



CONTENTS

	Highlights	
1	Ebola timeline	
2	Ebola impact on Travel & Tourism in the three most affected countries	1
3	The wider macroeconomic impacts of Ebola	
4	The impact on wider West Africa and Africa	7
5	How Ebola compares to other epidemics and crises	9
6	Recommendations Beyond Ebola	10
7	Annex	1

For more information, please contact:

ROCHELLE TURNER | Research Director rochelle.turner@wttc.org

SUMMARY OF IMPACTS

- The West Africa Ebola epidemic, which had its first reported case in December 2013, lasted two-and-a-half years, affecting almost 30,000 people.
- 99% cases were in Guinea. Sierra Leone and Liberia¹.
- The majority of airlines froze flight routes and a number of neighbouring countries closed their borders with the affected country, including Senegal and Côte D'Ivoire. Countries began to re-open their borders in January/ February 2015, and as late as September 2016 in the case of Côte D'Ivoire.
- The impact of Ebola on Travel & Tourism was immediate for Sierra Leone, with tourist arrivals down by 50% from 2013 to 2014. To date, neither arrivals nor spending from international visitors have yet returned to their preepidemic peak, with inbound arrivals from Western markets hit hardest.
- The resulting "loss" of direct Travel & Tourism GDP is equivalent to 0.9% and 1.6% of whole economy GDP in Guinea and Sierra Leone respectively. GDP in Sierra Leone slowed from a 10-year average growth rate of 7.8%, to 4.6% in 2014.. The economy in Guinea almost came to a halt over the same two-year period.
- While tourists were urged to avoid the Ebola zone in West Africa, many saw the entire African continent as a risk. The rest of West Africa (excluding Nigeria) saw a 7.7% decrease in arrivals in 2014. Countries as far away as Kenya, over 3,000 miles from the outbreak, reported a significant loss in arrivals during the period, citing travel fears over Ebola among other factors.
- The scale and longevity of the impact of Ebola on Travel & Tourism is significant
 when compared to other epidemics, reflecting the duration of the epidemic and
 the period over which the borders were closed and flights were frozen.

¹ The research provides a detailed analysis of the impact of Ebola on Travel & Tourism in Sierra Leone. Analysing the impact in Liberia and Guinea however was more difficult due to issues surrounding the availability and quality of data. Due to gaps in the data for Liberia and volatility in the data history for Guinea, it has not been possible to properly assess the direct impact of Ebola on T&T in these two countries.

1 EBOLA TIMELINE 2 EBOLA IMPACT ON T&T IN THE THREE MOST AFFECTED COUNTRIES

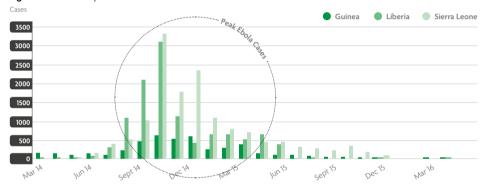
1 EBOLA TIMELINE

The 2014 Ebola outbreak lasted over two-and-a-half years, infecting 28,652 people and causing 11,325 deaths. 99% of Ebola cases were recorded in the three countries of Guinea, Liberia and Sierra Leone, with only a small number occurring outside this area by travel association or to medical workers. The disease had a major impact on the wider economies and posed a major deterrent to inbound visitors.

According to the World Health Organisation (WHO)², the outbreak of Ebola Virus Disease during 2014-2016 was the largest and most complex outbreak of the virus since it was discovered in 1976. Although the epidemic lasted over two-and-a-half years, most cases occurred between July 2014 and May 2015 (Figure 1). It was only in June 2016, two-and-a-half years after the first case, that the outbreak officially ended.

