

An Examination of Irish Outbound Tourism Expenditure

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1. Introduction

Over the past number of years, the patterns and volume of outbound tourism from Ireland have changed dramatically. There have been many contributing factors to this change, ranging from the advent of low cost airlines, greater use of regional airports, a weakened dollar, an increase in real disposable income, expansion of the EU and improved access to the “new” EU combined with a growing immigrant population making regular trips to their countries of origin. Together, these factors have led to a significant increase in trips, a decline in lengths of stay and average per diems.

Taking existing and previously unpublished data from the Household Travel Survey, this paper explores some of these influences and examines the impacts on the expenditure patterns of Irish residents abroad. In particular the paper will detail new information on expenditure breakdowns, explore differences in expenditure calculation from different sources and outline some pilot work to develop data to support cost-benefit analysis of international travel.

2. Household Travel Survey

As the results for this paper are sourced primarily from the Household Travel Survey (HTS) the key characteristics of the survey are outlined. The HTS was first launched by the CSO in the first quarter of 2000 and first results were published on December 19, 2003. Conducted by post, the survey covers all non-routine, non-work overnight trips, both domestic and international. The HTS is a random stratified sample, where each quarter private households are randomly selected from District Electoral Divisions on the Electoral Register. The sample size of 13,000 households represents roughly 1% of the estimated 1.3 million private households in the state.

The questionnaire has 4 sections. Part A, establishes Household Composition, i.e. the number of persons in the household, their ages and their gender. Relationships between members of the household are not established. These data are required whether members of the household took any trips or not. Part B determines if any overnight trips were taken.

Part C is relevant only to those households where overnight trips were taken. The following variables are requested:

1. Destination (main country if outbound or county if domestic)
2. Who went (number of persons and who they were)
3. When (month of departure)
4. Why (main purpose of journey)
5. Length of trip (the number of nights spent away from home)
6. Accommodation (main)
7. How the trip was booked
8. Transport used (main)
9. Total expenditure
10. Pre-payments made in advance.

For all variables, the survey asks respondents to provide details of the “main” event. So if multiple destinations are visited or if multiple forms of accommodation or transport are used these are attributed to a single “main” destination, purpose, accommodation or transport type. It should be noted that all expenditure is attributed to the primary destination, and this expenditure is divided equally over all participants on the trip equally i.e. all members on a particular trip account for an equal share of the total expenditure irrespective of age or gender.

Since Q2 2006 an additional Part D has been added, asking respondents to detail their total expenditure, for their last reported trip, into the following breakdowns:

1. Package
2. Other accommodation (not included in package)
3. Other transportation (not included in package)
4. Other excursions/tours (not included in package)
5. Other food (not included in package)

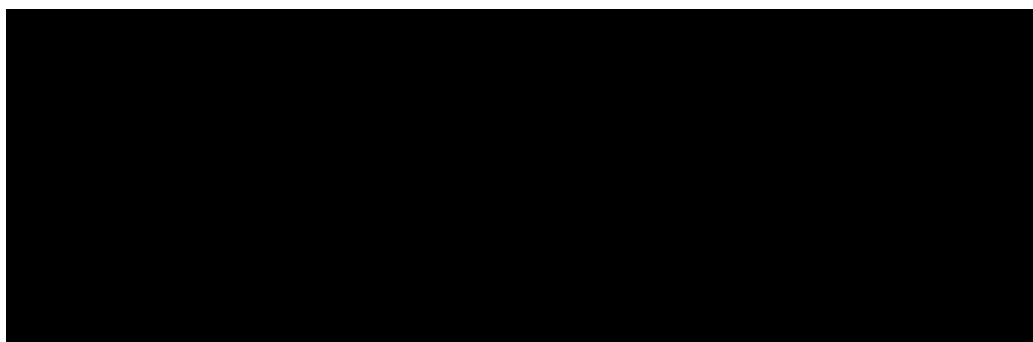
6. Shopping
7. Total expenditure.

Survey results are grossed to population by using a two stage weighting process. In stage 1, the survey results are weighted to household population estimates classified by household type (i.e. number of persons aged 18 or more) and region (at NUTS 3 or planning region level). These household population estimates are sourced from the Quarterly National Household Survey (QNHS). In the second stage the international or outbound HTS results are calibrated with the outbound tourism frontier survey results. The same calibration factor is also applied to domestic tourism results, on the assumption that the level of underreporting is approximately the same for domestic and outbound travel.

3. Summary Profile of Outbound Travel

In order to understand outbound expenditure, it is important to describe the context in which the changes have occurred. During the period 2000 – 2006 Irish residents took some 36 million outbound trips involving an overnight stay, resulting in 256 million nights being spent away from home. Between 2000 and 2006 the number of outbound trips grew by more than 85%, from almost 3.8 million in 2000 to just under 7 million in 2006, yielding an annual average growth rate of 10.8%.

