

Booking.com

The Economic Impact of Online Itavel Agencies In Europe

2019-2021



OTA Impacts

Summary impacts in Europe

Research Object

Including data sources

Econometric Res

Including on key effects

Additional Econ

GDP and employment impacts

OTA Details - Eu Composition of OTAs in Europe a

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OTA IMPACTS SUMMARY IMPACTS IN EUROPE

OTAs generate benefits for the hospitality industry, consumers and society as a whole

Online travel agencies (OTAs) in Europe (which for the purpose of this report is defined as EU member states plus Switzerland and the UK and referred to as the EU or Europe for simplicity) play an important function in the accommodation market and for destinations.

OTAs increase choice and transparency within the market, making it easier for consumers to compare the costs and quality of the accommodation facilities and services offered by providers. They also make it easier for customers to search and book online. This is particularly important for booking travel in unfamiliar destinations. As a result, OTAs generate more bookings from international travelers than the market average.

OTAs particularly benefit small independent properties by providing them with global visibility. Across Europe, the share of bookings accruing to independent properties through OTAs is significantly higher than the market average. This helps preserve Europe's uniquely diverse ecosystem of independent properties.

By offering consumers more choice, OTAs also exert a downward effect on rates, making travel more affordable and increasing the value for money. This benefits particularly low income households, who might otherwise not be able to afford any travel at all. Offering more choice also spreads out tourism away from the urban centers of economic and touristic activity towards rural destinations. As a result, rural areas benefit from an increase in economic opportunities and job creation. On an aggregate level, OTAs have generated large volumes of additional tourism nights and supported GDP growth and job creation across a wide range of destinations. If OTAs did not exist, there would be fewer overnight stays in Europe and the contribution of tourism to GDP and employment would also be lower.

This study quantifies the incremental impact of OTAs on the tourism industry and broader economy of Europe. The number of travellers organising travel through OTAs increased steadily from 2012 to 2019 to 1.2 billion nights which represented almost 1 in 3 nights booked in Europe – a proportion of these nights, and associated economic benefits would not have happened without the trusted information, transparency and choice provided by OTAs. All travel bookings fell sharply during the pandemic, including some shift in OTA use resulting in a lower impact on the tourism market and broader economy in 2020 and 2021. OTAs still play an important role in matching evolving consumer demand with available supply.

Nights in All Accommodation Types in the EU, 2012-2021

Billions of Room Nights



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the EU accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €9.40 per room night (7.1 percent reduction) across the EU.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across the EU. OTAs added an incremental €33.7 billion to the economy in 2019. OTAs contributed €12.9 billion to EU GDP in 2020 and €11.8 billion to EU GDP in 2021.

GDP Impacts (€ Billions) Attributable to OTAs in the EU, 2019-2021



TOURISM ECONC

OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the EU economy. In 2019, the economic impacts attributable to OTAs included 566,000 jobs. In 2020 and 2021, OTAs were responsible for 238,000 and 243,000 jobs, respectively.

Job Impacts Attributable to OTAs in the EU, 2019-2021



RESEARCH OBJECTIVES & METHODOLOGY

The main aim of this study is to quantify the additional – i.e., incremental – impact of OTAs in the EU for 2019, 2020 and 2021.

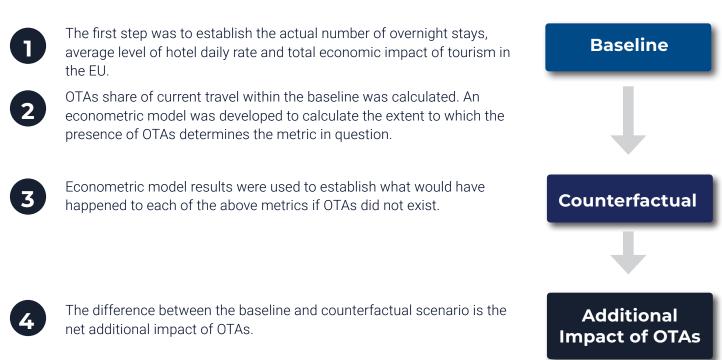
Specifically, this analysis aims to assess:

- 1. The overall impact on business by examining what impact OTAs have had on total overnight stays in the EU;
- 2. What impact OTAs have had on the hotel rates paid by consumers across the EU; and
- The additional economic activity that is supported by the presence of OTAs in the EU. З.

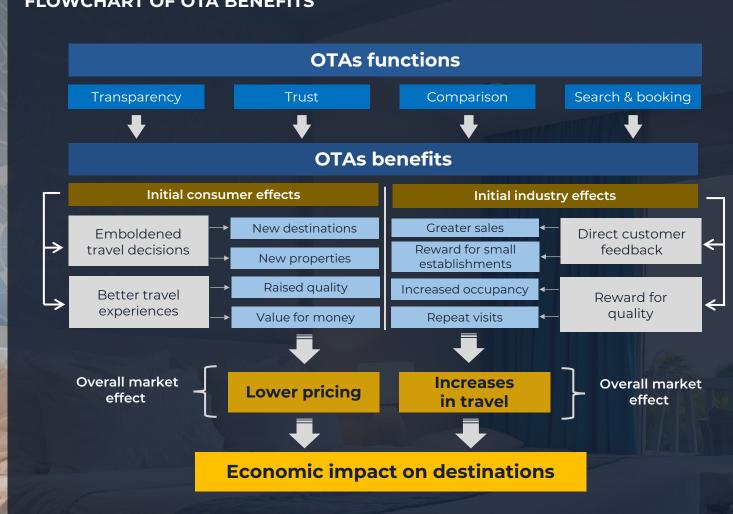
Analysis has guantified how these impacts have varied across the market segments and the extent to which OTAs have supported changing consumer preferences during the pandemic. The following effects have been considered:

- Accommodation type including the different impact of OTAs on chain and non-chain hotels as well as on alternative (non-hotel) accommodation.
- International and domestic visitors different visitors have differing needs regarding information and booking and engagement with OTAs which have been estimated.
- Geographic dispersion OTA impacts and booking patterns have been considered relative to those from the wider tourism industry, including the extent to which OTAs spread tourism to more rural areas compared to the market average.

OVERARCHING METHODOLOGY



FLOWCHART OF OTA BENEFITS



OTAS SUPPORT A RANGE OF BENEFITS TO CONSUMERS AND BUSINESS



Consumers

OTAs increase transparency within the market, making it easier for consumers to compare the costs and quality of the accommodation facilities and services offered by providers. They also make it easier for customers to search and book online. Lower prices and increased quality increase the value for money for consumers.

Industry

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. Smaller independent properties in particular benefit from an ability to better compete online against larger chains; while further technology benefits are also provided. OTAs also improve trust in providers and reward quality.





Economy

The direct benefits to consumers and industry will also have effects on the total spending of tourists: more visitors and nights will mean additional spending on other tourism services within the destinations. This will in turn have downstream effects on economies overall

ECONOMETRIC RESULTS

OTA FOOTPRINT & INCREMENTAL IMPACT ON NIGHTS

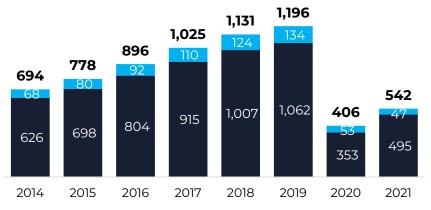
Of the 1.2 billion nights booked through OTAs in 2019, 11% would not have taken place without the benefits OTAs provide. 134 million additional nights were generated through the increase in choice, transparency, and trust provided by OTAs.

Panel econometric estimation considered how the OTA footprint has changed relative to all other identified drivers of demand in order to identify the incremental impact in demand for all major markets.

Estimation takes into account the changes in domestic and international demand drivers, including changes in indicators of income and affordability in all source markets. This calculation relies upon previously identified relationships and drivers in Tourism Economics' global tourism forecast models. The inclusion of OTA metrics in these models has improved equation accuracy by better explaining observed growth. By including all other demand drivers, there is high confidence that the incremental impact of OTAs is being fully identified.



Millions of Room Nights (2014-2021)



■ Counterfactual OTA footprint ■ Extra nights generated by OTAs

IMPACTS ON INTERNATIONAL AND DOMESTIC

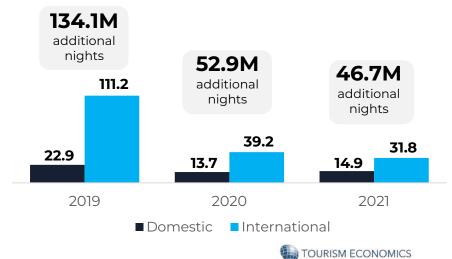
OTAs have a disproportionately larger incremental impact on international than on domestic travel demand. Estimation included OTA bookings as a share of all wider activity as an explanatory variable for equations of domestic and outbound travel demand. There is a higher estimated elasticity of international demand with respect to OTA intensity than for domestic demand. That means a significant share of international travel would not happen without the help of OTAs.

This confirms the theory that OTAs drive incremental demand by providing trusted information and increased transparency by supporting travel to less well-known foreign destinations.

Incremental outbound and domestic travel demand has been calculated for all major source markets and demand has been mapped to destinations according to relative OTA use and origin-destination bookings.

Additional Domestic and International Nights in Europe

Millions of Room Nights (2014-2021)



OTAS REDUCE ACCOMMODATION COSTS

Lower travel costs are an important benefit for consumers. OTAs increase consumer choice and intensify competition between accommodation providers. As a result, there is a clear inverse correlation between OTA share of accommodation nights sold and the average daily rate (ADR) paid. Markets with a higher OTA intensity have a lower ADR, while an increased intensity over time is correlated with lower ADR than would otherwise be the case.

Panel econometric estimation has identified the relationship between OTA intensity and ADR across all major markets, also taking into account hotel occupancy and prices and costs. Markets with a higher OTA intensity experience lower ADR, all other things being

€ per room 138

2014

ADR IMPACTS VARY BY PROPERTY

There is a stronger observed relationship between OTA intensity and ADR for independent hotels than for chain properties. This is partly due to a greater proportion of independent hotels selling rooms on OTAs to take advantage of the increased exposure and sales opportunities. These relationships have been separately identified for all destinations.

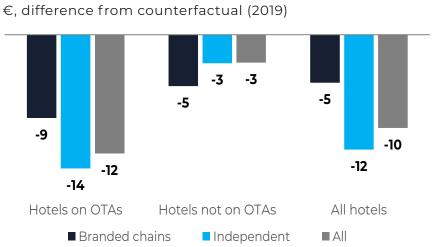
Estimation disaggregated ADR impacts for

sales through OTAs and all other channels.

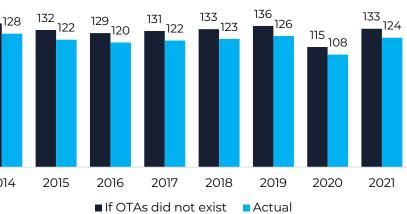
There is a notable, albeit lesser, impact on

ADR for non-OTA room sales due to the

increased competitiveness.







Hotel Average Daily Room Rates (ADR)

OTA Impact on Hotel ADR by Segment

ADDITIONAL ECONOMIC IMPACTS

The net effect of additional nights and lower ADR is an increase in overall destination spending, taking into account all other trip spending. Net direct gain in GDP and employment is calculated from an analysis of structural statistics including Gross Value Added to output ratios and productivity rates for relevant sectors of the economy. Total impacts include calculation of indirect effects through the supply chain and induced effects of spending of wages estimated from input-output tables.

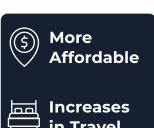
INCREMENTAL ECONOMIC IMPACT (2019)







€18.6B



in Travel





Direct GDP €5.2B

Affordable



More

\$



INCREMENTAL ECONOMIC IMPACT (2020)

238,000 Additional Jobs in Europe in 2020

€12.9 BILLION

Additional GDP in Europe in 2020

Direct GDP

Indirect & Induced GDP €7.1B

243,000 Additional Jobs in Europe in 2021

€11.8 BILLION

Additional GDP in Europe in 2021

Indirect & Induced GDP €6.5B

OTA DETAILS EUROPE



EUROPE OTA DETAILS

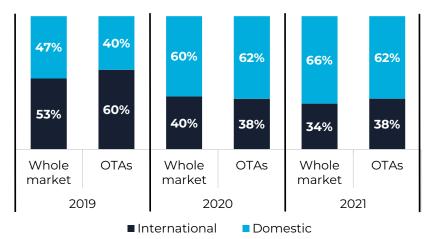
MARKET CHARACTERISTICS

International bookings made up a greater proportion of OTAs bookings, compared to the whole market in 2019

The international proportion of OTA bookings was relatively similar to the broader market in 2020 and 2021, when international travel in the EU was severely restricted.

Market Characteristics of OTAs Compared to Whole Market in the EU

Share of Nights (International & Domestic)

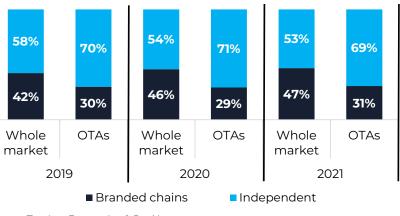


Source: Tourism Economics & Booking.com



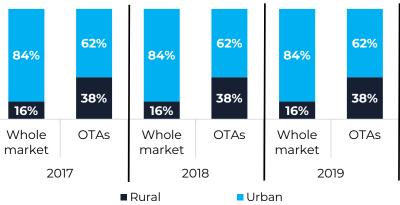
OTAs support independent accommodations

OTA booking accrue predominantly to independent hotels. In 2021, 69% of sales booked via OTAs were for independent hotels, as opposed to 53% across the market as a whole.



OTAs support travel to rural areas, spreading out tourism

In 2019, around 40% of nights booked via OTAs were in rural areas, compared to 16% across the whole market.



Source: Tourism Economics & ComScore

OTAs are important for alternative accommodation

Guests tend to be slightly more orientated towards alternative accommodations when booking via OTAs. In 2021, 46% of bookings over OTAs were for alternative accommodations as opposed to 44% across the market as a whole.

Market Characteristics of OTAs Compared to Whole Market in the EU

Share of Total Sales (Branded Chains & Independent)

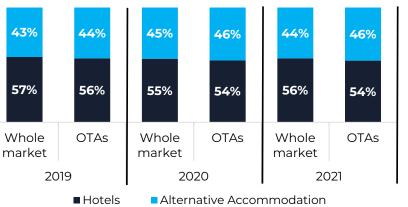
Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in the EU

Share of Total Sales (Rural & Urban)

Market Characteristics of OTAs Compared to Whole Market in the EU

Share of Total Sales (Hotels & Alternative Accommodations)



Source: Tourism Economics, ComScore, STR

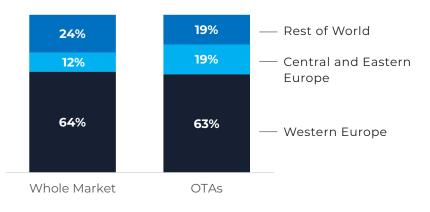
OTAs offer access to a different mix of international travelers

Over 60% of international overnight stays in the EU booked through OTAs were arranged by individuals from countries within Western Europe. For all international overnight stays within the EU, arrivals from Western Europe accounted for a similar share.

Almost 20% of OTA-linked EU overnight stays originated from Central and Eastern Europe—a higher share than the market overall. OTAs are used relatively less by long haul travelers to the EU, but they provide access to a different mix of international travelers.

Composition of International Travel

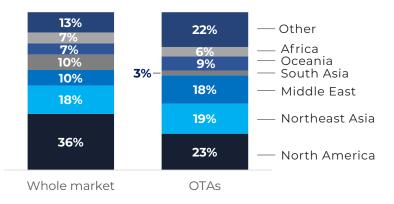
Origin of international travel to the EU, share of overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long Haul International Travel

Origin of long haul travel to the EU, share of overnights, 2019



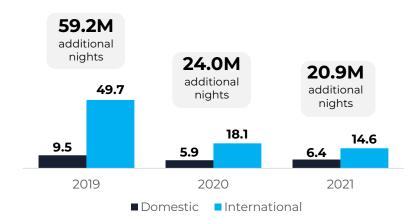
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Europe. In 2021, bookings of alternative accommodations via OTAs generated 20.9 million additional nights.

Additional Nights in Alternative Accommodation Millions of nights

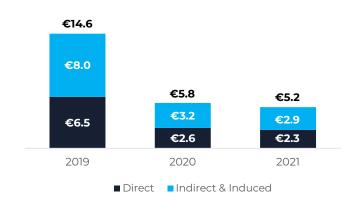


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

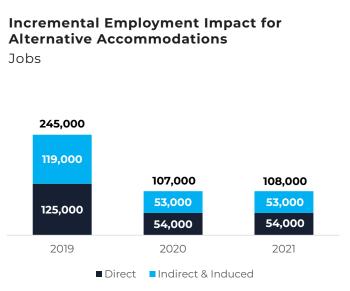
OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels, through the additional spending associated with non-hotel staying guests

In 2021, the incremental additional GDP impact generated by alternative accommodations booked via OTAs was €5.2 billion, supporting 108,000 employment across Europe.









Source: Tourism Economics & ComScore

OTA DETAILS EU COUNTRY RESULTS



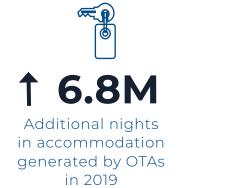
AUSTRIA KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Austria boosting GDP and job creation. Consumers in Austria also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel to Austria through OTAs increased steadily from 2015 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 34 million room nights were booked through OTAs in 2019, representing 22% of the 153 million room nights booked. In 2020, just 12 million room nights were booked through OTAs, representing 15% of the total 80 million room nights booked. There was little change in 2021 with 12 million nights booked through OTAs out of a total market of 78 million.

Key Impacts of OTAs in Austria in 2019





€1.3B Total incremental GDP

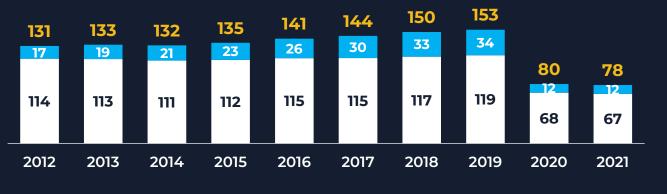
impact attributable to OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Austria, 2012-2021

Millions of Room Nights



Booked using other avenues

Booked using OTAs

OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Austrian accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €7.60 per room night (6.2 percent reduction) across Austria.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Austria. OTAs added an incremental €1.3 billion to the economy in 2019. OTAs contributed €0.6 billion to Austrian GDP in 2020 and 2021.

GDP Impacts (€ Billions) Attributable to OTAs in Austria, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



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OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Austrian economy. In 2019, the economic impacts attributable to OTAs included 16,000 jobs. In 2020 and 2021, OTAs were responsible for 8,000 and 10,000 jobs, respectively.

Job Impacts Attributable to OTAs in Austria, 2019-2021



AUSTRIA OTA DETAILS

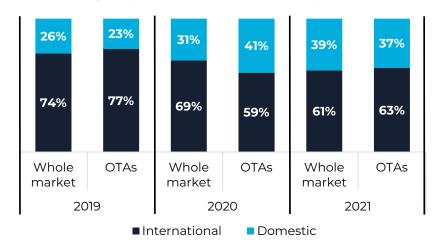
MARKET CHARACTERISTICS

International guest share of total bookings on OTA platforms is similar to the overall market

In 2021, international visitors accounted for 63% of nights booked on OTA platforms, compared to 61% for the market as a whole.

