

Extending the Tourism Satellite Account Framework to inform policy making in the UK

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Outline of Presentation

- Introduction: the Institutional context in the UK
- The UK Tourism Satellite Account (UK-TSA): key aggregates
- Nowcasting the UK-TSA
- Regional estimates from the UK-TSA
- Productivity measures from the UK-TSA
- Future work

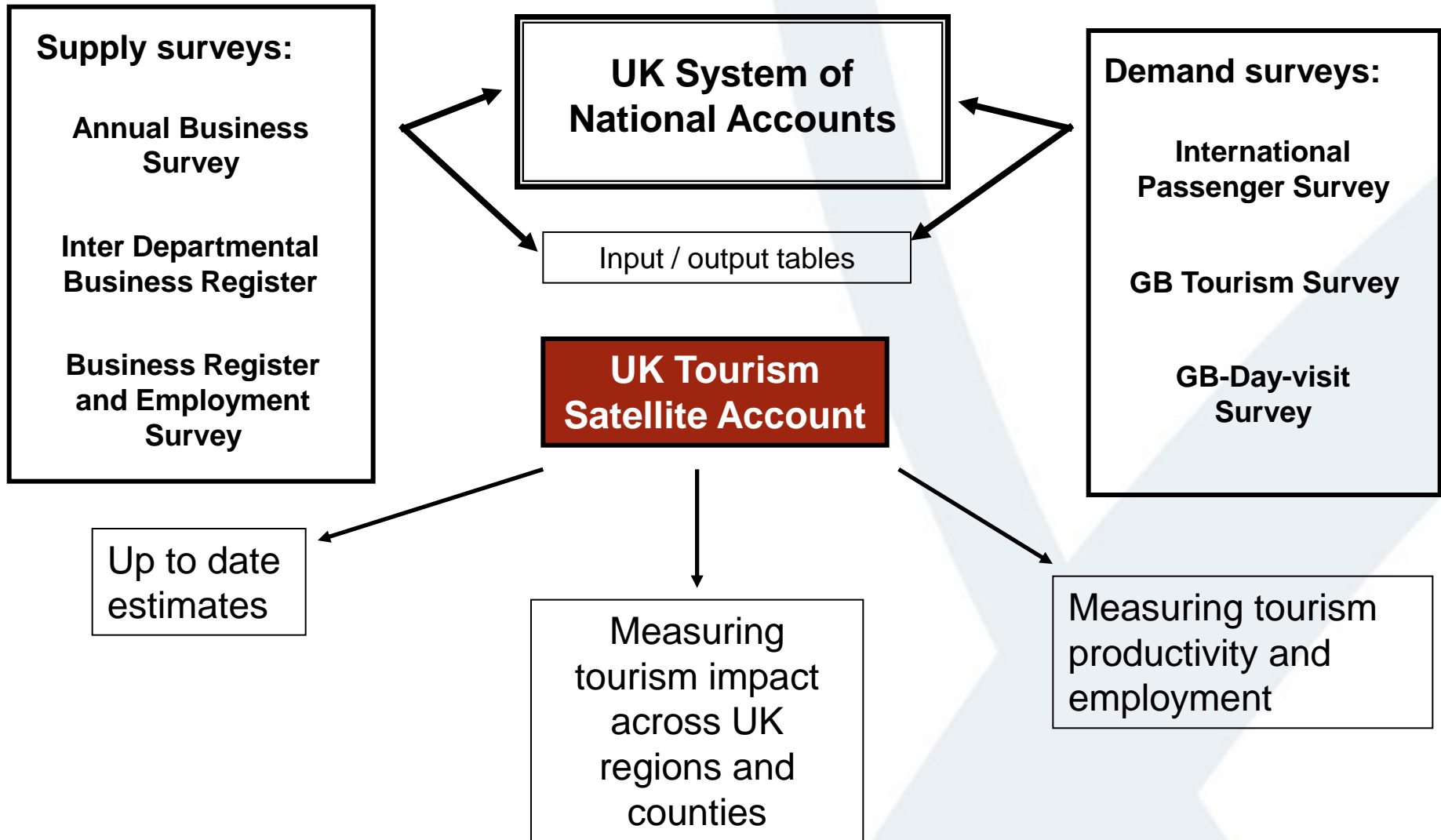
Introduction: The Institutional context

- The ministry responsible for tourism in the UK is the Department for Culture, Media and Sport (DCMS).
 - Arms length bodies – National Tourism Boards
 - Destination organisations
- Resistance within policy spheres in the UK in terms of accepting the TSA
 - Other measures preferred
- The development of a ‘System of Tourism Statistics’ has helped to promote the UK-TSA as the central tool

Introduction: The Institutional context

- By addressing policy needs, the UK-TSA became more accepted and is now the UK government preferred measure for tourism
- Limitations highlighted: 2 years out of date, and estimates are only available from the TSA at the national UK level
- Policy needs: Need for timely figures, at the regional level (and below) for advocacy
- Importance of dialogue with all key actors at the national level

