

Office of National Statistics University Working Group

# The effect of the depreciation of the pound sterling on the travel and tourism industry

& wider future implications

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## Introduction

### Motivation

We live in a time of great economic uncertainty. With the United Kingdom's (UK) imminent departure from the European Union (EU), many economists and statisticians have little certainty and idea what exactly will happen next. Many forecast economic downturns and a slump in the pound sterling against rival currencies, which could affect the nation across a variety of industries. Here, we look at the travel and tourism industry, and the various services that make it up, and try to see what potential effects a downturn in the pound could have on it.

### Aims

In this report we aim to do the following:

- Analyse the trends relating historic downturns in the pound. In particular, we will look at trends in the travel and tourism industry after the financial crisis of 2008, and also the months after the UK's vote to remove from the European Union in June 2016.
- Highlight the key similarities and differences between the two time periods, including any relation to change the UK's GDP, in order to try to determine whether similar events could occur, if a downturn in the pound were to happen when the UK does withdraw from the EU.
- Explore and acknowledge the potential repercussions of the changes in the tourism industry on other different industries, and how it may affect other countries across the world.

### The Financial Recession 2008

Otherwise known as 'The Great Financial Recession,' this was the deepest recession that the UK had faced since the Second World War. The UK economy recorded negative growths of 0.2%, 1.7%, 2.2%, 1.8% and 0.3% for the five successive quarters between and including Q2 2008 and Q2 2009. This caused manufacturing output to decline by 7.4%, unemployment to rise to 8.3% and the pound to fall in value, of which is of interest to us. The pound fell against both the Euro and US dollar by 16.5% and 31.0% respectively between April 2008 and January 2009, both the lowest levels since records began.

### United Kingdom's Vote to Leave the European Union

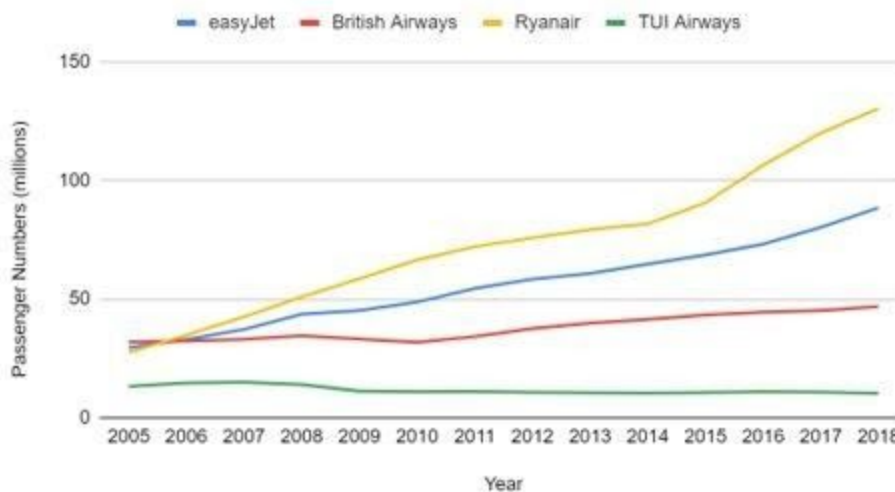
On the 23<sup>rd</sup> of June 2016, the United Kingdom held a referendum on whether the United Kingdom should remain a member of, or leave, the European Union. This resulted in 51.9% of people wanting to leave the European Union, and 48.1% remaining. This was an unexpected result, against all the poll makers, and lead to, amongst other things, a decline in the pound against the Euro and US dollar, of at worst 15.9% for both in the months after the vote.

## Travel Industry

The travel industry is an integral part of the travel and tourism industry and is formed of multiple smaller sub-industries. We focus on the air travel sub-industry, since there is a wide range of different products available. Here we focus on low-cost carriers, like easyJet and Ryanair, against more traditional airlines, like British Airways (BA) and TUI, as well as other aspects of the industry.

Since the recession, airlines' passenger numbers are on the rise

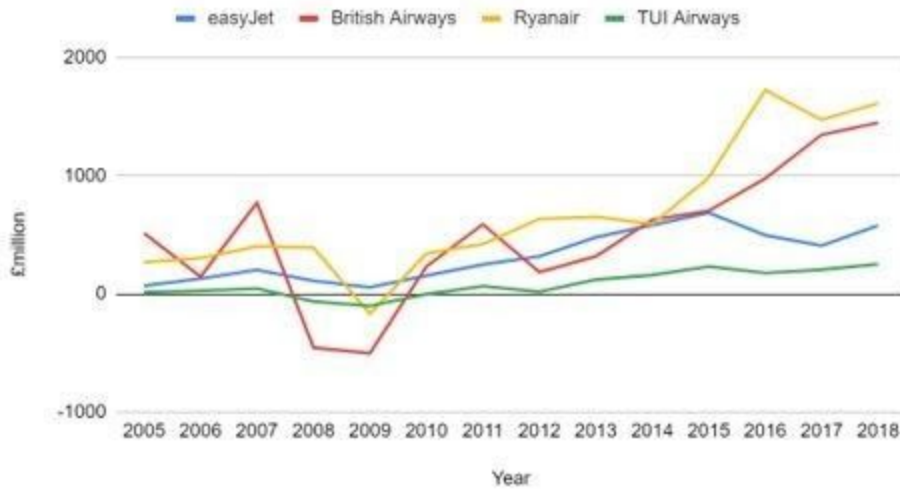
Passenger Flown By Airlines - Source IPS



- In the post-recession years 2008-2010, there is a noticeable difference between low-cost carriers and traditional airlines, with a large growth in demand for low-cost carriers and lack of demand for the traditional airlines, with their passenger numbers falling.
- This is likely due to a lack of disposable income during the recession period and consumers looking for cheaper alternatives to go on their holidays, not directly due to the depreciation of the pound.
- Little change in growth rates post-referendum, with an increase in all our candidate airlines, except TUI, which may be due to the rise of dry-leasing operations out to cheaper European carriers.