35 MONTHS
AFTER OUTBREAK,
INTERNATIONAL
ARRIVALS TO SIERRA
LEONE REMAINED
OVER 50% BELOW
PRE-EPIDEMIC HIGHS

Figure 1: Ebola cases peak in H2 2014-H1 2015



Source: Centre for Disease Control & Prevention (CDC)

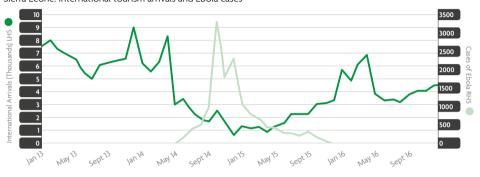
The first case was reported in Guinea in December 2013. The disease quickly spread into neighbouring Sierra Leone and Liberia. To contain the disease, some neighbouring states closed their borders to these countries, while others restricted access by air and sea. According to AOG, an airline data provider, by August 2014, almost half of monthly flights scheduled to Guinea, Liberia and Sierra Leone were cancelled. Flights from within the continent on African airlines such as Air Côte d'Ivoire, Arik Air (a Nigerian airline), Togo's ASKY Airlines and Kenya Airways, were cancelled while several major international carriers also suspended operations to and from the affected destinations.

During the outbreak, to prevent Ebola crossing borders, those leaving West Africa were screened at airports. The United States Centre for Disease Control and Protection (CDC)³ estimates that more than 339,000 people were screened leaving Guinea, Liberia and Sierra Leone. (Case breakdown shown in Figure A1 in the Annex)

2 EBOLA IMPACT ON TRAVEL & TOURISM IN THE THREE MOST AFFECTED COUNTRIES

The first case of Ebola in Sierra Leone was recorded in May 2014. Figure 2 shows that international tourist arrivals slumped immediately. May arrivals were down 54% on the previous year, with the most significant impacts when the epidemic was at its peak. A rebound did not take hold until April 2016 when there were no further cases recorded.

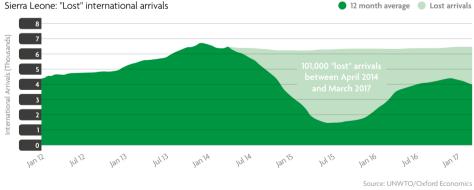
Figure 2: Arrivals down 70% in first three months of 2014 Sierra Leone: International tourism arrivals and Ebola cases



Source: UNWTO/Centre for Disease Control & Prevention (CDC)

Data available to March 2017 shows that 35 months on from the beginning of the Ebola epidemic in Sierra Leone, international visitor arrivals were still over 50% below pre-epidemic highs. Figure 3 shows that using Oxford Economics' pre-Ebola forecasts as a measure of "expected arrivals", it is estimated that during this 35-month period Sierra Leone "lost" over 101,000 international arrivals, with visitor exports similarly affected (Figure 4). Visitor exports⁴ also fell sharply in 2014 and have not yet recovered back to pre-crisis levels.

Figure 3: Arrivals in 2017 still over 50% short of pre-Ebola peak Sierra Leone: "Lost" international arrivals



⁴ The money spent in a country by international visitors

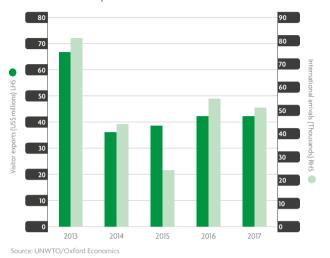
1 | WORLD TRAYEL & TOURISM COUNCIL IMPACT OF THE EBOLA EPIDEMIC ON TRAYEL & TOURISM | 2

² The World Health Organisation- Ebola Virus Disease Key Facts (12th February 2018)

³ U.S. Department of Health and Human services – Centres for Disease Control and Prevention - The Cost of the Ebola Epidemic

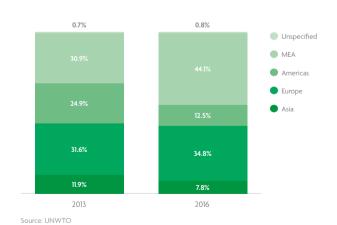
PRE-EPIDEMIC. ARRIVALS FROM SIERRA LEONE

Figure 4: Ebola impact on visitor exports extends into 2017 Sierra Leone visitor exports and international arrivals



Before the Ebola epidemic, arrivals from the Americas accounted for almost 25% of total inbound arrivals to Sierra Leone. However, by 2016 this share had almost halved with Sierra Leone now relatively more dependent on visitors, in market share terms, from the Africa and Middle East region.