Market Characteristics of OTAs Compared to Whole Market in Austria

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com

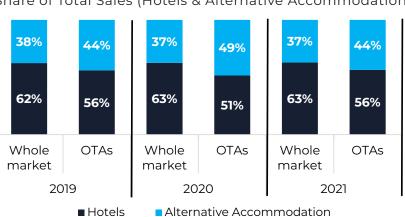


OTAs support independent accommodations

There is little difference in preference for chain or independent properties between OTA bookings and the wider market in Austria. In 2021, 76% of properties booked via OTAs were independent; the corresponding figure for the market as a whole was 72%.

OTAs are important for alternative accommodation providers

Guests tended to more orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021 44% of bookings via OTAs were alternative accommodations compared with 37% in the market as a whole.



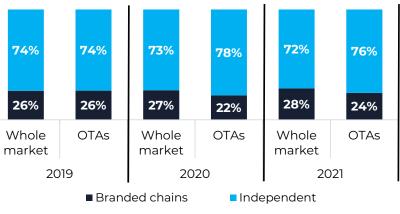
Source: Tourism Economics & ComScore

OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. Those listed on OTAs saw an average reduction of €12; those not listed saw an average reduction of €2.

Market Characteristics of OTAs Compared to Whole Market in Austria

Share of Total Sales (Branded Chains & Independent)



Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in Austria

Share of Total Sales (Hotels & Alternative Accommodations)

Total impact of OTA Activity on Average Daily Rates in Austria in 2019



Reduction on Daily Rates (Euros)

Source: Tourism Economics, ComScore, STR

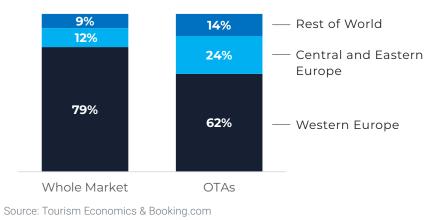
OTAs offer access to a larger share of non-European travelers as well as travelers from Central and Eastern Europe

Just over 60% of international overnight stays in Austria booked through OTAs were arranged by individuals from countries within Western Europe. For comparison, for the market as a whole, arrivals from Western Europe accounted for 79% of total international overnight stays. Over 20% of OTA international overnight stays originated from Central and Eastern Europe—double the share in the market overall (12%). OTAs provide larger support for long-haul markets than the wider market.

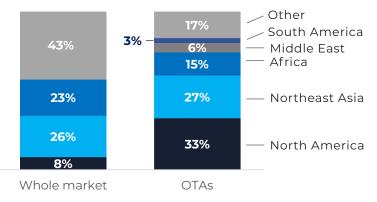
OTAs support long-haul arrivals from all over the world, with the share of long-haul overnights spread out across a range of global regions. The established North American regional source market was very important to the OTA long-haul market mix, accounting for one third of overnights. Northeast Asia accounted for a similar shares across OTA bookings and the wider market. At 27%, this was the second most important long-haul region.

Composition of International Travel

Origin of international travel to Austria, share of overnights, 2019



Composition of Long-Haul International Travel Origin of long haul travel to Austria, share of overnights, 2019



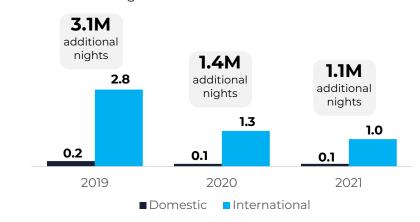
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Austria. In 2021, bookings via OTAs generated an additional 1.1 million nights in Austria.

Additional Nights in Alternative Accommodation Millions of nights



ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

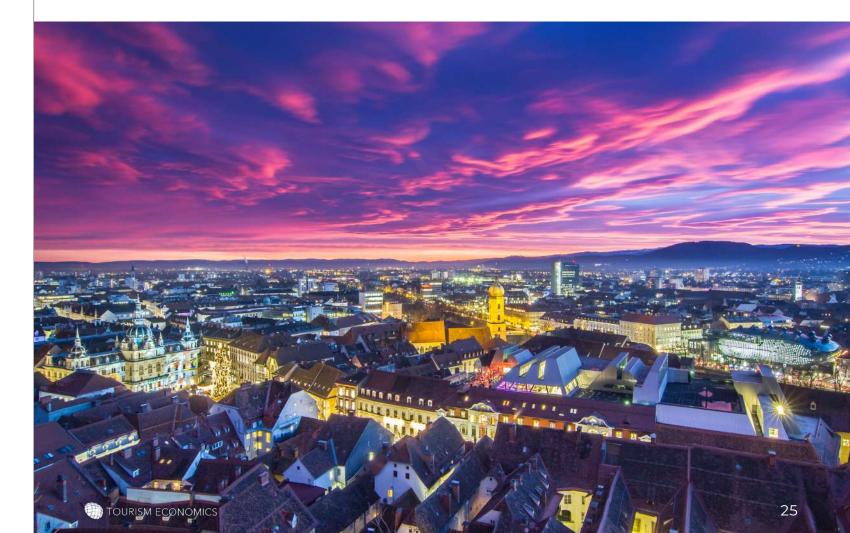
OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €0.24 billion in total incremental GDP and 4,200 total jobs although both were significantly higher in 2019.





Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

TOURISM ECONOMICS



BULGARIA KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Bulgaria boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. Consumers in Bulgaria also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Bulgaria through OTAs increased only marginally from 2016 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 6 million room nights were booked through OTAs in 2019, representing 21% of the 27 million room nights booked – a proportion which has been consistently maintained. In 2020, just 2 million room nights were booked through OTAs, representing 21% of all room nights booked. In 2021, 4 million nights were booked through OTAs out of a total market of 18 million.

Key Impacts of OTAs in Bulgaria in 2019

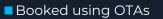


Nights in All Accommodation Types in Bulgaria, 2012-2021

Millions of Room Nights



■ Booked using other avenues



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Bulgarian accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of 11.50 leva per room night (6.9 percent reduction) across Bulgaria.

Reduction in Average Daily Hotel Rates Attributable to OTAs (Leva)



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Bulgaria. OTAs added an incremental 376 million leva to the economy in 2019. OTAs contributed 164 million leva to Bulgarian GDP in 2020 and 93 million leva to Bulgarian GDP in 2021.

GDP Impacts (Leva Billions) Attributable to OTAs in Bulgaria, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Bulgarian economy. In 2019, the economic impacts attributable to OTAs included 10,000 jobs. In 2020 and 2021, OTAs were responsible for 5,000 and 3,000 jobs, respectively.

Job Impacts Attributable to OTAs in Bulgaria, 2019-2021

10

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BULGARIA OTA DETAILS

MARKET CHARACTERISTICS

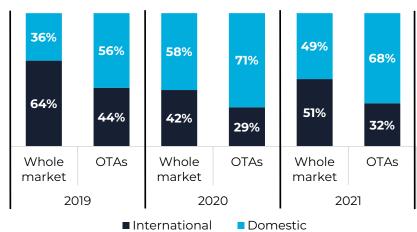
Domestic bookings comprise the majority of the OTA market

Amounts as Indicated

In Bulgaria domestic bookings are a higher share of the OTA market than they are of the market as a whole. In 2021, 68% of OTA bookings were domestic compared to a whole market share of 49%.

Market Characteristics of OTAs Compared to Whole Market in Bulgaria

Share of Nights (International & Domestic)



incremental GDP

jobs

accommodations

OTAs support independent

During the pandemic, OTA bookings were more orientated towards independent hotels, compared to the market as a whole. In 2021, 87% of hotels booked via OTAs were independent, compared to 74% across the whole market.

82%

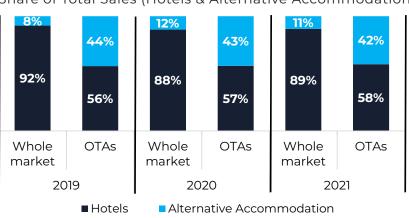
18%

Whole market

Source: Tourism Economics & Booking.com

OTAs are important for the alternative accommodation providers

Guests tended to more orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021, 42% of bookings via OTAs were alternative accommodations compared with just 11% across the market as a whole.



Source: Tourism Economics & Booking.com

OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. Those listed on OTAs saw an average reduction of 17 leva; those not listed saw an average reduction of 12 leva.



28

reduced daily rates

More Increases GDP Job Affordable in Travel Impacts Impacts **376M leva** 10.000 -1/13+1.1M 2019 reduced daily rates room nights incremental GDP 164M leva 5,000 -lv 12 +0.5M 2020 reduced daily rates room nights jobs -lv 10 3,000 93M leva +0.5M2021

room nights

International

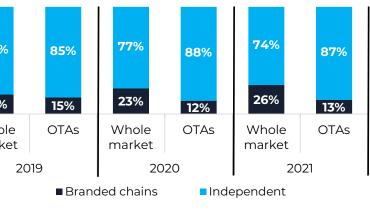
Source: Tourism Economics & Booking.com

Carl Assa

Summary Impacts of OTAs in Bulgaria, 2019-2021

Market Characteristics of OTAs Compared to Whole Market in Bulgaria

Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Bulgaria

Share of Total Sales (Hotels & Alternative Accommodations)

Total impact of OTA Activity on Average Daily Rates in Bulgaria in 2019

Reduction on Daily Rates (Leva)



Source: Tourism Economics, ComScore, STR

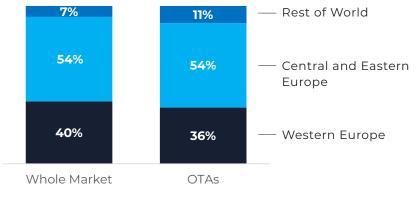
OTAs offer access to a different mix of international travelers

The vast majority of nights spent in Bulgaria are from short-haul source markets and this is reflected in the mix on OTAs as well.

The OTA shares of long-haul travel to the country also broadly echo the wider market as a whole. Six out of ten longhaul visitors are from the Middle East (compared to 61% across the wider market). A further 18% are from North America – just a slightly higher share than across the wider market. South Asia is less well represented in the OTA mix.

Composition of International Travel

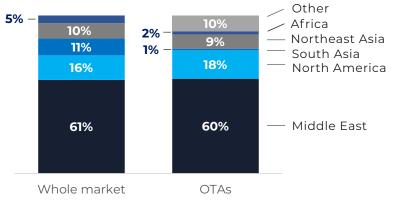
Origin of international travel to Bulgaria, share of overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

Origin of long haul travel to Bulgaria, share of overnights, 2019



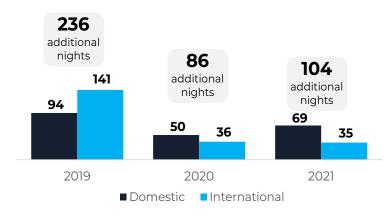
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Bulgaria. In 2021, bookings via OTAs generated an additional 104,000 nights in Bulgaria.

Additional Nights in Alternative Accommodation Thousands of nights

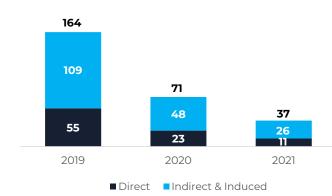


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

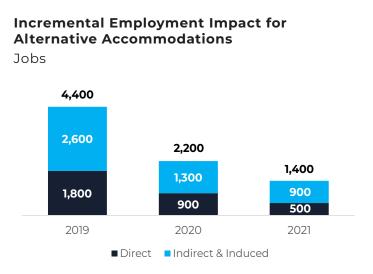
Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated 37 million leva in total incremental GDP and 1,400 total jobs although both were significantly higher in 2019.





Source: Tourism Economics & ComScore





Source: Tourism Economics & ComScore

CROATIA KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Croatia boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. Consumers in Croatia also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Croatia through OTAs increased steadily from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 19 million room nights were booked through OTAs in 2019, representing 20% of the 91 million room nights booked. In 2020, just 7 million room nights were booked through OTAs, representing 18% of the total 40 million room nights booked. Total room nights in Croatia in 2021 increased to 61 million; just 11 million were booked through OTAs, representing 18% of the total Croatian accommodations market.

Key Impacts of OTAs in Croatia in 2019



Nights in All Accommodation Types in Croatia, 2012-2021

Millions of Room Nights

in 2019



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Croatian accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of 80kn per room night (6.6 percent reduction) across Croatia.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021

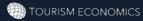


OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Croatia. OTAs added an incremental 2.5 billion kn to the economy in 2019. OTAs contributed 1.2 billion kn to Croatian GDP in 2020 and 1.3 billion kn to Croatian GDP in 2021.

GDP Impacts (Billions kuna) Attributable to OTAs in Croatia, 2019-





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Croatian economy. In 2019, the economic impacts attributable to OTAs included 10,000 jobs. In 2020 and 2021, OTAs were responsible for 6,000 and 7,000 jobs, respectively.

Job Impacts Attributable to OTAs in Croatia, 2019-2021



CROATIA OTA DETAILS

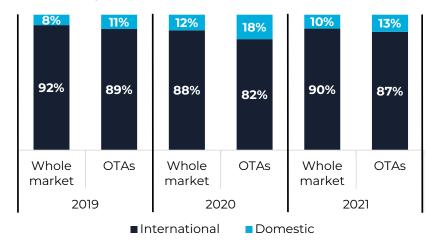
MARKET CHARACTERISTICS

International bookings dominate the market with little difference between OTAs and the market as a whole

Bookings on OTAs to Croatia have consistently been marginally more skewed to the domestic sector when compared to the market as a whole. Despite this, the international segment is dominant across both, accounting for 87% of OTA nights and 90% of total market nights in 2021.

Market Characteristics of OTAs Compared to Whole Market in Croatia

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be slightly more orientated towards independent hotels when booking travel through OTAs. In 2021, independent properties booked on OTAs accounted for 77% of sales as opposed to 59% across the market as a whole.

69% 31%

Whole market

Source: Tourism Economics & Booking.com

OTAs are important for alternative accommodation providers

Alternative accommodation providers support the majority of accomodation sales in Croatia. However, guests tended to be slightly more orientated towards alternative accommodation solutions when booking travel through OTAs.

69% 31%

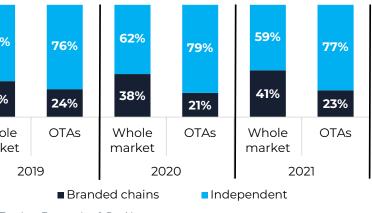
Whole market

Non-hotel accommodation is dominated by apartments in Croatia

In Croatia in 2019, the non-hotel accommodation segment was dominated by apartments, which accounted for 65% of alternative accommodation sales. Guest houses accounted for the next largest share.

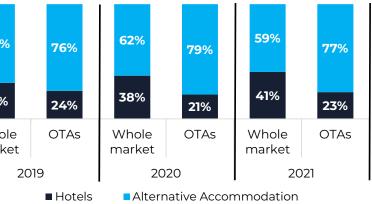
Market Characteristics of OTAs Compared to Whole Market in Croatia

Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Croatia

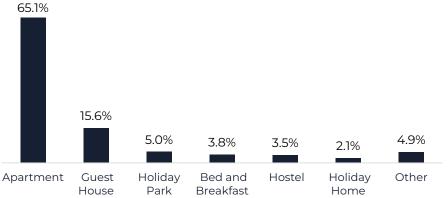
Share of Total Sales (Hotels & Alternative Accommodations)



Source: Tourism Economics & ComScore

Types of non-hotel sales in Croatia, 2019

Share of total sales excluding hotels



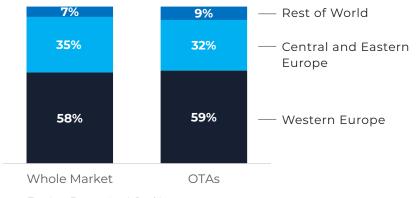
OTAs offer access to a different mix of international travelers

Almost 60% of international overnight stays in Croatia booked through OTAs were arranged by individuals from countries within Western Europe. This was similar to the market as a whole in which Western European nights accounted for 58%. Central and Eastern Europe was a lower share in the OTA mix than across the whole market but, unsurprisingly, both were substantial—32% on the OTA market share.

The established North American regional source market is important for the whole market mix of long-haul travel, accounting for 43% of long-haul total. For OTA bookings it is a significantly lower share, at 29%. Northeast Asia is important for both source market mixes. Oceania and South America represent higher shares in the OTA mix.

Composition of International Travel

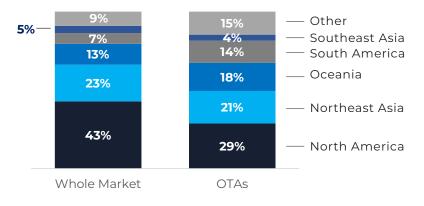
Origin of international travel to Croatia, share of overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

Origin of long haul travel to Croatia, share of overnights, 2019



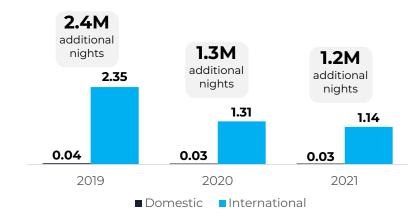
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Croatia. In 2021, bookings of alternative accommodations via OTAs generated an additional 1.2 million nights

Additional Nights in Alternative Accommodation Millions of nights

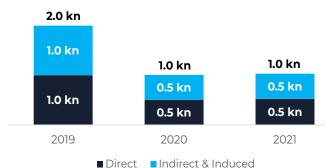


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated 1 billion kn in total incremental GDP and 6,000 total jobs although both were significantly higher in 2019.

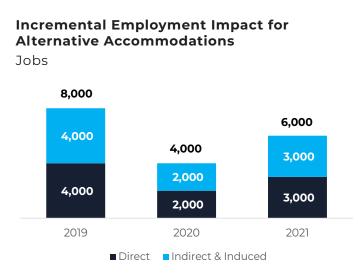




Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore



CZECH REPUBLIC KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Czech Republic boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. Consumers in Czech Republic also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Czech Republic through OTAs increased steadily from 2012 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 16 million room nights were booked through OTAs in 2019, representing 30% of the 52 million room nights booked. In 2020, just 6 million room nights were booked through OTAs, representing 23% of the total 25 million room nights booked. Total room nights in Czech Republic in 2021 stayed at 25 million, of which 6 million were booked through OTAs, representing 23% of the total Czech accommodations market.

Key Impacts of OTAs in the Czech Republic in 2019



Nights in All Accommodation Types in the Czech Republic, 2012-2021 Millions of Room Nights



Booked using other avenues

Booked using OTAs

OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Czech accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of 154 Kč per room night (7.2 percent reduction) across the Czech Republic.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Czech Republic. OTAs added an incremental 10.9 billion Kč to the economy in 2019. OTAs contributed 3.4 billion Kč to Czech GDP in 2020 and 3.0 billion Kč to Czech GDP in 2021.

GDP Impacts (Czech koruna Billions) Attributable to OTAs in the Czech

10.9 Kč 3.4

2019

TOURISM ECONOMICS

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OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Czech economy. In 2019, the economic impacts attributable to OTAs included 13,000 jobs. In 2020 and 2021, OTAs were responsible for 4,000 jobs.

