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**The Global Economic  
Contribution of  
TripAdvisor**

**April 2016**



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## Executive Summary

This report presents analysis undertaken by Oxford Economics, quantifying the economic impacts of TripAdvisor on the global travel economy. Extensive econometric modelling has been designed to identify both correlation and causality between TripAdvisor activity and global travel. Data were analysed from 2009-2014 across more than 100 countries. Granger Causality Tests were run to identify the power of lagged values in TripAdvisor activity to predict current values in travel while accounting for changes in economic conditions.

This statistical analysis was undertaken to test the theory that TripAdvisor's breadth of content, trusted consumer reviews, and booking facilities not only influence travel decisions but also generate incremental travel. Economic theory would suggest that these functions would produce benefits to both consumers and businesses in the form of better travel experiences, an improved product, business rewards for quality, and emboldened booking decisions. Indeed, extensive modelling has shown the effects of TripAdvisor content to be significant.

### How does TripAdvisor impact the global tourism economy?

- TripAdvisor content influenced 352 million trips in 2014. This translates to 13.2% of international inbound and 7.7% of domestic travel, worldwide.
- Globally, TripAdvisor generated 22 million trips and 352 million visitor nights (including both new trips and extended stays) in 2014. This travel would not have occurred apart from TripAdvisor content.
- The content on TripAdvisor sites influenced \$478 billion of travel spending in 2014. This includes \$64 billion of incremental travel expenditures generated by TripAdvisor (\$28 billion international and \$36 billion domestic).
- 1.9 million jobs were sustained by the travel spending generated by TripAdvisor in 2014.

Influenced travel			
	Trips (mn)	Nights (mn)	Spend (US\$bn)
<b>Total</b>	352	1,892	478
<b>Inbound</b>	144	842	190
<b>Domestic</b>	208	1,050	288
Additional travel			
	Trips (mn)	Nights (mn)	Spend (US\$bn)
<b>Total</b>	22	352	64
<b>Inbound</b>	8	162	28
<b>Domestic</b>	14	189	36

### How large is TripAdvisor in the global online market place?

- TripAdvisor accounts for nearly 11% of the global online travel market.

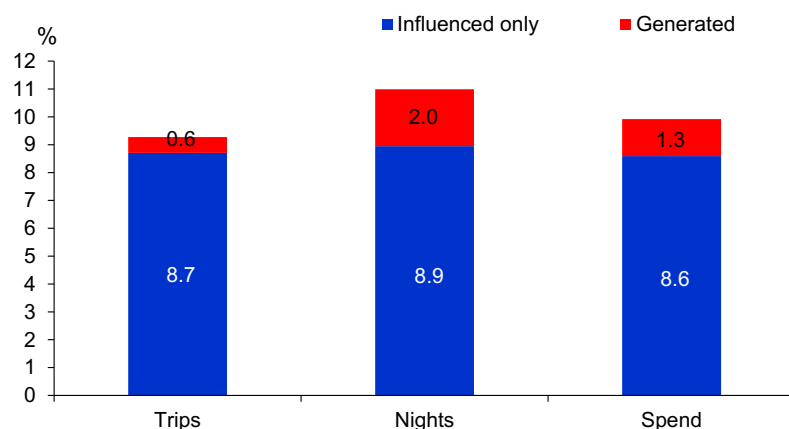
### What is TripAdvisor's impact on global visitor nights?

- TripAdvisor influenced a total of 1.9 billion visitor nights in 2014 (10.9% of total).
- 352 million visitor nights would not have taken place without TripAdvisor in 2014 (2.0% of total).

### What is TripAdvisor's impact on global trips?

- TripAdvisor influenced a total of 352 million overnight trips in 2014 (9.3% of total).
- 22 million overnight trips would not have taken place without TripAdvisor in 2014 (0.6% of total).

### TripAdvisor 'influenced' and 'generated' % of total travel market, 2014



Source: Oxford Economics, TripAdvisor

### What is TripAdvisor's impact on global visitor spending?

- \$64 billion generated spend would not have taken place without TripAdvisor in 2014 (1.3% of total). There are multiple factors at work, including positive impacts on new trips and extended average length of stay as well as fixed cost savings and a reduction in average daily spend.
- TripAdvisor influenced a total of \$478 billion global spend in 2014 (9.9% of total).

### What proportion of growth in trips does TripAdvisor influence?

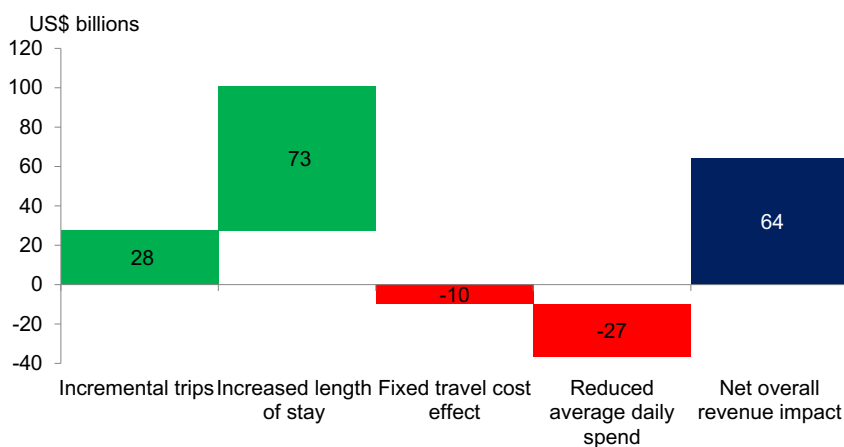
TripAdvisor has an even greater influence when growth in travel metrics in recent years is considered.

- 22% of all growth in nights over 2011 to 2014 was influenced by TripAdvisor.

### What is the composition of TripAdvisor's travel spending effect?

- TripAdvisor sites generated \$64 billion in travel spending around the world because of its breadth of trusted content.
- This consists of positive contributions from an increase in trips (\$28 billion) and an increase in the average length of stay (\$73 billion).
- The net revenue impact is lower than these positive impacts due to counterbalancing reductions in average daily spend. The effective reduction in spend per night from fixed travel costs accounts for approximately \$10 billion.
- There is an estimated further \$27 billion reduction in revenue from lower daily spending.

### Components of net revenue impact in 2014



Source: Oxford Economics

### How many jobs are supported by TripAdvisor?

- Over 1.9 million jobs were sustained by the travel spending generated by TripAdvisor in 2014. This includes induced and indirect jobs (through supply chains and spending) as well as those directly generated.

A separate Supporting Technical Document summarises various appendices and econometric work. References to Appendices refer to that separate document.

# 1 The global reach and effect of TripAdvisor

## What is TripAdvisor's share of the online travel market?

- TripAdvisor accounts for nearly 11% of the global online travel market with higher penetration in some large developed markets such as North America (16%) and Europe (15%).
- Global property listings on TripAdvisor have risen from less than 535,000 in 2009 to 3.59 million in 2014.

## How does this growth in TripAdvisor reviews impact on the tourism economy?

- Travellers are emboldened by additional transparency and trusted reviews provided by TripAdvisor as the internet has become a key source in the travel decision-making process. Additional trips are taken with clear benefits for the consumer.
- Industry benefits from increased revenue as well as clearer channels of communication with travellers allowing some smaller operators to compete more easily.

## Has TripAdvisor promoted a greater sense of confidence in travel?

- Reviews have a clear causal impact on the volume, and nature, of trips taken. Clearer information helps travellers with decision making and gives an understanding of the true nature of a destination before making a trip.
- TripAdvisor review scores generate a return for quality as higher scores generate increased length of stay and spending. This is an incremental benefit for both consumers and the industry.

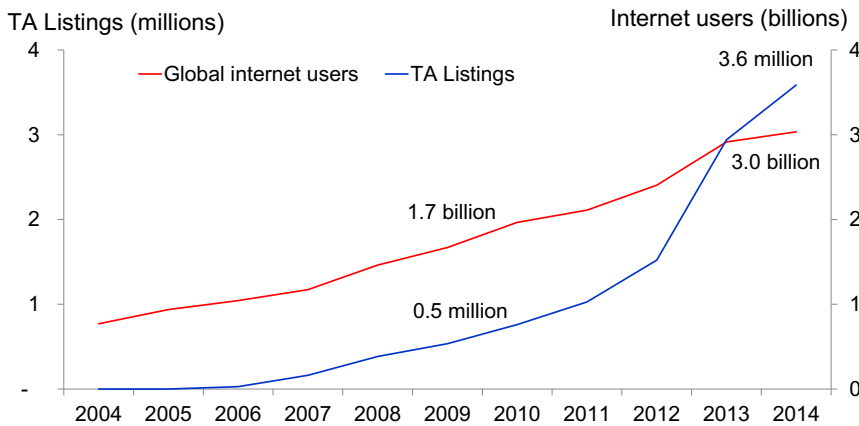
## 1.1 TripAdvisor's global reach

As internet penetration has increased over the years, it has become a more widespread resource for travel research and booking. The growth in internet users worldwide has been accompanied by greater use of the internet for travel research and booking, evident in even larger increases in TripAdvisor usage.

TripAdvisor usage has grown faster than internet penetration, as the site has taken a growing share of online traffic. Since TripAdvisor's foundation in 2000, the number of global internet users has expanded rapidly from under 400,000 users to over 3 billion. Looking at just the five year period between 2009 and 2014, the number of internet users has more than doubled from 1.7 billion to 3.0 billion.