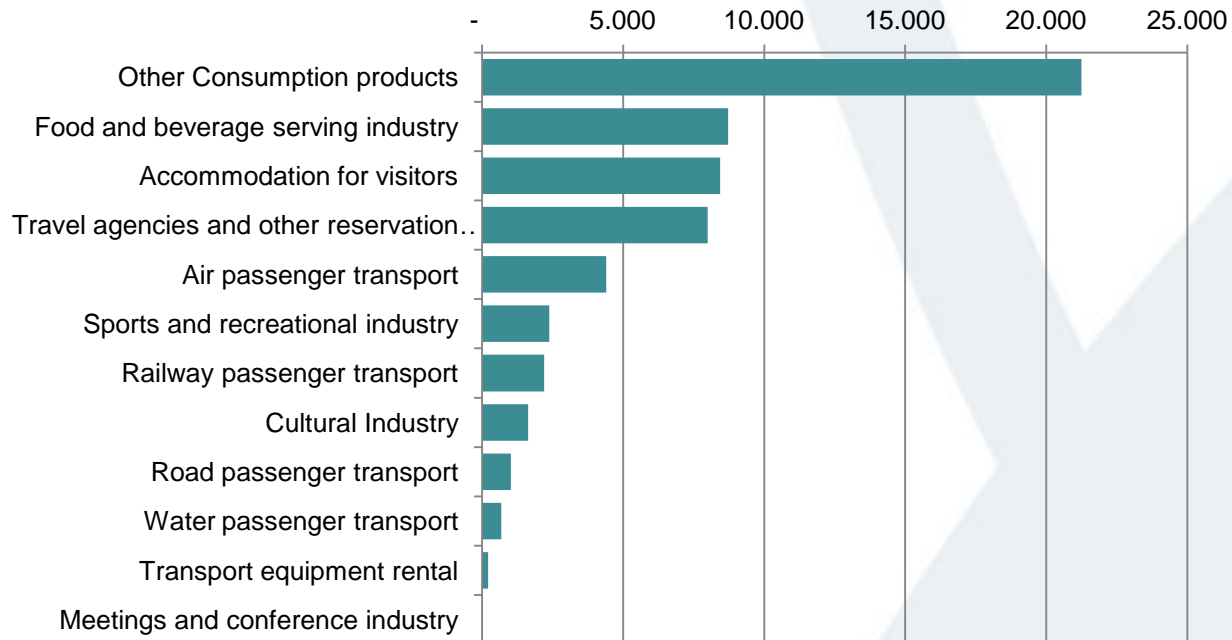
An integrated system of tourism statistics – the importance of the TSA



The UK-TSA Key Aggregates

- TDGVA was worth £59.0 billion to the economy in 2013, which was a 2.9% increase when compared to 2012 where TDGVA stood at £57.3 billion

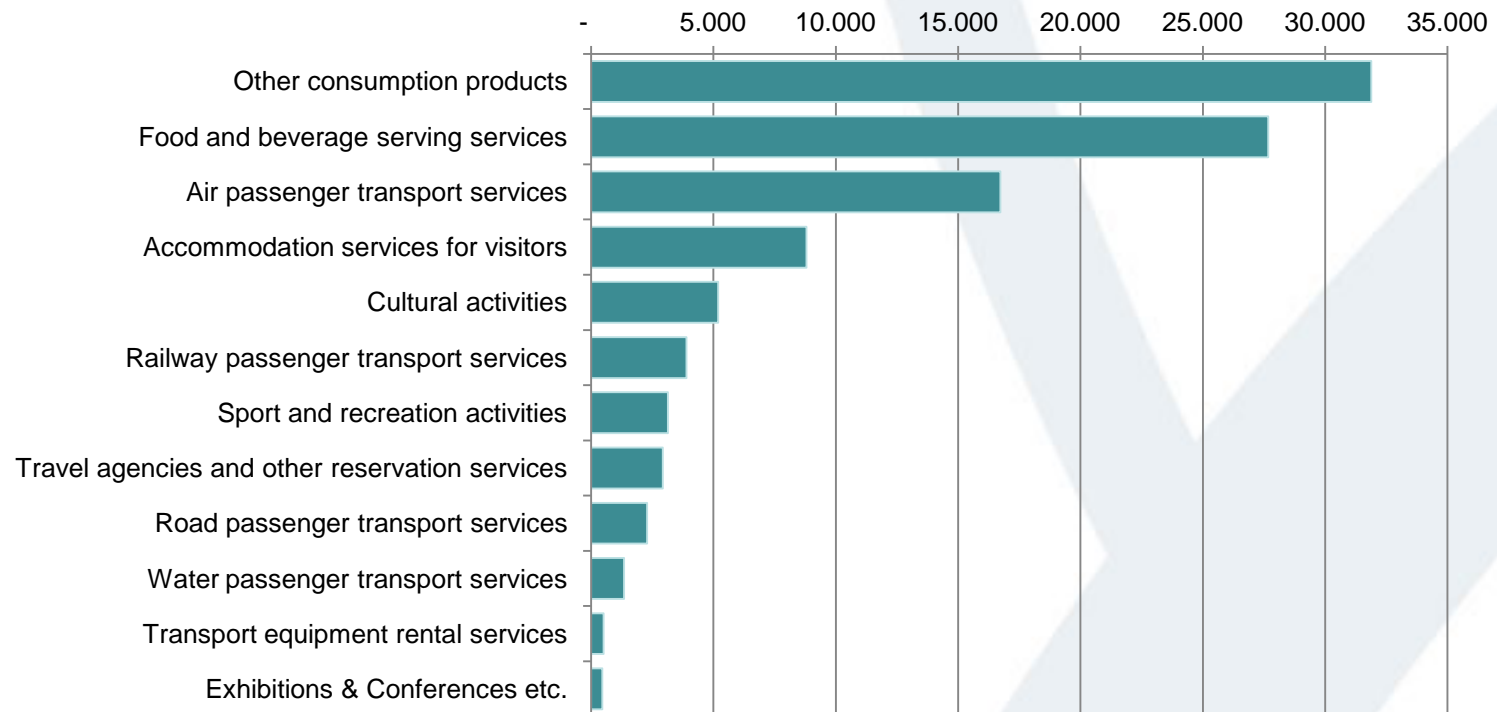
Tourism Direct Gross Value Added (£m) by industry in the UK, 2013



The UK-TSA Key Aggregates

- Domestic tourism consumption within the UK was £104.9 billion in 2013, a decrease of 1.7% or £1.8 billion from 2012