Job Impacts Attributable to OTAs in the Czech Republic, 2019-2021



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CZECH REPUBLIC OTA DETAILS

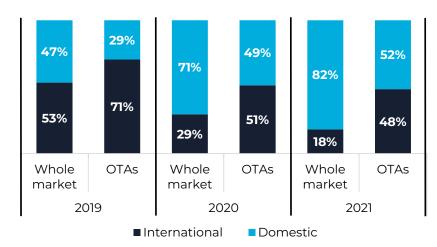
MARKET CHARACTERISTICS

International bookings make up a greater share of OTAs bookings compared to the whole market

International bookings make up a greater proportion of OTAs bookings, compared to the whole market. In 2021, international bookings comprised 48% of total OTA bookings and 18% of bookings for the market as a whole.

Market Characteristics of OTAs Compared to Whole Market in the Czech Republic

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

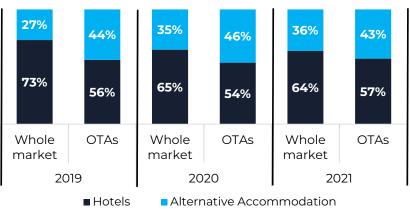
Guests tended to more orientated towards independent hotels when booking travel through OTAs. In 2021, approximately 82% of total OTA sales were booked at independent hotels, compared to 74% across the market as a whole.

74% 26%

> Whole market

OTAs are important for alternative accommodation providers

Guests in Czech Republic booking through OTAs have tended to orient towards alternative accommodations when compared to the whole market. In 2021, 43% of sales on OTAs were alternative accommodations compared to 36% of the whole market.



Source: Tourism Economics & ComScore

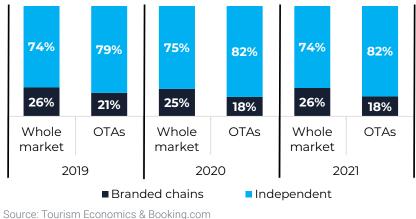
OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. Those listed on OTAs saw an average reduction of 307 Kč; those not listed saw an average reduction of 61 Kč.

-251

Market Characteristics of OTAs Compared to Whole Market in the Czech Republic

Share of Total Sales (Branded Chains & Independent)

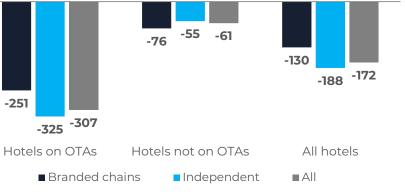


Market Characteristics of OTAs Compared to Whole Market in the Czech Republic

Share of Total Sales (Hotels & Alternative Accommodations)

Total impact of OTA Activity on Average Daily Rates in the Czech Republic in 2019

Reduction on Daily Rates (Czech koruna)



Source: Tourism Economics, ComScore, STR

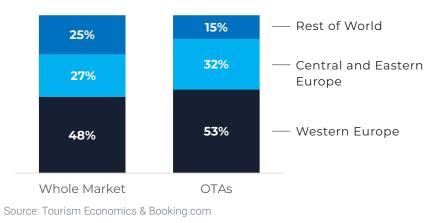
OTAs offer access to a different mix of international travelers

Approximately 53% of international overnight stays in Czech Republic booked through OTAs were arranged by individuals from countries within Western Europe For the market as a whole, arrivals from Western Europe accounted for 48% of international overnight stays. Around 32% of OTAs international overnight stays originated from Central and Eastern Europe—a slightly larger share than for the whole market (27%). Long-haul travel accounted for 15% of OTA bookings which was a small share than for the market as a whole (25%).

For long-haul travel, Northeast Asian travellers were OTAs largest beneficiary, accounting for 28% of long haul stays in the Czech Republic in 2019. Arrivals from the Middle East accounted for the second largest share (25%) of long-haul overnight stays booked through OTAs. This share was much larger than the Middle East's share of the market overall.

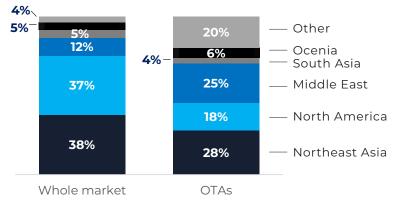
Composition of International Travel

Origin of international travel to the Czech Republic, share of overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to the Czech Republic, share of overnights, 2019



Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

OTAs support impacts in alternative lodgings as well as hotels In each year from 2019 to 2021, OTAs increased the number of overnight stays in alternative accommodations in Czech Republic. In 2021 bookings on OTAs generated an additional 170,000 nights.

Additional Nights in Alternative Accommodation Thousands of nights



ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated 1.3 billion Kč in total incremental GDP and 1,700 total jobs.



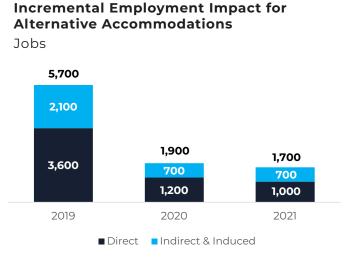


Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

TOURISM ECONOMICS



DENMARK **KEY INSIGHTS**

OTAs generate additional travel demand for accommodations in Denmark boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in Denmark by orienting consumers towards rural areas. Consumers in Denmark also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Denmark through OTAs rose steadily from 2014 to 2019, before the effects of the pandemic led to a decline in all travel bookings - which was less steep than for many other European countries.

As shown in the accompanying chart, approximately 14 million room nights were booked through OTAs in 2019, representing 24% of the 57 million room nights booked. In 2020, although total travel fell, travel through OTAs fell more steeply with just 5 million room nights being booked, representing 11% of the total 45 million room nights booked. In 2021, 6 million nights were booked through OTAs with 51 million booked in total, meaning that OTAs accounted for 12% of the total Danish accommodations market.

Key Impacts of OTAs in Denmark in 2019





4.78 KR.

Total incremental GDP impact attributable to OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Denmark, 2012-2021 Millions of Room Nights



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Danish accommodation market would be higher. Between 2014 and 2021, OTAs generated an average reduction in rates of 86 Kr. per room night (6.9 percent reduction) across Denmark.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Denmark. OTAs added an incremental 4.7 billion Kr. to the economy in 2019. OTAs contributed 2.0 billion Kr. to Denmark's GDP in 2020 and 1.9 billion Kr. to Denmark's GDP in 2021.

GDP Impacts (Kroner Billions) Attributable to OTAs in Denmark, 2019-





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of Denmark economy. In 2019, the economic impacts attributable to OTAs included 6,000 jobs. In 2020 and 2021, OTAs were responsible for 3,000 and 3,000 jobs, respectively.

Job Impacts Attributable to OTAs in Denmark, 2019-2021



DENMARK OTA DETAILS

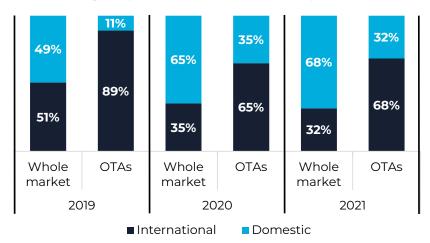
MARKET CHARACTERISTICS

International bookings make up a far greater proportion of OTAs bookings, compared to the whole market

In Denmark, the OTA split between international and domestic bookings is dominated by the international segment. This has even persisted through the pandemic period. In contrast, the market as a whole was evenly split in 2019 and has become more domestic since.



Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs, although in some years the difference has been at the margin. In 2021, 65% of OTA bookings were independent as opposed to 62% across the market as a whole.

62% 38%

Source: Tourism Economics & Booking.com

OTAs support travel to rural areas, spreading out tourism

OTA benefits in Denmark are significantly more concentrated in rural areas than across the market as a whole. In 2021, rural bookings accounted for 34% as opposed to a mere 6% across the market as a whole.

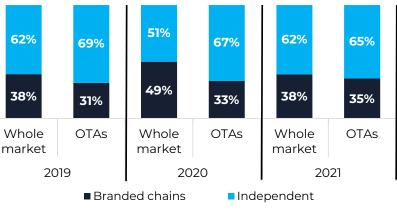
94%

Whole market

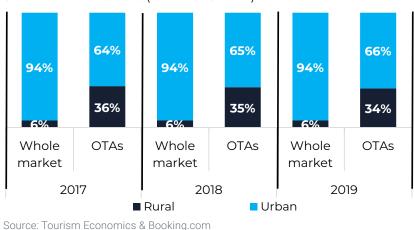
OTAs have demonstrated an ability to **Rural Booking Index in Denmark** adapt to changing preferences 2012-2021 OTAs have demonstrated that they are 50 able to respond rapidly to changing 40 market preferences and the rural booking index increased significantly above trend 30 in 2020. 20 Rural bookings 10 Pre-pandemic trend 0

Market Characteristics of OTAs Compared to Whole Market in Denmark

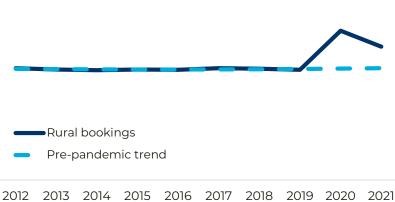
Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Denmark



Share of Total Sales (Rural & Urban)



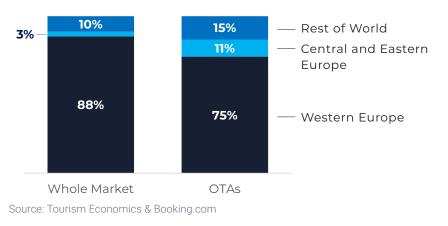
OTAs offer access to a larger share of non-European travelers as well as travelers from Central and Eastern Europe

Around 75% of international overnight stays in Denmark booked through OTAs were arranged by individuals from countries within Western Europe. This was less than for the market as a whole in which Western European nights accounted for 88%. Central and Eastern Europe was more strongly represented in the OTA source market mix, accounting for 11% as opposed to just 3% in the whole market. The long-haul element booked via OTAs was also significantly larger – 15% compared to 10% across the wider market.

The North American regional source market is very important for the whole market mix of long-haul travel, accounting for 56% of long-haul total. For OTA bookings it is less than half that as a share (27%). Northeast Asia accounts for similar shares across OTA bookings and the wider market (26% and 25% respectively). Oceania and South America have significantly higher shares in the OTA mix than they have in the overall market mix.

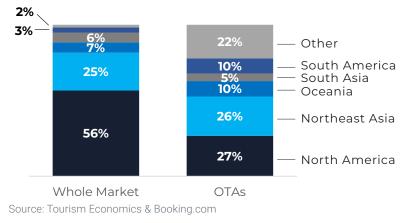
Composition of International Travel

Origin of International Travel to Denmark, Share of Overnights, 2019



Composition of Long-Haul International Travel

Origin of Long Haul Travel to Denmark, Share of Overnights, 2019

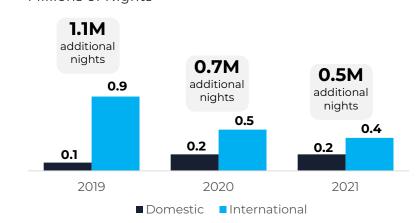


MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Denmark. In 2021, bookings of alternative accommodations via OTAs generated an additional 0.5 million nights.

Additional Nights in Alternative Accommodation Millions of Nights

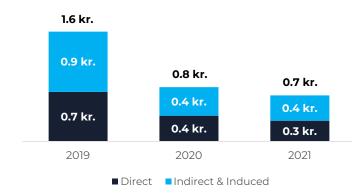


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated Kr.0.7 billion in total incremental GDP and 1,100 total jobs although both were significantly higher in 2019.

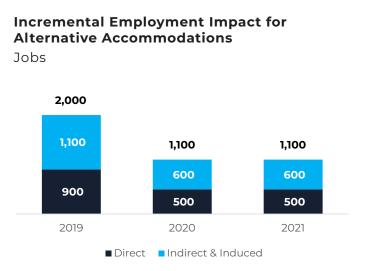




Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore



ESTONIA KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Estonia boosting GDP and job creation. Consumers in Estonia also benefit from OTAs through more affordable rates offered to travelers.

Although relatively small in volumes, the number of travellers organising travel in Estonia through OTAs rose steadily from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 2 million room nights were booked through OTAs in 2019, representing 30% of the 7 million room nights booked. In 2020, although total travel fell, travel through OTAs fell more steeply with just 1 million room nights being booked, representing 27% of the total 4 million room nights booked. In 2021, 1 million nights were booked through OTAs with 4 million booked in total, meaning that OTAs accounted for 29% of the total Estonian accommodations market.

Key Impacts of OTAs in Estonia in 2019



in 2019

OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Estonia, 2012-2021 Millions of Room Nights



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Estonian accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €6.20 per room night (7.5 percent reduction) across Estonia.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Estonia. OTAs added an incremental €115 million to the economy in 2019. OTAs contributed €40 million to Estonia's GDP in 2020 and €29 million to Estonia's GDP in 2021.

GDP Impacts (€ Millions) Attributable to **OTAs in Estonia, 2019-2021**





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Thousands) in All Accommodation Attributable to OTAs, 2019-2021

210

2020

163

2021

OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

529

2019

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of Estonia's economy. In 2019, the economic impacts attributable to OTAs included 3,000 jobs. In both 2020 and 2021, OTAs were responsible for around 1,000 jobs.

Job Impacts Attributable to OTAs in Estonia, 2019-2021



ESTONIA OTA DETAILS

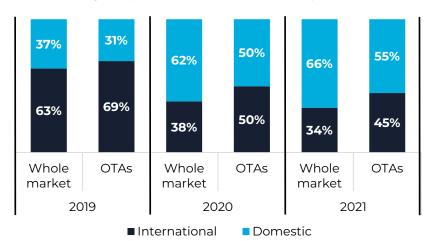
MARKET CHARACTERISTICS

International bookings make up a greater proportion of OTAs bookings, compared to the whole market

Among OTA bookings, the international segment of the market has consistently represented a higher share than across the market as a whole. In 2021, 45% of bookings via OTAs were international, compared to 34% across the whole market.



Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

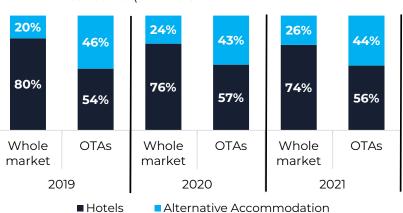
Guests tended to be more orientated towards independent hotels when booking travel through OTAs, although in some years the difference has been at the margin. In 2021, 82% of OTA bookings were independent as opposed to 76% across the market as a whole.

80%

Whole

OTAs are important for alternative accommodation providers

Guests tended to be more orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021, 44% of OTA bookings were to alternative types of accommodation as opposed to just 26% across the whole market.



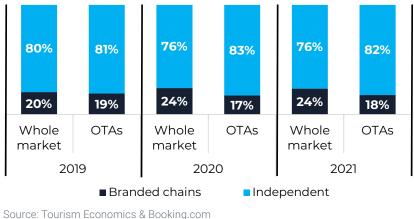
Source: Tourism Economics & ComScore

OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. Those listed on OTAs saw an average reduction of €12; those not listed saw an average reduction of €5.

Market Characteristics of OTAs Compared to Whole Market in Estonia

Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Estonia

Share of Total Sales (Hotels & Alternative Accommodations)

Total impact of OTA Activity on Average Daily Rates in Estonia in 2019

Reduction on Daily Rates (Euros)



Source: Tourism Economics, ComScore, STR

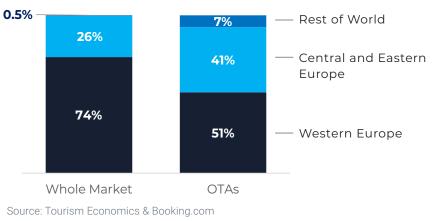
OTAs offer access to a larger share of non-European travelers as well as travelers from Central and Eastern Europe

Over 50% of international overnight stays in Estonia booked through OTAs were arranged by individuals from countries within Western Europe. This was far lower than the market as a whole in which Western European nights accounted for 74%. Central and Eastern Europe was more strongly represented in the OTA source market mix, accounting for 41% as opposed to just 26% in the whole market. Longer haul travel represented 7% of OTA overnights but a very minimal share of whole market overnights.

Within long-haul travel, OTAs support demand from a range of developing source markets including Northeast Asia, Oceania, the Middle East and South America.

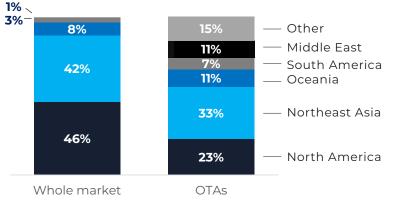
Composition of International Travel

Origin of international travel to Estonia, share of overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to Estonia, share of overnights, 2019

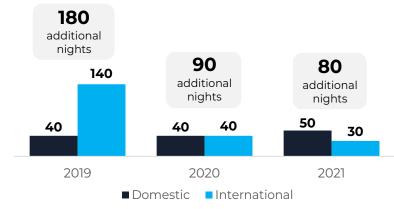


Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Estonia. In 2021, bookings of alternative accommodations via OTAs generated an additional 80,000 nights. **Additional Nights in Alternative Accommodation** Thousands of nights

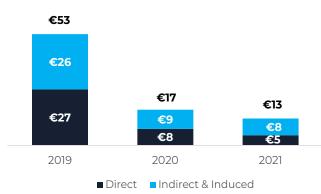


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €13 million in total incremental GDP and 400 total jobs although both were significantly higher in 2019.

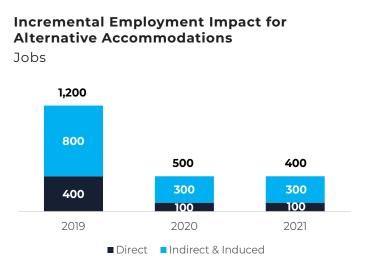




Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore



FRANCE **KEY INSIGHTS**

OTAs generate additional travel demand for accommodations in France boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in France by orienting consumers towards rural areas. Consumers in France also benefit from OTAs through more affordable rates offered to travelers.

As an already very well-established destination, the number of travellers organising travel to France through OTAs increased relatively slowly from 2012 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 210 million room nights were booked through OTAs in 2019, representing 22% of the 944 million room nights booked. In 2020, just 74 million room nights were booked through OTAs, representing 15% of the total 506 million room nights booked. While total room nights in France in 2021 increased to 601 million, just 98 million were booked through OTAs, representing 16% of the total French accommodations market.

Key Impacts of OTAs in France in 2019



Nights in All Accommodation Types in France, 2012-2021

Millions of Room Nights

in 2019



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the French accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €7.10 per room night (4.6 percent reduction) across France.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across France. OTAs added an incremental €3.5 billion to the economy in 2019. OTAs contributed €1.6 billion to French GDP in 2020 and €1.6 billion to French GDP in 2021.

GDP Impacts (€ Billions) Attributable to OTAs in France, 2019-2021



TOURISM ECONOMICS

OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

1710

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the French economy. In 2019, the economic impacts attributable to OTAs included 45,000 jobs. In 2020 and 2021, OTAs were responsible for 23,000 and 26,000 jobs, respectively.

