percent of total industry GVA (although the US figure is likely to be an undercount for various methodological reasons).

7.9.3 The relatively high figure in the UK may be driven by a result which shows the output of restaurants and bars to be more ‘tourism dependent’ than is usually the case, having a tourism ratio of 43% compared to that under 20% found in the USA and Canada.

7.9.4 This particularly high level in the UK appears to be a function of the level of demand from day visitors estimated in the GB Leisure Day Visits Survey. Given the lack of a split between accommodation, and restaurants and bars in UK National Accounts reporting (for either products or industries) and the limited information available from Annual Business Inquiry it is impossible to make any further comment upon the likely accuracy or otherwise of this section of TSA estimation, beyond the points already made in Section 5.

7.9.5 The smaller and less diverse Australasian economies report Tourism GVA at around the same level for the UK, with Norway only marginally lower. It should be noted that international comparisons, in TSA terms, are always invidious, and are only included here as a broad brush indicator of how UK results compare. Reference to Figure 4.5 gives full information on how countries compare.

7.10 NOTABLE ISSUES IN TSA ESTIMATION

7.10.1 The UK Tourism Satellite Account First Steps project has shown, in common with similar projects undertaken in other ESA95 compliant economies, that it is possible to obtain reasonable estimates of the value of tourism in the UK following the WTO:RMF and EUROSTAT implementation manual.

7.10.2 The reconciliation of supply and demand within the TSA framework reveals some inconsistencies, whereby the addition of tourism consumption vectors suggests a certain level of supply of a product, and supply-side data suggests a different figure. The product particularly affected is that of restaurants and bars. Tourism data suggests a rather larger supply of products than UK Annual Business Inquiry data (by about 10%). Reference to National Accounts is of limited use given the aggregated nature of these sectors. The research team has taken the view that adherence to tourism consumption data should take precedence over ABI, despite the importance of the link to National Accounts. There are several reasons for this approach:

- Amending estimation to conform to ABI2 would involve a fundamental step away from tourism data sources. The First Steps results would then tend towards a simple restatement of UK national accounts rather than adding value,
- As tourism data improves over the medium term, one might expect convergence on the demand and supply side. This dynamic would be masked if tourism consumption data was discarded or downplayed in TSA construction,
- Notwithstanding problems with tourism consumption data, ABI2 data in this specific tourism-related sector may be problematic due to under-enumeration of micro-businesses, and the outputs of casual and family labour.

7.10.3 The above options for reconciliation issues are not likely to cause first-order differences in the estimation of key TSA indicators, such as Tourism GVA but these issues should be noted and investigated further in any future TSA construction. It may be that a ‘compromise’ approach in any future TSA construction, whereby differences are balanced rather than set to one or the other, would be deemed more appropriate.

7.10.4 The project has highlighted several notable outstanding issues which hinder a full accounting and international comparisons. It is clear, firstly that the quality of tourism consumption data leaves much to be desired. This issue is covered extensively elsewhere. However, suffice to say that not only does under-resourcing of surveys lead to significant standard errors when dealing with expenditure, but also the subsuming of expenditure data collection in to more general tourism surveys is far from ideal. The main surveys (UKTS, IPS and GBDVS) are inconsistent and incomplete in how they deal with key issues such as business expenditures and package tourism. Add to this significant non-response and inconsistent expenditure breakdowns and it is clear that the statistical landscape is far from a coherent one.

- 7.10.5 Additional to the above, the conceptual treatment of business tourism is problematic. The TSA as currently specified treats business tourism overwhelmingly as a final demand, discounting corporate purchases of ‘business tourism products’. Full incorporation of such activity would probably however require a substantial re-engineering of TSA tables (see McNicoll, 2004).
- 7.10.6 Other TSAs developed elsewhere, notably in Spain, have moved away somewhat from the WTO:RMF table format, and report *intermediate* (businesses’) and *government* consumption of tourism products explicitly. The data to do this does not yet exist for the UK, at least in a usable form, but future steering committees may wish to examine the structure of the Spanish tables (available from DCMS) to consider their appropriateness for adoption in the UK. The Spanish structure also allows the supply of tourism products to be explicitly balanced with the demand for those products. This balance is not immediately obvious in the UK (WTO:RMF compliant) TSA Table 6.
- 7.10.7 On the supply side, a major problem is the inadequate identification and treatment of tourism connected industries in UK National Accounts. In particular, the lack of disaggregation between accommodation and restaurants/bars, travel agencies and other transport services, and within recreation industries is a severe hindrance, particularly as one would expect a substantial cross-production of tourism commodities. Additional to specification problems, the construction of the TSA (for the UK and earlier for Wales) hints that there may be issues with the estimation of sector size and key characteristics for the hotels and restaurants sector, perhaps driven by inadequate coverage in the ABI and PAYE-derived statistics.
- 7.10.8 Despite the comprehensive WTO and EUROSTAT documentation several conceptual issues remain, including the treatment of usual environment and business tourism. The most appropriate and current methodology has been followed in relevant cases, but it is likely that international comparisons will remain difficult in the medium term.