The number of listings on TripAdvisor globally has increased more than five-fold over the same five year period from 535,000 in 2009 to 3.59 million in 2014. At the same time, the number of reviews rose more than sixteen-fold to nearly 110 million reviews compared to around 6 million as recently as 2009.

## Growth in global internet users and TripAdvisor, 2004 - 2014

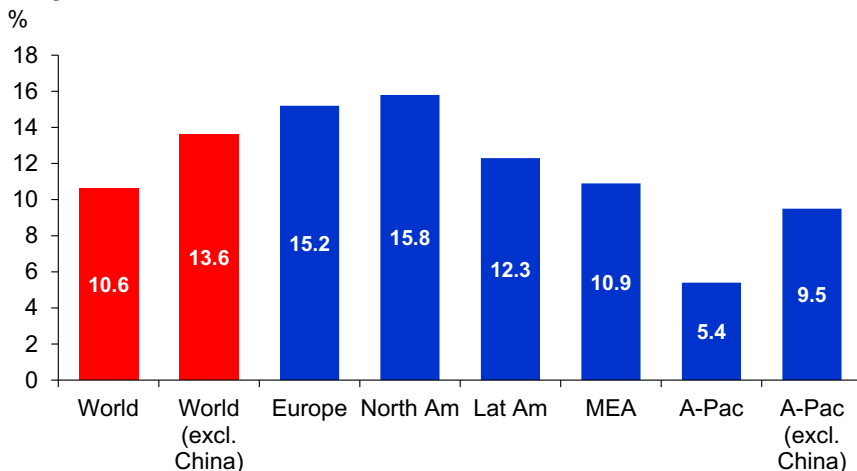


Source: Oxford Economics, TripAdvisor, Internet World Stats

TripAdvisor accounted for 10.6% of online travel activity in 2014, but with significant variation across world regions. Its market share is highest in Europe and North America, accounting for 15.2% and 15.8% of users visiting travel sites according to data reported by ComScore. Lowest market share is reported in the Asia-Pacific region, with particularly low usage in China and Hong Kong. Excluding these markets from analysis, TripAdvisor's share of the online travel market in the rest of the world is 13.6%.

This measurement of TripAdvisor market shares excludes visits to TripAdvisor affiliate sites that would further expand market share but adds some inconsistency to comparison across regions. Data for affiliates are also unavailable for the more detailed analysis of influence and additional activity in subsequent sections.

## TripAdvisor share of travel website users in 2014



Source: Oxford Economics, ComScore

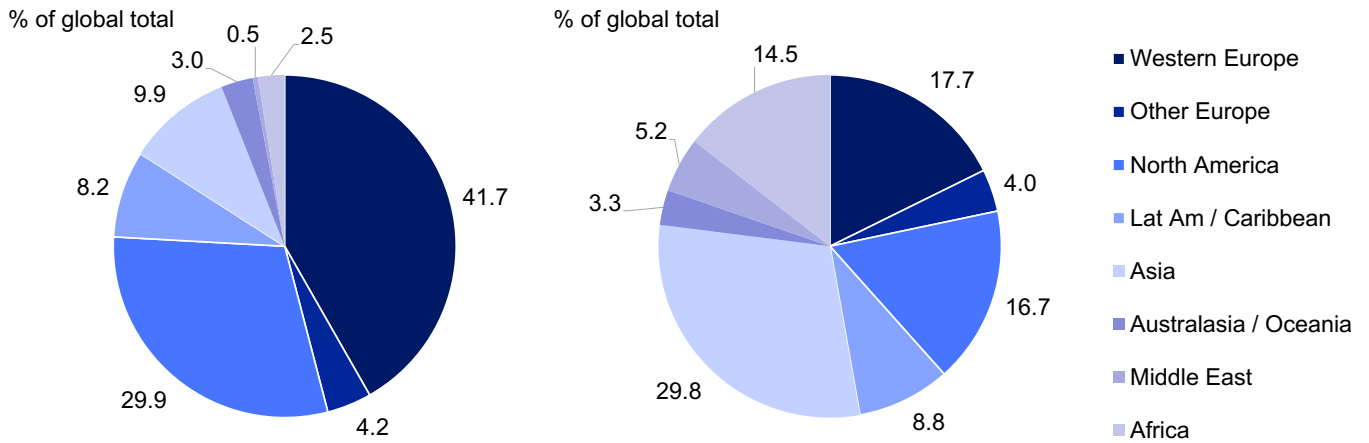
In a simple analysis, TripAdvisor influences at least this proportion of the online travel market, and likely a higher proportion. However, since TripAdvisor is not a booking platform, the majority of travellers researching destinations on the site also have to visit a travel booking site. Accounting for this double counting of visits to travel sites for research and for booking implies an even higher reach and that almost 17% of travellers using the internet for research use TripAdvisor in some way.

An initial analysis of TripAdvisor’s influence on travel suggests that the site influenced almost 10% of trips worldwide in 2014. The proportion of total travel influenced by TripAdvisor is a product of the proportion of travellers using the internet for research (around 60%) and also TripAdvisor’s share of the online market (around 17%).

A simple bottom-up approach of this sort provides a useful guide to the overall global influence but cannot accurately inform regional trends. While the online proportion of the total population is well tracked, the proportion of travellers online is harder to source accurately by country and region. There are also further complications in understanding TripAdvisor share by destination rather than source market.

It is likely that the benefit of TripAdvisor is skewed towards developed countries and notably in Western Europe and North America. These markets account for a large proportion of global TripAdvisor reviews and much larger share than they take of the global travel markets

**Share of global reviews by region    Share of global nights by region**



Source: Oxford Economics, TripAdvisor

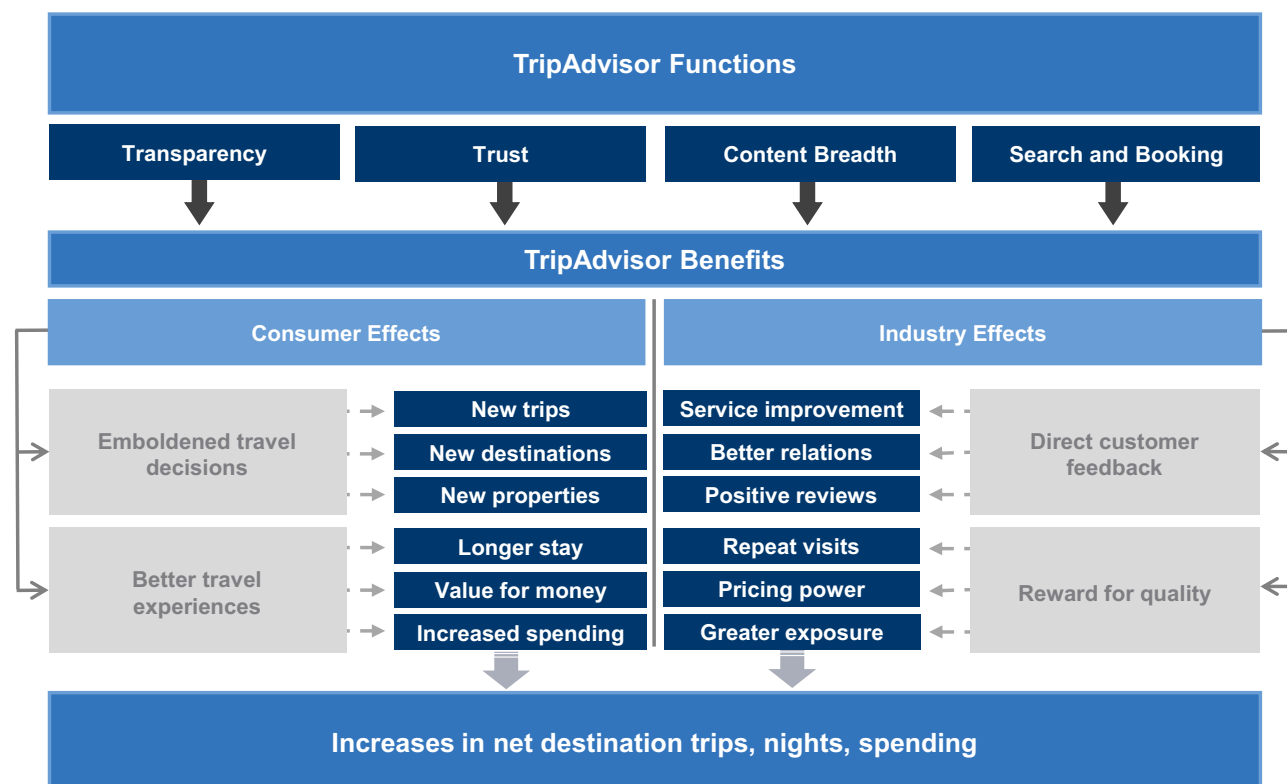
Source: Oxford Economics

Subsequent sections of this report quantify the impact of TripAdvisor on the global travel economy in further detail while the remainder of this section explores the various impacts of the site on travel behaviour and the sector.



## 1.2 How do online reviews influence the tourism economy?

The improved information flow provided by TripAdvisor benefits both the travel and tourism industry and also consumers consistent with conventional economic theory. Clearer communication and understanding of the true nature of destinations, properties and attractions allows more informed decisions and purchases. This aids market efficiency with benefits to both consumers and the industry.