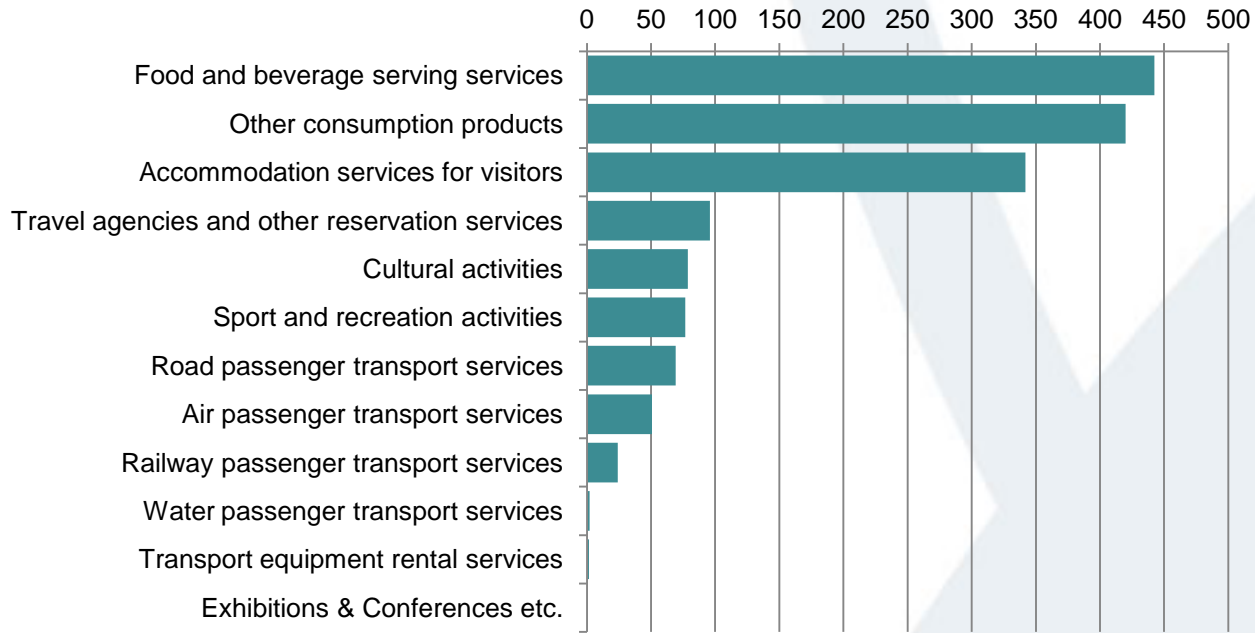
Domestic Tourism Consumption (£m) by industry (UK, 2013)



The UK-TSA Key Aggregates

- Tourism Direct employment rose from 1.532 million to 1.603 million from 2012-2013

Tourism Direct Employment (thousands) in the UK, 2013



Nowcasting the TSA – demand

Obtaining a quarterly time series for the total demand of tourism is relatively straightforward.

It uses:

- quarterly time series for the total UK GVA
- demand to supply ratio (or Tourism Ratio).

It allows for the following estimation procedure:

$$Total_Demand_t = DSR \times Total_Supply_t \quad (1)$$

Nowcasting the TSA – demand

- Having obtained quarterly estimates of the total demand of the tourism economy over the time span 2006q1-2015q1, we have now to break it down in its main components.
- The International Passenger Survey (IPS) collects spend and volume data for the inbound tourists. This data source is both frequent (monthly),
- The IPS measures both excursionists' and overnight visitors' inbound expenditure.
- The Great Britain Tourism Survey (GBTS) provides quarterly estimates for the total domestic tourism expenditure.
- Quarterly data on the expenditure of day visitors from the Great Britain Day Visits Survey (GBDVS) which provides a high degree of detail on the expenditure of day visitors that can be matched to TSA categories.