Job Impacts Attributable to OTAs in France, 2019-2021



FRANCE OTA DETAILS

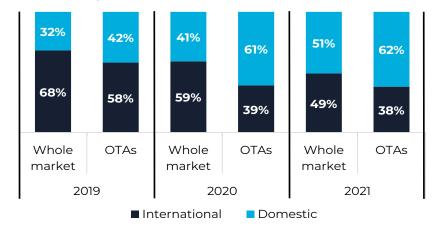
MARKET CHARACTERISTICS

Domestic bookings make up a greater share of OTAs bookings compared to the whole market

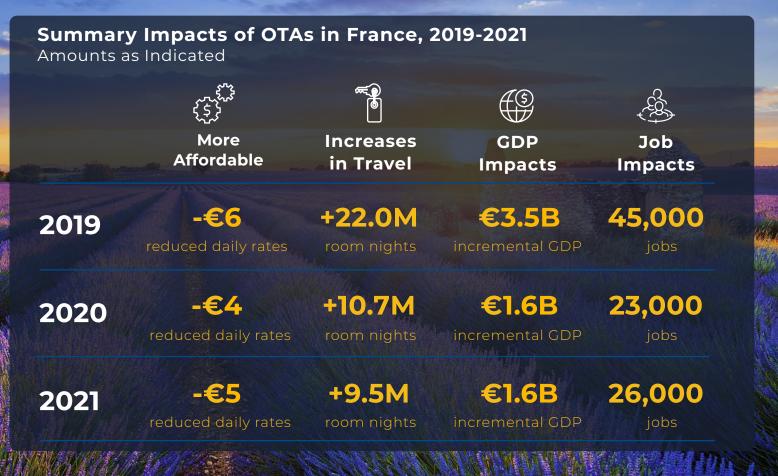
Domestic bookings make up a greater share of OTAs bookings compared to the whole market. In 2019, domestic bookings comprised 42% of total OTA bookings and 32% of bookings for the market as a whole.

Market Characteristics of OTAs Compared to Whole Market in France

Share of nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs. In 2021, approximately 58% of total OTA sales were booked at independent hotels, compared to 41% across the market as a whole.

OTAs support travel to rural areas, spreading out tourism

Guests tended to be more orientated towards rural locations when booking travel through OTAs. In 2021, approximately 41% of total OTA sales were booked in rural areas, compared to only 12% across the wider market.

88%

Whole market

Source: Tourism Economics & Booking.com

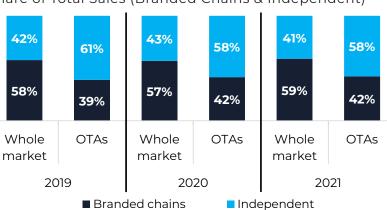
OTAs demonstrated the ability to respond to changes in traveller demand during the pandemic

The OTA sector proved in 2020 and 2021 that it responds well to change with a jump in rural bookings connected both with 'staycationing' and with a desire for less crowded places.

50

URISM ECONOMIC:

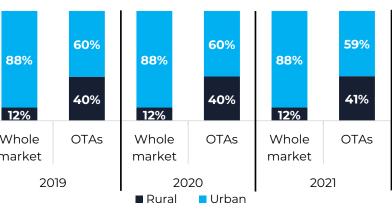
Market Characteristics of OTAs Compared to Whole Market in France



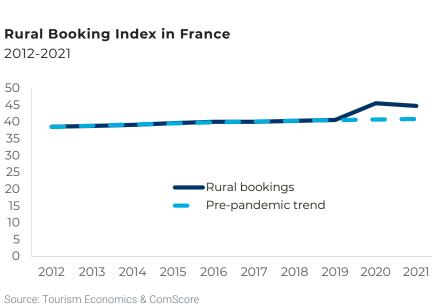
Share of Total Sales (Branded Chains & Independent)

Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in France



Share of Total Sales (Rural & Urban)



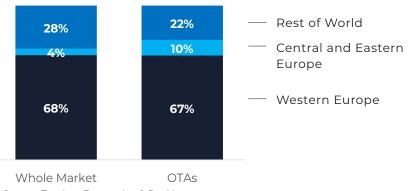
OTAs offer access to a different mix of international travelers

Approximately 67% of international overnight stays in France booked through OTAs were arranged by individuals from countries within Western Europe. For the market as a whole, arrivals from Western Europe accounted for 68% of total international overnight stays. Around 10% of OTAs international overnight stays originated from Central and Eastern Europe—a higher share than the market overall (4%).

Although North America accounted for the largest single share, the composition of OTAs long-haul sales was less orientated towards it than the overall market. Demand from a range of developing source markets is supported instead. There is a notable skew towards Northeast Asia compared to the accommodation market overall. The same is true for bookings from South America.

Composition of International Travel

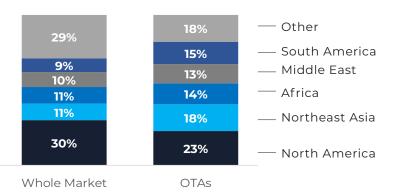
Origin of International Travel to France, Share of Overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

Origin of Long Haul Travel to France, Share of Overnights, 2019

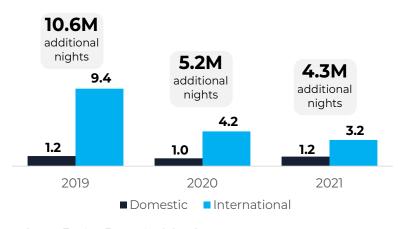


Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021, OTAs increased the number of overnight stays in alternative accommodations in France. In 2021 bookings on OTAs generated an additional 4.3 million nights. **Additional Nights in Alternative Accommodation** Millions of Nights



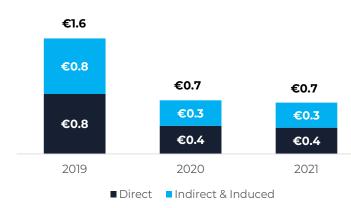
TOURISM ECONOMICS

ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

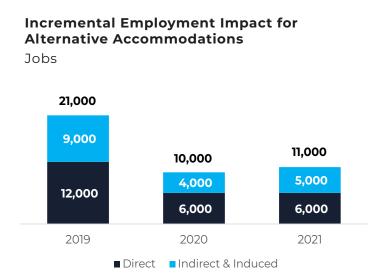
Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €0.7 billion in total incremental GDP and 11,000 total jobs although both were significantly higher in 2019.

Incremental GDP impact for Alternative Accommodations Billions of Euros



Source: Tourism Economics & ComScore





GERMANY KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Germany boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in Germany by orienting consumers towards rural areas. Consumers in Germany also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Germany through OTAs increased steadily from 2012 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings. As shown in the accompanying chart, approximately 153 million room nights were booked through OTAs in 2019, representing 31% of the 496 million room nights booked. In 2020, just 63 million room nights were booked through OTAs, representing 21% of the total 302 million room nights booked. While total room nights in Germany in 2021 increased to 315 million, just 58 million were booked through OTAs, representing 18% of the total German accommodations market.

Key Impacts of OTAs in Germany in 2019



Nights in All Accommodation Types in Germany, 2012-2021

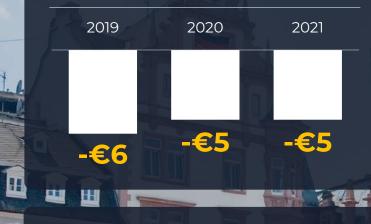




OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the German accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction of €6.50 in average daily hotel rates in Germany (5.7 percent reduction).

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

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OTAs generate additional economic growth across Germany. OTAs added an incremental €4.7 billion to the economy in 2019. OTAs contributed €1.6 billion to German GDP in 2020 and €1.5 billion to German GDP in 2021.

GDP Impacts (€ Billions) Attributable to OTAs in Germany, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the German economy. In 2019, the economic impacts attributable to OTAs included 82,000 jobs. In 2020 and 2021, OTAs were responsible for 30,000 jobs and 31,000 jobs, respectively.

Job Impacts Attributable to OTAs in Germany, 2019-2021



GERMANY OTA DETAILS

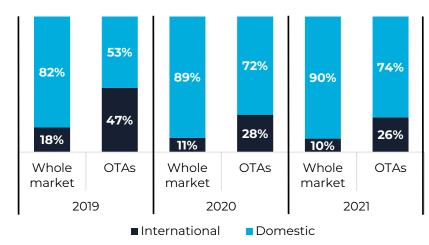
MARKET CHARACTERISTICS

International bookings make up a greater proportion of OTAs bookings compared to the whole

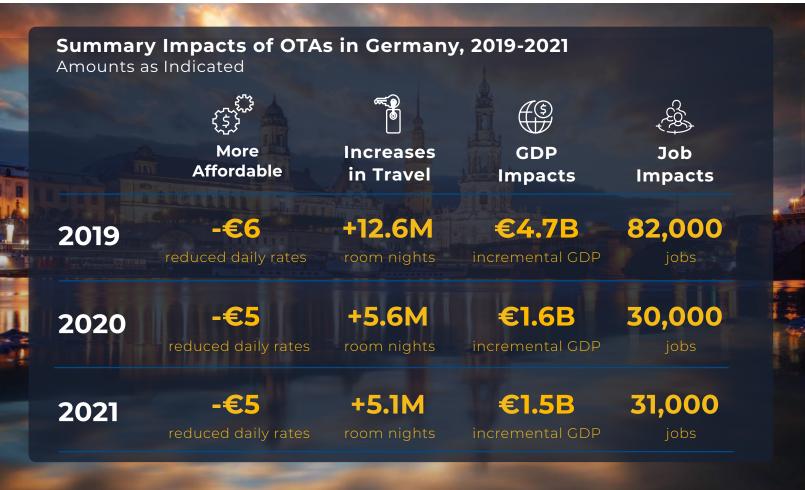
International bookings make up a greater proportion of OTAs bookings compared to the whole market. In 2021, international bookings comprised 26% of total OTA bookings and just 10% of bookings for the whole market in Germany.

Market Characteristics of OTAs Compared to Whole Market in Germany

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs. In 2021, approximately 68% of total OTA sales were booked at independent hotels.

Whole market

Source: Tourism Economics & Booking.com

OTAs support travel to rural areas, spreading out tourism

In 2019, approximately 39% of total OTA sales were booked in rural areas, compared to only 15% across the wider market.

15%

Whole market

40

35

30

25

20

15

10

5

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OTAs demonstrated the ability to respond to changes in traveller demand during the pandemic

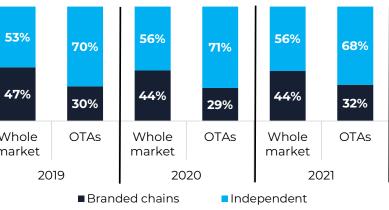
The OTA sector proved in 2020 and 2021 that it responds well to change with a jump in rural bookings connected both with 'staycationing' and with a desire for less crowded places.

The share of rural bookings on OTAs increased to a higher level in 2020 and 2021.

TOURISM ECONOMICS

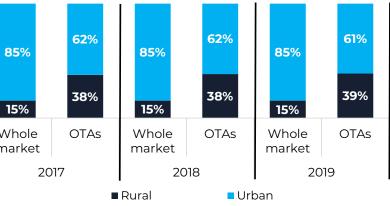
Market Characteristics of OTAs Compared to Whole Market in Germany

Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Germany

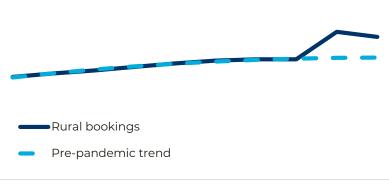
Share of Total Sales (Rural & Urban)



Source: Tourism Economics & Booking.com

Rural Booking Index in Germany

2012-2021



2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Source: Tourism Economics & Booking.com

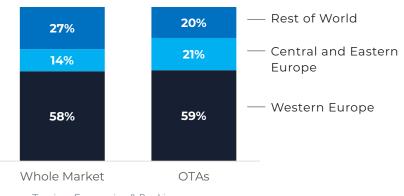
OTAs offer access to a different mix of international travelers

Approximately 59% of international overnight stays in Germany booked through OTAs were arranged by individuals from countries within Western Europe. For comparison, for the market as a whole, arrivals from Western Europe accounted for an almost identical 58% of total international overnight stays. Around 21% of OTAs international overnight stays originated from Central and Eastern Europe—half as much again as the share in the whole market. Longer haul travel accounted for one fifth of OTA overnights—slightly less than the 27% across the market as a whole.

The composition of OTAs long-haul sales was much less orientated towards established North American demand when compated to the overall market. Demand from a range of developing source markets is supported instead. There is a notable skew towards the Middle East compared to the accommodation market overall.

Composition of International Travel

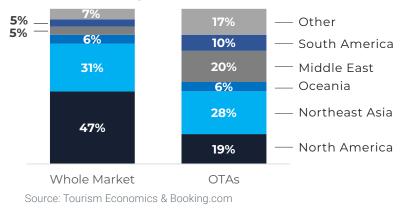
Origin of International Travel to Germany, Share of Overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

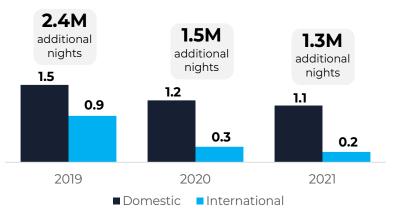
Origin of Long Haul Travel to Germany, Share of Overnights, 2019



MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021, OTAs increased the number of overnight stays in alternative accommodations in Germany. In 2021 bookings on OTAs generated an additional 1.3 million nights. **Additional Nights in Alternative Accommodation** Millions of Nights



TOURISM ECONOMICS

ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

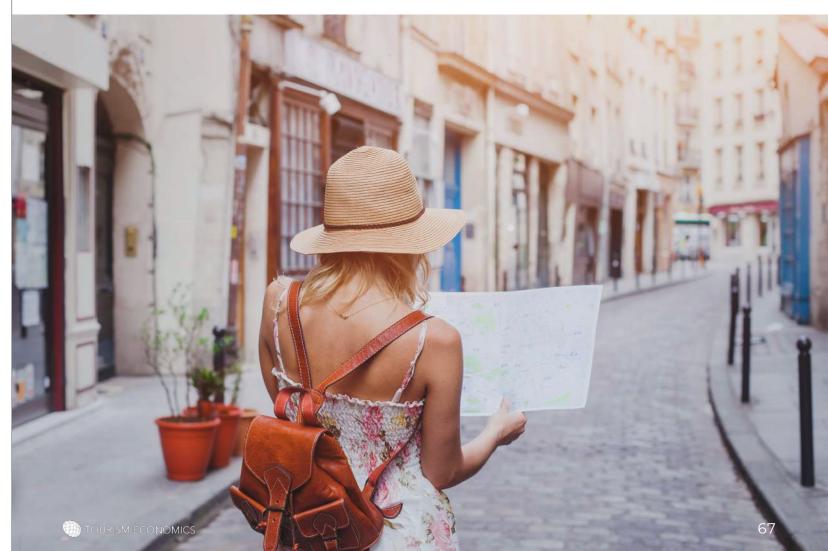
Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €0.5 billion in total incremental GDP and 10,000 total jobs, although both were higher before the pandemic.

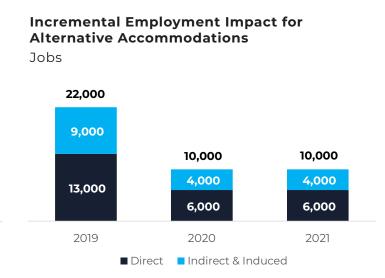
Incremental GDP impact for Alternative Accommodations Billions of Euros



■ Direct ■ Indirect & Induced

Source: Tourism Economics & ComScore





GREECE KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Greece boosting GDP and job creation. Consumers in Greece also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Greece through OTAs nearly doubled from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 23 million room nights were booked through OTAs in 2019, representing 18% of the 127 million room nights booked. In 2020, just 7 million room nights were booked through OTAs, representing 17% of the total 41 million room nights booked. Total room nights in Greece in 2021 increased to 74 million; just 12 million were booked through OTAs, representing 16% of the total Greek accommodations market.

Key Impacts of OTAs in Greece in 2019



Nights in All Accommodation Types in Greece, 2012-2021 Millions of Room Nights



■ Booked using other avenues

Booked using OTAs



If OTAs did not exist rates in the Greek accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €6.00 per room night (6.1 percent reduction) across Greece.

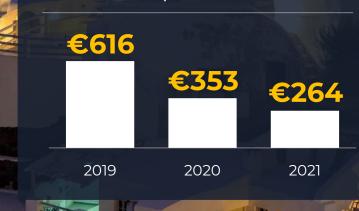
Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Greece. OTAs added an incremental €616 million to the economy in 2019. OTAs contributed €353 million to Greek GDP in 2020 and €264 million to Greek GDP in 2021.

GDP Impacts (€ Millions) Attributable to OTAs in Greece, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Greek economy. In 2019, the economic impacts attributable to OTAs included 13,000 jobs. In 2020 and 2021, OTAs were responsible for 9,000 and 7,000 jobs, respectively.

Job Impacts Attributable to OTAs in Greece, 2019-2021



69

GREECE OTA DETAILS

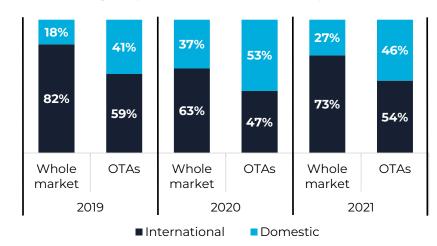
MARKET CHARACTERISTICS

Domestic bookings make up a greater share of OTAs bookings compared to the whole market

Bookings on OTAs to Greece have consistently been more skewed to the domestic sector when compared to the market as a whole. Despite this, the international segment was still bigger.

Market Characteristics of OTAs Compared to Whole Market in Greece

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be slightly more orientated towards independent hotels when booking travel through OTAs over the pandemic but in 2019 the shares were very similar. Both markets are strongly dominated by independent properties.

Market Characteristics of OTAs Compared to Whole Market in Greece

84% 83% 80% 83% 870 20% 20% 16% 17% 17% 13% OTAs Whole OTAs Whole Whole OTAs market market market 2019 2020 2021 Branded chains Independent

Source: Tourism Economics & Booking.com

OTAs are important for alternative accommodation providers

Guests tended to be far more orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021, 58% of bookings via OTAs were hotels compared with only 28% in the market as a whole.



Source: Tourism Economics & ComScore

OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. Those listed on OTAs saw an average reduction of €11; those not listed saw an average reduction of €5.

TOURISM ECONOMICS

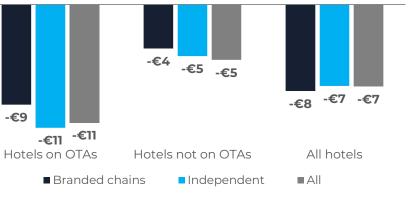
Share of Total Sales (Branded Chains & Independent)

Market Characteristics of OTAs Compared to Whole Market in Greece

Share of Total Sales (Hotels & Alternative Accommodations)

Total impact of OTA Activity on Average Daily Rates in Greece in 2019

Reduction on Daily Rates (Euros)



Source: Tourism Economics, ComScore, STR

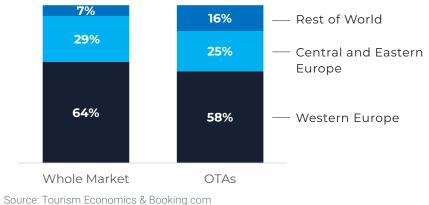
OTAs offer access to a larger share of non-European travelers, in particular from the Middle East and South America

Almost 60% of international overnight stays in Greece booked through OTAs were arranged by individuals from countries within Western Europe. This was similar to the market as a whole in which Western European nights accounted for 64% Central and Eastern Europe was a lower share in the OTA mix than across the whole market. The long-haul element booked via OTAs accounted for more than twice the share of the whole market.