Key functions served by TripAdvisor can be summarised as:

- **Transparency:** with increased information about the true nature of properties, brands and prices become less of an indicator of quality. This helps businesses compete on a more equal footing, while consumers have a clearer understanding of quality. Quality improvement and lower pricing can also ensue.
- **Trust:** in the absence of direct in person recommendations, consumers are increasingly looking to online content. Unbiased reviews from the peer group of other travellers and clearer communication channels raises trust in the information provided.
- **Breadth of content:** by supporting a broad range of properties, destinations and attractions a comprehensive view of a destination can be achieved. This facilitates comparison of properties and attractions within a destination as well as direct comparison of different destinations. TripAdvisor is a one-stop shop for travel research

- **Search and Booking:** comparison is enabled by search functions allowing easy comparison on specific terms. Links to booking sites or properties merge the research and booking process allowing stronger links between business and consumer and reducing the need for intermediaries.

Although the specific channels of impact differ for consumers and industry, the net overall impact is a clear increase in trips, overnights, and spending.

Economic theory and prior studies clearly describe the benefits that we would expect from these different functions. The *information society* has fundamentally refashioned both the way tourism-related material is distributed and the way people plan and consume travel<sup>1</sup>. In the pre-internet era tourism suppliers had little option but to make use of a relatively narrow range of traditional intermediaries such as travel agents and tour operators for their distribution functions in a market that was characterised by asymmetric information<sup>2</sup>.

### 1.2.1 Emboldened consumer travel decisions

Personal recommendations are important sources of information for potential travellers in assessing the nature of a destination or property. Since potential visitors to new destinations cannot pre-test products, perceptions formed from biased reviews or partial information not fully reflect reality<sup>3</sup>. Bad experiences whereby destinations do not live up to expectations can act as a deterrent to further travel to different destinations or smaller independent properties. Electronic word of mouth is increasingly being relied upon by potential tourists in forming images of destinations<sup>4</sup>; the next best option to a personal recommendation is an online review from a traveller with similar objectives<sup>5</sup>, including reviews hosted on TripAdvisor sites<sup>6,7</sup>.

A Eurobarometer survey suggests that information gathered from internet websites is the second most important source when making decisions about travel plans for Europeans (46%), behind only personal recommendations from friends, colleagues or relatives (56%) and that it is the single most important source in seven EEA countries.

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<sup>1</sup> D. Buhalis, R. Law – 'Twenty years on and 10 years after the internet: the state of eTourism research', *Tourism Management*, 2008.

<sup>2</sup> S. Clerides, P. Nearchou, P. Paherdees – 'Intermediaries as quality assessors: tour operators in the travel industry', *International Journal of Industrial Organization*, 26 (1), 2005, 372-392.

<sup>3</sup> W. Gartner – 'Image formation process', *Journal of Travel and Tourism Marketing*, 2 (2/3), 1993, 191-215.

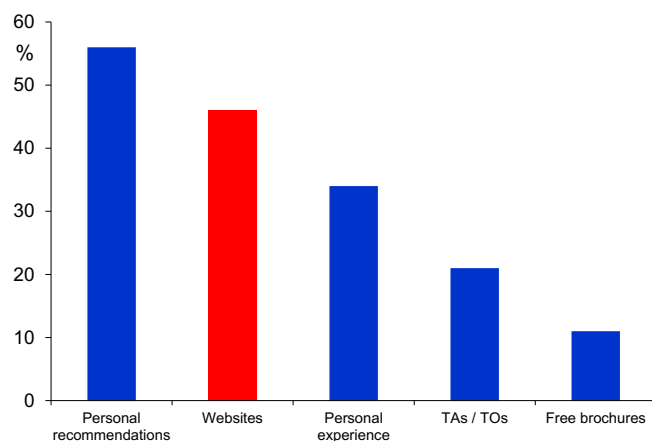
<sup>4</sup> C.H. Alcázar, M.S. Piñero, S.R. de Maya – 'The effect of user-generated content on tourist behaviour: the mediating role of destination image', *Tourism & Management Studies*, 10 (Special issue), 2014, 158-164.

<sup>5</sup> Oxford Economics – 'The impact of online content on European tourism', October 2013.

<sup>6</sup> I Jeacle, C. Carter – 'In TripAdvisor we trust: rankings, calculative regimes and systems trust', *Accounting, organizations & society*, Vol. 36, 4-5, 2011, 293 – 309.

<sup>7</sup> D. Buhalis, C. Licata – 'The future of eTourism intermediaries', *Tourism Management*, Vol 23(3), 2002, 207-220.

### Most important sources for making decisions on travel plans in EU27 (%)



Source: TNS Research / European Commission

TripAdvisor reviews help to foster a culture of greater confidence in travel amongst consumers, generating visits to new destinations and properties and even additional trips. Previous research showed that more than 80% of TripAdvisor users believed that reading other travellers' reviews increased their confidence in making tourism decisions and reduced risk and uncertainty<sup>8</sup>.

#### 1.2.2 Better travel experiences

Clearer information means that improved experiences for consumers are derived on both new trips and those that may otherwise have occurred. This benefit is technically described as an increase in consumer surplus: the value of goods and services to consumers in excess of the price paid. An increase in consumer surplus is evident if average prices fall or if the volume of consumption rises; a movement along the demand curve from a shift in the nature of supply.

TripAdvisor functions lead to increased consumer surplus from both lower prices and increased consumption including new trips and additional activities. These benefits are especially relevant where other information about destinations, properties and attractions are sparse. Literature suggests that the consumer benefits from web services in general are between 1.7<sup>9</sup> and 6<sup>10</sup> times larger than the benefits to producers while previous research for the UK suggests the ratio is around 4.5 for TripAdvisor<sup>11</sup>.

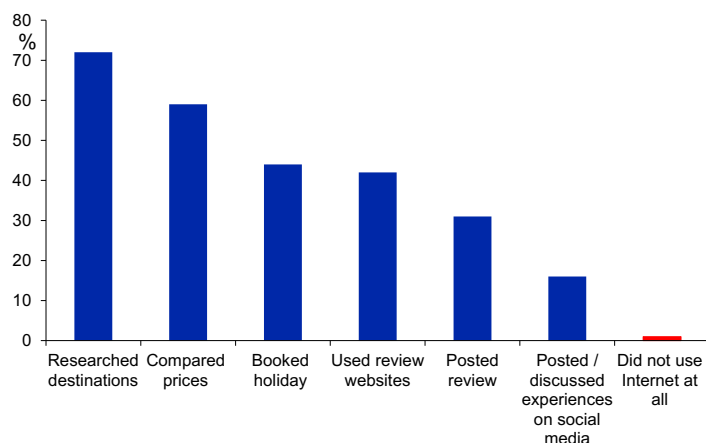
<sup>8</sup> Gretzel, Kyung & Purifoy (2007), making use of a survey with 1480 usable responses.

<sup>9</sup> IAB Europe. (2010). Consumers driving the digital uptake: The economic value of online advertising based services for consumers. IAB; Dublin.

<sup>10</sup> Goolsbee, A., & Klenow, P.J. - Valuing consumer products by the time spent using them: An application to the internet. *The Roots of Innovation*, 96(2), 108-113.

<sup>11</sup> Oxford Economics – Economic impact of TripAdvisor on the UK tourism economy, July 2012

### UK holidaymakers' use of Internet in holiday planning (%)



Source: Deloitte UK / British Travel Awards

Increased consumption can materialise as new trips are taken but also as existing travellers choose to extend their stay to visit more attractions within a destination; or otherwise to increase spending to experience all the destination has to offer.

Travellers are able to compare average prices directly across competing destinations and properties with a clearer understanding of quality. This increased competition has been seen to drive down average prices. Deloitte UK's Travel Consumer 2015 report suggests that the fact that 59% of holidaymakers compare prices online is a behaviour which became embedded in the recession of 2008-2010 as consumers were price aware and seeking value for money.

#### 1.2.3 Industry service improvements

Internet travel communities are driving higher standards in the sector with consumers facing much greater choice in their searches with increased opportunities to air dissatisfaction with travel products.

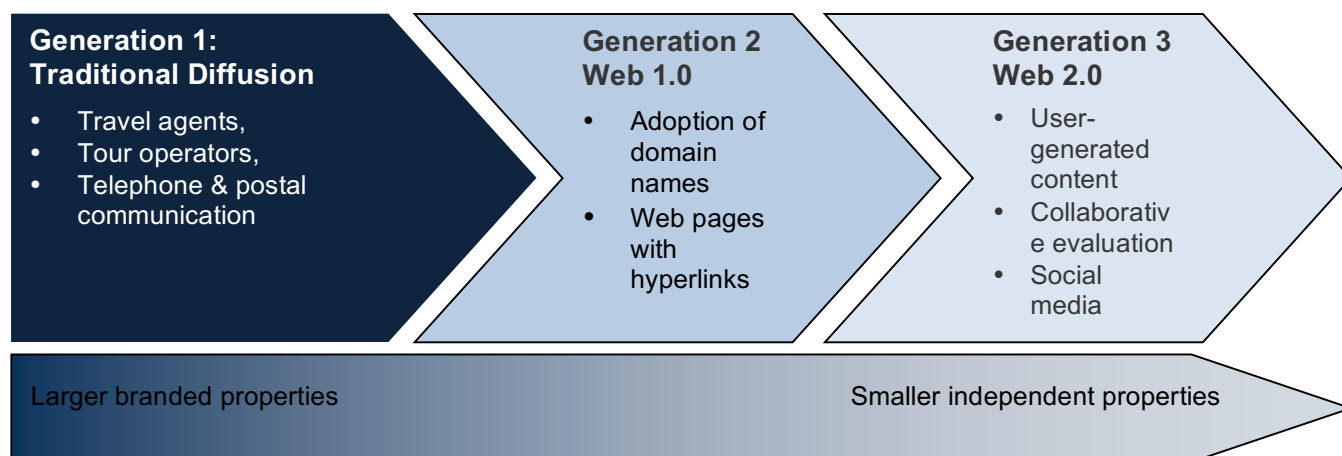
The advent of the internet has enabled a shift in travel sector supply, allowing properties not only to undertake direct distribution but also to use a range of third party online intermediaries. This has yielded greater opportunities for the consumer in terms of price and quality comparison but also helps the industry connect with previous and potential travellers. Package tourism has lost market share to independently organised travel while smaller independent businesses are increasingly able to compete.