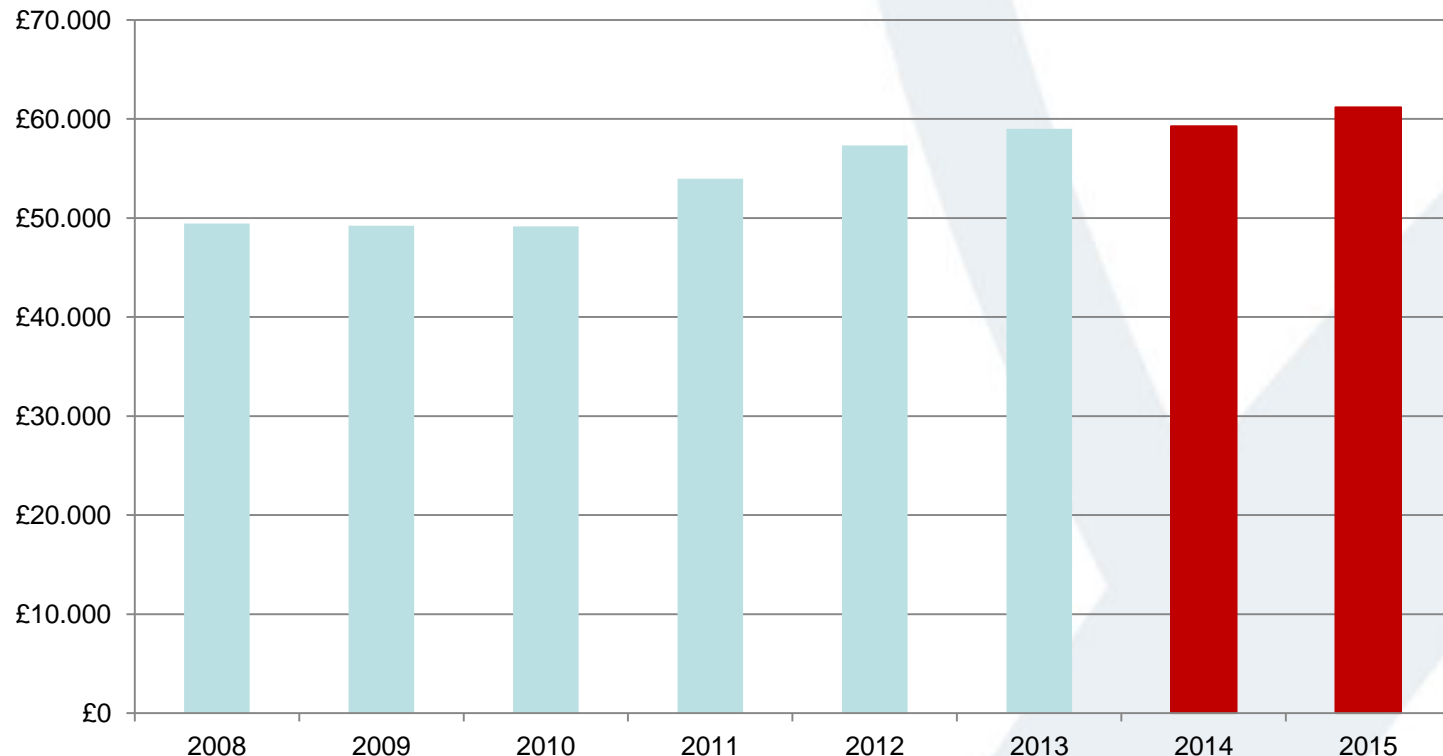
Nowcasting the TSA - supply

- The supply side is nowcasted adopting a bottom-up approach. This involves nowcasting the supply of each tourism industry individually and summing them up to obtain total supply of the tourism industries.
- This is achieved by benchmarking UK TSA industry supply figures to a quarterly non-seasonally adjusted (NSA) GVA index series for each tourism industry, measured in current prices (CP).

Nowcasting results

The graph shows how TDGVA has grown since 2008 when it stood at £49.4 billion, to £59.0 billion in 2013.

Applying the nowcast technique allows estimates of TDGVA to be produced for 2014 and 2015, at £59.3 billion and £61.2 billion respectively.



Testing the Nowcast

In the UK TSA for 2012, we provided estimates for 2013 and 2014 based on the same nowcast methodology and projected that in 2013 TDGVA would be £58.7, billion which is £0.3 billion short of the actual TSA estimate for 2013 shown in this table:

United Kingdom, 2008-2015 £ millions and percentage		
	TDGVA	Change (%) based on previous year
2008	49444	-
2009	49217	-0.5
2010	49148	-0.1
2011	53947	9.8
2012	57344	6.3
2013	58997	2.9
2014	59268	0.5
2015	61183	3.2

Notes: current prices

Source: UK-TSA 2013 (ONS)

Data may not sum due to rounding

UK-TSA Regional Estimates – Tourism Ratio

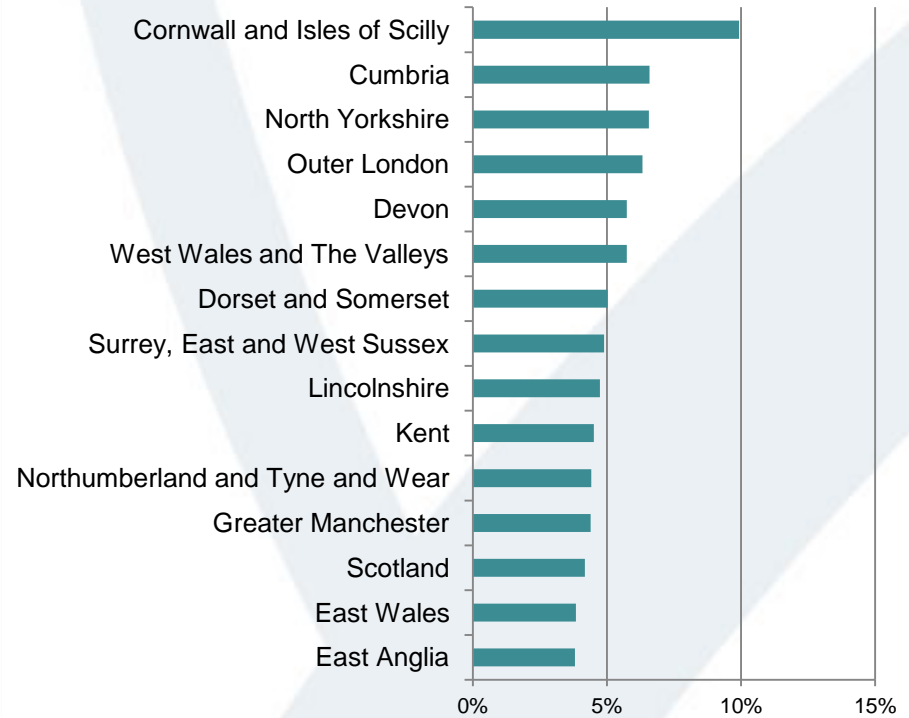
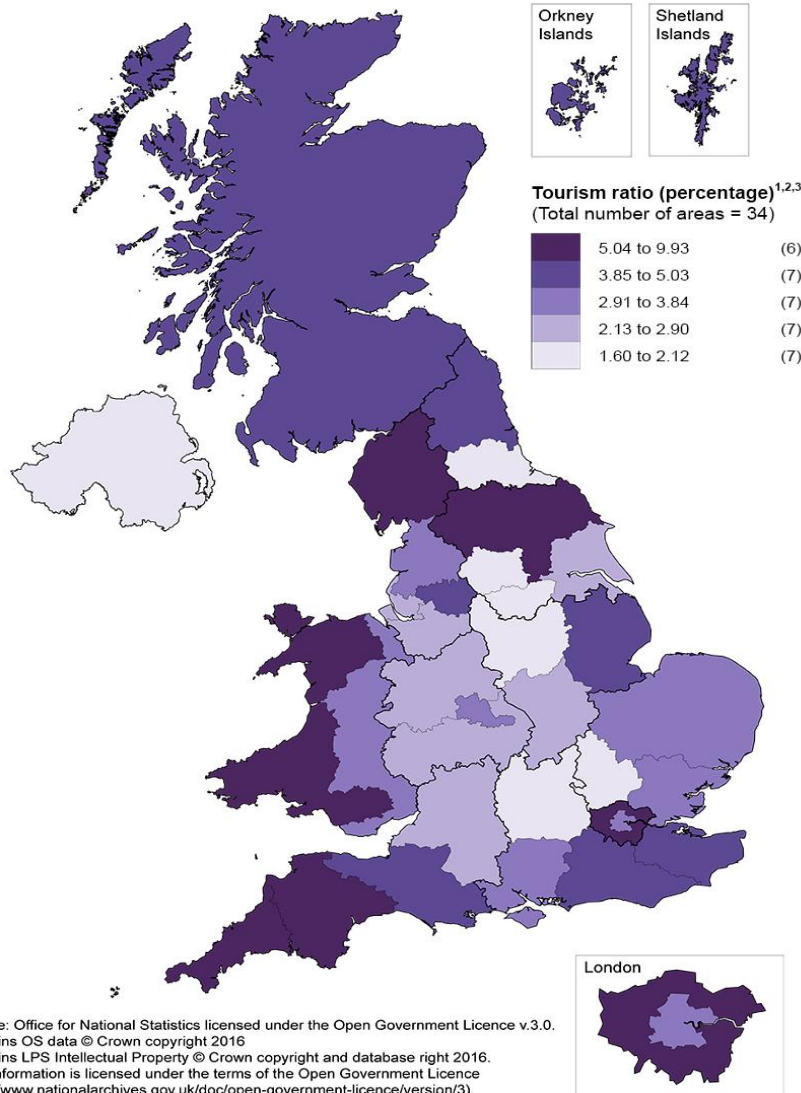
$$DS(ratio)_i = \frac{TotInbExp_i + TotDomNightExp_i + TotDomDayVis_i + TotOutDomExp_i}{TOT - SP_i^{SU}} \quad (3)$$