After financial difficulties during the recession, larger airlines become profitable

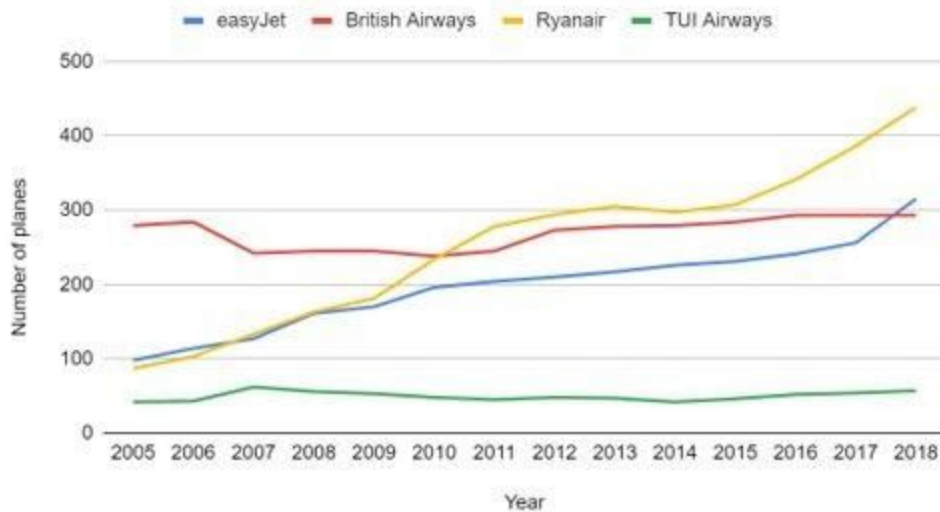
### Pre-Tax Profits - Source Financial Summaries



- During and after the recession, all airlines struggle to remain profitable, with BA making nearly £1bn of losses and on the brink of collapse requiring 30,000 staff to work without pay for one month to survive. Ryanair make small losses, most probably due to cutting ticket prices by 20% to incentive people to travel with them and establish a large consumer base for future expansions.
- Since the recession, all candidate airlines have remained profitable, with BA and Ryanair both making notably large profits.
- Post-referendum, we see small dips in profit for low-cost carriers, but the traditional airlines' profits continue to grow. This however is unlikely to be due to depreciation of the pound, but other facts like changes to fleet and establishing European based subsidiary airlines like easyJet Europe and Ryanair Sun.

## Low-cost carriers are expanding their fleets quicker than traditional airlines

Fleet Size - Source: Financial Summaries



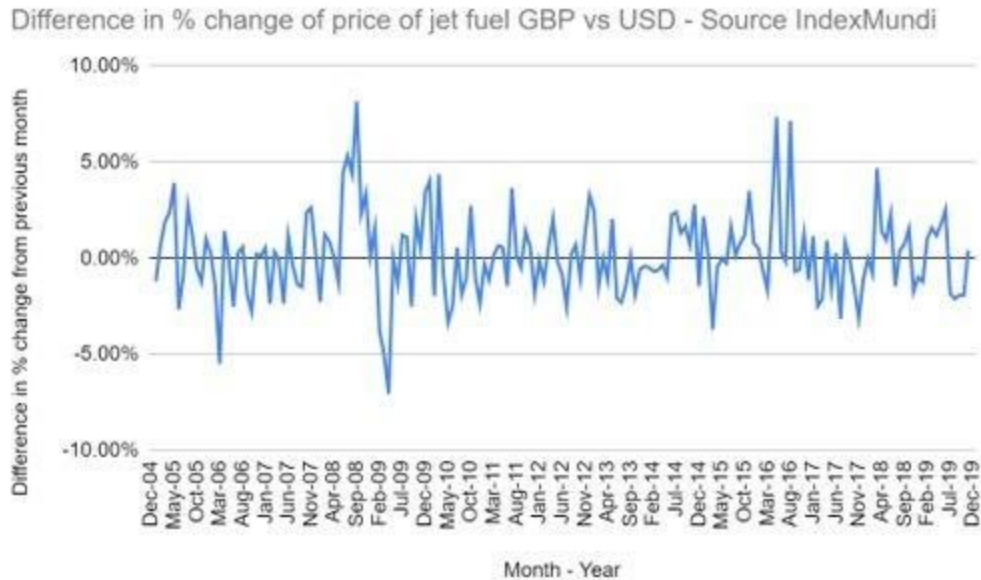
- Around both of our times of interest, both low-cost carriers made large purchases of new state-of-the-art aircraft. During the recession, easyJet ordered 34 Airbus a320 family aircraft and Ryanair ordered 97 Boeing 737-8 aircraft. Post-referendum, easyJet ordered 147 Airbus a320neo family aircraft and Ryanair ordered 135x Boeing 737 MAX aircraft. Both would have large impacts on profitability.
- BA and TUI replace old aircraft rather than expand. Average BA fleet age is 6.5 years older than easyJet and Ryanair, which may incur higher maintenance costs, which may limit BA's profitability.
- IAG, owner of BA, recently ordered 200+ Boeing 737 MAX aircraft, during MAX grounding, which could be a good game-changer against the low-cost carriers.

## Previously unheard airports are appearing out of nowhere



- Terminal passenger numbers at previously well-established airports remains relatively consistent year on year, with no major changes relating to either periods of time of interest to us.
- Smaller airports however mostly wiped out during the recession, like Southend, with yearly terminal passenger numbers falling to 5000 in 2009. However, this allows large airlines to have large negotiating power over visiting these airports, they can demand cheap rates and bring an airport back to life again. This is what happened at Southend in 2011/12.
- Often used tactic by low-cost carriers to get a cheap 'city' airport even though it could be miles away from the advertised city.