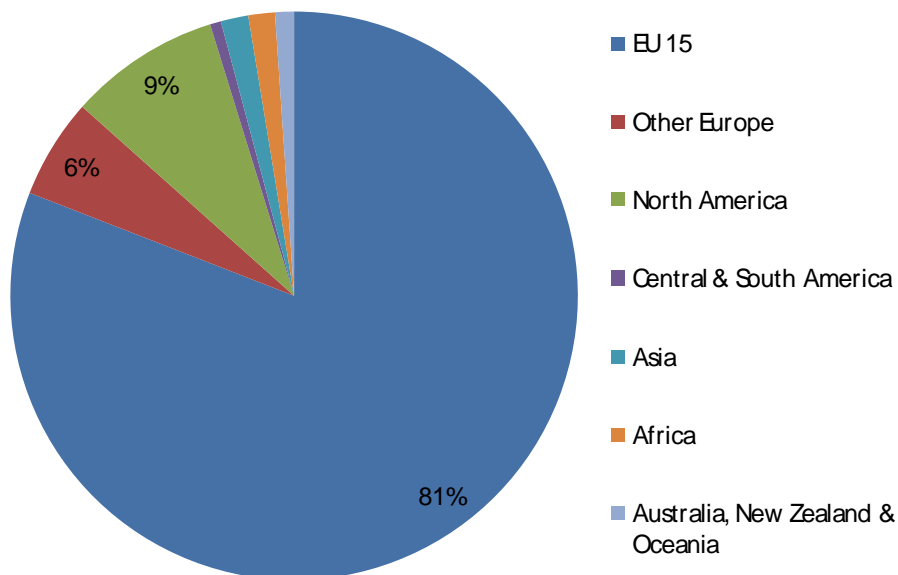
Table 3.1 – Outbound Tourism by broad destination, 2000 - 2006



Over the seven year period, the other EU-15 member states were the most popular destinations, accounting for 81% of all outbound trips. North America and Other Europe accounted for another 9% and 6% respectively.

In terms of growth however, it was trips to Other Europe that stood out. Although starting from a low base, trips to Other Europe grew at a staggering 233% between 2000 and 2006 or 22% on an annual basis. Other Europe includes those member states that have joined the EU since 2004. During this period, the EU-15 expanded to EU-27; trips to the 10 new EU states¹ increased by 549% and between 2004 and 2006, trips to the two new EU-27 member states² increased by 750%. But despite the dramatic increases, trips to Bulgaria and Romania still accounted for less than 1% of total outbound trips to the EU in 2006. Figure 3.1 highlights the dominance of the original EU-15 as the primary destination for Irish tourists. Of the 29 million trips taken to the EU-15 between 2000 and 2006, over 19 million were to the UK and Spain (11.2 million and 8 million respectively).

Figure 3.1– Broad destination market share, 2000 – 2006



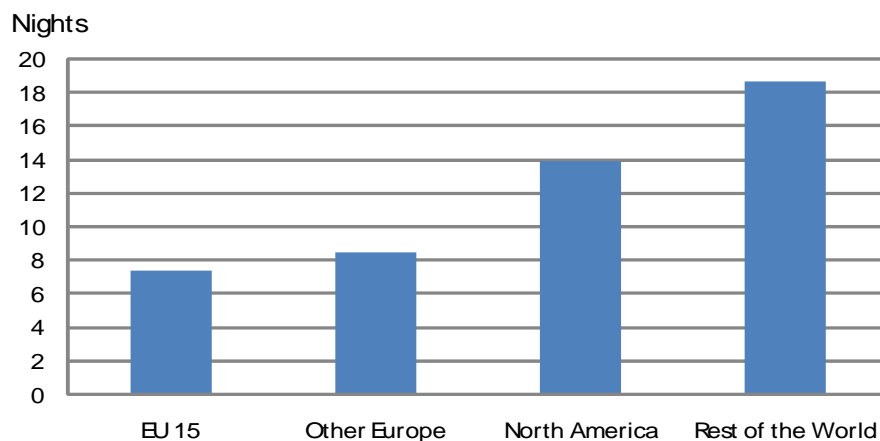
The number of nights spent abroad increased over 35 million in 2000 to just over 54 million in 2006 (an increase of 53%). Consequently, the Average Length of Stay (ALS) fell

¹ In 2004 the EU-15 expanded to EU-25. The following 10 countries joined the EU: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

² In 2007 the EU-25 expanded to EU-27 with Bulgaria and Romania joining the Union.

from an average of about 9.5 nights to just under 8 nights. This was reflected for all broad destination groups. Of course ALS varies considerably by destination. There appears to be a clear correlation between ALS and distance, or at any rate travel time. Destinations closest to Ireland, EU 15 and Other Europe, typically have the shortest length of stay, whereas destinations such as North America, Asia and Australia, typically have a much longer ALS. Between 2000 and 2006, trips to North America experienced the largest fall in ALS, from 14.8 nights in 2000 to 11.8 nights in 2006.