The North American regional source market is very important for the whole market mix of long-haul travel, accounting for 60% of long-haul total. For OTA bookings it is a significantly lower share, at 29%. Northeast Asia is important for both source market mixes. However, the Middle Eat and South America represent higher shares in the OTA mix.

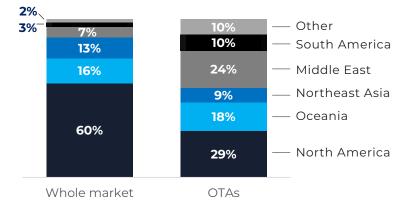
Composition of International Travel

Origin of international travel to Greece, share of overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to Greece, share of overnights, 2019



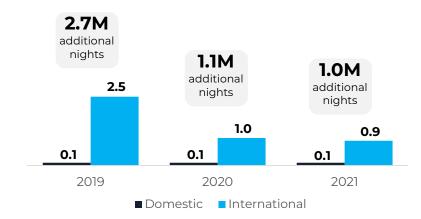
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Greece. In 2021, bookings of alternative accommodations via OTAs generated an additional 1 million nights.

Additional Nights in Alternative Accommodation Millions of nights



ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €152 million in total incremental GDP and 4,000 total jobs although both were significantly higher in 2019.





Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore



*Note: figures may not add due to rounding Source: Tourism Economics & ComScore

ITALY **KEY INSIGHTS**

OTAs generate additional travel demand for accommodations in Italy boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in Italy by orienting consumers towards rural areas. Consumers in Italy also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Italy through OTAs rose steadily from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 115 million room nights were booked through OTAs in 2019, representing 26% of the 437 million room nights booked. In 2020, just 41 million room nights were booked through OTAs, representing 19% of the total 215 million room nights booked. Total room nights in Italy in 2021 increased to 328 million; just 66 million were booked through OTAs, representing 20% of the total Italian accommodations market.

Key Impacts of OTAs in Italy in 2019



generated by OTAs in 2019

OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Italy, 2012-2021

Millions of Room Nights



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Italian accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €10.40 per room night (6.6 percent reduction) across Italy.

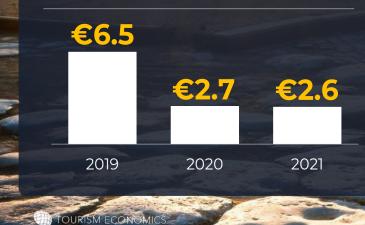
Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Italy. OTAs added an incremental €6.5 billion to the economy in 2019. OTAs contributed €2.7 billion to Italian GDP in 2020 and €2.6 billion to Italian GDP in 2021.

GDP Impacts (€ Billions) Attributable to OTAs in Italy, 2019-2021





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

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The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Italian economy. In 2019, the economic impacts attributable to OTAs included 98,000 jobs. In 2020 and 2021, OTAs were responsible for 45,000 and 49,000 jobs, respectively.

Job Impacts Attributable to OTAs in Italy, 2019-2021

98,000 49.000 45.000 2019 2020 2021

ITALY OTA DETAILS

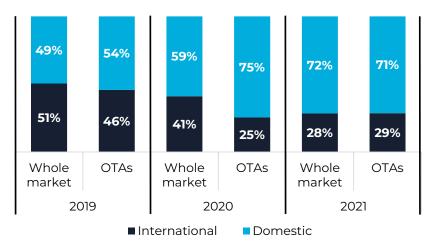
MARKET CHARACTERISTICS

Domestic bookings account for a similar share of OTAs bookings as across the whole market

The split between international and domestic segments on OTA bookings was similar to the whole market in 2019 and has followed overall trends in domestic substitution since. But in 2020. the OTA split was much more domestic segment oriented.

Market Characteristics of OTAs Compared to Whole Market in Italy

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs, and the differences from the total market have become more pronounced over the pandemic.

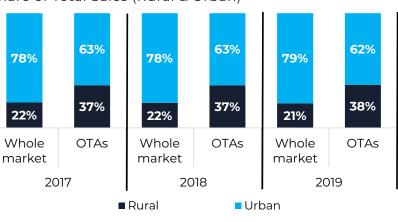
79%

21%

Whole market

OTAs support travel to rural areas, spreading out tourism

Although the majority of bookings are to urban areas, the rural share is higher among OTA bookings than across the market as a whole. In 2019, 38% of bookings were to rural areas (compared to 21% in the whole market).

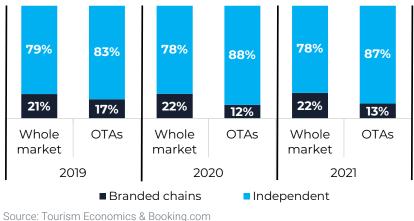


OTAs are important for alternative accommodation providers as well as hotels

Guests tended to be more orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021, 52% of bookings via OTAs were hotels compared with only 35% in the market as a whole.

Market Characteristics of OTAs Compared to Whole Market in Italy

Share of Total Sales (Branded Chains & Independent)



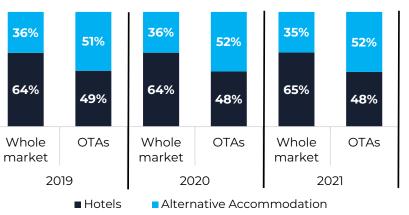
Market Characteristics of OTAs Compared to Whole Market in Italy

Share of Total Sales (Rural & Urban)

Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in Italy

Share of Total Sales (Hotels & Alternative Accommodations)



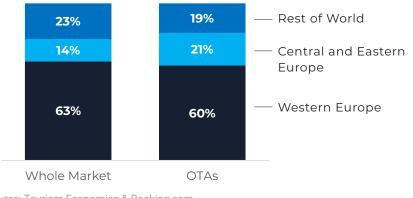
OTAs offer access to a different mix of international travelers

Around 60% of international overnight stays in Italy booked through OTAs were arranged by individuals from countries within Western Europe. This was similar to the market as a whole in which Western European nights accounted for 63%. Central and Eastern Europe was more strongly represented in the OTA source market mix, accounting for 21% as opposed to 14% in the whole market.

Arrivals from North America accounted for largest share (27%) of long haul overnight stays in Italy in 2019—albeit this share was much lower than North America's share of the whole market. South American travellers were the secondlargest beneficiary of OTAs, accounting for 21% of long haul stays in Italy in 2019. A significant proportion of OTAs sales originated from Northeast Asia, accounting for a larger share of demand than for the wider travel market. OTAs are supporting demand from some rapidly growing emerging source markets.

Composition of International Travel

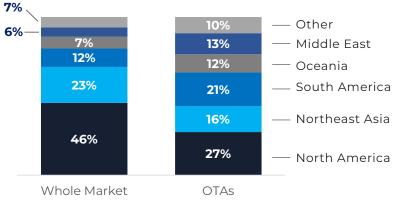
Origin of international travel to Italy, share of overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

Origin of long haul travel to Italy, share of overnights, 2019



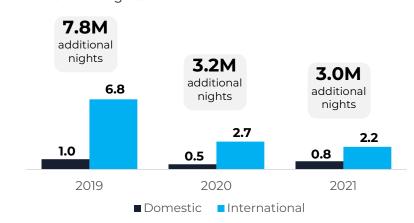
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Italy. In 2021, bookings of alternative accommodations via OTAs generated an additional 3.0 million nights.

Additional Nights in Alternative Accommodation Millions of nights



ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €1.4 billion in total incremental GDP and 26,000 total jobs although both were significantly higher in 2019.





Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

ECONOMICS



MALTA KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Malta boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. Consumers in Malta also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Malta through OTAs increased steadily from 2012 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 5 million room nights were booked through OTAs in 2019, representing 24% of the 20 million room nights booked. In 2020, just 1 million room nights were booked through OTAs, representing 23% of the total 5 million room nights booked. Total room nights in Malta in 2021 increased to 7 million, of which 2 million were booked through OTAs, representing 21% of the total Maltese accommodations market.

Key Impacts of OTAs in Malta in 2019



Nights in All Accommodation Types in Malta, 2012-2021

Millions of Room Nights

in 2019



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Maltese accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction of €8.90 in average daily hotel rates in Malta (7.1 percent reduction).

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Malta. OTAs added an incremental €36 million to the economy in 2019. OTAs contributed €17 million to Maltese GDP in 2020 and €12 million to Maltese GDP in 2021.

GDP Impacts (€ Millions) Attributable to OTAs in Malta, 2019-2021





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Thousands) in All Accommodation Attributable to OTAs,



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of Maltese economy. In 2019, the economic impacts attributable to OTAs included 900 jobs. In both 2020 and 2021, OTAs were responsible for around 500 jobs.

Job Impacts Attributable to OTAs in Malta, 2019-2021



MALTA OTA DETAILS

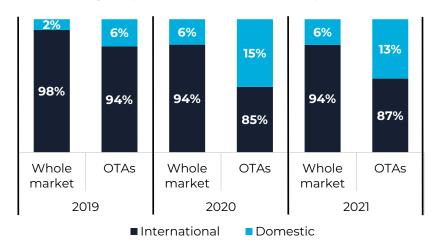
MARKET CHARACTERISTICS

Domestic bookings make up a greater share of OTAs bookings compared to the whole market

Domestic bookings make up a greater proportion of OTAs bookings, compared to the whole market. In 2021, domestic bookings comprised 13% of total OTA bookings and 6% of bookings for the market as a whole, although both represented an increased share in 2019.

Market Characteristics of OTAs Compared to WholeMarket in Malta

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to more orientated towards independent hotels when booking travel through OTAs. In 2021, approximately 68% of total OTA sales were booked at independent hotels, compared to 56% across the market as a whole.

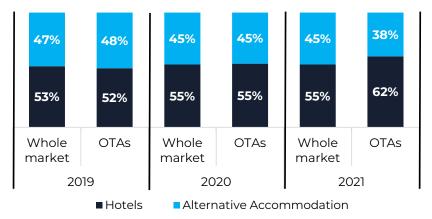


53% **47**%

Whole market

OTAs are important for alternative accommodation providers as well as hotels

Guests in Malta booking through OTAs have tended to have a similar pattern of choices regarding hotels and alternative accommodation as the market as a whole. 2021 did see a smaller share of OTA guests choosing alternative accommodation. This is not expected to permanently affect longer-term trends.

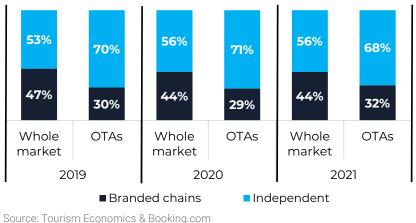


OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. In 2019, those listed on OTAs saw an average reduction of €12; those not listed saw an average reduction of €5.

Market Characteristics of OTAs Compared to Whole Market in Malta

Share of Total Sales (Branded Chains & Independent)



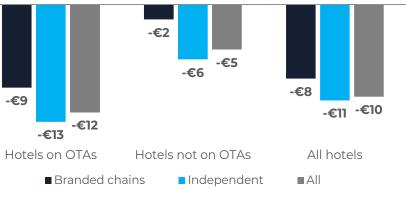
Market Characteristics of OTAs Compared to Whole Market in Malta

Share of Total Sales (Hotels & Alternative Accommodations)

Source: Tourism Economics & ComScore

Total impact of OTA Activity on Average Daily Rates in Malta in 2019

Reduction on Daily Rates (Euros)



Source: Tourism Economics, ComScore, STR

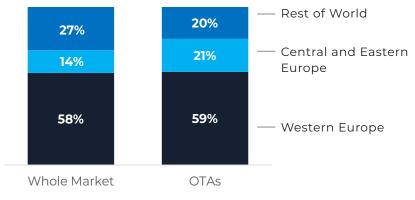
OTAs offer access to a different mix of international travelers

Just under 60% of international overnight stays in Malta booked through OTAs were arranged by individuals from countries within Western Europe. For the market as a whole, arrivals from Western Europe accounted for almost the same proportion total international overnight stays. Around 21% of OTAs international overnight stays originated from Central and Eastern Europe. Longer haul travel accounted for one fifth of OTA overnights – slightly less than the 27% across the market as a whole.

Across the whole market 47% of longhaul travel was from North America. For OTA bookings, North America's share was 19% and the largest regional source market was Northeast Asia (28%) Oceania accounted for 6% of both source market mixes. However, South America accounted for twice the whole market share (10% compared to 5%) while the Middle East accounted for four times its whole market share (20% instead of 5%).

Composition of International Travel

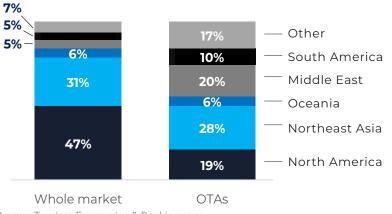
Origin of international travel to Malta, share of overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

Origin of long haul travel to Malta, share of overnights, 2019



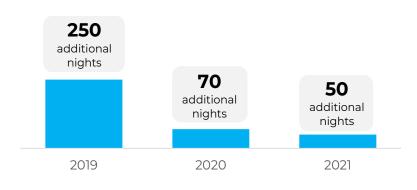


MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021, OTAs increased the number of overnight stays in alternative accommodations in Malta. In 2021 bookings on OTAs generated an additional 50,000 nights.

Additional Nights in Alternative Accommodation Thousands of nights



Source: Tourism Economics & ComScore

ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €4 million in total incremental GDP and 200 total jobs although both were significantly higher in 2019.

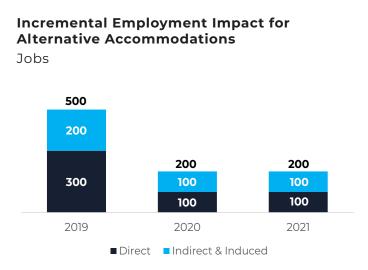




Source: Tourism Economics & ComScore



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NETHERLANDS KEY INSIGHTS

OTAs generate additional travel demand for accommodations in the Netherlands boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. Consumers in the Netherlands also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in the Netherlands through OTAs steadily from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 43 million room nights were booked through OTAs in 2019, representing 34% of the 125 million room nights booked. In 2020, although total travel fell, travel through OTAs fell more steeply with just 15 million room nights being booked, representing 21% of the total 75 million room nights booked. In 2021, 15 million nights were booked through OTAs with 82 million booked through in total, meaning that OTAs accounted for just 18% of the total Dutch accommodations market.

Key Impacts of OTAs in the Netherlands in 2019





€1.7B Total incremental GDP

impact attributable to OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in the Netherlands, 2012-2021



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Dutch accommodation market would be higher. Between 2014 and 2021, OTAs generated an average reduction in rates of €8.80 per room night (6.9 percent reduction) across the Netherlands.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Italy. OTAs added an incremental €1.7 billion to the economy in 2019. OTAs contributed €0.6 billion to Dutch GDP in 2020 and 2021.

GDP Impacts (€ Billions) Attributable to OTAs in the Netherlands, 2019-2021



TOURISM ECONOMICS



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

高井

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the economy of the Netherlands. In 2019, the economic impacts attributable to OTAs included 27,000 jobs. In 2020 and 2021, OTAs were responsible for 11,000 jobs.

Job Impacts Attributable to OTAs in the Netherlands, 2019-2021



NETHERLANDS OTA DETAILS

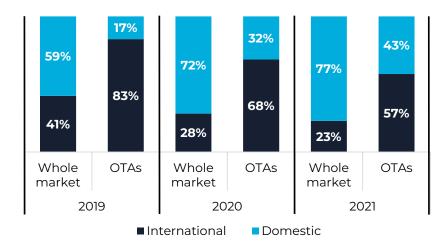
MARKET CHARACTERISTICS

International bookings make up a far greater proportion of OTAs bookings, compared to the whole market

In the Netherlands, the OTA split between international and domestic bookings is dominated by the international segment. This has even persisted through the pandemic period despite an increase in the domestic market segment share.

Market Characteristics of OTAs Compared to Whole Market in the Netherlands

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com

Summary Impacts of OTAs in the Netherlands, 2019-2021 Amounts as Indicated $\left(\begin{array}{c} & & \\ & & \\ & & \\ & & \end{array} \right)$ More Increases GDP Job Affordable in Travel Impacts Impacts 27,000 **-€10** +4.8M €1.7B 2019 reduced daily rates room nights incremental GDP jobs €0.6B 11,000 **-€6** +1.8M 2020 reduced daily rates room nights incremental GDP jobs €0.6B **-€6** +1.6M 11.000 2021 reduced daily rates incremental GDP room nights

OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs. In 2021, 69% of OTA bookings were independent as opposed to 48% across the market as a whole.

46% 54%

Whole market

OTAs support travel to rural areas, spreading out tourism

Bookings to the Netherlands are mainly focused on urban areas. The rural share booked on OTAs is slightly smaller than across the market as a whole.

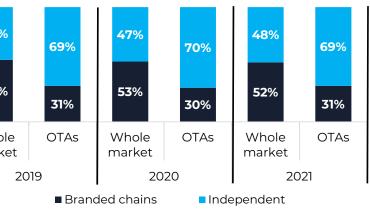
83% 17% Whole

OTAs have demonstrated an ability to adapt to changing preferences

OTAs have demonstrated that they are able to respond rapidly to changing market preferences and the rural booking index increased markedly in 2020 (although the overall score is still low compared to most European countries).

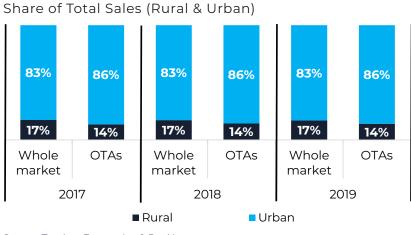
Market Characteristics of OTAs Compared to Whole Market in the Netherlands

Share of Total Sales (Branded Chains & Independent)



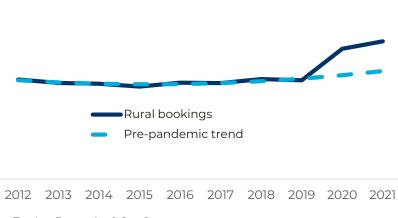
Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in the Netherlands



Source: Tourism Economics & Booking.com

Rural Booking Index in the Netherlands 2012-2021



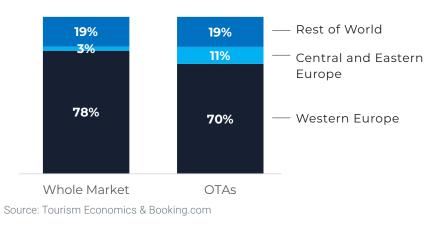
OTAs offer access to a different mix of international travelers

Individuals from countries within Western Europe accounted for 70% of international overnight stays booked through OTAs.This was 8% lower than the share of overnights that arrivals from Western Europe account for in the accommodation market overall as OTAs support a higher proportion of demand from developing source markets. Around 11% of OTAs international overnight stays originated from Central and Eastern Europe—a higher share than the market overall (3%).