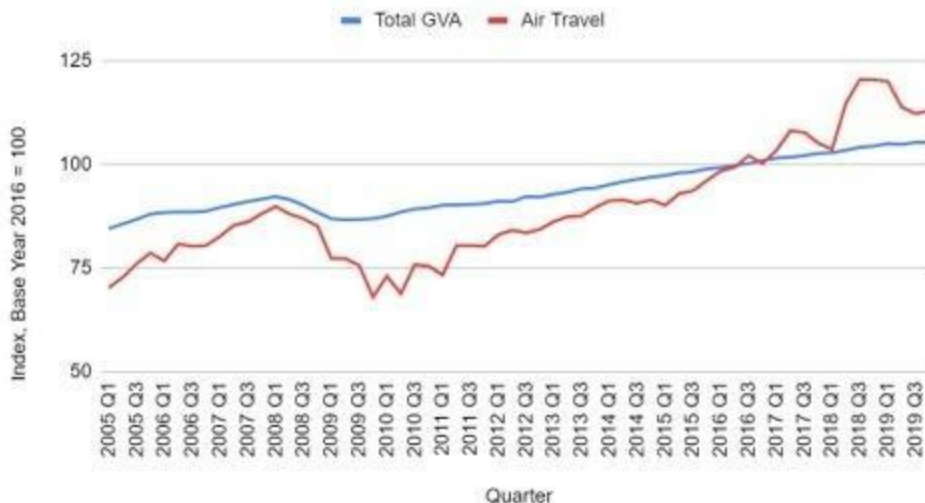
However, jet fuel is more expensive when the pound is weak



- Generally, alternates between positive and negative, showing a usual lag in jet fuel price between the UK and USA.
- Notable large spikes in April 08 and August 16, which are periods of interest to us, the recession and referendum respectively. This indicates fuel is more expensive for the UK paying in sterling, which would have a negative effect on the industry in the UK.
- All UK airlines affected similarly, this would limit the UK's industry relative to European and American industries, since all flights require having fuel.

After recession freefall, the air travel industry is becoming a larger influence on GDP

GDP Index (CVM) - Source ONS



- In 2016, the air travel industry direct contributes £22.3bn (1.5%) to total GDP, supporting 341,000 high productivity jobs, contributing £8.7bn in taxes.
- The decline of the industry during and after the recession was longer and steeper, taking a long time to recover. Measures were put in place to 'kick-start' the industry again like the EU-US Open Skies Agreement.
- The referendum has very little effect on the air travel industry's contribution to GDP.
- We see a decline today, maybe due to Thomas Cook collapsing, and the Boeing 737 MAX groundings.

## Key Takeaways

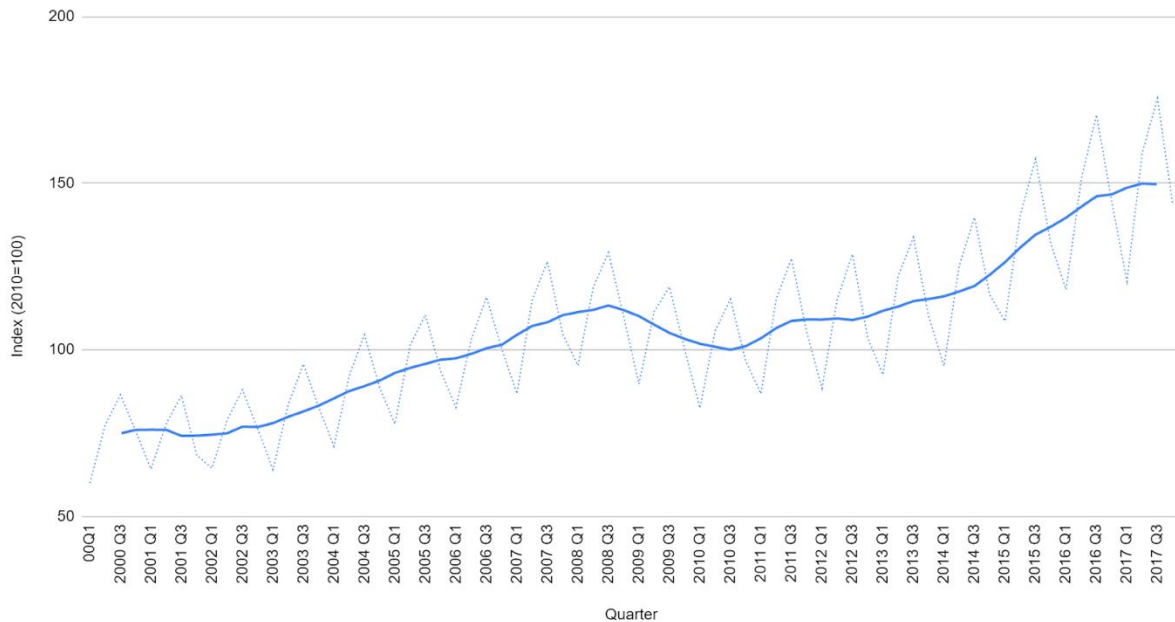
- Seemingly little dependence on the depreciation of the pound itself. Similar amounts of depreciation were seen in the recession and referendum; however, the recession was much more damaging to the industry.
- The event that caused the depreciation has a much greater effect. In the recession people didn't have much disposable income, so either people didn't go on holidays, or used cheaper alternatives. Post-referendum, little change can be seen.
- Looking forwards, the coronavirus has had a much worse impact on the industry, with easyJet and IAG stocks falling up to 30%, staff on pay freeze and hundreds of flights cancelled. Also, Flybe are on the brink of collapse due to lack of demand.
- Also, the rise of environmentalism against airport expansions (e.g. Heathrow's 3<sup>rd</sup> runway and Bristol airport) threaten to bottleneck the industry and limit its growth, so more sustainable long-term action plans for the industry are required.