Figure 3.2 - Average Length of Stay by broad destination, 2000 – 2006



4. Summary Profile of Outbound Expenditure

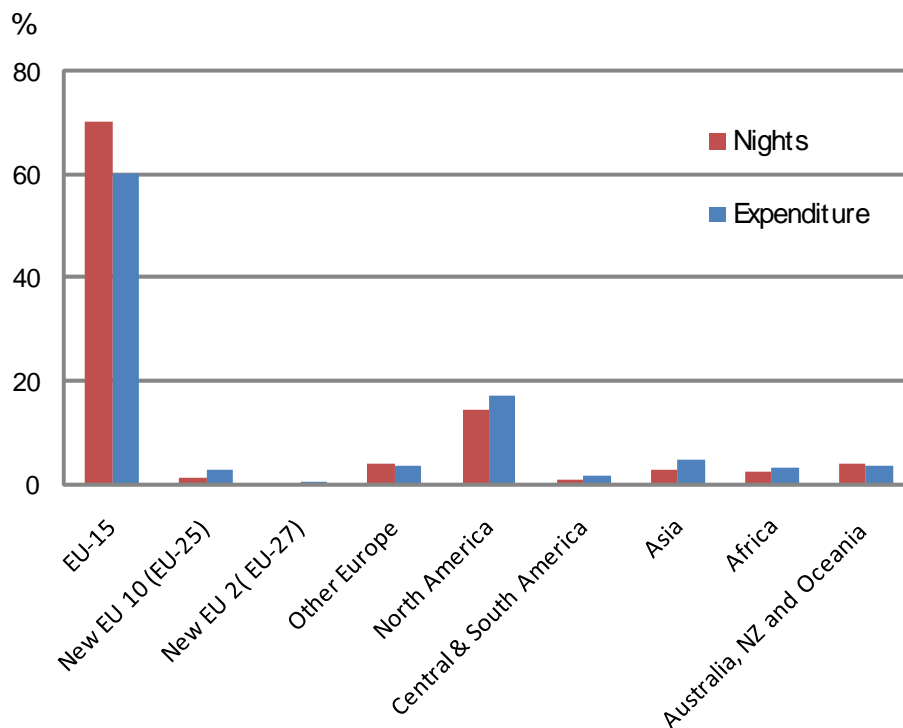
Between 2000 and 2006 outbound expenditure increased from just under €3.2 billion to €6.1 billion, a nominal increase of 93%. As one would expect, trips to the EU-15 took the lions share of total spend, accounting for about 60%. Trips to North America took the

next biggest slice of Irish tourism spend, accounting for roughly 17% or over €5 billion over the seven years in question.

In general Average Per Diem (APD) increased by 26% in nominal terms but this varied considerably by destination. APD in North America and Africa nominally increased by 46% and 51% respectively. In 2006 the APD for North America was €155 per day and for Africa it was €164. However it was Bulgaria and Romania that generated the largest increase in APD; between 2004 and 2006 APD increased by 63%, growing from an average of €75 per day to €121.

Figure 4.1 shows that North America, Asia and Africa performed better in that they captured a higher share of expenditure relative to their share of total nights.

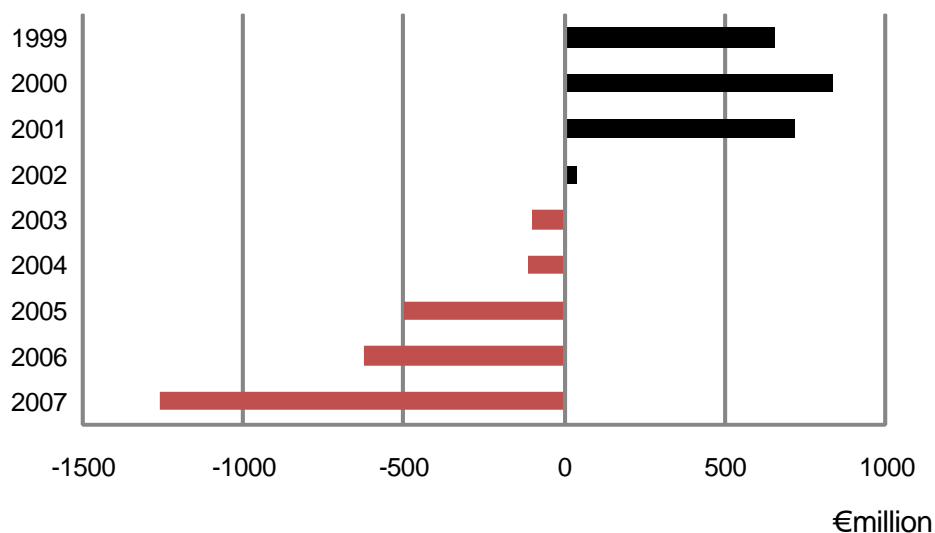
Figure 4.1 – Nights and Expenditure: Relative Market Share by Destination, 2000 - 2006



In 2007 alone outbound tourism expenditure grew by 20% year-on-year generating a €7.3 billion spend. Some of the most dramatic expenditure increases were in the long haul markets such as North America (28%), Asia & Middle East (45%) and Australia, New Zealand and Oceania (63%) reflecting an increased interest in long haul travel and more exotic destinations.

Despite a very impressive increase in inbound tourism to Ireland (22% between 2000 and 2006), the rapid growth in outbound tourism and outbound tourism expenditure has had a detrimental impact on the tourism balance of payments. Traditionally inbound tourism has been a net contributor to the Irish economy. However since 2003, the pendulum has swung into the red yielding a net loss. The negative gap between inbound and outbound expenditure has been growing steadily since 2003, with the deficit standing at almost €-1.3 billion in 2007 i.e. outbound expenditure exceeds inbound expenditure by approximately 26%.