8 TSA-NEXT STEPS

8.1 INTRODUCTION

- 8.1.1 The purpose of this section is to draw together the various themes covered in the preceding sectors and to indicate the potential for further action following this First Steps project.
- 8.1.2 The recommended next steps are in two main parts, firstly dealing with general structural and institutional issues relevant to the future development of the UK TSA, and secondly more specific issues regarding data and surveys. In the latter case the recommendations are also informed by the priorities found within Denis Allnutt's *Review of Tourism Statistics*, part of the DCMS Tourism Statistics Improvement Initiative. A key recommendation of the *Review* was that UK First Steps Project should provide firm recommendations on a prioritisation of the improvements.

8.2 THE ENVIRONMENT FOR TSA CONSTRUCTION – MANAGING EXPECTATIONS

- 8.2.1 There is a strong interest from DCMS and its partners for a better economic accounting of tourism activity. The conclusions of the *Review of Tourism Statistics* highlighted that a developed TSA would represent an important improvement to national (and by extension, regional) tourism information. There is great potential for the TSA to inform new policy and resource directions and to aid in the broader evaluation of policy interventions.
- 8.2.2 The value of this accounting system is reinforced from case evidence from other EU states, Australasia, the USA and Canada. The perceived value of the system has also been evidenced by a degree of bottom up pressure, with English RDAs, and other regional tourism authorities acutely aware that their decision making in the tourism sphere (and the promotion of tourism) needs requires a more complete regional statistical base, this ideally placed within a reliable UK TSA framework. Consequently the environment is ripe for better accounting of the UK tourism sector.
- 8.2.3 Set against this more proactive environment is a growing recognition in the UK of the problems involved with TSA construction, encompassing methodological, statistical and conceptual issues. This report has gone some way to resolving these issues as relates to the UK. However, much remains to be done beyond 'First Steps' to improve the TSA. Furthermore, while representatives of central and regional government may be aware of TSA-related policy tools (e.g. from the Canadian example), it will come as no surprise that for this highly technical subject, awareness of the complex procedures that underpin the estimations in the tables is generally poor.

8.2.4 A key part of the next steps process is to carefully manage expectations based around what has been produced hitherto. There is a danger that the contributions of the defined tourism industries to UK gross value added will be the main ‘headlines’ of this report, whereas the real need is to take forward the data priorities reviewed later in this section, whilst maintaining the proactive interest of the key institutions in the context of the very real difficulties of construction.

8.3 THE INTERNATIONAL CONTEXT: THE DEVELOPING CONCEPTUAL ISSUES WITH TSAs

8.3.1 There remain a number of issues that require further clarification by international agencies. This is not to downplay the interactive nature of TSA development, where a dialogue between WTO, EUROSTAT and individual nations progresses the TSA project globally. Figure 8.1 illustrates where some issues would appear to need clarification.

Figure 8.1 Some Conceptual & Measurement Issues in TSA Development

Area	Table	Notes
Purchase of durables	1,2	Included if purchased during a trip, but not if outside a trip unless single purpose tourism-specific. Some international differences (e.g. treatment of recreation vehicles in USA). No list of tourism ‘single-use’ items available.
Business Tourism	5	Largely conceptualised as a demand-side phenomenon. Little attention in RMF regarding <i>business-tourism characteristic products</i> or supply of same.
Capital Formation; Govt consumption	8, 9	Not recommended for development in the TSA at this stage due to conceptual difficulties.
Package Tours	1,2,5	Conceptual guidance clear, but little evidence available regarding appropriate margins and composition of tours.
Second Homes	4	Conceptual guidance clear, but measurement remains (and is likely to remain) notional and illustrative only.