Figure 5: Shift in inbound market share away from Asia and the Americas Sierra Leone: International arrivals by origin



THE AMERICAS **ACCOUNTED FOR** 25% OF INBOUND **TOURISM TO**

Arrivals from all regions to Sierra Leone fell during 2014 and 2015, dropping 32% in 2016 compared to 2013 arrival figures and bringing a corresponding drop of 35% in tourist expenditure over the same period. Figure 6 looks at the major inbound markets to Sierra Leone as of 2013 – Canada, UK, US, Nigeria and Ghana. Figures from 2016 show that arrivals from each of these five destinations fell during the epidemic and remained considerably below the 2013 peak. The biggest decline is in visitors from Canada, with 2016 arrivals 84% below 2013 peak.

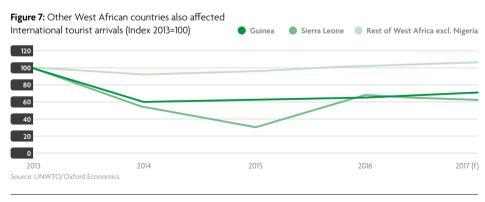
Figure 6: Neighbouring markets less deterred from visiting Sierra Leone Sierra Leone: 2016 v 2013 international tourist arrivals (5 major inbound markets in 2013)



Source: UNWTO

Analysing the impact of Ebola on Travel & Tourism in Liberia and Guinea is more difficult, due to data issues. Data for tourist arrivals to Liberia was not available and basic expenditure data had gaps in relevant years.

Figure 7 shows a decline in tourist arrivals during 2014 for Guinea, however, arrivals and expenditure data is extremely volatile making it hard to determine the extent any decline could be attributed to the outbreak of Ebola. However, other data, like Guinea air passenger flow figures, show a significant reduction in air travel during 2014 with the number of passengers down 27% in 2014 when the outbreak began. 2015 saw a slight rebound in air passengers but a return to 2013 levels was not seen until 2016. A report by the World Bank (2015)⁵ suggests that in the first quarter of 2015 alone, hotel occupancy in Guinea was down 25% compared to the same period in 2014.



⁵ World Bank Group – Update on the economic impact of the 2014-2015 Ebola epidemic on Liberia, Sierra Leone and Guinea (15th April 2015)

ARRIVALS TO SIERRA LEONE FELL BY 32% IN 2016 WHILE TOURISM **EXPENDITURE ALSO** FELL BY 35% IN THE SAME PERIOD

3 | WORLD TRAVEL & TOURISM COUNCIL

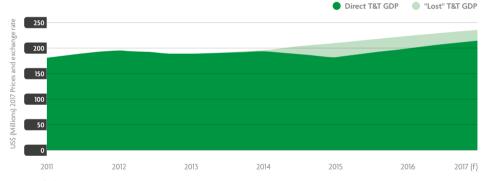
Nigeria experienced an unprecedented jump in its recorded visitor arrivals in 2014 and therefore has been excluded from the Rest of West Africa calculations in the analysis. Most other West African countries did experience at least some degree of decline in arrivals during 2014, with some seeing larger impacts than others and Ebola being a likely determining factor. The rest of West Africa (excluding Nigeria) as a whole experienced an 8% decline in international arrivals in 2014.

3 THE WIDER MACROECONOMIC IMPACTS OF EBOLA

The economic impact of Ebola extended beyond the devastating health effects. According to the CDC using World Bank projections⁶, \$2.2 billion in GDP was "lost" in Guinea, Liberia and Sierra Leone in 2015. The disease had widespread socioeconomic effects. Guinea, Sierra Leone and Liberia suffered from lower investment and a substantial loss in private sector growth, declining agricultural production (leading to concerns about food security) and a decrease in cross-border trade as restrictions on movement, goods, and services increased.