Figure 4.2 – Tourism Balance of Payments, 1999 – 2007



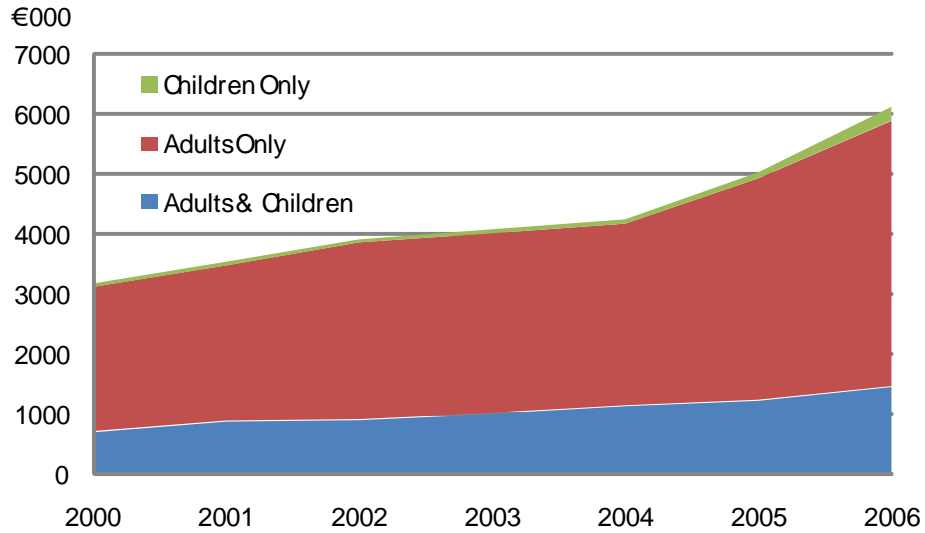
5. Travel Group Expenditure

How does the profile of the travel group impact on their expenditure pattern? For the purposes of our analysis, the travel party is limited to people travelling together from their household only i.e. friends accompanying a family are not included in the group as measured by the HTS. Nor are business colleagues travelling together unless they reside in the same household. The trip expenditure is compiled for the total trip and that expenditure is divided equally between each member of the household so that for example the per capita spend of a child (i.e. persons less than 18 years old) on the same trip is exactly the same as that of the adult.

Outbound expenditure by “Adult Only” groups accounted for approximately 73% of total outbound expenditure during the 2000 – 2006 period compared with 24% for Adults travelling with Children and 2% for Children travelling alone. During those 7 years however, the share of total expenditure accounted for by Adults travelling with children increased from 22% in 2000 to 24% in 2006.

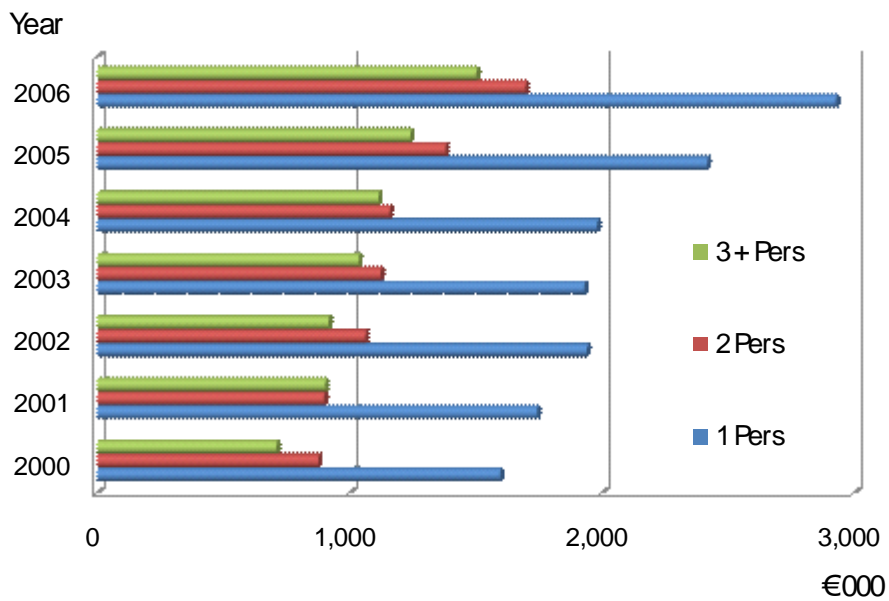
Looking at the party composition from 2000-2006, we can see that mixed groups of adults and children had a lower APD spend compared with adults travelling alone or children travelling alone. Adults travelling alone typically had the highest per diem expenditure. Over the period, adult only spending averaged €113 per day, compared with only €63 per day for Adult and Children groups. Children travelling alone averaged a daily expenditure of €75.

Figure 5.1 – Travel Group Expenditure, 2000 - 2006



Group size appeared to have an important influence on expenditure. Specifically, the larger the travel group, the smaller the total expenditure. Overall single person trips accounted for 48% of total expenditure, two person trips accounted 27% and trips involving 3 persons or more only generated 25%. It should be stressed again, that the group size is simply the group size travelling from within a single household. This analysis does not include groups comprising of many different households.