Middle Eastern travellers formed the largest share (31% as a share of overnights) of long-haul users of OTAs by identified region. In the accommodation market overall, travellers from the Middle East accounted for a much smaller proportion (8%) of overnight stays from long haul markets. North America's share of long-haul OTA users was almost as large as the Middle East, accounting for 29% of all overnight stays. However, this was considerably less than the share of long-haul arrivals that North American accounts for in the whole market.

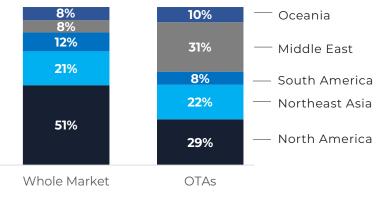
Composition of International Travel

Origin of international travel to the Netherlands, share of overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to the Netherlands, share of overnights, 2019



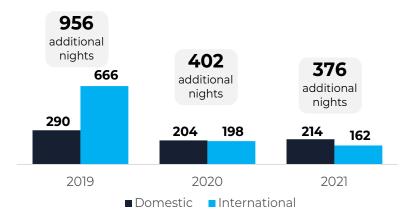
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in the Netherlands. In 2021, OTA bookings for alternative accommodations generated an additional 376,000 nights.

Additional Nights in Alternative Accommodation Thousands of nights



ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €161 million in total incremental GDP and 3,000 total jobs although both were significantly higher in 2019.

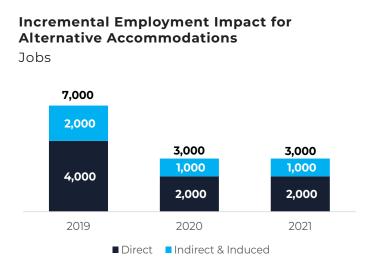




Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore



PORTUGAL **KEY INSIGHTS**

OTAs generate additional travel demand for accommodations in Portugal boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in Portugal by orienting consumers towards rural areas. Consumers in Portugal also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Portugal through OTAs rose steadily from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 29 million room nights were booked through OTAs in 2019, representing 37% of the 77 million room nights booked. In 2020, although total travel fell, travel through OTAs fell more steeply with just 9 million room nights being booked, representing 32% of the total 30 million room nights booked. In 2021, 14 million nights were booked through OTAs with 41 million booked in total, meaning that OTAs accounted for 33% of the total Portuguese accommodations market.

Key Impacts of OTAs in Portugal in 2019

in 2019



Nights in All Accommodation Types in Portugal, 2012-2021 Millions of Room Nights



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Portuguese accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €9.70 per room night (8.0 percent reduction) across Portugal.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Portugal. OTAs added an incremental €1.1 billion to the economy in 2019. OTAs contributed €0.5 billion to Portugal's GDP in 2020 and €0.4 billion to Portugal's GDP in 2021.

GDP Impacts (€ Billions) Attributable to OTAs in Portugal, 2019-2021





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



Carlos An Allanda

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OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of Portugal economy. In 2019, the economic impacts attributable to OTAs included 35,000 jobs. In 2020 and 2021, OTAs were responsible for 16,000 and 15,000 jobs, respectively.

Job Impacts Attributable to OTAs in Portugal, 2019-2021



PORTUGAL OTA DETAILS

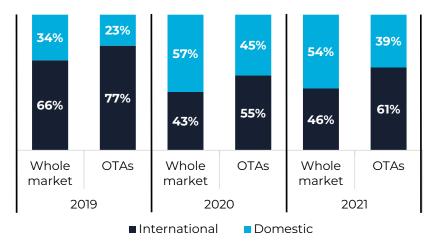
MARKET CHARACTERISTICS

International bookings make up a far greater proportion of OTAs bookings, compared to the whole market

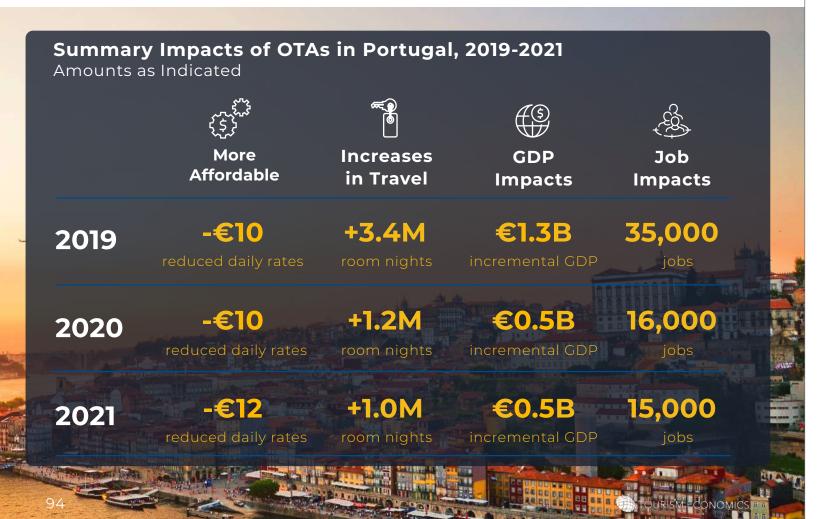
Among OTA bookings, the international segment of the market has consistently represented a higher share than across the market as a whole. In 2021, 61% of bookings via OTAs were international, compared to 46% across the whole market.



Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs, although in some years the difference has been at the margin. In 2021, 73% of OTA bookings were independent as opposed to 68% across the market as a whole.

69%

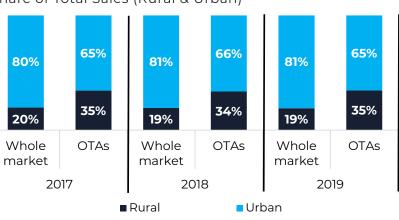
31%

Whole market

Source: Tourism Economics & Booking.com

OTAs support travel to rural areas, spreading out tourism

OTA benefits in Portugal are significantly more concentrated in rural areas than across the market as a whole. In 2021, rural bookings accounted for 35% as opposed to 19% across the market as a whole.

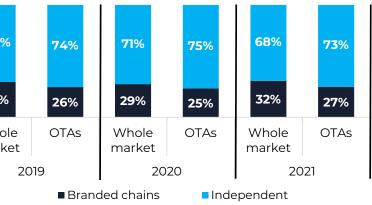


OTAs are important for alternative accommodation providers as well as hotels

Guests tended to be more orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021, 57% of OTA bookings were to alternative accommodation as opposed to just 29% across the whole market.

Market Characteristics of OTAs Compared to Whole Market in Portugal

Share of Total Sales (Branded Chains & Independent)



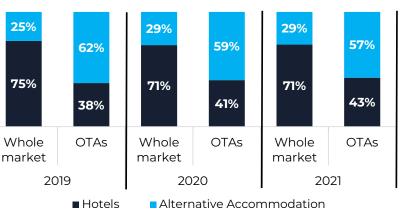
Market Characteristics of OTAs Compared to Whole Market in Portugal

Share of Total Sales (Rural & Urban)

Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in Portugal

Share of Total Sales (Hotels & Alternative Accommodations)



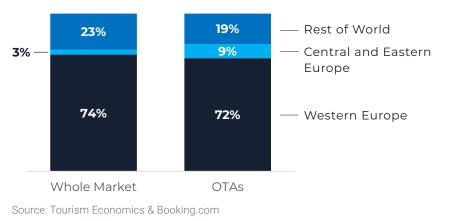
OTAs offer access to a different mix of international travelers

Over 70% of international overnight stays in Portugal booked through OTAs were arranged by individuals from countries within Western Europe—similar to the market as a whole. Central and Eastern Europe was more strongly represented in the OTA source market mix, accounting for 9% as opposed to just 3% in the whole market. Consequently, the long-haul element of the OTA market was slightly smaller (19%) than for the overall market (23%).

Like the market as a whole, travellers from the Americas accounted for the majority of long-haul international arrivals who booked through OTAs. In contrast, the composition of OTA long-haul sales was more orientated towards South America and less towards North America compared to the accommodation market overall. OTAs support demand from some high value source markets, like the Middle East, and may help to support future growth from these markets.

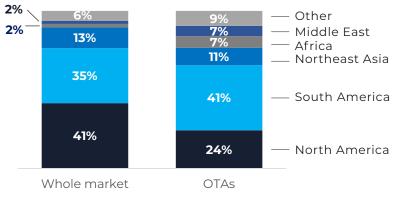
Composition of International Travel

Origin of international travel to Portugal, Share of Overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to Portugal, Share of Overnights, 2019



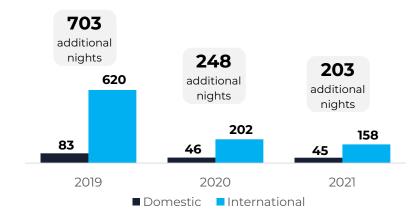
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Portugal. In 2021, bookings of alternative accommodations via OTAs generated an additional 203,000 nights.

Additional Nights in Alternative Accommodation Thousands of Nights

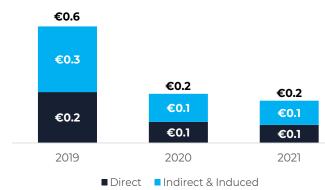


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

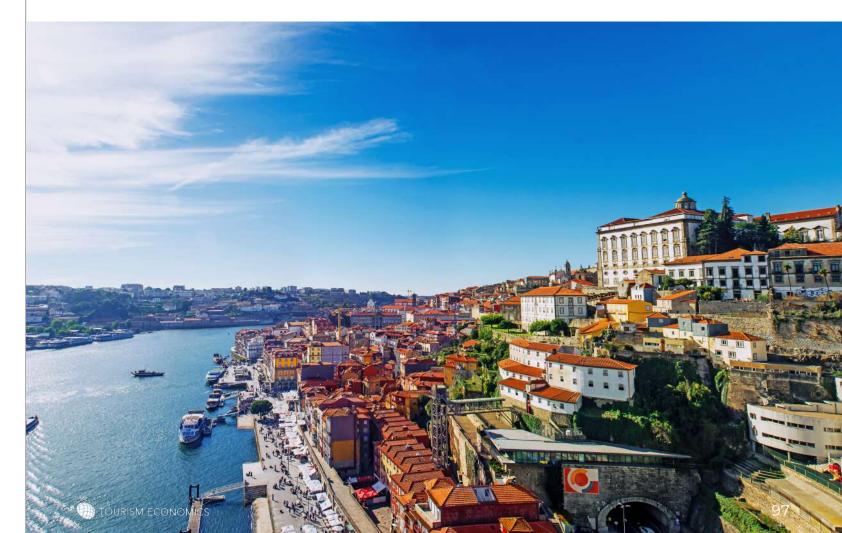
OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €0.2 billion in total incremental GDP and 7,000 total jobs although both were significantly higher in 2019.



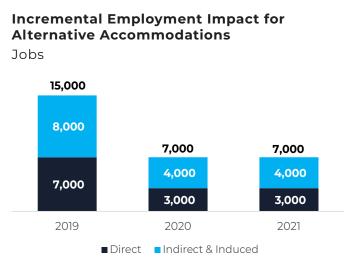


Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

TOURISM ECONOMICS



SPAIN KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Spain boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in Spain by orienting consumers towards rural areas. Consumers in Spain also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel to Spain through OTAs increased steadily from 2012 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 171 million room nights were booked through OTAs in 2019, representing 36% of the 470 million room nights booked. In 2020, just 47 million room nights were booked through OTAs, representing 29% of the total 161 million room nights booked. The OTA share bounced back a little in 2021 as overall nights increased to 261 million with 87 million booked through OTAs, representing 33% of the total Spanish accommodations market.

Key Impacts of OTAs in Spain in 2019





€2.7B

impact attributable to OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Spain, 2012-2021

Millions of Room Nights



Booked using other avenues

Booked using OTAs

OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Spanish accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of €10.20 per room night (7.8 percent reduction) across Spain.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Spain. OTAs added an incremental €2.7 billion to the economy in 2019. OTAs contributed nearly €1.1 billion to Spanish GDP in 2020 and nearly €0.8 billion to Spanish GDP in 2021.

GDP Impacts (€ Billions) Attributable to OTAs in Spain, 2019-2021





OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Spanish economy. In 2019, the economic impacts attributable to OTAs included 44,000 jobs. In 2020 and 2021, OTAs were responsible for 21,000 and 17,000 jobs, respectively.

Job Impacts Attributable to OTAs in Spain, 2019-2021



SPAIN OTA DETAILS

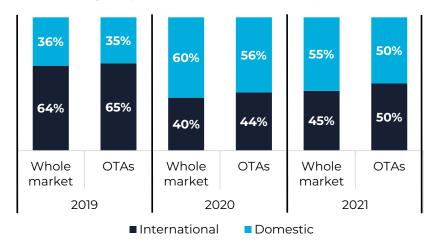
MARKET CHARACTERISTICS

International bookings make up a slightly greater proportion of OTAs bookings, compared to the whole market

International bookings make up a slightly greater proportion of OTAs bookings, compared to the whole market. In 2021, international bookings accounted for half of OTA bookings compared to 45% across the wider market as a whole.



Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs. In 2021, 72% of total OTA bookings were independent compared with only 57% across the market as a whole.

66%

34%

Whole market

Source: Tourism Economics & Booking.com

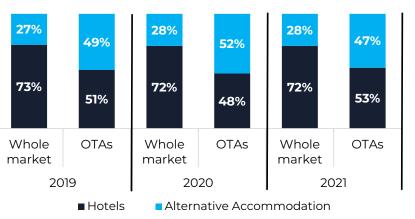
OTAs support travel to rural areas, spreading out tourism

OTA benefits in Spain are more concentrated in rural areas than across the market as a whole. In 2019, rural bookings accounted for 33% as opposed to 25% across the market as a whole.

market

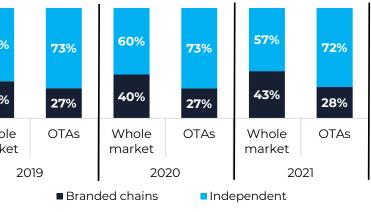
OTAs support impacts in alternative lodgings as well as hotels

Guests tended to be orientated towards alternative accommodation solutions when booking travel through OTAs. In 2021, 47% of bookings via OTAs were alternative accommodations compared with 28% in the market as a whole.

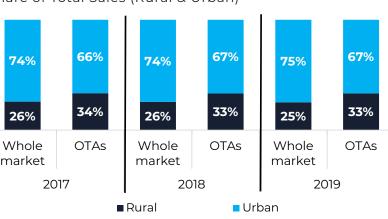


Market Characteristics of OTAs Compared to Whole Market in Spain

Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Spain



Share of Total Sales (Rural & Urban)

Source: Tourism Economics & Booking.com

Market Characteristics of OTAs Compared to Whole Market in Portugal

Share of Total Sales (Hotels & Alternative Accommodations)

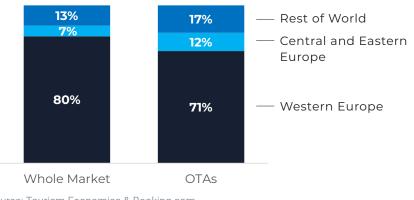
OTAs offer access to a larger share of non-European travelers as well as travelers from Central and Eastern Europe

Individuals from countries within Western Europe accounted for 71% of international overnight stays booked through OTAs. This was 9% lower than the share of overnights that arrivals from Western Europe account for in the accommodation market overall. Around 12% of OTAs international overnight stays originated from Central and Eastern Europe—a higher share than the market overall (9%).

South American travellers formed the largest share (30% as a share of overnights) of long-haul users of OTAs. North America's share of long-haul OTA users was the second largest, accounting for 22% of all overnight stays. However, this was considerably less than the share of longhaul arrivals that North American accounts for in the whole market.

Composition of International Travel

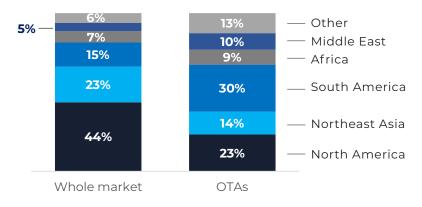
Origin of international travel to Spain, Share of Overnights, 2019



Source: Tourism Economics & Booking.com

Composition of Long-Haul International Travel

Origin of long haul travel to Spain, Share of Overnights, 2019

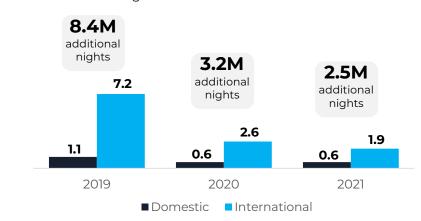


Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Spain. In 2021, bookings of alternative accommodations via OTAs generated an additional 2.5 million nights. **Additional Nights in Alternative Accommodation** Millions of Nights



ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated €0.4 billion in total incremental GDP and 8,000 total jobs although both were significantly higher in 2019.



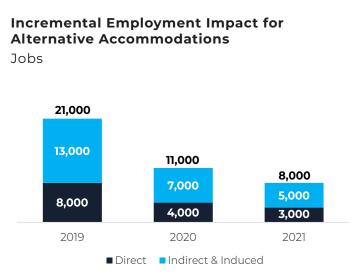


Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

TOURISM ECONOMICS



SWEDEN KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Sweden boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in Sweden by orienting consumers towards rural areas. Consumers in Sweden also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Sweden through OTAs rose steadily from 2012 to 2019, before the effects of the pandemic led to a decline in all travel bookings.

As shown in the accompanying chart, approximately 16 million room nights were booked through OTAs in 2019, representing 23% of the 67 million room nights booked. In 2020, although total travel fell, travel through OTAs fell more steeply with just 6 million room nights being booked, representing 13% of the total 44 million room nights booked. In 2021, 8 million nights were booked through OTAs with 54 million booked in total, meaning that OTAs accounted for 15% of the total Swedish accommodations market.

Key Impacts of OTAs in Sweden in 2019





8.9B KR Total incremental GDP

impact attributable to OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Sweden, 2012-2021

Millions of Room Nights



■ Booked using other avenues

Booked using OTAs

OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Swedish accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of 69 kr per room night (5.9 percent reduction) across Sweden.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Sweden. OTAs added an incremental 8.9 billion kr to the economy in 2019. OTAs contributed 3.6 billion kr to Sweden's GDP in 2020 and 3.5 billion kr to Sweden's GDP in 2021.

GDP Impacts (Kr Billions) Attributable to OTAs in Sweden, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of Sweden economy. In 2019, the economic impacts attributable to OTAs included 9,000 jobs. In both 2020 and 2021, OTAs were responsible for around 4,000 jobs.

Job Impacts Attributable to OTAs in Sweden, 2019-2021



SWEDEN OTA DETAILS

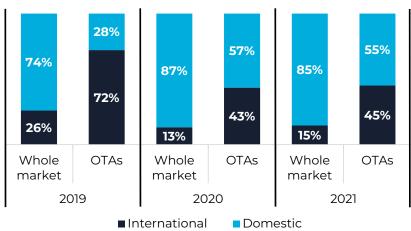
MARKET CHARACTERISTICS

International bookings make up a far greater proportion of OTAs bookings, compared to the whole market

Among OTA bookings, the international segment of the market has consistently represented a higher share than across the market as a whole. In 2021, 45% of bookings via OTAs were international, compared to only 15% across the whole market.