Using Oxford Economics' forecast prior to the Ebola epidemic, it is estimated that Sierra Leone "lost" over \$67 million in direct Travel & Tourism GDP following the epidemic, equal to 1.6% of total economy GDP (Figure A2). Despite robust growth in 2015 and 2016, direct Travel & Tourism GDP has not rebounded to levels that were forecast pre-Ebola. Figure 8 shows that direct Travel & Tourism GDP in Guinea also suffered because of Ebola, with an estimated \$75 million? "lost" following the epidemic in 2014, equal to 0.9% of total economy GDP.

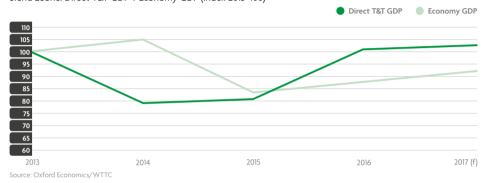
Figure 8: \$75m in lost T&T GDP in Guinea Guinea: "Lost" Direct Travel & Tourism GDP



Source: Oxford Ecogomics WHTC.
The impacts of Ebola on the affected countries were severe and not limited to the Travel & Tourism sector.
Currencies also suffered. The Sierra Leonean Leone depreciated 4% versus the dollar in 2014, 12% in 2015, and a further 24% 20168. Currency depreciation made imports significantly more expensive and coupled with supply pressures as a result of lower production and closed borders, annual consumer price inflation in Sierra Leone was 11% in 2016. The impact on total economy GDP in Sierra Leone (Figure 9) was significant, with growth first slowing in 2014, albeit still positive. However, this was followed by a 20% decline in 2015. Absenteeism increased among

the labour force as people stayed at home to care for sick relatives or because they feared contracting the disease in the work place. Downward pressure on sales and profits forced companies to cut working hours and lay off staff leading to a reduced supply of goods and lower employment. Building activity stopped and border closures caused blockages affecting imported inputs and exports. Despite growth in 2016, the Sierra Leone economy has not yet experienced a full recovery and total economy GDP in 2016 was still 13% below its pre-epidemic level. It is important however to note that while the Ebola epidemic played a significant role in the 2015 recession in Sierra Leone, this was also coupled with other economic issues such as shocks to iron ore prices.

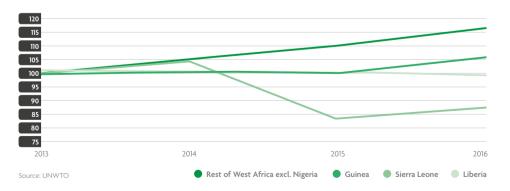
Figure 9: Rebound underway but slow
Sierra Leone: Direct T&T GDP v Economy GDP (Index 2013=100)



GDP growth in Guinea almost came to a complete halt in 2014 and 2015. However, a strong 2016 rebound brought GDP levels back to beyond those in 2013.

Figure 10 shows that rest of West Africa's total economy GDP was relatively unaffected by the epidemic. Growth in the West African economy slowed but remained positive during the epidemic and there has been no long-lasting impact on wider economy GDP in the region.

Figure 10: West Africa economies relatively unaffected Total economy GDP (Index 2013=100)



5 | WORLD TRAVEL & TOURISM COUNCIL IMPACT OF THE EBOLA EPIDEMIC ON TRAVEL & TOURISM | 6

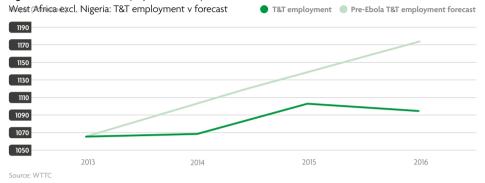
⁵ The Wold Bank – Accessed 20th January 2016.

⁷ Figures are in constant 2017 prices and exchange rate

⁸ Lis unlikely that the 2016 depreciation was purely Ebola-related, however, as the US Fed's tightening cycle impacted many emerging and developing currencies at this time.