As the internet has matured as a channel for distribution of travel-related information the benefits have clearly shifted away from larger companies and towards consumers and smaller business. There has also been an observed substitution away from hotels using traditional distribution channels and towards those making use of online channels<sup>12</sup>. Larger hotels had an advantage over smaller hotels in the early stages of internet development (Web 1.0) as there were still significant costs related to domain registration and website design and advertisement<sup>13</sup>. However, social media platforms and user generated content level the playing field and allow smaller independent businesses to compete.

<sup>12</sup> Scaglione & Schegg (2013)

<sup>13</sup> Scaglione and Schegg (2014)

Phased diffusion channels in the tourism sector<sup>14</sup>



Branding and selective photography are no longer enough to keep market share in the industry in an era of consumer-generated content. It has not only meant that service providers have to do their utmost to avoid bad reviews, they also have to engage directly with the consumer online to respond to them. Across the industry, this has a competitive effect, rewarding those establishments that are seen to represent value for money or excellence through price premia whilst discriminating against those establishments that fail to perform.

1.2.4 Reward for quality

Additional trust and the ability to make more comprehensive comparisons also translate into higher spending. Research suggests that tourists who researched their potential destinations on the internet tended to spend more money at their eventual destinations compared to those who utilised alternative information sources<sup>15</sup>. This is likely true even when accounting for demographics, incomes and differing trip motivations which also play a role in average trip spending.

An overall net positive impact can be identified for properties and destinations, offsetting the lower price pressure from increased competitiveness. Quality establishments will see the highest return and there are examples of net sales and revenue increases from increased use of online channels and TripAdvisor in particular.

Coupled with some increased volume of consumption an overall higher return to businesses in general is identified for many destinations, although performance for specific properties varies considerably. A study cited by The Caterer magazine (2009) found that TripAdvisor had an estimated effect worth £500 million per annum on corporate spend. Oxford Economics (2012) estimated that bookings made through TripAdvisor were directly related to around £1.7 billion of annual tourism spend in the UK and that the average domestic spending per trip of a UK user is more than 20% higher than the average online booking.

<sup>14</sup> Scaglione & Schegg (2014)

<sup>15</sup> Luo, Feng and Cai (2004)

### 1.3 The impact of TripAdvisor on travel confidence

Oxford Economics combined TripAdvisor data with tourism and economic data and existing modelling expertise to quantify the economic impact of TripAdvisor listings and reviews in terms of visits, nights and spend in all destinations worldwide. The associated economic benefit and employment arising from this revenue has also been determined.

Oxford Economics used extensive econometric modelling to identify and quantify the net overall effects described in the previous section. Analysis has identified both correlation and causality between TripAdvisor activity and global travel. Data were analysed from 2009-2014 across more than one hundred countries. Granger Causality Tests were run to identify the power of lagged values in TripAdvisor activity to predict current values in travel.

The Oxford Economics model utilises 3 classes of information:

1. **TripAdvisor activity** – Metrics provided by TripAdvisor on page views, reviews, property listings, review scores and 'meta-clicks' to generate bookings data. These were tested as key model drivers of tourism demand
2. **Travel activity** – The key dependent variables including domestic and international arrivals overnights and spending. Existing models track these industry performance metrics as a function of other demand drivers.
3. **Economic activity** – Oxford Economics' global macroeconomic model predicts drivers of travel activity (such as GDP, consumer spending, unemployment and exchange rates) that act as controls to changes in tourism so that any TripAdvisor impact can be isolated. In addition to these macroeconomic drivers, further indicators of online activity were included for each country to understand the specific importance of TripAdvisor distinct from more general online trends.

The modelling exercise began with Oxford Economics' existing global model of tourism flows and inserted TripAdvisor metrics to determine the influence of site relative to other factors. The existing model forecasts tourism flows according to source market demand using estimated relationships to key identified macroeconomic drivers. Source market travel is then mapped to destinations according to changes in market share.

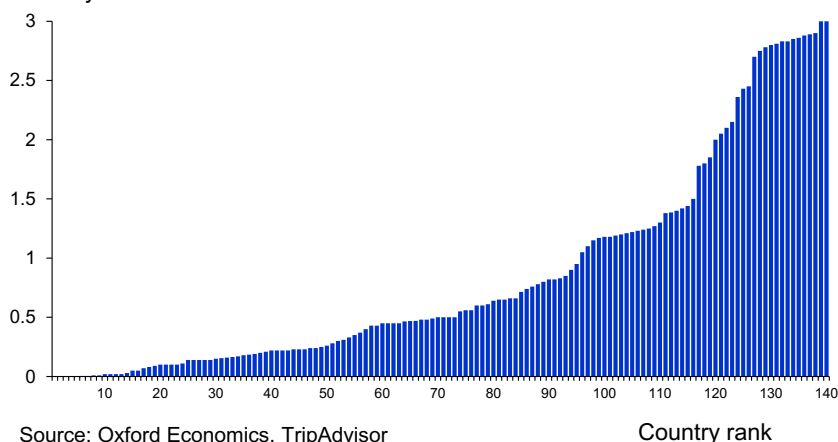
- First, we considered the extent to which TripAdvisor listings, reviews or scores influence market share and therefore performance by destination. This includes some influence on trips that would already have occurred but confirmed travel choices; replaced other sources of information; caused a shift in demand between different properties or locations within a country; or a change in share within a country.
- Next, the extent to which TripAdvisor use raised the level of demand from source markets for all destinations was tested.

Before estimating these impacts, detailed econometric tests were run to determine the validity of the supposed relationships. Statistical tests included checking for common unit roots for valid estimation and best equation format, simple correlation between the key metrics and crucially the likely causal relationships.

Correlation analysis pointed to some different relationships by country depending on the degree of economic development. The slope of the line in this relationship between TripAdvisor metrics and tourism performance analysis varies according to different groups of average income by country. Specifically we have observed a different relationship for groups of higher, lower and middle income countries.

### TripAdvisor bookings data relative to outbound spend, 2014

Intensity indicator



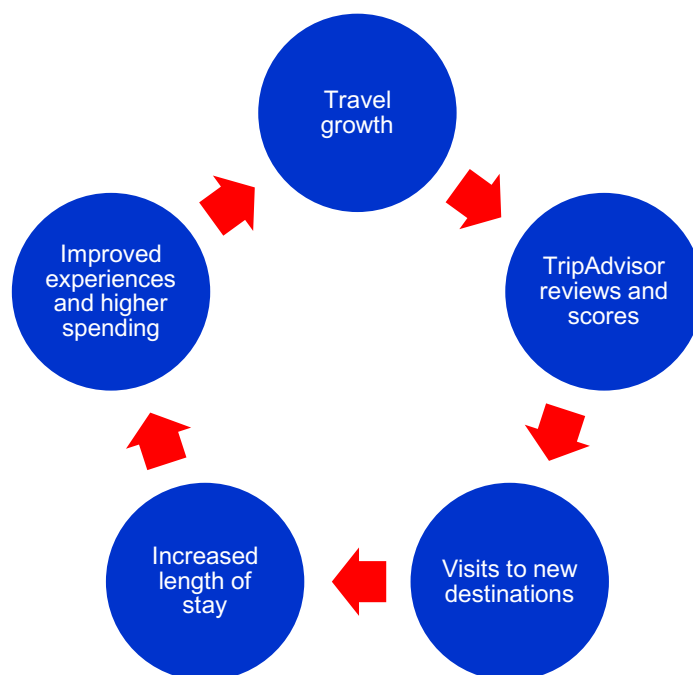
Source: Oxford Economics, TripAdvisor

This follows the standard S-curve relationship in adoption of new products or technology as more 'mature' countries make greater use of TripAdvisor relative to total tourism demand. Detailed estimation is carried out separately for the more developed 34 OECD countries, a group of 'Upper Middle Income countries' defined according to the World Bank and the rest of the world. This grouping provides stronger relationships than if estimation is for all countries combined. By using panel estimation over time and across markets stronger results can be derived to compensate for the relatively short time period for which data are available.

Causality tests using these groups show that causality runs in both directions.

- Rising travel to destinations, alongside increasing internet use, encourages an increased number of reviews being listed on TripAdvisor as travellers share experiences. Property listings are required for this.
- TripAdvisor reviews for properties and destinations influence travel decisions in subsequent periods as new information is discovered. New attractions or destinations are discovered and travellers are emboldened to try new experiences from the additional information.
- TripAdvisor review scores have a notable influence on the number of overnights taken and average length of stay. Travellers enjoy a better experience but also stay longer to experience fully destinations, attractions and properties with some increase in spending per trip. There is a clear economic benefit for a destination as well as for the traveller.