8.4 HOW FAR SHOULD NEXT STEPS GO?

8.4.1 Following production of these pilot accounts it is recommended that there is an active investigation into which organisations will (or might) use these accounts. Current TSA steering committee and other groups may provide the opportunity for such an investigation, although a full representation of views from government, academia, business and other users should be sought.

8.4.2 There is unlikely to be value in any further iteration of the UK TSA until key survey data is improved (see below). One option in the intervals between TSA construction could be an indicator series tracking tourism activity by benchmarking movements in macro-economic aggregates to key TSA relationships (see below). Consequently a core element of the TSA next steps does not actually involve the TSA at all, but rather working on the recommendations of this report, alongside those in the *Review of Tourism Statistics*, to examine what data and surveys can practically be improved and at what cost.

8.4.3 If the statistical base for TSA estimation is not improved significantly, then a second best option would be to repeat this broad estimation of the key TSA tables in 4-5 years. It is likely that any such re-estimation would benefit both from a more fully developed conceptual model as EUROSTAT and WTO take forward the TSA project, and from the ‘learning’ undertaken during the estimation of this First Steps TSA. However, these improvements would be largely irrelevant should the quality of the data used as the key inputs into TSA estimation not be significantly improved.

8.5 THE TSA AS A MODELLING TOOL

- 8.5.1 The TSA as predicated by international guidelines is, in many respects, the minimum necessary to obtain a ‘proper’ accounting of tourism economic activity, including an estimate of tourism GVA. This is quite properly intended to make sure as many countries as possible are able to construct the TSA.
- 8.5.2 However, the structure of the TSA (particularly Table 5 and 6) is somewhat different to those Input-Output tables which form the basis of tourism economic impact models. Such models typically require a reporting of domestic/internal transactions in a matrix; the mathematical inversion of this matrix then provides for multiplier analysis.
- 8.5.3 It is important to note that the TSA as reported here is not capable of providing tourism multipliers. To undertake such analysis one would require reporting domestic transactions in an industry-by-industry (or product-by-product) matrix before further mathematical work. Thus, the analyst would need to know the import propensities by individual for the products of individual industries. This information is not easily available and is not up-to-date for the UK; it depends on a full set of Analytical Input-Output tables which have not been published by ONS since reference year 1990.
- 8.5.4 The TSA, nevertheless, does potentially provide the basis for further estimation which could present tourism multipliers. It should always be remembered, however, that tourism accounting via a TSA and tourism (impact) modelling, are very different things with the latter involving a set of assumptions not inherent in the TSA. The Canadian Tourism Commission has been actively involved in the development of TSA-linked impact tools, and as the TSA develops in the UK DCMS and partners will need to consider how the potential for such tools be realised whilst retaining the reputation and integrity of the TSA itself.

8.6 DEVELOPMENTAL PLATFORM

- 8.6.1 The WTO highlights the importance of a strong multi-user development platform for national TSAs. Currently the DCMS has taken the lead on TSA development with assistance from the European Commission. The steering committee for this UK project has included representatives from national tourist boards, devolved administrations and the ONS.