Figure 11 however shows the impact Ebola had on Travel & Tourism employment in West Africa. Travel & Tourism employment growth slowed following the outbreak of Ebola and failed to pick up momentum with figures in 2016 7% below pre-Ebola estimates.

Figure 11: Travel & Tourism employment below pre-Ebola forecast



4 THE IMPACT ON WIDER WEST AFRICA AND AFRICA

Tourists were urged to avoid the Ebola zone in West Africa with the CDC issuing an "avoid nonessential travel" warning for Guinea, Sierra Leone and Liberia. But it was not just Guinea, Sierra Leone and Liberia that saw the impact on their T&T industry. According to Reuters9 (2014), tour operators in Africa said that despite the limited Ebola cases outside of the epicentre, many tourists were afraid to travel anywhere on the continent.

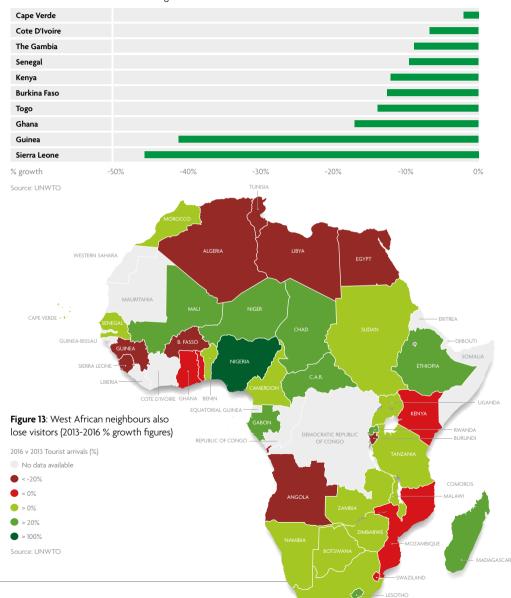
A report by the United Nations Economic Commission for Africa (2015)¹⁰ shows the results of a survey conducted by Safari Bookings, an online safari booking service. This survey found that half of the tour operators had suffered a 20-70% decline in their African safari business because of Ebola fears. "They don't realise that East and Southern Africa, where most safaris are conducted, are just as far from the outbreak area as Europe or South America", said one respondent.

International arrivals across West Africa fell during the outbreak. Burkina Faso, Cote D'Ivoire, The Gambia, Ghana, Senegal and Togo all experienced a decline in international tourist arrivals in 2014, with some countries seeing a further decline in 2015. This was due to tourists seeing the entire West Africa region as a "risk zone" and avoiding travelling there, even though most of these countries were completely Ebola free.

The impact of Ebola on arrivals to West Africa was much greater than on other regions across the continent. Arrivals to countries in West Africa fell by 3% on average in 2014. During the same time, international tourist arrivals to the rest of Africa¹¹ grew by an average of 9% (or 6% aggregated across all rest of Africa countries excluding North Africa).

Figures from 2013 to 2016 also show that countries neighbouring the three countries primarily affected by Ebola also suffered from the reduction in the numbers of inbound visitors.

Figure 12: Fall in arrivals across West Africa in 2014 International tourist arrivals 2013-2014 growth



⁹ Reuters - Ebola Fears slowing tourist flow to Africa (20th August 2014)

¹⁰ United Nations Economic Commission for Africa - Socio-economic impacts of Ebola on Africa (January 2015)

¹¹ Rest of Africa excludes North Africa as there were other factors impacting Travel & Tourism during this time.

5 HOW EBOLA COMPARES TO OTHER EPIDEMICS AND CRISES 6 RECOMMENDATIONS BEYOND EBOLA

5 HOW EBOLA COMPARES TO OTHER EPIDEMICS AND CRISES

Ebola was a unique epidemic with impacts on Travel & Tourism larger, more drawn out and different from other epidemics and crises that WTTC has studied.

Figure 14 compares the effects of the Ebola epidemic in Sierra Leone to other epidemics, using an index of 100 equal to the level of international visitor arrivals in the quarter before the crisis occurred.