Figure 5.2 – Expenditure by Travel Group Size, 2000 - 2006



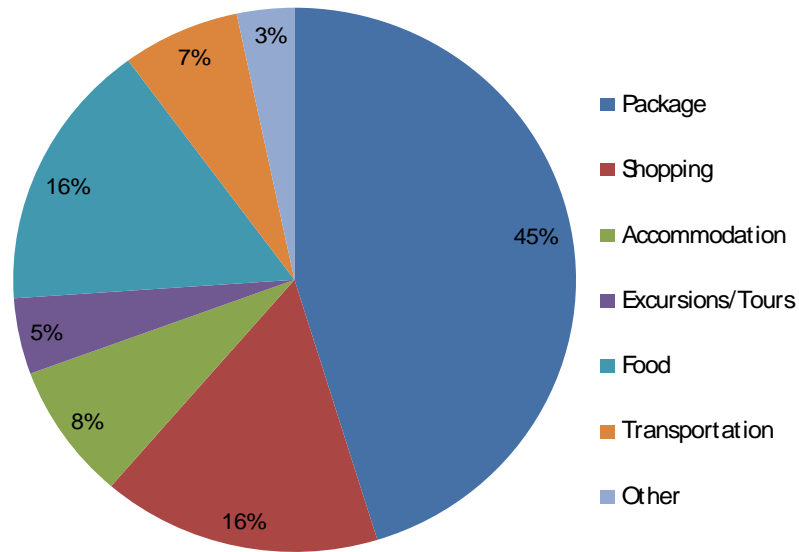
So from within an individual household, there appears to be a negative correlation between the number of persons in the travel group and the total expenditure, irrespective of gender mix or adult/child composition.

Group size and composition both appear to be important determining factors for expenditure. However the travel group analysis from the current HTS is limited to the usual residents of the household which restricts our understanding of travel patterns. Future editions of the HTS must address this issue so that travel party composition can include all members of the travel group whether they are resident in the household or not.

6. Main Expenditure Categories

While overall estimates of tourism expenditure are important for understanding tourism behavior, arguably a breakdown into spending categories is required to fully understand the contribution tourism makes to the economy and to properly track travel behavior and trends. More detailed demands for Balance of Payments and Consumer Price Indices have highlighted the importance of tourism expenditure breakdowns for Ireland, as have pilot TSA studies (Deegan et al, 2004). Since 2006 the HTS has asked respondents to detail the expenditure for their most recent trip (i.e. the trip with the least recall delay and hopefully with the least memory decay).

Figure 6.1 – Main Expenditure Categories



The aggregate results for Q2 2006 to Q4 2007 are presented and include expenditure information from 6,525 individual outbound trips. Figure 6.1 shows that despite the growth in independent travel, package holidays still account for 45% of total outbound expenditure.

Examining expenditure categories by gender and destination reveals some very interesting tourism profiles.

Figure 6.2 – Main Expenditure Categories by Destination

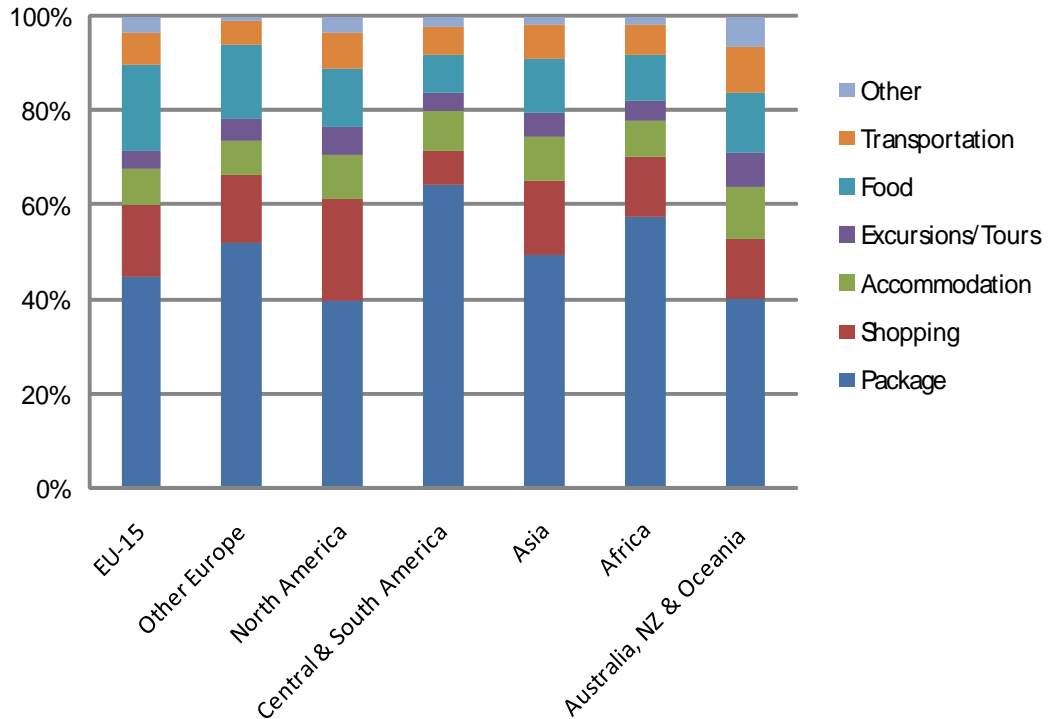
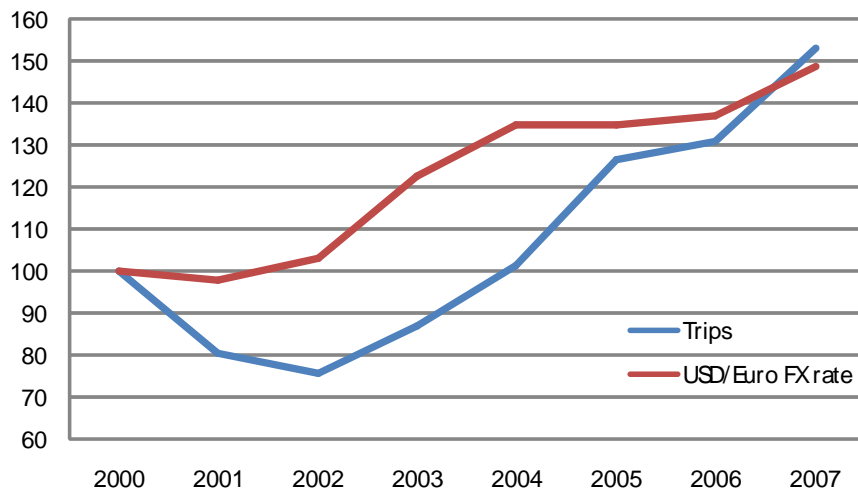