**The causal relationship between TripAdvisor and travel**



By including TripAdvisor reviews as a driver in arrivals equations we can identify the amount of influenced travel for each destination worldwide. Equation specifications in terms of historic fit are improved by this inclusion and relationships are statistically valid. Estimated relationships allow us to see the impact of TripAdvisor reviews on trips for each destination relative to other identified drivers of demand. This methodology gives a comparable global impact to a simple approach of combining estimates of the size of the online travel market and TripAdvisor's market share. The benefit of the econometric approach is that influence can more clearly be identified by destination.

The number of reviews matters for tourism performance within a destination as greater trusted information about destinations can be shared with travellers while destinations. Reviews have a stronger relationship with tourism performance than listings, page views or even average review scores. Additional information helps travellers make informed choices and raise confidence in visiting that destination. Although of course the number of listings is highly correlated with the number of reviews and property listings are required to generate the reviews.

Review scores have a clear impact on average length of stay and the number of nights spent within a destination. Scores matters for individual properties within a destination, with the best properties or well-reviewed attractions receiving a premium for quality with people staying longer to fully experience the best a destination has to offer.

Incremental demand is identified within modelling as a share of the influenced demand by looking at TripAdvisor's influence on source market demand as well as for destinations. TripAdvisor metrics for source markets are included in equations for outbound travel for each source market, alongside other indicators of online penetration by market as well as identified economic drivers. The additional effect of TripAdvisor can be estimated relative to other factors that may drive additional demand. Any substitution



effects from changes in relative destination attractiveness are also controlled for with this approach. By looking at meta-clicks and bookings for country pairs we can understand the conversion rate for additional bookings by destination.

## 2 The influence of TripAdvisor on travel volumes

### To what extent do TripAdvisor reviews impact travel volumes?

- TripAdvisor influenced more than 350 million trips in 2014; 9% of global trips in 2014. This included 13% of international trips. This proportion equates to 352 million overnight trips.

### How do impacts on domestic and international travel differ?

- 13% of inbound trips were influenced by TripAdvisor in 2014; at nearly twice the rate of domestic travel.
- Less than 8% of domestic trips were influenced by TripAdvisor as destinations tend to be better known, with a higher proportion of repeat visits and less need for online research.
- Over 200 million domestic trips were influenced by TripAdvisor in 2014 compared with less than 150 million international trips. Domestic travel markets are larger than international so the lower proportion yields a higher absolute number of trips.

### Does TripAdvisor influence travel behavior?

- Average length of stay and spending is increased as a result of TripAdvisor reviews and scores. This is true for 'existing' travel that would have otherwise occurred as well as new trips.
- Impact is higher for international travel as the benefit of increased information is strongest for lesser known destinations.

### How has TripAdvisor growth impact evolved?

- TripAdvisor has taken a growing share of online activity and has also exerted a rising influence on travel.
- TripAdvisor-influenced trips have grown faster than wider travel trends.
- The impact on overnights and spending, especially for international travel has grown even faster with a clear return to quality establishments and destinations.

### 2.1 TripAdvisor's influence on visitor volumes

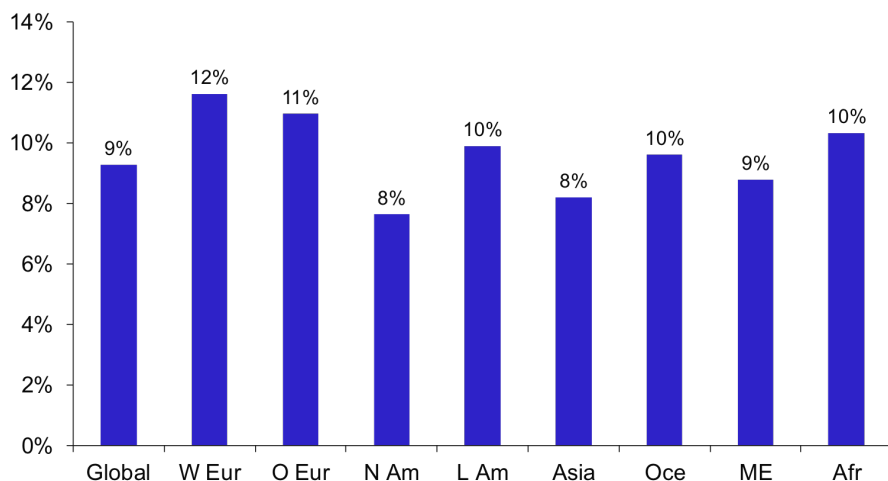
TripAdvisor influenced 352 million trips worldwide in 2014, representing more than 9% of all domestic and international trips.

The largest influence in absolute terms was in Asia with 94 million influenced trips in 2014, and the next largest influence was in Western Europe with 91 million trips. However, this differs significantly as a share of the total market. Just 8% of all travel to destinations was influenced in Asia while almost 12% of all travel to Western Europe was influenced. The relative size of the travel market in these regions is a factor in the volume of influenced trips.

A large influence is also estimated for North America touching 70 million trips or 8% of all travel. Though TripAdvisor maintains a large share of online travel activity, these users are researching destinations both

within and beyond North America, and influence is therefore more widely distributed across regions. The relatively high importance of domestic travel within North America is also a factor in this lower share.

### TripAdvisor influenced trips in 2014 by region



Source: Oxford Economics, TripAdvisor

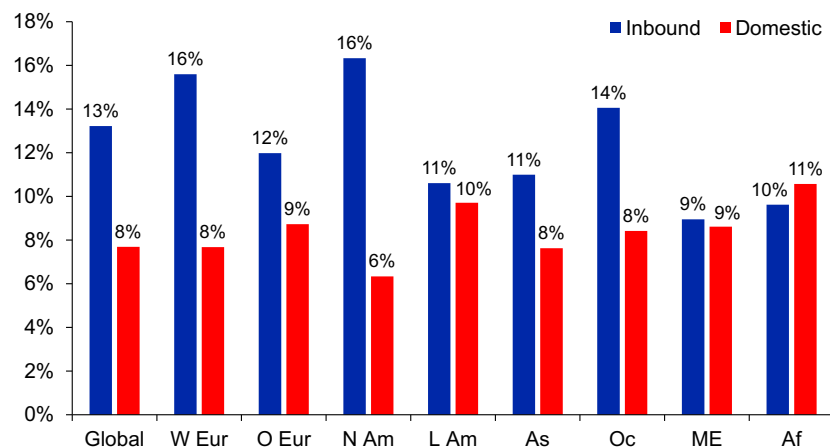
Influence is determined as trips involving anyone who has accessed TripAdvisor to research a destination or specific hotel or restaurant. Some of these people may leave TripAdvisor to go to a booking site and immediately book travel, while others may have previous choices confirmed. Not all of these people can be claimed to represent additional, 'generated' travel. In the pre-internet era many of these people might have researched destinations through guidebooks and brochures and booked through a tour operator or travel agency.

TripAdvisor influence is not just limited to online booking as a further group of people may use the platform to research choices once they have already arrived in a destination. This influence is also captured as part of the wider impact of TripAdvisor on travel and is therefore compared to the entire travel market rather than as a share of just online bookings.

## 2.2 Inbound and domestic impacts

TripAdvisor influenced 13.2% of international inbound trips and 7.7% of domestic trips in 2014. The domestic market is generally less reliant on TripAdvisor reviews as this involves more familiar destinations with a higher proportion of repeat trips than for international travel. This relationship does vary by type of market and TripAdvisor influence on domestic travel is particularly low for developed markets. Domestic influence is comparable to international for emerging markets.

### TripAdvisor influenced trips in 2014 by region



Source: Oxford Economics, TripAdvisor

Although the share of the domestic market is smaller in general, the volume of over 200 influenced trips is larger than the less than 150 in influenced international trips. This is because domestic travel markets are much larger than the number of international trips. In 2014, there were around 1.1 billion international trips taken relative to around 2.7 billion domestic overnight trips. This is only measuring trips including an overnight in paid accommodation as this definition provides the most reliable data and is also the type of trip most likely to be influenced by TripAdvisor. Day visits or stays with friends or relatives are typically of lower value and will have limited impact from TripAdvisor; the estimates within this report are representative of the overall impact of TripAdvisor.

The largest difference between inbound and domestic influence of TripAdvisor is in North America; 16% of inbound trips were influenced compared with only 6% of domestic trips in North America. The inbound influence is high, drawing on a mix of developed and emerging markets while domestic influence is relatively low. However, given the size of the US domestic market, this still relates to over 50 million trips in 2014, a larger volume than any region apart from Asia. The 16% of inbound trips influenced equates to 20 million trips.

Influenced inbound trips were largest in Western Europe, by a long way, at 61 million trips in 2014. The next largest influenced inbound markets were in Other Europe and Asia at 22 million trips in each region.