Figure 14: Ebola impact longer than other epidemics Epidemic impact on international arrivals (Index 100=Q)



Source: UNWTO/Oxford Economics

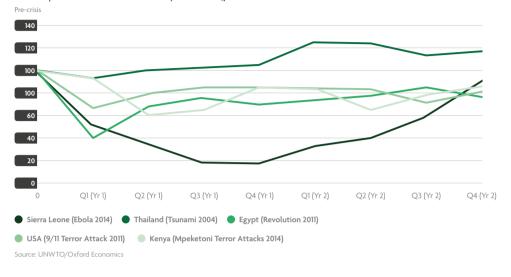
The initial fall in arrivals in Sierra Leone was much more severe and continued for much longer than that of other epidemics. It is over a year later before any signs of levelling out can be seen, with arrivals remaining below peak two years later.

Sierra Leone arrivals bottomed out at 93% below the pre-epidemic peak. Arrivals to Hong Kong fell 75% from peak to trough following the SARS outbreak while arrivals to the UK only fell 20% from peak following the Foot and Mouth outbreak. The impact of the Zika virus on arrivals to Brazil is harder to asses as the Olympics in Rio de Janeiro inflated the arrivals figures to the country during this time.

When comparing the impact of the Ebola outbreak to other crises like the Boxing Day Tsunami in Thailand, the 9/11 terror attacks in the United States and the 2011 Egyptian revolution, the scale of the Ebola impact on Travel & Tourism is still significant.

Figure 15 compares the effects of the Ebola epidemic in Sierra Leone to other types of crisis that have impacted Travel & Tourism, using the same methodology as above. The first quarter after the Ebola crisis saw a larger decline than for the four other crisis events. As Ebola cases continued to be reported in Sierra Leone for over a year after the initial outbreak, international arrivals to Sierra Leone continued to decline compared to the previous year whereas the other crises were mostly isolated, one-off events. The severity of the Ebola T&T impact is also evident from its long-lasting effect with arrivals only now starting to get back towards preepidemic levels. The lasting impact was exacerbated by long-lasting travel bans and airline closures.

Figure 15: Ebola impact larger than other shocks
Crisis impact on international arrivals (Index 100=Q)



6 RECOMMENDATIONS BEYOND EBOLA

In today's increasingly complex and interconnected global landscape, coordination and cooperation are a must have, especially when it comes to global security. The same principles apply to communication, whereby technologies from mobile to social media have enabled tweets, advisories and messages to go around the world in seconds. Given that cancelled trips to affected destinations is often the immediate response to news of a crisis event, it is essential that these decisions that affect economies and livelihoods are made with just cause rather than as a result of any sensationalised messaging or fear. According to the former Director General of the World Health Organization (WHO), Margaret Chan, 90% of economic losses during any outbreak arises from the uncoordinated and irrational efforts of the public to avoid infection.

Given the importance of Travel & Tourism to the global economy, accounting for 10% of global GDP and 1 in 10 jobs on the planet; the impact of a health emergency goes beyond the health of citizens to include the health of the economy.

As such, there is a need for cooperation not just between the public and private sectors, but within each of these, to ensure that all affected stakeholders have access to timely and accurate information to allow for efficient and optimal decision-making. All Ministries that have a stake in the issue, from Finance and Health to the Ministries of Tourism and Transport all need to have a seat at the table. The same principles should be applied in the context of private sector engagement.

In this context, the World Travel & Tourism Council has prioritised Crisis Preparedness as one of its three priorities and is collaborating with the World Economic Forum, WHO, the World Bank and other stakeholders, to develop a communication platform for Travel & Tourism, which would readily disseminate information to the world at large.