Market Characteristics of OTAs Compared to Whole Market in Sweden

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs, although in some years the difference has been at the margin. In 2021, 55% of OTA bookings were independent as opposed to 38% across the market as a whole.

39% 61%

Whole market

Source: Tourism Economics & Booking.com

OTAs support travel to rural areas, spreading out tourism

OTA benefits in Sweden are significantly more concentrated in rural areas than across the market as a whole. In 2021, rural bookings accounted for 43% as opposed to just 12% across the market as a whole.

88%

12% Whole market

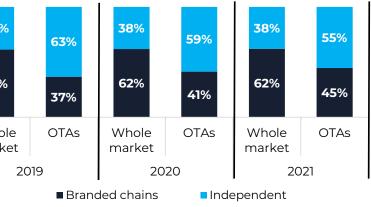
Source: Tourism Economics & Booking.com

OTAs have demonstrated an ability to adapt to changing preferences

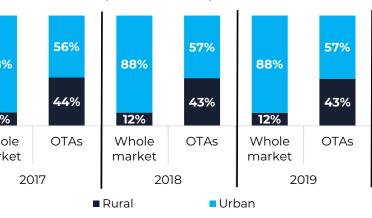
OTAs have demonstrated that they are able to respond rapidly to changing market preferences and the rural booking increased significantly above trend in 2020.

Market Characteristics of OTAs Compared to Whole Market in Sweden

Share of Total Sales (Branded Chains & Independent)

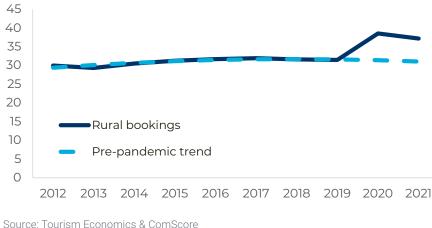


Market Characteristics of OTAs Compared to Whole Market in Sweden



Share of Total Sales (Rural & Urban)

Rural Booking Index in Sweden 2012-2021



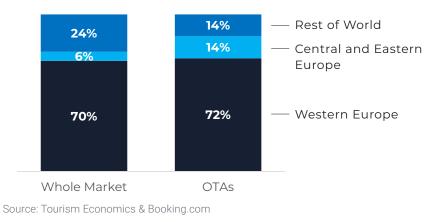
OTAs offer access to a different mix of international travelers

Over 70% of international overnight stays in Sweden booked through OTAs were arranged by individuals from countries within Western Europe.This was similar to the market as a whole in which Western European guests accounted for 70% of total overnight stays. Central and Eastern Europe was more strongly represented in the OTA source market mix, accounting for 14% as opposed to just 6% in the whole market. Consequently, the long-haul element of the OTA market was significantly smaller (14%) than for the overall market (24%).

The established North American regional source market is very important for the whole market mix of long-haul travel, accounting for 55% of long-haul total. For OTA bookings it is a considerably lower share at 24%. The largest source market region for the OTA market is Northeast Asia (29%).

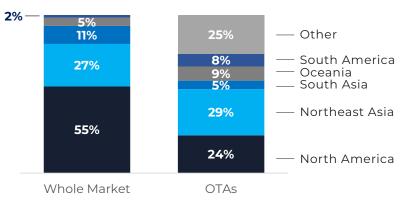
Composition of International Travel

Origin of international travel to Sweden, Share of Overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to Sweden, Share of Overnights, 2019



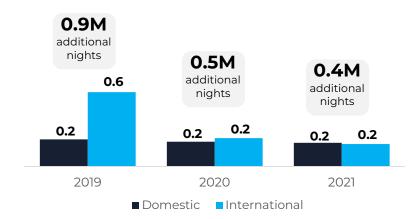
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Sweden. In 2021, bookings of alternative accommodations via OTAs generated an additional 0.4 million nights.

Additional Nights in Alternative Accommodation Millions of Nights

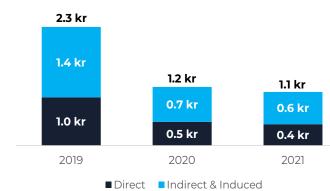


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated 1.1 billion kr in total incremental GDP and 1,200 total jobs although both were significantly higher in 2019.





Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

TOURISM ECONOMICS



SWITZERLAND KEY INSIGHTS

OTAs generate additional travel demand for accommodations in Switzerland boosting GDP and job creation. Consumers in Switzerland also benefit from OTAs through more affordable rates offered to travelers.

The number of travellers organising travel in Switzerland through OTAs increased after 2016 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 14 million room nights were booked through OTAs in 2019, representing 35% of the 40 million room nights booked. In 2020, just 5 million room nights were booked through OTAs, representing 23% of the total 24 million room nights booked. There was only a moderate improvement in 2021 with 7 million nights booked through OTAs out of a total market of 28 million (25%).

Key Impacts of OTAs in Switzerland in 2019





1.7B CHF Total incremental GDP

impact attributable to OTAs in 2019



Total incremental jobs impact attributable to OTAs in 2019

Nights in All Accommodation Types in Switzerland, 2012-2021 Millions of Room Nights



OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the Swiss accommodation market would be higher. Between 2014 and 2021, OTAs generated an average reduction in rates of 21.40 CHF per room night (8.0 percent reduction) across Switzerland.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across Switzerland. OTAs added an incremental 1.7 billion CHF to the economy in 2019. OTAs contributed 0.6 billion CHF to the Swiss GDP in 2020 and 0.5 billion CHF to the Swiss GDP in 2021.

GDP Impacts (CHF. Billions) Attributable to OTAs in Switzerland, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the Swiss economy. In 2019, the economic impacts attributable to OTAs included 16,000 jobs. In both 2020 and 2021, OTAs were responsible for around 6,000 jobs.

Job Impacts Attributable to OTAs in Switzerland, 2019-2021



SWITZERLAND OTA DETAILS

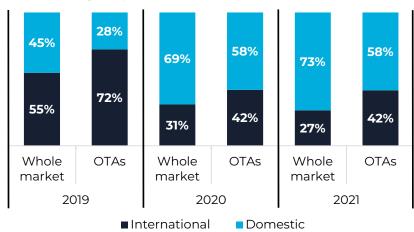
MARKET CHARACTERISTICS

International bookings make up a greater proportion of OTAs bookings to the market as a whole

In 2021, 45% of bookings via OTAs were international, compared to only 15% across the whole market.

Market Characteristics of OTAs Compared to Whole Market in Switzerland

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs bookings reflect the large share of independent properties

There is little difference in preference for chain or independent properties between OTA bookings and the wider market in Switzerland. In 2021, 77% of properties booked via OTAs were independent compared to 81% for the whole market.

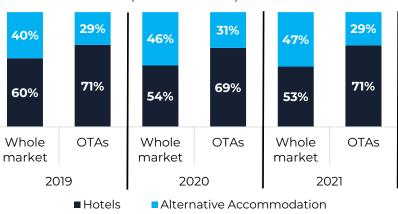
77%

23% Whole

Source: Tourism Economics & Booking.com

OTAs benefit in particular hotels

In 2021 29% of bookings via OTAs were alternative accommodations compared with 47% in the market as a whole.

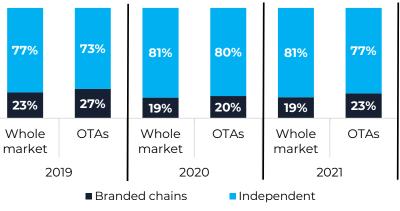


OTA platforms impact rates across the whole market

Price reduction effects are stronger for hotels that advertise on OTAs compared to those that do not. In 2019, those listed on OTAs saw an average reduction of 12 CHF; those not listed saw an average reduction of 10 CHF.

Market Characteristics of OTAs Compared to Whole Market in Switzerland

Share of Total Sales (Branded Chains & Independent)



Market Characteristics of OTAs Compared to Whole Market in Switzerland

Share of Total Sales (Rural & Urban)

Source: Tourism Economics & Booking.com

Total impact of OTA Activity on Average Daily Rates in Switzerland in 2019

Reduction on Daily Rates (CHF)



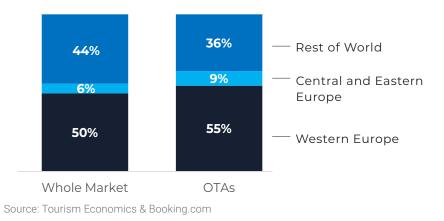
OTAs offer access to a different mix of international travelers

Individuals from countries within Western Europe accounted for 55% of international overnight stays in Switzerland that were booked through OTAs—a significantly lower share than most other countries in the study but a slightly higher share than for the whole market. Guests from Central and Eastern Europe accounted for 9% of OTA bookings compared to 6% across the whole market. At 36%, long-haul visitors share of OTA bookings was slightly smaller than over the market as a whole.

The North American regional source market was considerably less important for OTAs (19%) than across the market as a whole (32%). Northeast Asia was the largest OTA source region (30%) but still slightly smaller than the share across the market as a whole. However, the Middle East accounts for a much larger share of the OTA market (21%) than across Switzerland as a whole (12%).

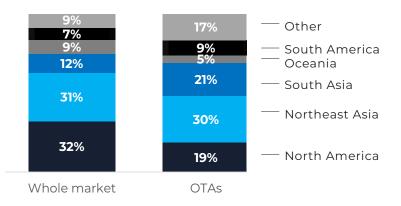
Composition of International Travel

Origin of international travel to Switzerland, Share of Overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to Switzerland, Share of Overnights, 2019



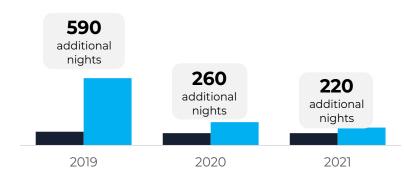
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in Switzerland. In 2021, bookings via OTAs generated an additional 200,000 nights in Switzerland.

Additional Nights in Alternative Accommodation Millions of Nights



TOURISM ECONOMICS

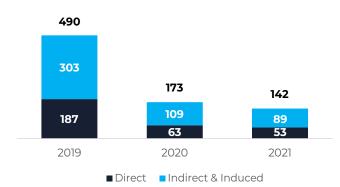
Source: Tourism Economics & ComScore

ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated 142 million CHF in total incremental GDP and 2,000 total jobs although both were significantly higher in 2019.

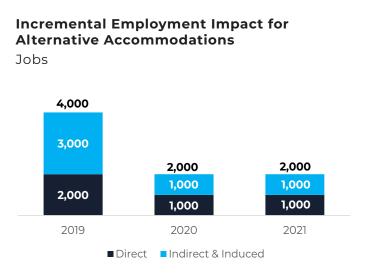




Source: Tourism Economics & ComScore



114



UNITED KINGDOM KEY INSIGHTS

OTAs generate additional travel demand for accommodations in the UK boosting GDP and job creation. In particular independent accommodations benefit from OTAs by accruing a larger share of bookings than the market average. OTAs support a more equitable development in the UK by orienting consumers towards rural areas. Consumers in the UK also benefit from OTAs through more affordable rates offered to travelers.

An established travel destination, the number of travellers organising travel in the UK through OTAs increased only marginally from 2012 to 2019, before the effects of the pandemic led to a sharp decline in all travel bookings.

As shown in the accompanying chart, approximately 191 million room nights were booked through OTAs in 2019, representing 29% of the 663 million room nights booked. In 2020, just 55 million room nights were booked through OTAs, representing 22% of the total 248 million room nights booked. The OTA share bounced back a little in 2021 as overall nights increased to 293 million with 76 million booked through OTAs, representing 26% of the total British accommodations market.

Key Impacts of OTAs in the UK in 2019



Nights in All Accommodation Types in the UK, 2012-2021

Millions of Room Nights



■ Booked using other avenues

Booked using OTAs

OTAS MAKE TRAVEL MORE AFFORDABLE

If OTAs did not exist rates in the British accommodation market would be higher. Between 2014 and 2019, OTAs generated an average reduction in rates of £7.30 per room night (6.7 percent reduction) across the UK.

Reduction in Average Daily Hotel Rates Attributable to OTAs, 2019-2021



OTAS CREATE ADDITIONAL GDP GROWTH

OTAs generate additional economic growth across The UK. OTAs added an incremental £1.7 billion to the economy in 2019. OTAs contributed £0.4 billion to UK GDP in 2020 and £0.3 billion to UK GDP in 2021.

GDP Impacts (£ Billions) Attributable to OTAs in the UK, 2019-2021



OTAS INCREASE BOOKINGS & EXPAND THE MARKET

OTAs provide businesses with an online platform to advertise their accommodation offer and expand their consumer base. OTAs also improve trust in providers, and reward quality.

Additional Nights (Millions) in All Accommodation Attributable to OTAs, 2019-2021



OTAS GENERATE JOBS AND ECONOMIC OPPORTUNITIES

The GDP impacts attributable to OTAs also generate significant job impacts across various sectors of the UK economy. In 2019, the economic impacts attributable to OTAs included 33,000 jobs. In 2020 and 2021, OTAs were responsible for 8,000 and 9,000 jobs, respectively.

Job Impacts Attributable to OTAs in the UK, 2019-2021



UNITED KINGDOM OTA DETAILS

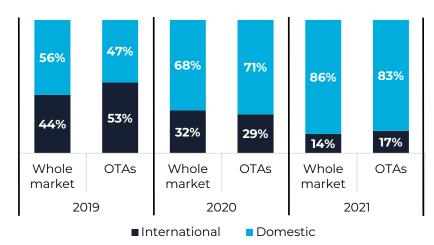
MARKET CHARACTERISTICS

International bookings make up a slightly greater proportion of OTAs bookings, compared to the whole market

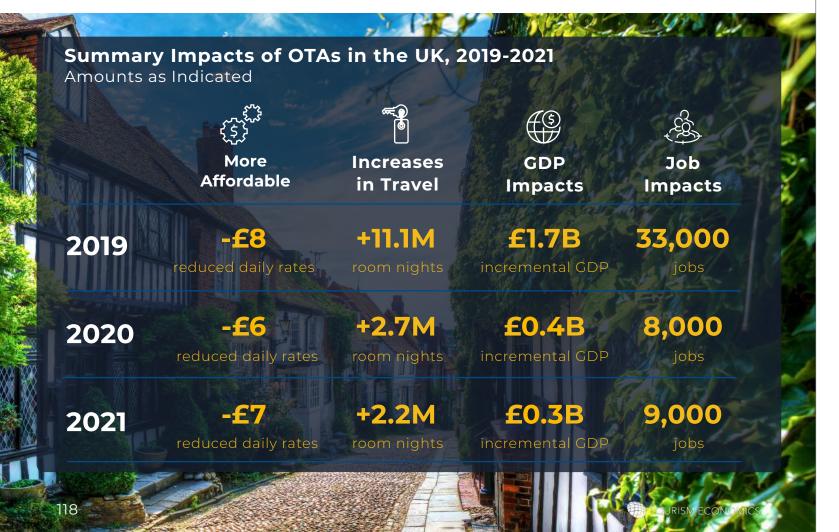
International bookings made up a slightly greater proportion of OTAs bookings, compared to the whole market in 2019. However, over the pandemic, proportions in OTA bookings and across the wider market have been similar.

Market Characteristics of OTAs Compared to Whole Market in the UK

Share of Nights (International & Domestic)



Source: Tourism Economics & Booking.com



OTAs support independent accommodations

Guests tended to be more orientated towards independent hotels when booking travel through OTAs. In 2021, 55% of total OTA bookings were independent compared with only 34% across the market as a whole. And the difference was more marked in 2019.

35% 39% 60% 55% 65% 66% 61% 44% 45% 40% OTAs OTAs OTAs Whole Whole Whole market market market 2019 2020 2021 Branded chains Independent

Source: Tourism Economics & Booking.com

OTAs support travel to rural areas, spreading out tourism

OTA benefits in the UK are significantly more concentrated in rural areas than across the market as a whole. In 2019, rural bookings accounted for 41% as opposed to 11% across the market as a whole.

11% Whole market

35

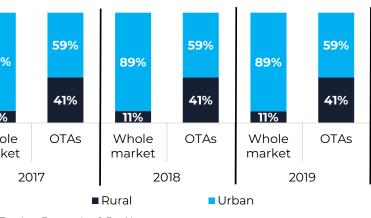
OTAs have demonstrated an ability to adapt to changing preferences

Although OTAs have demonstrated that they are able to respond rapidly to changing market preferences, the rural booking index only increased marginally above trend in 2020.

Market Characteristics of OTAs Compared to Whole Market in the UK

Share of Total Sales (Branded Chains & Independent)

Market Characteristics of OTAs Compared to Whole Market in the UK

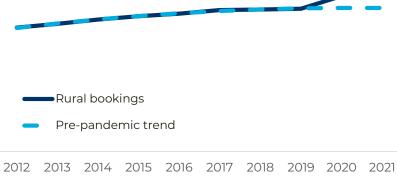


Share of Total Sales (Rural & Urban)

Source: Tourism Economics & Booking.com

Rural Booking Index in the UK

2012-2021



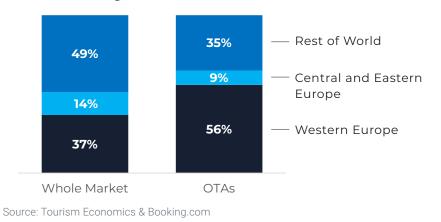
OTAs offer access to a different mix of international travelers

The majority of international overnight stays in the UK booked through OTAs were arranged by individuals from countries within Western Europe. For the market as a whole, arrivals from Western Europe accounted for only 37% of total international overnight stays. Just under 10% of OTA international overnight stays originated from Central and Eastern Europe—a lower share than the market overall (14%). The long-haul element booked via OTAs was also significantly smaller—35% compared to 49% across the wider market.

The North American regional source market is important both for long-haul OTA bookings and the market as a whole. Northeast Asia accounts for similar shares across OTA bookings and the wider market. The Middle East and Oceania account for considerably larger shares of OTA bookings relative to the wider market. In contrast, bookings from South Asia (4%) are a much smaller element than in the market as a whole (11%).

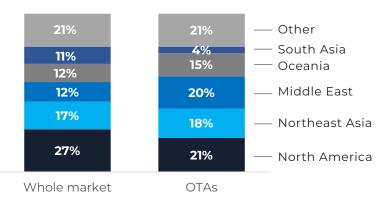
Composition of International Travel

Origin of international travel to the UK, Share of Overnights, 2019



Composition of Long-Haul International Travel

Origin of long haul travel to the UK, Share of Overnights, 2019



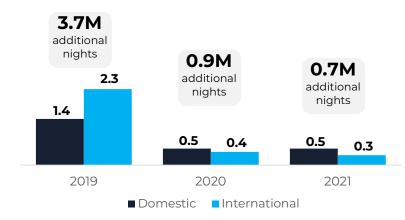
Source: Tourism Economics & Booking.com

MARKET EXPANSION EFFECT ON ALTERNATIVE ACCOMMODATIONS

OTAs support impacts in alternative lodgings as well as hotels

In each year from 2019 to 2021 OTAs increased the number of overnight stays in alternative accommodations in the UK. In 2021, bookings of alternative accommodations via OTAs generated 0.7 million additional nights.