The tourism ratio is usually expressed as a percentage.

On the numerator of the above fraction we sum up all the components of tourism for region i , with $i=1,2,\dots,12$ – total inbound tourism , total domestic overnight expenditure , total domestic expenditure by day visitors , total domestic expenditure of outbound tourists before they leave the region .

At the denominator of the fraction is reported the total supply of products at purchasers' prices for the region i in SUT units apportioned through the ABS.

UK-TSA Regional Estimates – tourism ratio – NUTS2



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1 The tourism ratio is the proportion of domestic supply in a region accounted for by the spend of tourists.

2 Data for Scotland are shown at NUTS level 1 only.

3 NUTS 2 is an abbreviation for Nomenclature of Territorial Units for Statistics, level 2.

UK-TSA Regional Estimates - TDGVA

$$TDGVA_i^{SUT} = GVA_i^{SUT} \times DS(Ratio)_i$$

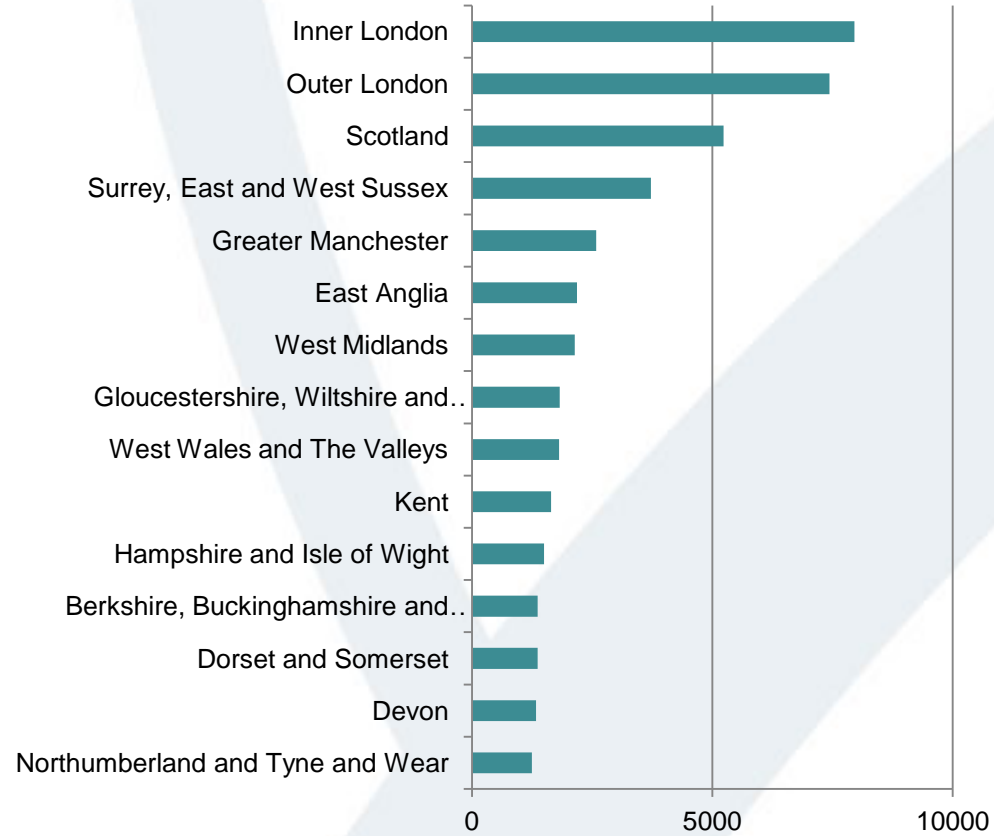
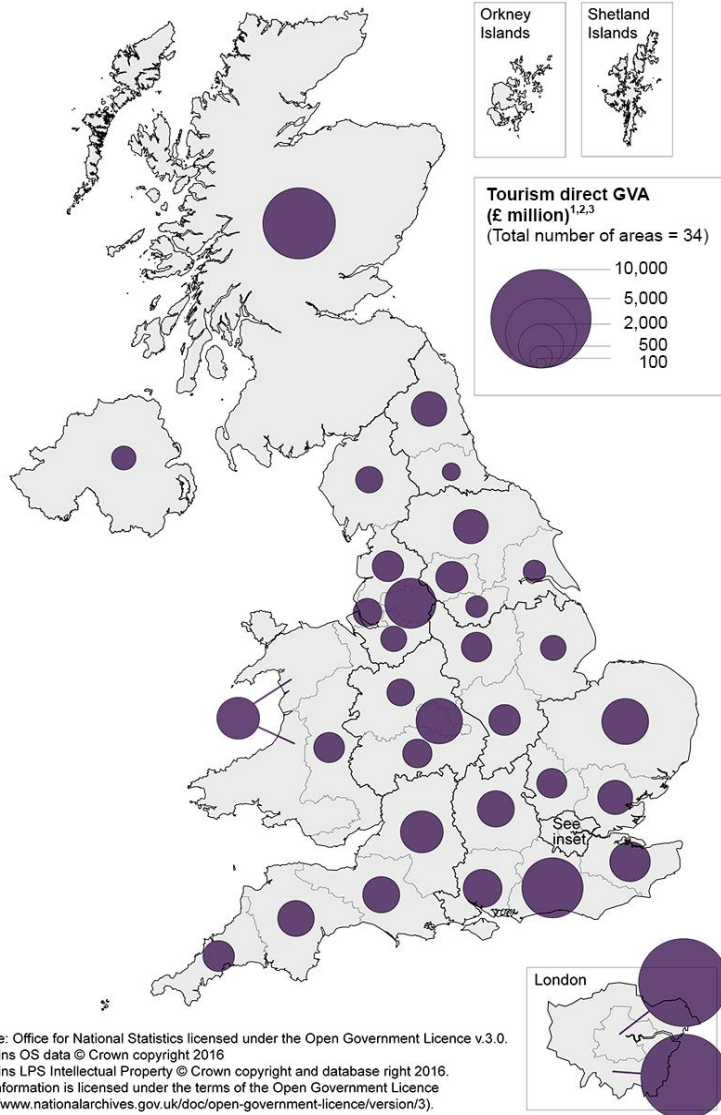
We can employ the demand to supply ratio (tourism ratio) to obtain figures for Tourism Direct Gross Value Added.