9 | WORLD TRAVEL & TOURISM COUNCIL IMPACT OF THE EBOLA EPIDEMIC ON TRAVEL & TOURISM | 10

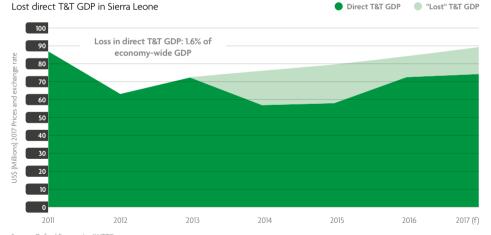
7 ANNEX

Table A1: Ebola remained relatively well contained with 99% of cases occurring within the 3-country epicentre

Countries with widespread transmission and other countries affected during the epidemic		
Country	Total cases (suspected, probable, confirmed))	
Countries with widespread transmission		
Guinea	3,814	
Liberia	10,678	
Sierra Leone	14,124	
Affected countries		
Italy	1	
Mali	8	
Nigeria	20	
Senegal	1	
Spain	1	
United Kingdom	1	
United States	4	
Total	26, 652	

Source: Centre for Disease Control & Prevention (CDC)

Figure A1: \$67m in lost T&T GDP in Sierra Leone



Source: Oxford Economics/WTTC



The World Travel & Tourism Council is the global authority on the economic and social contribution of Travel & Tourism.

WTTC promotes sustainable growth for the Travel & Tourism sector, working with governments and international institutions to create jobs, to drive exports and to generate prosperity. Council Members are the Chairs, Presidents and Chief Executives of the world's leading private sector Travel & Tourism businesses.

Together with Oxford Economics, WTTC produces annual research that shows Travel & Tourism to be one of the world's largest sectors, supporting over 292 million jobs and generating 10.2% of global GDP in 2016. Comprehensive reports quantify, compare and forecast the economic impact of Travel & Tourism on 185 economies around the world. In addition to the individual country reports, WTTC produces a world report highlighting the global economic impact and issues, and 24 further reports that focus on regions, sub-regions and economic and geographic groups.

To download reports or data, please visit www.wttc.org



Assisting WTTC to Provide Tools for Analysis, Benchmarking, Forecasting and Planning.

Founded in 1981 as a commercial venture with Oxford University's business college, Oxford Economics is one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities. Their best-of-class global economic and industry models and analytical tools give an unparalleled ability to forecast external market trends and assess their economic, social and business impact. Headquartered in Oxford, England, with regional centres in London, New York and Singapore, Oxford Economics has offices across the globe in Belfast, Chicago, Dubai, Miami, Milan, Paris, Philadelphia, San Francisco, and Washington DC. The company employs over 300 full-time staff, including more than 200 professional economists, industry experts and business editors – one of the largest teams of macroeconomists and thought leadership specialists – underpinning the inhouse expertise is a contributor network of over 500 economists, analysts and journalists around the world.

For more information, please see www.oxfordeconomics.com, or email: mailbox@oxfordeconomics.com





THE AUTHORITY ON WORLD TRAVEL & TOURISM

WORLD TRAVEL & TOURISM COUNCIL (WTTC), The Harlequin Building, 65 Southwark Street, London SEI 0HR, United Kingdom Tel: +44 (0) 207 48I 8007 | Email: enquiries@wttc.org | www.wttc.org

© World Travel & Tourism Council: Impact of the Ebola epidemic on Travel & Tourism - December 2018. All rights reserved.

The copyright laws of the United Kingdom allow certain uses of this content without our (is. the copyright owner's) permission. You are permitted to use limited extracts of this content, provided such use is fair and when such use is for non-commercial research, private study, review or news reporting. The following acknowledgment must also be used, whenever our content is used relying on this "fair dealing" exception:
"Source: World Travel & Tourism Council: Impact of the Ebola epidemic on Travel & Tourism - December 2018. All rights reserved."

If your use of the content would not fall under the "fair dealing" exception described above, you are permitted to use this content in whole or in part for non-commercial or commercial use provided you comply with the Attribution, Non-Commercial 4.0 International Creative Commons Licence. In particular, the content is not amended and the following acknowledgment is used, whenever our content is used:
"Source: World Tayel & Tourism Council Impact of the Ebola epidemic on Tayel & Tourism - December 2018. All rights reserved. Licensed under the Attribution, Non-Commercial 4.0 International Creative Commons Licence.