## Accommodation Industry Revenue

Figure 1 - Revenue Decreases when Sterling Depreciates

Source - Eurostat



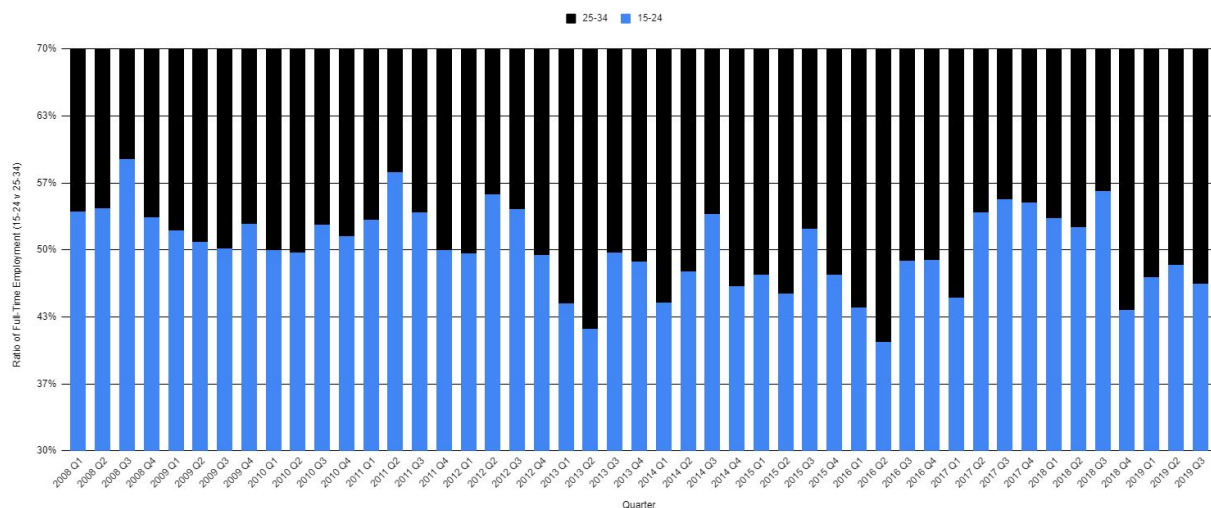
The 2008 depreciation of sterling caused a decrease in revenue generated by the accommodation industry. This is due to much of the western world entering financial difficulties during this period. Due to the recession many people lost jobs or received pay cuts meaning they had less disposable income to be spent on holidays. Many businesses reduced the amount of non-vital travel that was undertaken, resulting in a decrease in demand for accommodation.

The most recent data on the chart suggests a potential contraction in revenue growth. Since this data runs for six quarters after the referendum, when most of the depreciation of sterling occurred, it is unlikely that an overall contraction occurred in 2018. Unlike the 2008 depreciation of sterling where many other currencies depreciated too, the depreciation was isolated to just the UK. This meant that the UK became a cheaper place for foreign nationals to visit and that visiting other countries would be more expensive for UK residents, relatively. The result of this should mean more people choosing to holiday in the UK.

Due to the political uncertainty caused by the 2016 referendum, some businesses choose to cut back or suspend investment in the UK. This resulted in less business travel to the UK and would account for some contraction in growth.

# Employment

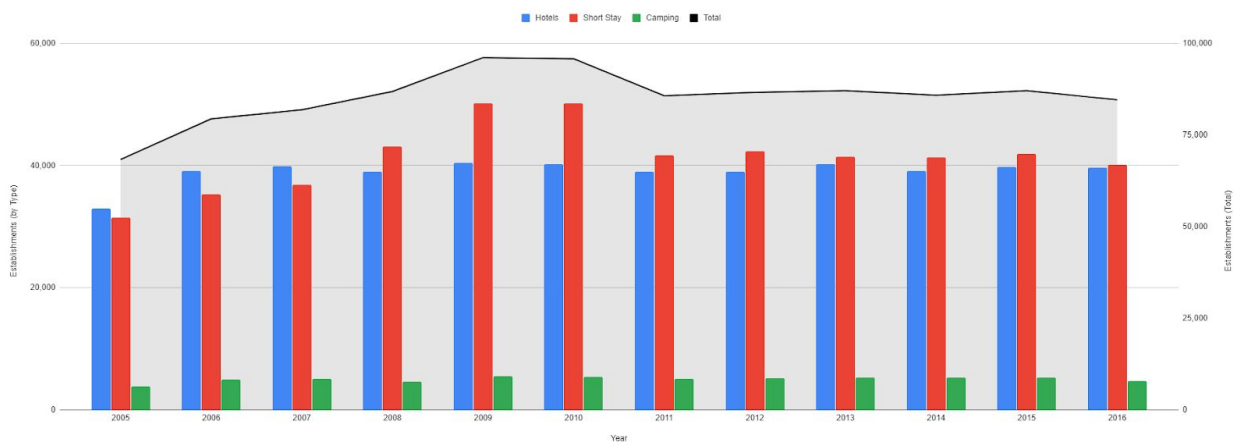
Figure 3 - Younger employees are preferred in periods following depreciation of sterling.  
Source - EuroStat



Employment figures show a reduction in total employment around a year after the start of the 2008 recession & 2016 referendum. This is due to businesses choosing not to renew contracts as they scaled back their operations. A breakdown of employment by age during these periods show an increase in the proportion of workers aged 15-24 compared to those aged 25-34. These younger employees typically demand lower wages and are less skilled, showing businesses were choosing reduced expenditure over greater expertise.