This step requires apportioning (by region) the GVA of the whole UK directly and multiplying it by the regional demand to supply ratios.

The total Gross Value added of the UK as a whole is reported in the SUT.

This is first apportioned by region using Business Survey based shares.

UK-TSA Regional Estimates – TDGVA (NUTS2)



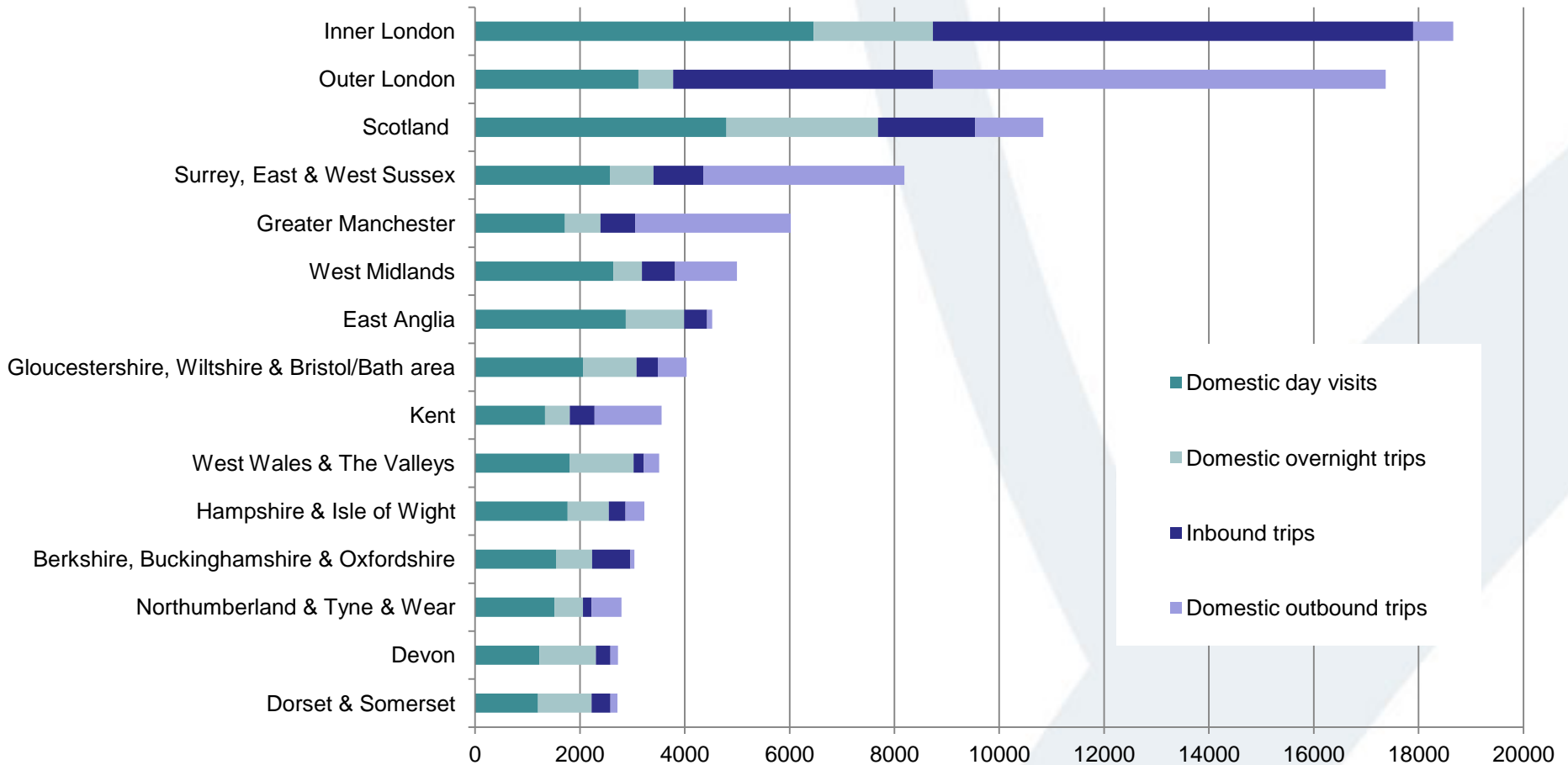
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1 Tourism direct GVA is the amount of Gross Value Added in a region that is directly accounted for by the spend of tourists.