### 2.3 TripAdvisor's influence on visitor nights

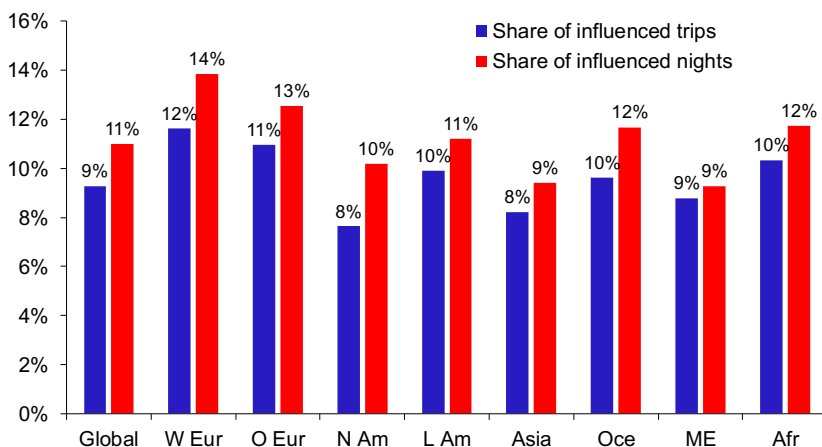
TripAdvisor influenced 11% of global visitor nights in 2014, a higher proportion than the 9% of trips influenced. As competition drives up average review scores for a destination there is an associated increase in average length of stay and a higher influence is evident in terms of the share of nights than trips. Average review score was found to be an important explanatory indicator of nights and average length of stay.

This higher impact in terms of nights than trips involves two effects related to the different ways TripAdvisor reviews can influence travel. First some new trips will be taken due to raised travel confidence, and length of stay may differ from other trips.

Second, trips that would otherwise have taken place but are influenced in some way by TripAdvisor involve a higher length of stay than other travel. Additional information from reviews, and higher scores for specific properties and attractions, encourage visitors to visit more attractions or otherwise stay longer within a destination to experience all that it has to offer.

This premium on nights is higher for international visits than for domestic travel. There is a greater return to destinations from international markets for a higher review score in terms of nights and spending than there is for domestic markets. This is also consistent with the lower domestic influence in these mature markets as less research is required. By contrast, for emerging markets, there is less knowledge of domestic markets as it is a less common behaviour so there is a larger return from domestic travel.

### TripAdvisor influenced travel in 2014 by region

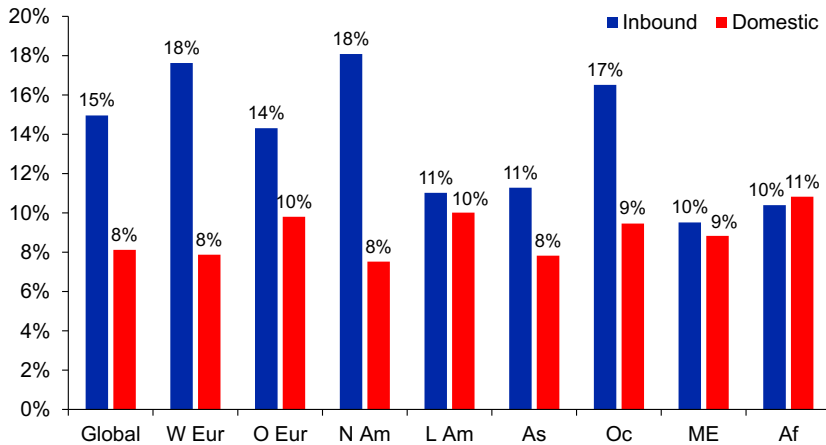


Source: Oxford Economics, TripAdvisor

## 2.4 Spending impacts

TripAdvisor influenced 10% of spending in global destinations in 2014, a higher proportion than the 9% of trips influenced. There is a clear premium on spending and destination revenue as reviews better identify quality destinations with more emboldened travellers. The overall impact is that TripAdvisor influence is related to higher spend per trip than for other travel.

### TripAdvisor influenced spend in 2014 by region



Source: Oxford Economics, TripAdvisor

Consistent with theory there are two competing effects here as the increased value derived by consumers from the increased information drives down prices, while a premium for quality leads to an increase in price for some properties. In general it is estimated that there is a fall in spending per night, but the additional benefits characterised by higher length of stay mean that overall spend per trip rises.

Influenced spending varies significantly according to domestic and inbound travel. There is more of a premium for spending over trips for inbound travel consistent with the fact that greater research is required for less well-known destinations. On average across all destinations, the influence on domestic spending is only marginally above the influence on trips. There is a higher spending premium for international trips. More of a premium for quality establishments is evident for international travel, consistent with the additional impact on average length of stay. TripAdvisor allows a greater impact in terms of price and quality comparison for domestic travel.

Western Europe is an apparent outlier since the proportion of influenced spending is 10.8%; a lower proportion than influenced trips at 11.6%. However, this is a peculiarity arising from the composition of travel demand. Consistent with all other regions, spending influence is higher than trips influence for both domestic trips and inbound. However, due to low average spend per trip on domestic travel, taking a weighted average provides the lower influence.

TripAdvisor influence by region: percentage and volumes

TripAdvisor Influence						
Percentage of total travel influenced by TripAdvisor				Volume of total travel influenced by TripAdvisor		
Total	Visits	Nights	Spend	Visits (mn)	Nights (mn)	Spend (US\$bn)
Global	9.3%	11.0%	9.9%	352	1,892	478
Western Europe	11.6%	13.8%	10.8%	91	478	157
Other Europe	11.0%	12.5%	12.0%	30	99	32
North America	7.6%	10.2%	9.6%	70	334	108
Latin America	9.9%	11.2%	10.2%	27	194	32
Asia	8.2%	9.4%	8.5%	94	513	110
Oceania	9.6%	11.7%	11.2%	5	50	13
Middle East	8.8%	9.3%	9.2%	9	77	12
Africa	10.3%	11.7%	10.7%	27	146	15
Inbound	Visits	Nights	Spend	Visits (mn)	Nights (mn)	Spend (US\$bn)
Global	13.2%	15.1%	15.0%	144	842	190
Western Europe	15.6%	18.4%	17.6%	61	330	77
Other Europe	12.0%	15.3%	14.3%	22	53	18
North America	16.3%	19.1%	18.1%	20	126	41
Latin America	10.6%	13.9%	11.0%	6	67	8
Asia	11.0%	12.0%	11.3%	22	152	29
Oceania	14.1%	17.4%	16.5%	1	20	5
Middle East	8.9%	9.6%	9.5%	5	47	6
Africa	9.6%	11.6%	10.4%	6	47	5
Domestic	Visits	Nights	Spend	Visits (mn)	Nights (mn)	Spend (US\$bn)
Global	7.7%	9.0%	8.1%	208	1,050	288
Western Europe	7.7%	8.9%	7.9%	30	148	80
Other Europe	8.7%	10.4%	9.8%	7	46	13
North America	6.3%	8.0%	7.5%	51	209	67
Latin America	9.7%	10.2%	10.0%	20	127	24
Asia	7.6%	8.6%	7.8%	72	362	81
Oceania	8.4%	9.6%	9.5%	3	30	9
Middle East	8.6%	8.9%	8.8%	4	30	5
Africa	10.6%	11.8%	10.8%	21	99	9

## 2.5 Impacts over time

TripAdvisor's influence has been growing over time and can be set alongside total observed growth to assess the importance of the site and its reviews and scores alongside more general expansion in travel activity. By including TripAdvisor reviews as a driver of travel by destination in modelling alongside economic drivers, the impact on growth relative to other factors, such as increasing wealth in emerging markets or economic recovery, can be determined.

The number of trips influenced by TripAdvisor has increased globally from around 310 million in 2011 to 352 million in 2014, an increase of over 40 million. This can be compared with a total of 465 million more trips being taken globally. TripAdvisor influenced growth is equivalent to over 9% of all growth seen over this period.

Influence on nights and spending has risen more rapidly than the influence on trips. This highlights the increasing benefit of TripAdvisor reviews in building travel confidence. While the increases in travel confidence manifesting in increased length of stay and spending are not dramatic at face value, they are striking when compared to wider trends.

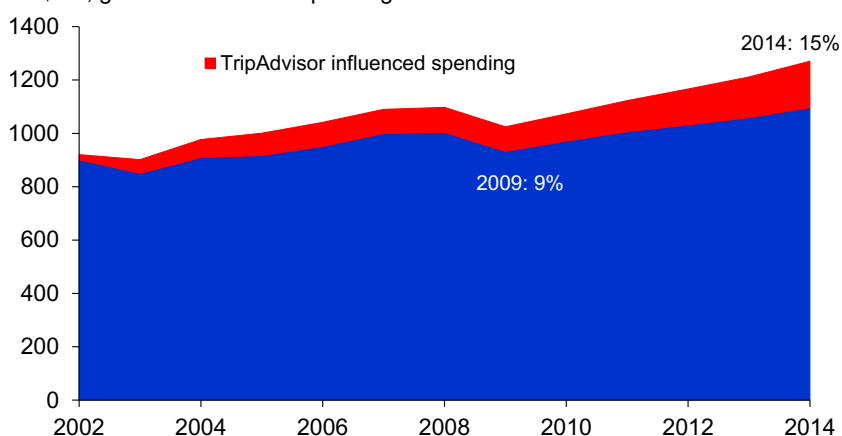
Over the past 3 years the growth in TripAdvisor influenced nights is equivalent to 22% of the growth in total worldwide overnights. The influence is also clearer for international travel over time. Growth in influenced inbound nights is equal to 42% of the growth in all overnights by foreign visitors.

TripAdvisor's influence on spending has also risen faster than wider trends, with a notable benefit for international travel.