## Accommodation Space

Figure 4 - Short Stay Establishments peaked after depreciation of Sterling

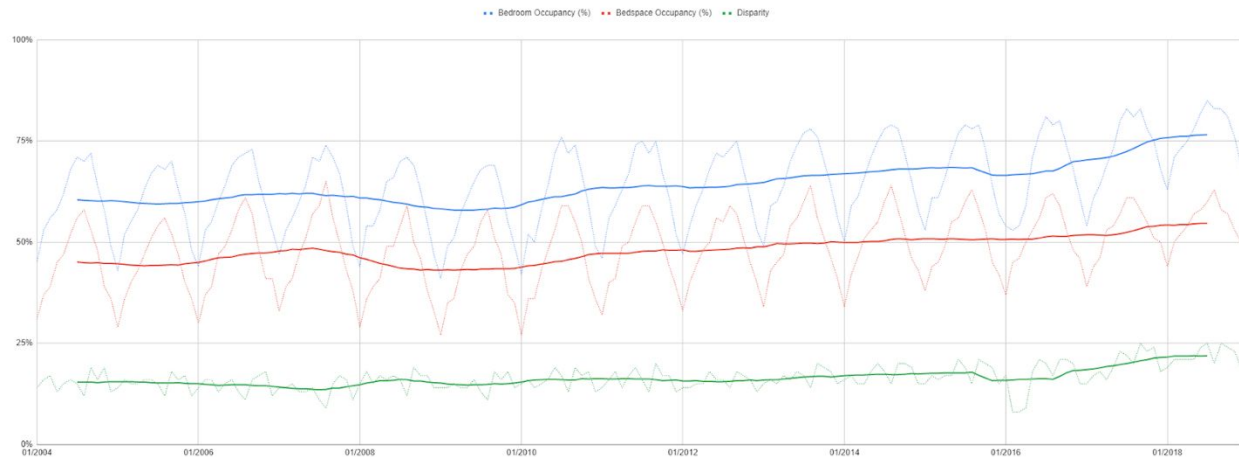


The total number of accommodation establishments in the UK saw little growth between 2005 and 2016 as the UK accommodation industry is well established. A peak occurred during 2009-2010 due to the number of short-stay establishments increasing for this period. In this period individuals (and, to a lesser extent, businesses) were looking for cheaper choices for accommodation. And individuals were looking to new sources of income in order to become more financially stable. Some of these individuals chose to open their homes as B&Bs (or similar establishments) as it would fulfil both these desires. As people became more financially

stable during 2010-11 demand for cheap accommodation and extra income decreased, and with it these establishments closed too.

## Occupancy Rates

Figure 5 - Occupancy Rates decreased after 2008 and increased after 2016 referendum.  
Source - VisitBritain



Occupancy rates increased in the UK during the period 2004-2018. After the 2008 depreciation of sterling both occupancy rates decreased due to the recession affecting much of the western world (which accounts for a large proportion of the UK accommodation market). Bedspace rates reduced more than bedroom rates, meaning people were booking rooms with more beds than required. This is due to families reducing the nights they spent at hotels, whilst people travelling for business did not do so as much as their trips were more vital.

Occupancy rates dropped in the build-up to the 2016 referendum due to people choosing to postpone trips due to uncertainty around the immediate ramifications. In the wake of the 2016 depreciation of sterling occupancy rates increased as this depreciation was isolated to the UK, thus making it cheaper for people to visit.

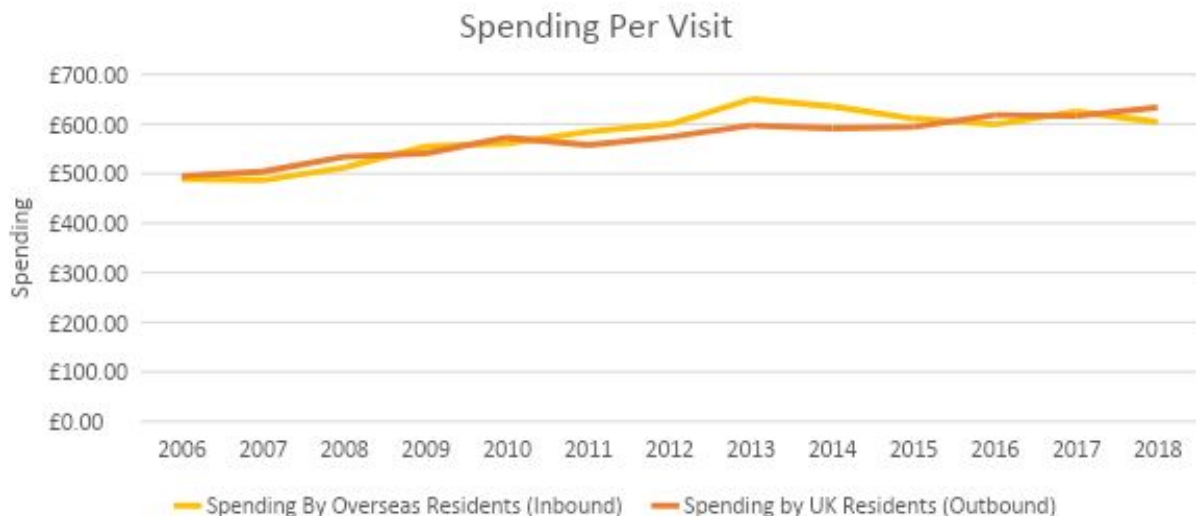
## Key Takeaways

- 2008 depreciation caused a contraction in the accommodation industry as many western nations fell into a recession.
- 2016 depreciation caused an expansion in the industry as it was isolated to sterling, making it cheaper for foreign nationals to visit.
- Employment numbers take a year to decrease after a depreciation.
- During depreciations of sterling businesses choose to hire younger, cheaper employees over experienced older employees.