Figure 6.2 shows the very high proportion of package holiday expenditure for destinations such as Central & South America (64%) and Africa (57%). The high spend on package holidays for these destinations corresponds with relatively low spends on additional excursions/tours or on other miscellaneous expenditure. In contrast trips to North America or Australia/NZ have a much lower spend on package tours, 40% of the total for both destinations. This possibly reflects the relative ease of independent travel in English speaking countries for Irish tourists. The high package spend in destinations such as South America or Africa may reflect a desire for more adventurous holidays coupled with a hesitancy for independent travel in foreign speaking or perceived dangerous countries.

For trips to North America a sizeable proportion of total spend is given to shopping (22%). This has become a well established phenomenon in recent years, where Irish tourists go shopping in NY and Boston. There are many contributing factors, not least the relatively cheap prices in the US via-a-vis Ireland (PPP ratio for 2005 was?) but also the exchange rate. In recent years the weak dollar has created a very favourable exchange rate. Figure 6.3 shows the close correlation between the number of trips to the US and the exchange rate.

Figure 6.3 – Number of Outbound Trips to US and USD\$/€ FX rate

presented in index form (Base: Year 2000 = 100)



If the data are mined further we discover that the highest relative expenditure on shopping is made by “Women Only” groups visiting North America where 30% of total expenditure is dedicated to shopping. In fact “Women Only” groups generate the highest shopping expenditure for every destination with the exception of Africa.

In 2007 shopping in North America accounted for an estimated €293 million or 25% of all tourist shopping outside of Ireland. In terms of contribution to total expenditure, the top 10 shopping destinations for Irish tourists in 2007 were:

Table 6.1 – Shopping (Top 10 Contributors to Total Expenditure)

Country	Shopping as % of total
United States	22.4
Spain	14.8
GB	20.0
France	14.2
Italy	14.0
Portugal	13.8
Canada	15.8
Australia	12.5
Germany	17.1
Greece	16.6

7. Impact of detailed categories on recorded expenditure

When the expenditure breakdowns were added to the HTS questionnaire we had expected an increase in expenditure might occur, as the results from the pilot TSA suggested that Irish per diem expenditure was low vis-à-vis that of UK tourists and asking for more detailed expenditure information would 'prompt' respondents to better remember expenditure incurred. In fact the opposite happened. The average per-capita per-diem expenditure from the detailed expenditures was lower than when detailed breakdowns were not supplied.

Inevitably there will be miscellaneous or residual expenditure that does not fit neatly into the categories provided. This residual or 'Other' category is derived by matching the total expenditure from the detailed expenditure total (provided in Section D of the questionnaire) with the overall expenditure total (provided in Section C of the questionnaire).

On investigation we discovered the list of expenditure categories may have contributed to this result as the questionnaire did not provide any explicit miscellaneous expenditure category. Could this omission have resulted in respondents re-calculating their total expenditure in Section D as their original total less miscellaneous expenditure? Or were respondents simply over-estimating the expenditure in Section C? A number of checks are

conducted to ensure there are no mis-matches between section C and D and all obvious discrepancies are corrected.

Further analysis is required to resolve this result. It would seem unlikely that respondents take the trouble to subtract miscellaneous expenditure from the overall total to ensure the sub-total in section D is correct. Equally it is unintuitive that the provision of greater detail should result in a lower per capita spend. The HTS questionnaire has been amended so that a miscellaneous category has now been added. When sufficient data are collected further analysis will be conducted.

8. Consistency with other sources of tourism data:

In 2005 the Country of Residence Survey (CRS) was redeveloped in such a way that travel to specific countries can now be tracked rather than country groupings as was the case previously. The re-engineered CRS allows a direct comparison with the HTS i.e. traffic flows to destinations from the household and frontier survey can now be compared.