The share of inbound influenced spend has expanded approximately 50% in five years, from 9% in 2009 to 15% in 2014. Influence grew even more rapidly over the years 2002-2009 as the number of property listings grew rapidly, covering an increasing number of global destinations.

### TripAdvisor influence on inbound spending

US\$ bn, global international spending



Source: Oxford Economics



## 3 Incremental benefits of TripAdvisor

### **Does TripAdvisor generate additional travel demand for destinations or is this just redistribution of existing travel?**

- There is a clear net positive benefit to destinations worldwide. 22 million trips were generated in 2014 that would not otherwise have been taken.

### **What is TripAdvisor's impact on average spending per trip and per night?**

- Additional impacts are more evident in terms of overnights and spending. Travellers on trips that would otherwise have taken place stay for longer and spend more in destinations due to clearer information about quality establishments, attractions and activities.
- The return to travellers is clear as increased competition can result in some lower average prices, although quality establishments are recognized as such and can raise rates. On average, spend per night is lower than would otherwise be the case, but spend per trip is higher.

### **Has TripAdvisor had a positive effect on all global regions?**

- Net benefits are evident for all regions worldwide in terms of more trips being taken and a greater number of overnights and spending.

### 3.1 TripAdvisor 'generated' trips

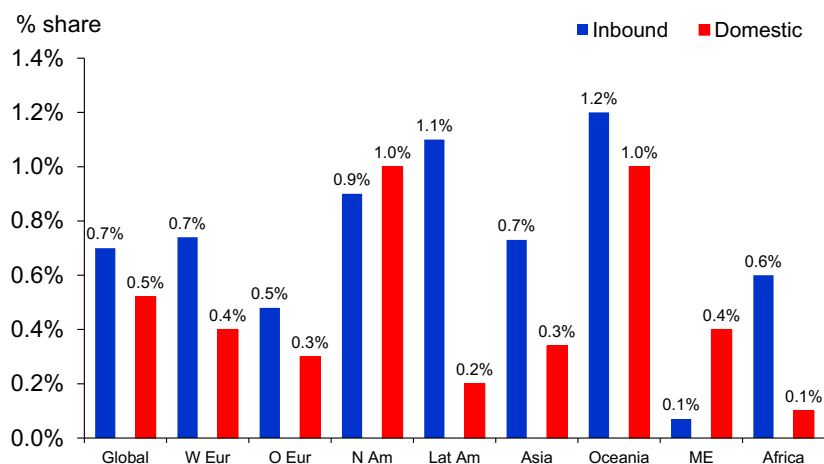
A proportion of the TripAdvisor influenced trips represent travel that would not otherwise have happened. TripAdvisor reviews generate incremental travel demand for global destinations as travellers are emboldened to visit new destinations with heightened interest in travel generally by drawing on the experiences of others. It is estimated that this proportion is relatively small at around 6% of the influenced trips.

22 million trips (0.6% of all trips) in 2014 were generated by TripAdvisor reviews and would not otherwise have taken place. A higher proportion (1.0%) of additional trips was generated in North America than in any other region, while the lowest proportion of incremental travel was in Middle East and Africa.

The conversion rate of influence to additional bookings is estimated to be comparable for domestic and inbound travel. Given the relative size of domestic markets, this is where largest incremental impacts are seen with 14 million additional domestic trips and 8 million international trips taken due to TripAdvisor.

TripAdvisor reviews have had a large incremental impact on developed market travellers and notably North American travellers. Around half of the incremental domestic demand generated by TripAdvisor occurred in North America. This has also helped to generate sizable impacts for Latin American inbound markets.

## TripAdvisor generated share of trips, 2014



Source: Oxford Economics, TripAdvisor

The largest inbound benefits were realised in Western Europe, with 3 million extra trips taken.

Bookings data for outbound travel by each source market are used as inputs in existing equations for outbound travel alongside the identified economic drivers, with other indicators of more general online usage, to identify the incremental impact of TripAdvisor on travel demand.

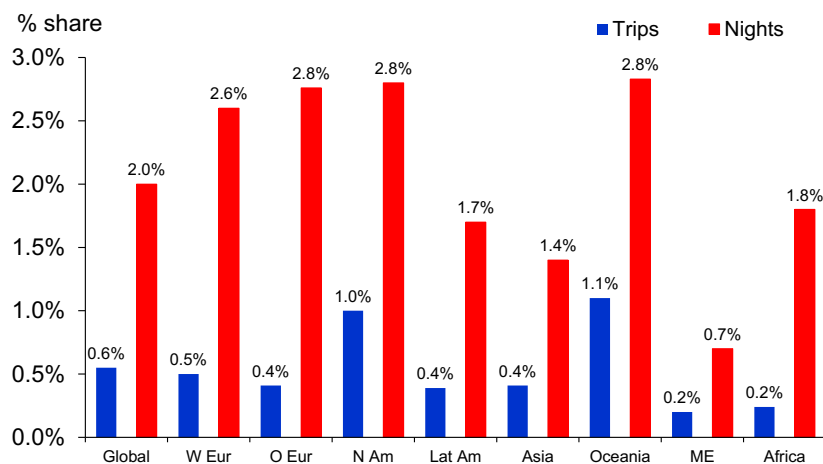
### 3.2 Additional nights and spending

Incremental visitor nights and spending generated by TripAdvisor are proportionately much larger than the amount of new visits. This is consistent with the higher influenced proportion of trips and spending than visits.

352 million visitor nights in 2014 were generated by TripAdvisor reviews and review scores equivalent to 2.0% of all overnights. This compares favourably with the 0.6% of trips taken being generated by TripAdvisor.

Higher relative increase in nights is estimated as a result of two separate effects. Firstly, new trips are made due to the increased information. This effect accounts for almost 100 million of the additional nights under the simplifying assumption that the 22 million generated visitors behave in a similar way to all other travellers with a typical length of stay of 4.5 nights.

## TripAdvisor generated travel share of market, 2014



Source: Oxford Economics, TripAdvisor

The second - and larger - effect is that length of stay is increased on existing trips. This accounts for the remaining 250 million overnights generated by TripAdvisor. Higher review scores and additional information about destinations and quality attractions and activities persuade travellers to stay longer within destinations.

The second effect of increased length of stay on existing trips is especially large for European destinations. Inbound trips are more likely to involve an increased length of stay due to additional information through TripAdvisor reviews and scores. This is especially true for developed markets where domestic travel is more well-known. Due to the combination of relatively high levels of international travel the developed European markets see this effect clearly.

The additional trips and nights generated by TripAdvisor reviews also generate incremental spending for destinations worldwide and this increase in spending outstrips the additional trip numbers. There is some benefit to destinations as visitors spend more on better quality accommodation and restaurants. However, TripAdvisor users might also find more highly rated properties or restaurants at a lower price. Increased length of stay offsets any price effect.

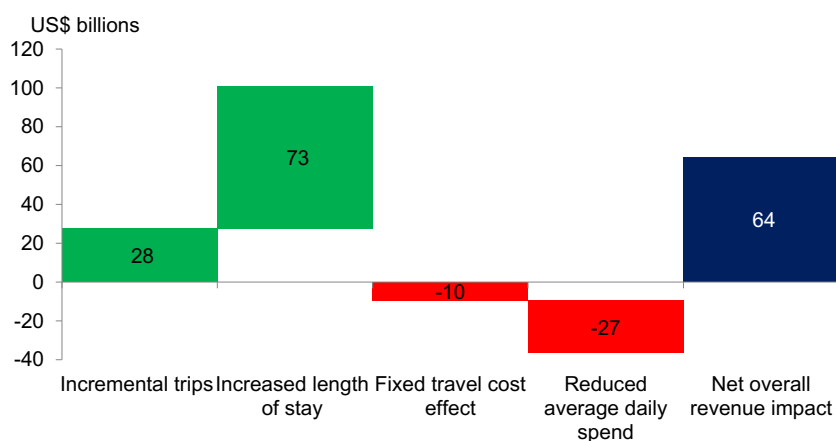
\$64 billion of travel spending in 2014 was generated by TripAdvisor; 1.3% of total travel spending worldwide compared with 0.6% of trips. A similar pattern is evident for all global regions with a higher benefit to spending than trips with increased average length of stay being a key factor.

The share of spending generated by TripAdvisor is universally smaller than the share of nights. This is also partly to be expected due to fixed travel costs such as fares and travel insurance, which will not need to be paid for additional nights.

The total net revenue effect of \$64 billion consists of four broad but competing effects.

1. **Incremental trips** – a positive contribution from an increase in trips is estimated to be around \$28 billion. This is calculated under the assumption that length of stay and average spend per night (and therefore by trip) is comparable for both these trips and usual travel patterns.
2. **Increased length of stay** – a further \$73 billion of spending would be generated from the roughly 250 million additional nights taken on existing trips, under the assumption that average spending per day remains unchanged.
3. **Fixed travel cost effect** – a proportion of costs is fixed, notably airfares and other travel costs to reach a destination, plus insurance. These costs are constant regardless of the length of stay in a destination and hence average costs per trip would fall for longer trips. This effect is estimated to partially offset the previous two positive impacts by \$10 billion.
4. **Reduced average daily spend** – a further \$267 billion net offset is estimated according to the change in behaviour by both travellers and business due to TripAdvisor. Some increase in average spending on quality establishment would occur, but a larger downward effect is estimated according to the increased competition and transparency. Price and brand are less of an indicator of quality due to trusted reviews.