## Tourist consumer spending – Adam

General consumer spending in the realm of tourism may provide well-reasoned insights within the constantly morphing sector. We will take two approaches when analysing the available data. First a high-level approach will be taken, exploring the trends for overall consumer spending. We will then take a far granular approach exploring each individual industry affected by tourism.

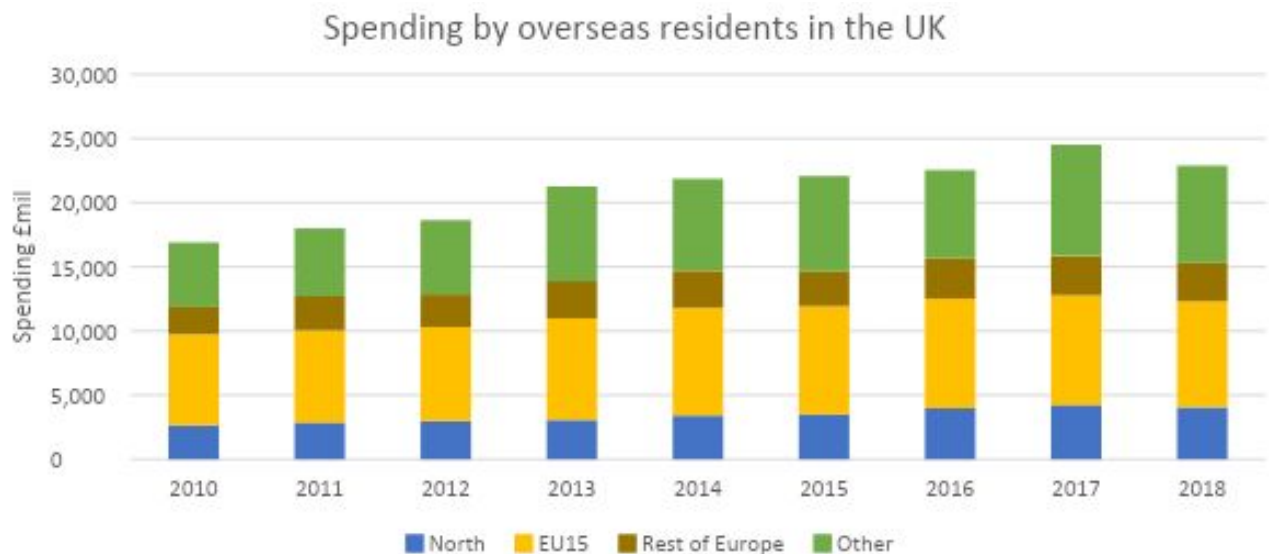
### General Spending Per Visit



To get a broader idea on the effects of the value of the pound, we look at the 'Overseas travel and tourism' dataset. We can first look at general expenditure data ranging from 2006 to 2018. To account for a potential increase in visits to the UK, the spending figures have been scaled to reflect spending per visit. Looking at the above figure, we can't see anything extraordinary. There is a general upward trend but no real noticeable perturbations around the two key periods of depreciation.

Within this same data set we can see estimates of earnings and expenditure for trips for ten consecutive years for individual regions, detailing trips completed by UK citizens abroad and trips completed by overseas residents within the UK. We will split the analysis into those two groups.

## Spending Within the UK by Overseas Residents (Inbound)

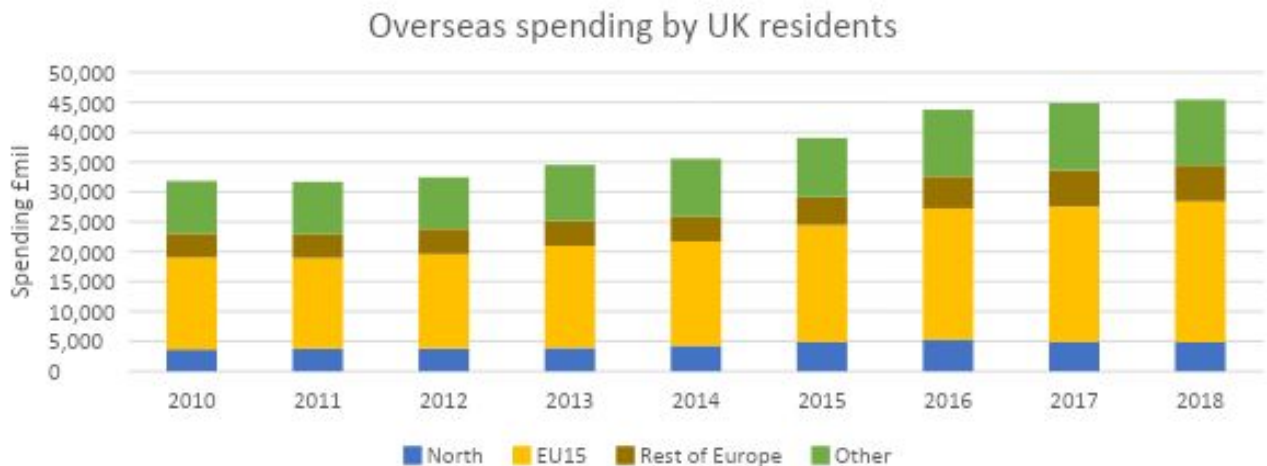


The above shows that nothing highly drastic has occurred, aside from the overall upwards trajectory for spending.

Focusing on around the period of depreciation (circa 2016), we do, however, see a large increase in spending jumping by from £22.5b to £24.5b – an overall increase by 8.7%. This is one of the largest overall increases, second only to the 14% increase from 2012 to 2013. We can see this was predominantly led by a stronger than normal performance from outside of North America or Europe. One can find this is understandable as the news of the Brexit vote may have had a more adverse effect on countries more closely connected to the process than those further removed (e.g. China).