The CRS is conducted at all Ports and Airports and covers all overseas travel into and out of Ireland. Each month a sample of flights and sailings are selected and a systematic sample of passengers from each is surveyed. The selection of sailings and flights is done in such a way as to ensure proper representation of time/date/destination for sailings and flights. Sampled passengers from selected sailings/flights are asked their country of residence and their flight/sailing number. CRS splits for routes that are not covered on a particular month are imputed on the basis of "nearest neighbour". The sample results are grossed up to total passenger numbers provided by the airport and port authorities. The CRS provides high quality, detailed traffic volumes on a monthly basis.

Compared with the CRS, the HTS underestimates the number of trips taken by Irish residents. The underestimation has been quite volatile over the years but at times it has been as high as 25%. It also appears to have a seasonal element, where the underestimation is typically worse for Q4. Initially the 3 month time lag for the HTS was assumed to be the primary problem, with recall difficulties posing a problem and high response burden for frequent travelers. There may be other contributing factors however.

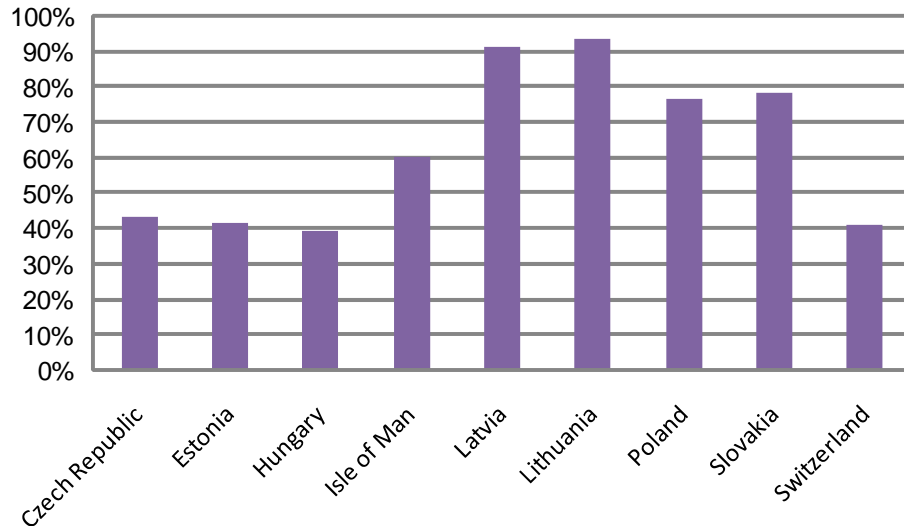
For 2007 data in in-depth analysis of flights from Dublin Airport was conducted. As Dublin airport accounts for 77% of all air passengers on direct flights in and out of Ireland this was deemed sufficient. Using the CRS the number of Irish passengers was estimated for each route/number of Irish passengers at each airport destination.

When the HTS and CRS data were compared, countries with no direct flights from Ireland understandably had a large surplus i.e. the estimates of outbound tourism from the HTS exceeded the estimates from the CRS. For example, HTS had a surplus of trips to Australia (53,000 trips) and Thailand (33,000 trips). Both countries are relatively popular destinations with no direct flights from Ireland.

Other countries had a deficit i.e. the estimates of outbound tourism from the HTS was lower than the estimates from the CRS. For example, countries like UK, Netherlands and Germany had large deficits but given the popularity of airports like Standstead, Heathrow, Schipol and Frankfurt-Am-Main for transfers, this wasn't entirely unexpected. Whether the discrepancy could be entirely attributed to transfers was another matter however. Interestingly, while the discrepancies were large, as a percentage of total trips for each respective country, the difference averaged about 35% which did not seem implausible.

When the traditional transfer hubs were excluded, a number of countries remained with large unexplained deficits. In some cases, these deficits exceeded 90% (Latvia and Lithuania). The countries with the largest negative discrepancies are shown in Figure 9.1.

Figure 9.1 – Negative Discrepancies between HTS and CRS (Dublin Airport), 2007



These results were separated into two groups. The first group are new members to the EU, such as Czech Republic, Estonia, Latvia, Lithuania, Poland and Slovakia. All of these countries have relatively large non-national populations residing in Ireland. For example, the 2006 Census of Population estimated there were approximately 63,000 Polish, 25,000 Lithuanians and 13,000 Latvians. In all non-nationals were estimated to account for 24% of the total population (CSO, 2008). This raised an interesting question.

There is no household register in Ireland and consequently the HTS uses the electoral register as a population/sampling frame. While all residents over 18 years old are eligible to register there is no legal obligation to be registered in the Republic of Ireland. Furthermore there is probably little incentive (other than local elections) for non-nationals to register in Ireland. Consequently one likely source of disparity in the results is likely to arise from an inadequate population frame. It is likely therefore that migrant populations and persons aged between 20 and 30 (the age group most likely to rent) are likely to be underestimated.

So despite the dramatic increases in outbound travel to the new EU states outlined in section 3, these are likely significantly underestimating the reality. This has important implications for our overall travel profile and the resulting outbound expenditures. As the HTS is calibrated at an aggregate level to the CRS, the result is that trips to UK, Spain and France etc. are likely being overestimated and trips to the new EU are likely being underestimated. Many of the trips by non-Irish residents are likely trips back home to visit

friends, relatives and family and probably a relatively low tourist spend (but perhaps a high remittance). Consequently the deficit in the tourism balance of payments may be somewhat overstated, as outflows of tourism spending may not be as high as the current estimates suggest.