- 8.6.2 However, the WTO also strongly recommends that national TSA construction involves the national statistical authority *in a central role*. There are few cases internationally where TSA developments have been led outside the relevant national statistical office. ONS was only able to provide a modest (though extremely useful) input to this project and indications are that without significant extra ring-fenced resource, TSA development will continue to be far from a priority for the ONS. These same constraints are also expected to limit the construction of future Input-Output analytical tables for the UK, which are an important resource in TSA construction, but which have not been released in full since 1990.
- 8.6.3 The absence of the ONS from an explicit management role in TSA construction has ramifications in terms of data access, validation, and the level of consistency with National Accounts. A key to the success of any future TSA development will be how far it can lever ONS support and advice in the face of scarce resources, thus remaining consistent with UK National Accounts concepts and methods. Establishing formal relations with ONS should be a key initial objective of any Tourism Statistics Unit (see below).
- 8.6.4 The ONS has co-operated with the First Steps project, providing access to statistical expertise and data. It is recommended that in the short-term next steps developments include ONS personnel on the project team, rather than simply as ‘observers’ on the steering committee. In the longer term, and assuming ONS cannot take the lead on TSA development, further iterations of the UK TSA should be constructed by the Tourism Statistics Unit proposed in the Allnutt Review, in close consultation with ONS.
- 8.6.5 It is recommended that the any approved developments highlighted by the Allnutt Review are managed in conjunction with the next steps TSA. The Steering Committee for the next steps project might include those on the existing First Steps panel, but also include a far stronger industry user representation. Canada has found that it is increasingly possible to involve tourism providers as the TSA develops and more ‘value added’ products such as impact and forecasting models, and timely indicators, are developed as a result. It may be that with the First Steps account complete, together with provisional estimates of value added and tourism-dependent employment that have been hitherto unavailable, it is easier to engage the industry in the UK.
- 8.6.6 It is suggested that the steering committee that guides the *Tourism Statistics Improvement Initiative* also guides any future TSA projects, given the strong commonality in issues. As a result, external technicians working on next steps TSA could form a technical working group appointed by this steering committee.

8.7 FORMING INTERNATIONAL LINKS

- 8.7.1 During the First Steps project the research team have benefited from the goodwill and technical expertise embodied in the World Tourism Organisation. WTO provided access to key statistics and methodological literature. Whilst there are significant costs involved in WTO membership, it may be appropriate (particularly now the WTO has full affiliation with the UN) to revisit the case for UK membership. Whilst such membership will undoubtedly benefit future TSA development, it is outside the scope of this report to judge whether the business case for membership can be made in the wider context.
- 8.7.2 The literature review in this volume has shown that a number of countries are ahead of the UK in TSA development. There is clear value in learning from the experiences of other countries. Given that European funding has been used to develop the pilot UK TSA, there is value in collaborating with other EU states at a similar stage of TSA development. This type of collaboration could extend to statistical development, with cross national surveys of tourism spending and activity a potential means of saving on development costs. It is also likely that tourism spending profiles, particularly day visit profiles vary little across selected EU states, such that inference drawn from surveys in other EU states could both inform, and provide a check on the accuracy of UK findings.
- 8.7.3 Where methodological and technical problems can be discussed and solved in a wider expert forum, then in the longer term resources are used in a more efficient manner. DCMS and ONS should continue to ensure that the UK is appropriately represented at such meetings in order to access best practice from elsewhere in the EU (for example the slightly non-standard presentation of tables by certain countries including Spain).

8.8 TOURISM STATISTICS IMPROVEMENTS (SPECIFIC LINKS TO ALLNUTT REVIEW RECOMMENDATIONS)

- 8.8.1 The First Steps project has revealed that in large measure the tourism spending statistics collected in the UK are not fit for the purpose of constructing a TSA. Unfortunately in surveys such as the IPS, UKTS and GB DVS, the expenditure data is not prioritised.
- 8.8.2 A good example is the UKTS where within primary survey instruments spending data is requested at later stages of an extensive data collection process (the telephone survey questionnaire runs to over 30 pages). Moreover, spending data is collected using different classifications and with these surveys providing little methodological consistency. There are two potential options here.

- 8.8.3 First, would be the development of a separate UK Tourism Spending survey which would combine the resources currently used on the above. A complete re-engineering of tourism spending statistics is beyond the scope of the Allnutt recommendations but needs to be considered at this early stage of the TSA development process. Given uncertainties over future iterations of GBDVS the separation of tourism expenditure surveys from attitudinal surveys must be considered urgently and this separation is a strong recommendation of this report.
- 8.8.4 A second option would be lower cost, and would match spending classifications, concepts and definitions across the three surveys. This would still involve some difficulties. For example, re-engineering may compromise trends data (although it is questionable how accurate such data is at present in any case), and there are certain international obligations in place in regard of the IPS.
- 8.8.5 This type of reform is highlighted within the Allnutt Review which made a total of 60 recommendations regarding potential improvements. Many of these recommendations did not specifically relate to TSA construction. However, in line with the above comments the research team believe that the critical recommendations from Allnutt regarding improvements to TSA construction would include those found Figure 8.2. In each case the table shows why the recommendation is important for TSA construction. Many of these relate to improvements in the core survey sources, rather than to institutional arrangements.