It may also be interesting to note that expenditure decreased in 2018 for the first time since 2010. This could suggest the existence of some time-lagged relationship between expenditure and strength of the pound sterling. One, however, should exercise extreme caution when making such a hypothesis as many other factors are bound to be involved in this dip. It could simply be the result of a re-equilibration following an abnormally strong year.

## Spending in Overseas Countries by UK Residents (Outbound)



Now taking the reverse and looking at spending by UK citizens, we see a much more significant overall increase. This trend accelerates as it approaches 2016, with the greatest difference occurring that year 2016. There was a significant jump in expenditure by £4.7 billion, producing a 12.2% overall increase. After this period, we see a slowing in expenditure growth but, nevertheless, still an overall growth. This expansion is mainly the result of growing expenditure within the EU15. This may be driven by the decreasing costs for inter-EU flights

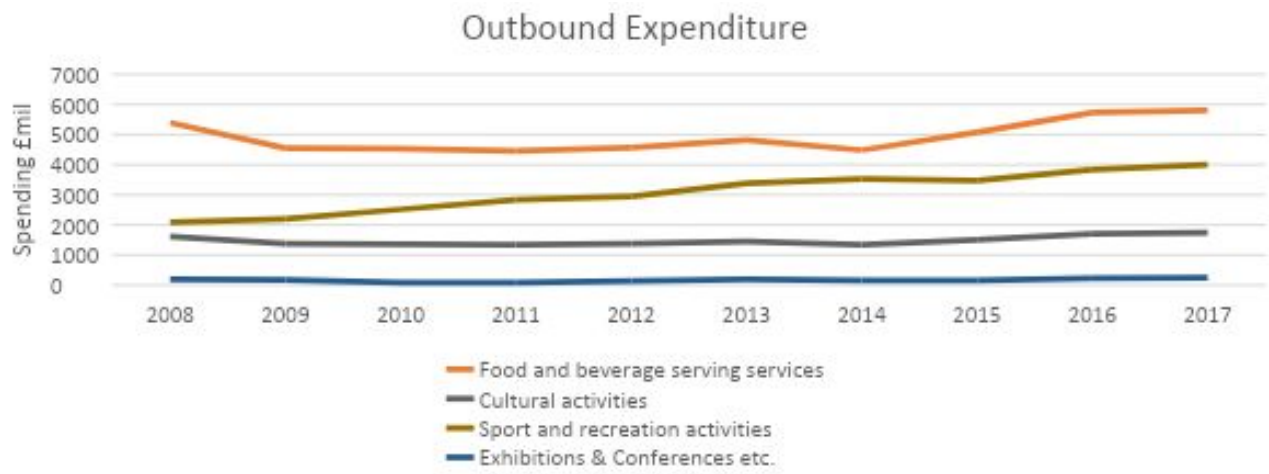
## Industry Specific Trends

Having an understanding of the overall change will of course be beneficial to large amounts of people. It may, however, be more useful for some to understand this at a more granular level – observing the implications of the pound on the financial climate of specific industries within tourism. These industries can range from all forms of transport, although more commonly public transport, to the more stereotypical tourist activities like cultural sights. Four industries critical to the tourism industry and that will be explored are **Food and Beverage**, **Cultural Activities**, **Sport and Recreation**, and **Exhibitions and Conferences**. The analysis of these is largely based on data provided by the UK Tourism Satellite Accounts. We combine the annual reports from 2008 to 2017 to provide a wide spanning and comprehensive account of the landscape. The foundations of this dataset are taken from International Passenger Survey (IPS). Although this provides invaluable detail into tourism trends, an estimation needs to be made to provide the industry level breakdown. These estimates are derived from the annual ONS Supply and Use Tables (SUTs)

We again look at each of the industries for two different cases: UK residents spending overseas (outbound) and overseas residents spending in the UK (inbound).

## Outbound

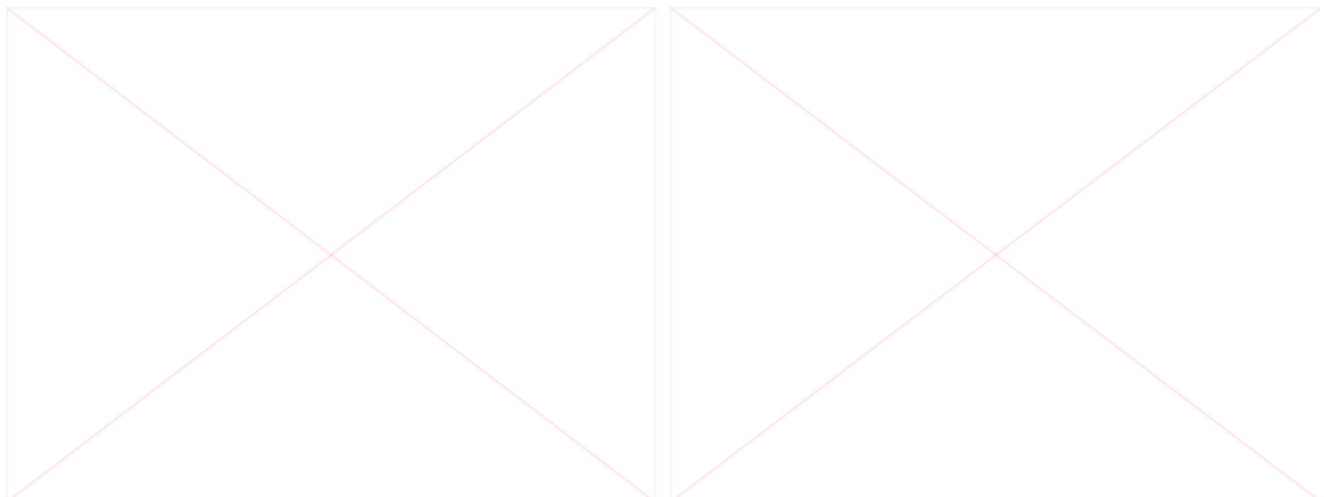
Starting with the former, we can see a very muddled and unclear trends (although generally upwards). Focusing more around 2016, we don't see much to be interested about. Although an increase for both **Food and Beverage**, and **Sport and Recreation** this isn't exactly a dramatic result. **Cultural Activities**, and **Exhibitions and Conferences** also see fairly bland results with little insight to be drawn. There appears to be a seeming invariance within these industries with respect to the depreciation of the pound during the tumultuous time following on from the Brexit vote.