The second group, which includes Switzerland and Isle of Man is harder to explain.

Based on these comparisons we believe that our Household Travel survey may be overestimating our expenditure. We are currently working on estimates for expenditure taking into account the biases in our sample.

9. Cost – benefit analysis

In 2008 CSO launched the Airport-Pairings Database (APD). This database provides monthly information on every direct aviation route in and out of Ireland. Although it varies by month, the database typically comprises a matrix of the 9 Irish airports and approximately 500 foreign airports, resulting in around 4,000 populated cells per month. The database allows users to navigate or search, subset and structure data using PC AXIS before viewing on screen or saving to a file type of their choice. Data can be compiled at four different levels of aggregation airport (IATA³ coded), city, country or continent. The data are lagged by 6 months in agreement with the data providers in order to safeguard market sensitivities.

The CSO are currently developing a second generation of the database that will offer route-KMs and a country of residence (Irish/Non-Irish) passenger split by route. These latter additions will facilitate the calculation of Irish/Non-Irish passenger-KMs by route. For example, tentative estimates for overseas air passenger-KMs are presented in Table 9.1.

Table 9.1 - Total Air Passenger-KMs generated by Irish Travellers, 2007

³ IATA – International Air Transport Association

	Direct Flights- Number of journeys	Direct Flights - Air Passenger KM	Direct + Indirect - Air Passenger KM
	Million	Billion	Billion
Irish Residents	14.6	23.2	33.2
Overseas Residents	13.9	17.6	26.3
Total	28.5	40.8	59.5

By combining the 2007 APD and CRS results, and using great circle routes to estimate the air-route distance between airports, total and Irish air passenger-KMs are derived. Direct flights in and out of Ireland generated 40.8 billion air passenger-KMs in 2007. Irish passengers accounted for 23.2 billion passenger-KMs or 57% of the total. Of course, Irish tourists travel to many destinations beyond the range of direct flight (such as Australia etc.). Using the HTS results to estimate transfers (by comparing ultimate destination with direct flight destinations) then Irish passenger-KMs in 2007 were likely to have approximated 33.2 billion. This latter estimate is a rather approximate number, as detailed route and destination information were not available. Nevertheless, it serves to highlight the scale or magnitude of air passenger-KMs generated for a single year.

The main detailed frontier survey conducted by CSO, the Passenger Card Inquiry (PCI) is currently being re-engineered. Among the many changes being introduced is the sampling/grossing methodology to adopt the "route" approach now used by the CRS and the Airport-Pairings. This will allow the PCI results to be matched directly with the CRS and APD at route or airport-pairing level. This will allow route profiles to be developed, where typical CRS splits, per capita expenditure etc. can be balanced against passenger-KMs or even emissions⁴. Crucially these data will facilitate a micro or bottom-up approach to tourism-environmental analysis rather than a macro or top-down approach.

10. Conclusions:

⁴ Further developments of the APD include asking the airport authorities to provide aircraft type details for each route. This could then be linked to emissions databases (EMEP, 2007) to estimate aviation emissions from flights in and out of Ireland.

Outbound tourism has grown at a rapid pace in recent years. Many factors have contributed to this growth. Many of the same factors have posed challenges in accurately measuring these flows.

The HTS treatment of the travel group is not sufficient to adequately capture the reality of travel patterns on the ground. This is an issue highlighted in the revised IRTS (UNWTO, 2007) and in the next generation of the HTS, this issue must be improved. No definitive solutions have been settled on as yet but one possible solution may be to sample "individuals" rather than "households".

The recall period of 3 months for the HTS is too long and consequently responses suffer from recall decay and a compounding response burden that discourages frequent travellers from cooperating. Again any new generation of the HTS must reduce the recall period to 1 month. In order not to limit the length of trips taken this may result in a switch from measuring "trips taken during the reference period" to "trips returned from during the reference period".

The pilot work on expenditure breakdowns is still ongoing. The categories appear to be working well from a respondent perspective, however the absence of a miscellaneous category has caused some difficulties. Not least the counter intuitive result that extra expenditure detail has possibly led to a reduction in overall tourism expenditure.

There appears to be clear bias issues with using an electoral register as a population/sample frame for tourism surveys. It is probable that the HTS is underestimating non-Irish trips and quite possibly certain age cohorts also. CSO are currently looking for an alternative register that could be used. A number of possibilities such as television license databases or tax records have been considered. Many alternatives have been ruled out but as yet no final decision has been made.

Ongoing work to re-engineer the Passenger Card Inquiry (PCI) and launch the next generation of the Airport-Pairings Database will lead to a much improved set of tourism data. In time analysts should be able to balance typical revenues from an individual route with the environmental damage that route is causing. The re-engineered PCI should in

time provide more detailed expenditure data, including expenditure by activity in addition to reason for journey.

Recent developments such as the APD and the improved CRS have added greatly to our ability to analyse and understand tourism activity. What is equally however is that both the HTS and PCI need to be re-engineered as a matter of urgency.

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