Figure 8.2 TSA Construction: Next Steps - Key Data Recommendations from Allnutt Review

Allnutt review recommendation	Key elements according to Allnutt Review of tour. Stats. (PRIORITY and cost estimate if available)	Link to next steps TSA construction
1&2 Review of practicality, costs and benefits of making UKTS and DVS part or not part of Continuous Population Survey	Achievement of satisfactory, sample frame, response rates, and timeliness. (HIGH under £10,000 for initial review)	If instituted following review then increases in sample frame of these surveys will improve quality of spending data available to inform construction of UK TSA Table 2 and Table 6.
5. Identification of resources available to maximise the sample and size of improved UKTS and DVS	Important to regional UKTS results, and more timely LDVS results (HIGH – low cost)	Improvements to sample sizes of these surveys improve quality of spending data to inform UK TSA table 2.
7. Evaluate the use of diaries for collection of UKTS and LDVS data	May improve quality & richness of data (LOW)	Diaries found to be very effective way of collecting tourism spending data in countries such as Malta which subsequently feeds directly into TSA construction process. Also pilot work in Ireland reveals effectiveness of this method. Of wider benefit.
8. Review questionnaire content of UKTS and DVS	Part - Liaison with TSA construction groups (MEDIUM)	Links to TSA construction process in terms of value in common set of concepts, classifications, and questions.
9 & 10 Maximise extent to which IPS analyses	(HIGH & MEDIUM, low cost)	See 8 above – inconsistencies between surveys in treatment of students &

adopt UKTS/EU definitions, and evaluate differences between UKTS and IPS definitions, possible revision.		fees, people with second homes, pre-trip spending, spending on durables on trips etc. Inconsistencies makes TSA construction difficult – particularly TSA tables 1-4.
11. Extend LDVS to cover business tourism trips	Development of appropriate questions and lengthening of interview. (HIGH, costs depend on scale).	If taken up would improve quality information in TSA tables 2, 4 and 6 relating to domestic tourism expenditures. Likely to require new survey given limitations of DVS
15. Identify resources available to fund expenditure trailer in IPS, and agree schedule for its inclusion with ONS	(HIGH, £150,000 for each year trailer used)	More regular IPS expenditure trailer a crucial component for TSA table 1. This currently very out of date.
24. Ensure production of best possible regional input-output tables	Encouragement of ONS to produce these tables.	This is actually very unlikely, but the more timely production of UK level analytical tables would inform TSA tables 5 & 6.
25. Commission the consistent collection for all regions of the additional detailed data needed from businesses to support TSA development	Ensure maximum achievable benefit from ONS experience and data (HIGH – significant cost)	Links through to all other recommendations in Figure 8.2. Links to Tables 5 & 6. However, costs could be minimised if TSA constructors had improved access to raw ABI returns and data.
26. Reach a consensus prioritisation of other data needs for TSAs	Consensus must take accounts of costs (MEDIUM, low cost)	Part of current exercise
41. Refine the relevant areas of the SIC	(HIGH - low cost and in progress)	Links to common definitions, but with improved SIC breakdowns in Input-Output balances would assist in preparation of TSA tables 5 & 6.

- 8.8.6 As highlighted above the data issues are not straightforward. However, some of these issues can be dealt with at low cost. Examples would include improving the access of TSA constructors to ABI survey returns. The Business Data Linking scheme being run by the ONS is a valuable initiative which might be extended in this regard.
- 8.8.7 More problematic is the absence of regular analytical Input-Output tables for the UK and any official IO Tables for its regions. This hinders TSA development at the UK level, and effectively inhibits an accurate accounting of tourism activity at the sub-national level. Additionally, the structure of UK Input-Output as regards reported products is not ideal as a basis for TSA construction, particularly in the lack of a separate accounting of accommodation and serviced food products, travel agents and tour operators, and within recreational services.
- 8.8.8 In Wales a bespoke survey of tourism providers enabled a splitting of the Welsh Input-Output Tables and a separate accounting of different sorts of accommodation provision (hence the latest version of the Welsh TSA has more separately identified tourism products than for the UK). This approach is perfectly appropriate for an area which does not in any case benefit from a set of well developed regional accounts, but at a national level a more fundamental reappraisal of suitable reported product categories by ONS would be the ideal solution.