## Inbound

When observing the reverse case, we do however see a relatively large jump from 2016 to 2017 in every single industry:

- **Food and Beverage** - 10.8%,
- **Cultural Activities** - 11.9%,
- **Sport and Recreation** - 34.2%,
- **Exhibitions and Conferences** - 12.0%





## Travel Agencies / Tour Operators – Fintan

Travel Agencies and Tour Operators remain one of the main ways consumers book holidays and trips abroad. Despite structural changes in this market due to the rise of the internet, changes in activities and revenues of travel agents and tour operators offer insight into how general demand for holidays has changed. Where this data is helpful is that revenues of UK tour operators and travel agents are likely being driven by UK consumers. This is useful to isolate the effect of UK demand and how this has responded to changes in the value of sterling. This section covers the background of the sector, provides insight into the data on sector activities and revenues and provides some comparison between 2007-2009 changes in the value of sterling and similar changes in the run up and immediately after the UK's vote to leave the EU.

### Background

The general theme for Travel Agencies, Tour Operators and similar services in the UK economy over the past year has been one of difficulty. Thomas Cook's collapse in October 2019 and the financial difficulties of On The Beach and Hostelworld, as reported by the FT in March 2019<sup>1</sup>, fit into a broader picture of changing consumer habits. Consumers are more likely than ever to book directly and arrange their own travel plans<sup>2</sup>, which has put pressure on the travel agency industry to innovate and move away from traditional high-street stores. However, where the traditional high-street sector may be facing the most difficulties, the rise of the internet has allowed consumers to explore more travel options, compare and book using sites such as Expedia and has stimulated demand for more specialist trips.

### Statistical Considerations

It is likely that data on the activities of consumers whilst on holiday may suffer from a time lag. Given that consumers book holidays several months before, any change in the value of sterling can be expected to influence consumer spending patterns whilst on holiday several months in the future. The data below presents activity for tour operators, which is more likely to respond to currency changes in real time.

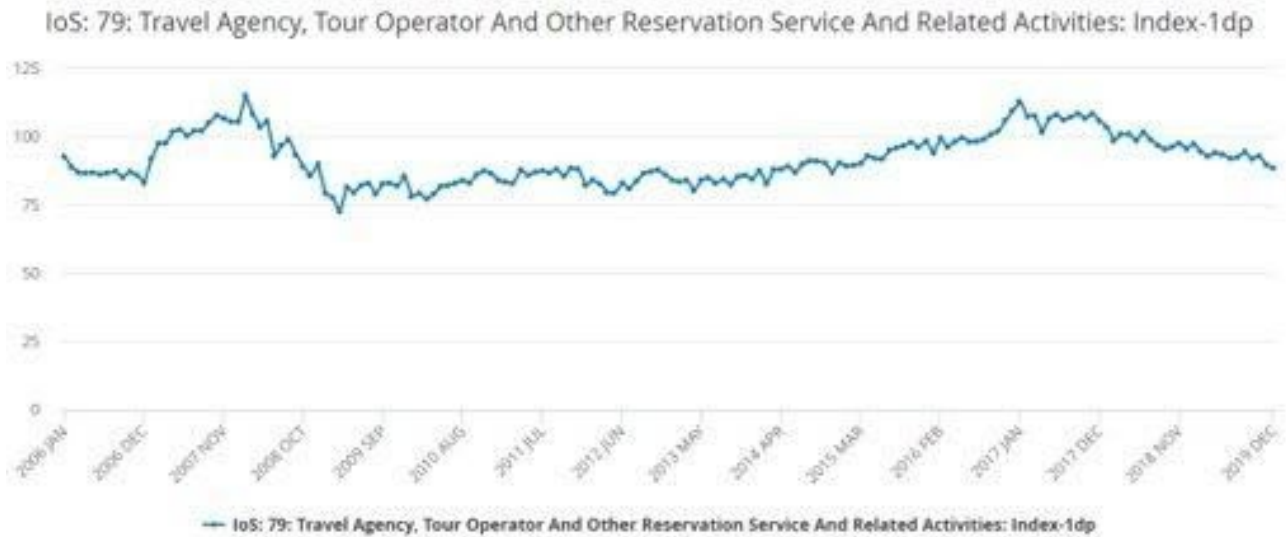
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<sup>1</sup> <https://www.ft.com/content/b0ed327e-4c9c-11e9-bbc9-6917dce3dc62>

<sup>2</sup> <https://www.ft.com/content/b25e0e62-c6ca-11e6-9043-7e34c07b46ef>



## Travel Agent / Tour Operator Activities, 2006-2019 Index



This time series suggests that between 2006 and the end of 2007 there was a significant rise in the activities in this sector. From 2008 onwards there is a sharp fall in the activities of travel agents. This sharp fall can be attributed to the recession / credit crunch. From 2010 until 2016 there is a steady rise, reaching a peak around January 2017. From January 2017 onwards there is a steady fall in these activities. It is likely that we can attribute the decline in activities to currency changes, yet there may also be other factors behind this change.