### Components of net revenue impact in 2014

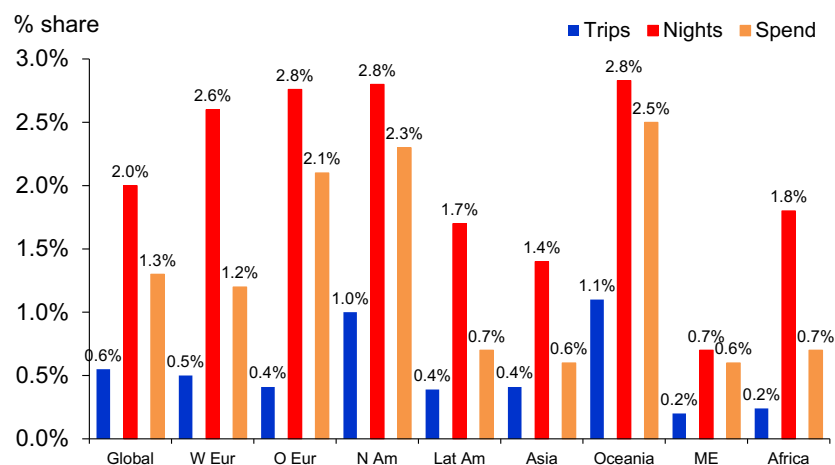


Source: Oxford Economics

### 3.3 Total revenue by region 2014

Revenue effects vary by region and the largest net revenue impact in 2014 was in North America at \$25.7 billion. This was followed by Western Europe at \$17.7 billion and then Asia at \$8.2 billion. These regions receive large volumes of visitors and travel spending so some similar effects in percentage terms translate to large revenue benefits.

#### TripAdvisor generated travel share of market, 2014



Source: Oxford Economics, TripAdvisor

Other regions typically see less benefit in terms of incremental trips, as lower engagement is not driving the same proportion of incremental trips, although improving review scores are generating additional nights and spend. The impacts as a share of total tourism activity remain comparable to the larger travel regions.

North America incremental spending is relatively high at 2.3% of total spending. Looking at the four competing revenue effects shows that the region benefits from a large proportion of estimated incremental trips as well as a sizable impact from increased length of stay. Estimated reduction in average daily spend due to TripAdvisor is relatively slight and may be due to high relative internet penetration and some reduction from downward price pressure from other sources. There is a similar pattern for Oceania which also has relatively high engagement with TripAdvisor and large proportions of the industry listing on the site attracting reviews.

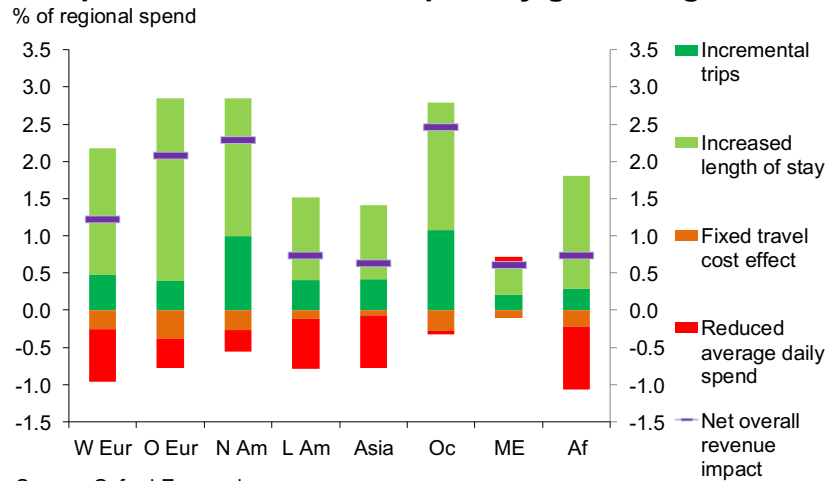
Western European destinations experienced some larger offset to increased spending due to some large estimated reductions in daily spend due to TripAdvisor. These destinations are mature but TripAdvisor has been able to fill a large information gap to bridge language barriers and clarify the true nature of properties and destinations. This increased competition is estimated to be driving down prices.

Total additional net revenue received by North American destinations was almost \$26 billion while Western European destinations attracted an additional \$18 billion. Combined these two developed regions accounted for over two thirds of the total net revenue generated by TripAdvisor in 2014. Developed

Oceania markets also received a high share of incremental revenue relative to the total market; the highest proportion of all regions at 2.5%. However, given the smaller market size this only represented an additional \$3 billion.

Latin America, Asia, Middle East and Africa regions all experienced relatively small revenue benefits in 2014 relative to wider tourism activity. In all regions there was a large downward impact on spending from reduced daily spending. These destinations also saw more limited benefits in terms of incremental trips being taken while the proportion of extended trips is more subdued than in the more developed markets.

### Components of revenue impact by global region, 2014



The travel industry in these regions is not as engaged with TripAdvisor, allowing opportunity for fewer reviews. The degree of information available is sufficient to reveal quality and allow competition on that basis but there has apparently not been enough quality improvement to drive up additional activity to compensate for this.

## 5 Impact on employment

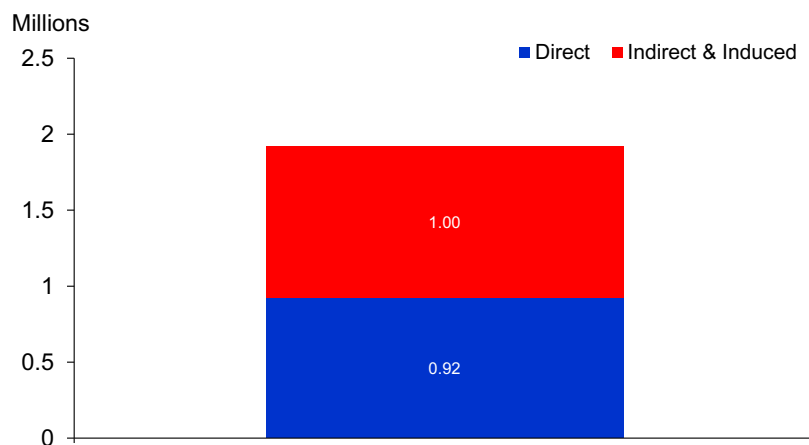
- Over 900,000 jobs in the travel industry were sustained by the incremental travel activity generated by TripAdvisor in 2014. These are jobs that would not have existed otherwise.
- A further 1 million jobs were sustained indirectly via supply chains and through income effects.

Using Oxford Economics impact models for individual countries, we estimated employment impacts delivered through the \$64 billion generated by TripAdvisor's existence in 2014. This section presents only a global picture; individual global regions are affected by diverse levels of productivity in different parts of the world.

Over 900,000 jobs were sustained in the travel industry by TripAdvisor in 2014 by its incremental travel impacts.

However, growth in tourism also affects labour markets through other channels: firstly, via supply chains and, secondly, via its impact on aggregate demand. This will actually mean that many of the jobs supported by TripAdvisor are in sectors which would usually be considered to be outside the travel and tourism sector.

### TripAdvisor generated employment, 2014



Source: Oxford Economics, TripAdvisor

This happens because each directly affected sector also purchases goods and services as inputs (e.g. food wholesalers, utilities) into production. These impacts are called indirect impacts. Furthermore, an induced impact is generated when employees whose incomes are generated either directly or indirectly by tourism, spend those incomes in the local economy.

Including indirect and induced effects, a further 1 million jobs were supported worldwide by TripAdvisor activity.

## 6 Concluding remarks

TripAdvisor has been found to be a causal factor in global travel growth with a wide influence in all world regions, generating additional trips, overnights and spending.

TripAdvisor has partly stepped into the role of services once provided by tour operators and travel agents influencing some similar travel that would have taken place anyway. However, travel behaviour on such trips is modified involving some substituted trips to alternative destinations. Increased length of stay on these existing trips arises from a better understanding of the true nature of destinations and their accommodation, attractions and activities on offer.

TripAdvisor's influence is broadly in line with its share of the global online travel market at the global level, the influence on international travel is more profound. Higher relative influence on international travel arises as information on the less familiar is more important. Over 15% of international inbound nights were influenced by TripAdvisor in 2014. And the influence is even greater when seen in the context of growth: 42% of the expansion of international nights between 2011 and 2014 was influenced by TripAdvisor.

352 million tourism nights (2.0% of total global visitor nights) in 2014 would not have taken place without TripAdvisor. Reviews and scores generate additional travel and persuade travellers to stay longer than they otherwise would have done. Clear benefits are generated for both travellers and business.

Furthermore, these additional trips and nights generate \$64 billion in spending that would not have otherwise taken place. The revenue impact is derived from four competing effects including an incremental trip impact (worth \$28 billion globally); greater increased length of stay (\$73 billion); an offsetting fixed travel cost effect (-\$10 billion); and a genuine reduction in average daily spend because of greater transparency and information (-\$27 billion).

Of the net \$64 billion total global revenue generated in 2014, around two thirds was in the more mature North America and Western European markets which have embraced TripAdvisor. North America net additional revenue was nearly \$26 billion while Western Europe received \$18 billion.

The \$64 billion net revenue impact in 2014 sustained over 900,000 jobs in the travel industry. A further 1 million jobs were supported through indirect and induced effects through either supply chain effects or increased demand in local economies.