2 Data for Scotland are shown at NUTS level 1 only.

3 NUTS 2 is an abbreviation for Nomenclature of Territorial Units for Statistics, level 2.

UK-TSA Regional Estimates – tourism consumption (demand)



Tourism Productivity

Productivity estimates are calculated using the following ratio:

$$\frac{\text{OUTPUT}}{\text{INPUT}}$$

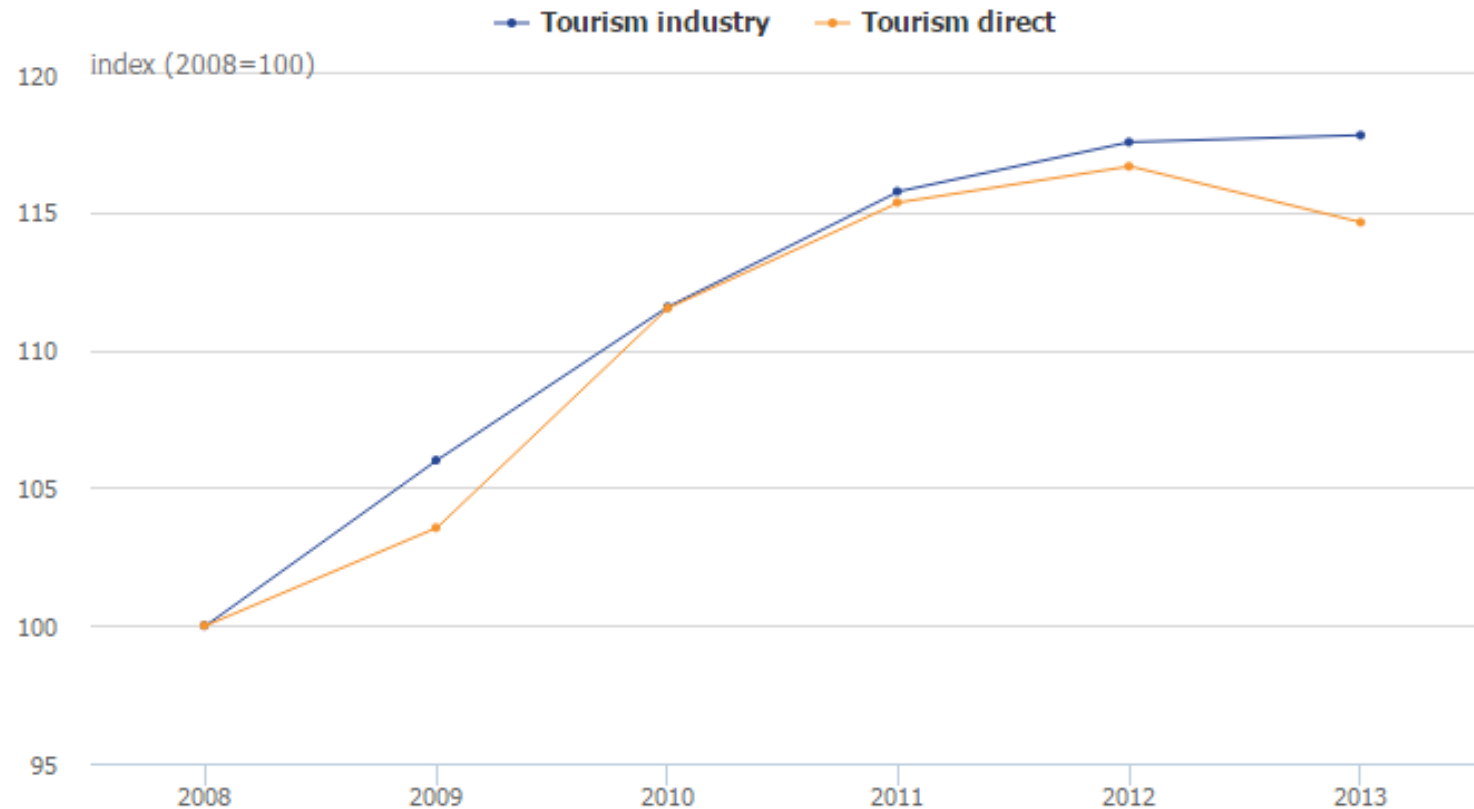
Two options for inputs and outputs with the UK-TSA:

	Input	Output
Measure 1	Tourism direct (TD) jobs	Tourism direct GVA
Measure 2	Tourism industries (TI) jobs	Tourism industries GVA

Source: Office for National Statistics

Tourism Productivity

Results look very similar:



Tourism Productivity

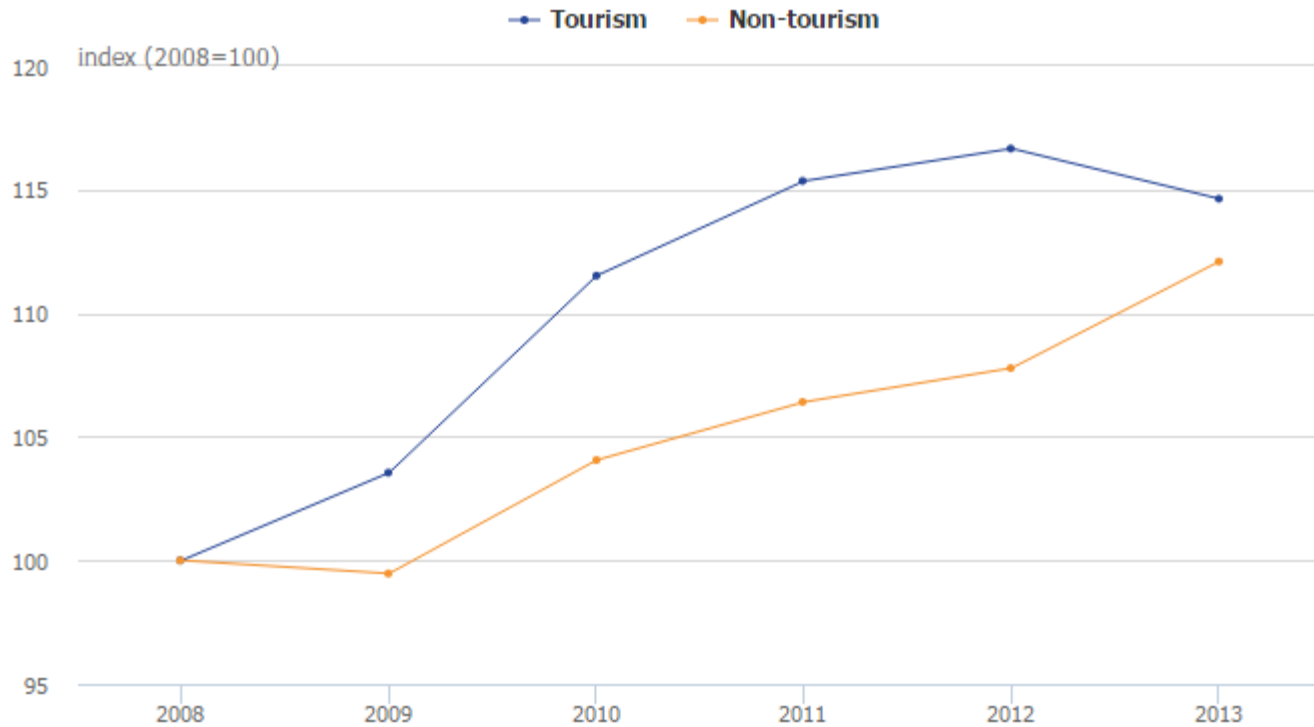
Productivity estimates for each tourism characteristic industry are calculated using the following components:

$$\frac{\text{OUTPUT}}{\text{INPUT}}$$

- input: the number of jobs directly attributable to the specific tourism characteristic industry
- output: the TDGVA directly attributable to the specific tourism characteristic industry

Tourism Productivity

Productivity of tourism versus non-tourism industries:

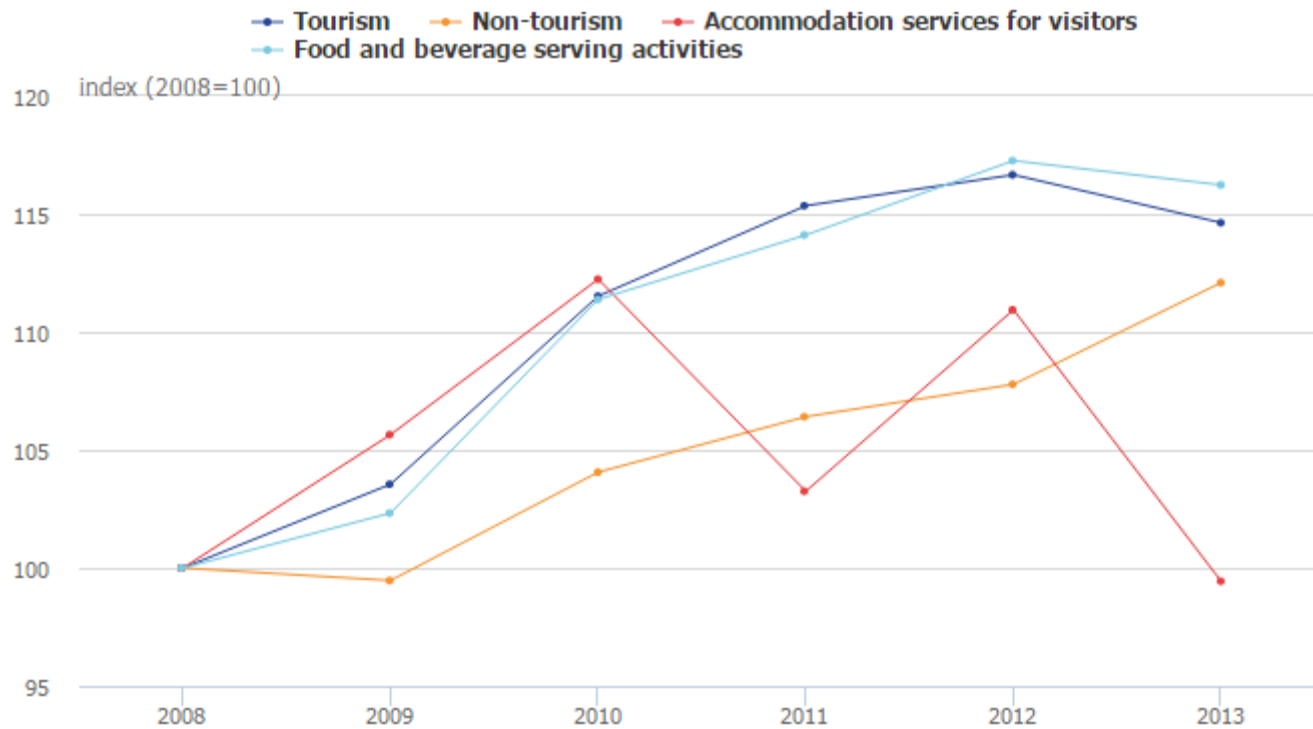


Future Work

- Review of sources that feed into TSA and possible refinements
- Explore the potential for linking with Environmental accounts
- Further refinement of tourism productivity measures
- Explore potential for completing tables 8 and 9

Tourism Productivity

An example of two tourism characteristic industries:



Tourism productivity measures

Tourism Satellite Account productivity estimates	ONS Labour productivity estimates
<ul style="list-style-type: none">• uses components that are directly attributable to tourism• a whole tourism productivity figure can be calculated and compared with a non-tourism industries figure, calculated using consistent methodology• TSA productivity estimates can be produced for each of the 11 tourism characteristic activities in the UK-TSA tables, providing an in-depth look• the tourism direct gross value added (GVA) (output) component is in current prices, meaning that it is not adjusted for inflation which would affect the tourism direct GVA (TDGVA) and thus impact the growth of productivity in tourism industries• productivity estimates using the UK-TSA rely on data in the UK System of National Accounts which is unavailable until 18 months after the reference year	<ul style="list-style-type: none">• uses the inputs and outputs of tourism industries• estimates are non-additive (cannot be summed together), so a whole tourism productivity figure cannot be calculated• industry classes we have data for (SIC 2 digit) also include non-tourism activities and are therefore not wholly tourism related industries• GVA estimates used in labour productivity measures are chain-linked and adjusted for inflation, allowing each year to be compared• timely estimates, they can be produced 2 months after the latest quarter

Thank you.

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