Additional Nights in Alternative Accommodation Millions of Nights

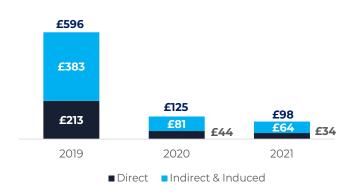


ECONOMIC IMPACTS ON ALTERNATIVE ACCOMMODATIONS

OTAs generate incremental economic impacts in the form of GDP and jobs for alternative lodgings as well as hotels

Economic impacts are generated through the additional spending associated with non-hotel staying guests. In 2021, OTAs generated £98 million in total incremental GDP and 3,000 total jobs although both were significantly higher in 2019.



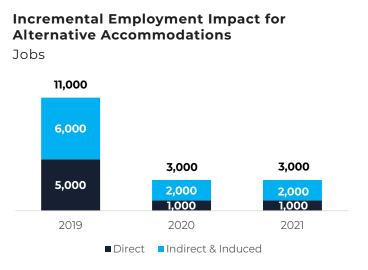


Source: Tourism Economics & ComScore



Source: Tourism Economics & ComScore

TOURISM ECONOMICS



APPENDICES

INTRODUCTION

In these appendices we explain how OTA influence, the key explanatory variable used in the analysis, was constructed (Appendix 1). We also describe the econometric equations used to estimate OTA impact on nights and average daily rates (Appendix 2).

This study assessed the impact of OTAs in three global regions: North America, Europe, and APAC. We produced estimates for individual countries within these regions as well as for the regions as a whole. This report presents the results for Europe and 17 selected markets.

Estimates for the key explanatory variable were developed for each of the markets examined in the study. Econometric equations were developed using a panel dataset which included all countries considered in the study (across the three regions) and covered the period 2012 to 2021, where data was available.

GEOGRAPHICAL COVERAGE

The key markets considered in this study are:

- 1. Asia Pacific (8 markets)
 - Australia .
 - India
 - Japan .
 - New Zealand
 - Singapore
 - South Korea
 - Thailand
 - Vietnam
- 2. North America (2 markets)
 - Canada
 - USA

Note: findings for key states and metro areas in the US are also reported.

- Europe (17 markets) З.
 - Austria
 - Bulgaria
 - Croatia
 - Czechia
 - Denmark
 - Estonia
 - France
 - Italy
 - Germany
- 122

- Greece
- Malta
- Netherlands
- Portugal
- Spain .
- Sweden
- Switzerland
- UK

APPENDIX 1 DEVELOPMENT OF THE OTA INFLUENCE VARIABLE

OTA influence is a measure of OTA's share of online travel research, in each country for each year in the survey. By using this as the explanatory variable in the analysis, it is possible to assess how changes in the use of OTAs (as distinct from changes in online usage) affect the key outcomes variables.

The measure of OTA influence in the online travel market was constructed using two different methodologies: i) the "top-down" approach; and ii) the "bottom up" approach. By using two different methods to measure OTA influence, the estimated impact of OTAs can be validated by comparing the results of each method.

The bottom-up approach aggregates and scales Booking.com activity data (e.g. number of transactions) to estimate the overall level of OTA activity, while the top-down approach calculates OTA influence by identifying the OTA share of online travel activity. OTA influence calculated in this way includes travel booked through OTAs as well as travel activity researched through these platforms but booked in other ways.

The Bottom-Up Approach

The bottom-up approach to estimating OTA influence combines information from Booking.com on the overall number of bookings and the number of room nights booked on its own website, and an estimate of the share of OTA activity accounted for by Booking.com. Essentially the bottom-up measure is an estimate of the total bookings, guests, and room nights booked through OTAs, in each of the countries examined in this study. (The measure can be presented both as an absolute value, or as a share of online travel research - see further discussion in the next section, below.)

Booking.com provided the data on the total number and value of transactions and the length of stay booked on Booking.com, on a yearly basis for 2012-2021 (inclusive), for all geographies it currently operates within. Information that allowed chain and non-chain (independents) accommodation bookings to be identified as well as the country of origin of each transaction was also provided.

Information on the number of guests per booking was not available to Booking.com, so total guests were instead calculated using an assumption that the average number of guests per booking is 1.5, which is in line with previous work by Oxford Economics on average room occupancy.

To estimate the Booking.com share of the online sector, Oxford Economics used data from ComScore which tracks unique visitors to an exhaustive list of online travel sites. This was used to calculate the Booking.com share of unique visitors to all OTAs, as well as the share of all travel research accounted for by OTAs.

To obtain the volume of transactions, guests and room nights influenced across all OTAs, activity for Booking.com was divided by Booking.com's estimated share of OTA visits by geography. This implicitly assumes that unique visitors to Booking.com do not have a higher propensity to book (for example) than consumers on other OTAs, and that the average length of stay for bookings on Booking.com is representative of the average length of stay for other OTAs.

The final stage of the analysis was to convert our results from a source market basis (i.e. country of consumer origin) to a destination basis (i.e. by geography in which the accommodations are based). To do

this, booking.com data was used to create a matrix of source-destination flows for all geographies within the regions of the study, of which a simplified version is shown in the table below (note, numbers are for illustrative purposes only).

In this table, the source countries are shown in the columns and the destination countries in the rows. The resulting diagonal elements show domestic travel, while the off-diagonal elements refer to foreign or outbound travel. This matrix can then be applied to the number of OTA influenced trips and room nights for each source market to determine the destination size of OTA influence.

The levels of OTA activity, thus obtained, were compared to the total travel demand by destination market to obtain a share of guests, room nights, and transaction value accounted for by OTAs. The estimates of total travel demand by source market were taken from the Oxford Economics' Global Travel Service (GTS) model. This model includes historic data and forecasts for visits, room nights and spend for 185 countries as both source markets and destinations, including bilateral country-to-country flows. It provides a comprehensive view of the total travel market for comparison with the estimated OTA impacts.

Source-Destination Matrix

	Germany	France	United Kingdom
Germany	0.80	0.10	0.10
France	0.15	0.60	0.25
United Kingdom	0.05	0.30	0.65

The Top-Down Approach

The top-down approach to estimating OTA influence instead starts by identifying the share of a country's population that are internet users, and estimates the proportion of those users that relied on OTAs for their travel and research decisions.

The total population and rate of internet penetration in each country, for 2012-2021 (inclusive), were based on data provided by the World Bank. Rates of internet penetration were corroborated with other sources such as Internet Live Stats to ensure measurement was consistent across countries – this was used for validation purposes only, and was not used for any further calculations.

To identify the proportion of the online population that used the internet to research travel decisions specifically, ComScore data was used. The results from this analysis were checked against results from previous studies.

To identify the size of the OTA segment, ComScore data was again used to calculate OTAs' share of unique visits to all online travel sites. Combining these data with previous estimates for the total online population researching travel provides the top-down measure of OTA influence.

This share is then applied to data on trips (from our GTS model) to determine the proportion of trips that were influenced by OTAs. Data on average length of stay is then used to convert influenced trips to influenced room nights. Average length of stay data is also included within Tourism Economics' GTS model.

As with the bottom-up estimation, these data were converted from a source country basis to a destinations basis, using data on origin/destination travel patterns based on the GTS model.

Top-Down Methodology

Group	Number of individuals (millions)	Proportion of prior group	Data Source
Online Population	67		World Bank
Researching Travel	52	0.785	ComScore
Using OTAs	27	0.515	ComScore

By way of example, the table above shows the steps to calculate the level of OTA influence for UK in 2019. Using the figures presented above, the proportion of the UK's online population using OTAs is 40% (27M/67M).



APPENDIX 2 ECONOMETRIC ANALYSIS

Equations to estimate OTA impact on additional nights

OTAs impact on additional room nights was estimated using the measure of OTA influence as an explanatory variable in an econometric specification.

The basic econometric specification employed is a reduced form version of Oxford Economics' global tourism model, which regresses the number of hotel nights stayed by country of consumer origin on key economic indicators in each country, including GDP, unemployment and exchange rates. The estimation is given by the equation below

Nights - Equation 1

$logNIGHTS_{it} = \beta_0 + \beta_1 trend_t + 1 \cdot logGDP_{it} - 0.1 \cdot logUP_{it} + 0.1 \cdot logRXTOUR_{it} + \alpha_i + u_{it}$

NIGHTS - nights spent by residents of country i on trips abroad and within the country

GDP – Gross Domestic Product for country i

UP - unemployment rate

RXTOUR - weighted average exchange rate index; weights are derived according to bilateral travel flows.

Coefficients have been imposed on GDP, unemployment and exchange rates, according to prior estimation results, to avoid excess explanatory power attributed to any new indicators; additional indicators of online and OTA influence therefore only help to explain current equation errors and time trends.

These panel data equations have been estimated using generalised least squares (GLS) with cross-section weights, for the entire set of countries examined in the study between 2012 and 2021. Cross-section weights were applied to place greater weight on the more reliable country flows and relationships. Weights were derived from the inverse of the equation standard deviation for each country in an initial unweighted calculation.

To determine whether the OTA influence has an incremental impact on nights, OTA influence was added as an explanatory variable to the basic specification, see equations below.

As these equations show, indicators of online research and OTA influence were initially included individually to confirm that these do help to improve estimates and explain a proportion of the error and exogenous trends in the prior specification. This also clarifies that using OTA influence alone would overstate the impact by providing a similar impact to the inclusion of online research as they follow a similar trend over time.

As a result, the size of the online population was added as a further explanatory variable to ensure that OTA influence – which can be expected to be strongly correlated with the use of the internet – isolates increased OTA usage from online usage altogether. Including both variables therefore ensures the additional impact of OTAs on room nights accounts for wider economic fluctuations and the broader impact of the internet on travel.

Nights - Equation 2

 $logNIGHTS_{it} = \beta_0 + \beta_1 trend_t + logGDP_{it} - 0.1 \cdot logUP_{it} + 0.1 \cdot logRXTOUR_{it} + \beta_2 logONLINE_{it} + \alpha_i + u_{it} + u_{it}$

 $logNIGHTS_{it} = \beta_0 + \beta_1 trend_t + logGDP_{it} - 0.1 \cdot logUP_{it} + 0.1 \cdot logRXTOUR_{it} + \beta_3 logOTA_{(it-1)} + \alpha_i + u_{it} + u_{it}$

NIGHTS – nights spent by residents of country i on trips abroad and within the country GDP – Gross Domestic Product for country i UP – unemployment rate RXTOUR – weighted average exchange rate index; weights are derived according to bilateral travel flows. ONLINE – number of internet users by country OTA – number of trips influenced by OTAs

The final specification includes both online access (ONLINE) and the ratio of OTA transactions to online travel research (RESEARCH). This ratio is the propensity for travel research to involve an OTA, which has increased power to explain the OTA impact.

In this equation (shown on the following page), OTA influence as a proportion of research is included as a lagged variable; i.e. the prior period's OTA influence is used in the equation. If contemporaneous OTA influence was used instead, this would result in a high degree of collinearity between the OTA effect and the wider online effect. This would make it harder to identify the effect of each factor. The final specifications estimated dropped the trend term as it is statistically insignificant.

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Nights - Equation 3

 $logNIGHTS_{it} = \beta_0 + \beta_1 trend_t + logGDP_{it} - 0.1 \cdot logUP_{it} + 0.1 \cdot logRXTOUR_{it} + \beta_2 logONLINE_{it} + \beta_3 log(OTA_{(it-1)}/(RESEARCH_{(it-1)}) + \beta_3 log(OTA_{(it-1)}/(RESEARCH_{(it-1)})) + \beta_3 log(OTA_{(it-1)}/(RESEARCH_{(it-1)}$ $\alpha_i + u_{it}$

NIGHTS – nights spent by residents of country i on trips abroad and within the country

- GDP Gross Domestic Product for country i
- UP unemployment rate

RXTOUR – weighted average exchange rate index; weights are derived according to bilateral travel flows.

ONLINE – number of internet users by country

OTA – number of trips influenced by OTAs

RESEARCH – number of people using the internet for tourism research

This model was used to estimate the impact on total and foreign nights separately. The domestic impact can be derived from the difference between the two.

The estimation was calculated on a demand by origin (domestic and outbound) basis. So the final step was to convert these results to destination effects, taking into account overall demand uplift (i.e. estimation) as well as market share changes (from origin to destination flows in Booking.com data).

Equations to estimate OTA impact on average daily rates One of the key beneficial effects of OTAs is the downward pressure they exert on average daily rates (ADR). As with room nights, an econometric model can be used to quantify the impact OTAs have on ADR.

The econometric model is based on several key drivers identified by Tourism Economics:

- and consumer purchasing power and;
- Cyclical hotel room occupancy, which ADR typically follows with a 6 month lag.

These drivers, combined with country-specific fixed effects and a time trend are the components for a reduced form model of ADR. Although ADR and room occupancy are jointly determined, this does not occur contemporaneously. Therefore, as the cycles of ADR and occupancy are linked, lagged occupancy can be used to predict current ADR.

The equations have all been estimated using OLS over a panel dataset of the countries in the study between 2012 and 2021. STR provides data on the rates of hotel occupancy and ADR for the whole hotel market in each country. Monthly data (and daily data for some large markets) are collected by STR from a representative sample of properties in each country and are summed to an annual level to provide the total census of hotel rooms.

Average Daily Rates - Equation 1

$logADR_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_{(it-1)} + \alpha_i + u_{it}$

ADR – Average Daily Rate charged by hotels for rooms in USD CPIE – Consumer Price Index converted to USD terms from local currency OCC – average room occupancy rate for hotels

• Inflation (measured by the CPI index). ADR follows prices in the wider economy, reflecting increased costs

As with the estimation procedure used for nights, an additional variable capturing the effect of online presence as a whole was used to isolate the specific effect of OTAs, see equation below.

Average Daily Rates - Equation 2

 $logADR_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}) + \beta_5 TRAV_RESEARCH_{it} + \alpha_i + u_{it} +$

ADR – Average Daily Rate charged by hotels for rooms in USD CPIE – Consumer Price Index converted to USD terms from local currency OCC – average room occupancy rate for hotels OTA_NIGHTS – nights spent in hotels booked influenced by OTAs. This corresponds to the OTA indicator used in the additional nights equation, although OTA_NIGHTS relates to influenced nights whereas OTA relates to trips. DNIGHTS – nights spent by on trips within country i by residents and foreign visitors TRAV_RESEARCH – propensity to research tourism online in travel to country i relative to the regional average. It is defined as: (DRESEARCHi / DNIGHTSi) / (DRESEARCH EU / DNIGHTSEU) DRESEARCH - number of people using the internet for tourism research for country i as a destination

OTA_NIGHTS/DNIGHTS is the OTA-influenced share of room sales by nights. TRAV_RESEARCH is a relative measure of propensity to research travel online for a country compared to the specific regional average. This is a better indicator of prices over time and across countries and helps to explain some of the cross-country fixed effects and time trend. A greater propensity to research travel online is related to a lower ADR. Using both of these measures improved model fit and ensured that the OTA effect was not overstated. Again, t-tests were run on the coefficients of interest to determine their statistical significance.

In total, four final equations were estimated for ADR (chain OTA sales, non-chain OTA sales, chain non-OTA sales) and the impacts were then combined to give the total final impact. These equations are given overleaf: the ADR impact was calculated separately for chain and non-chain hotels, and separately for OTA sales and non-OTA sales to improve model fit and to estimate more accurately the impact of OTA influence on these different sub-segments.

Average Daily Rates - Equation 3

 $logADR_CH_OTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_5 TRAV_RESEARCH_{it} + \alpha_i + u_{it}$

 $logADR_CH_NOTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_5 TRAV_RESEARCH_{it} + \alpha_i + u_{it}$

 $logADR_IN_OTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 dtend_t + \beta_2 (CPIE_{it}) + \beta_3 dtend_t + \beta_2 dtend_t + \beta_2 dtend_t + \beta_3 dte$

 $logADR_IN_NOTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_1 trend_t + \beta_2 trend_t + \beta_$

ADR – Average Daily Rate charged by hotels for rooms in USD, by type of property _CH_OTA – chain hotel sales through OTAs _CH_NOTA – chain hotels sales not through OTAs _IN_OTA – independent hotel sales through OTAs _IN_NOTA – independent hotel sales not through OTAs OCC – average room occupancy rate for hotels, by type of property CPIE – Consumer Price Index converted to USD terms from local currency OTA_NIGHTS – nights spent in hotels booked influenced by OTAs. This corresponds to the OTA indicator used in the additional nights equation, although OTA_NIGHTS relates to influenced nights whereas OTA relates to trips. NIGHTS – nights spent by residents of country i on trips abroad and within the country TRAV_RESEARCH – propensity to research tourism online in travel to country i relative to the regional average.

Key Adjustment

To account for changes in price parity regulation, additional dummy variables (for relevant years and countries) were included in the panel estimation to assess the OTA impact on additional room nights and average daily rates. In some instances, there are apparent step changes in data in the years that policy changes came into force. The inclusion of these dummy variables allows quantification of the apparent policy effect distinct from all other underlying indicators. Different dummy indicators have been included by type of policy change. The inclusion of these policy dummies improves the equation fit and adds greater confidence to the estimated coefficients, as well as highlighting some of the apparent risks.

Dummy had the strongest effect on ADR, consistent with theory as some of the benefits of comparison, and increased competition, are eroded.

$logADR_CH_OTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it} / DNIGHTS_{it}) + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_2 trend_t + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_2 trend_t + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_2 trend_t + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_3 trend_t + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_3 trend_t + \beta_3 trend_t + \beta_3 trend_t + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_3 trend_t + \beta_3 trend_t + \beta_4 log(OTA_NIGHTS_{it} - \beta_1 trend_t + \beta_4 trend_t +$

 $logADR_CH_NOTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_CH_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}) + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}/DNIGHTS_{it}) + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}/DNIGHTS_{it}) + \beta_4 log(OTA_NIGHTS_{it}/DN$

 $logADR_IN_OTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_IN_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}) + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}/DNIGHTS_{it}) + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS$

 $logADR_IN_NOTA_{it} = \beta_0 + \beta_1 trend_t + \beta_2 (CPIE_{it}) + \beta_3 logOCC_IN_{(it-1)} + \beta_4 log(OTA_NIGHTS_{it}/DNIGHTS_{it}) + \beta_5 logOCC_IN_{(it-1)} + \beta_4 logOCC_IN_{(it-1)} + \beta_4 logOCC_{it}/DNIGHTS_{it}) + \beta_5 logOCC_{it}/DNIGHTS_{it}/DNIGHTS_{it}) + \beta_5 logOCC_{it}/DNIGHTS_{it}/DNIGHTS_{it}/DNIGHTS_{it}) + \beta_5 logOCC_{it}/DNIGHTS_{it}/DN$

ABOUT THE RESEARCH TEAM





Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, we have become 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. Our best-of-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social and business impact.

Oxford Economics is an adviser to corporate, financial and government decision-makers and thought leaders. Our worldwide client base comprises over 2,000 international organizations, including leading multinational companies and financial institutions; key government bodies and trade associations; and top universities, consultancies, and think tanks.

This study was conducted by the Tourism Economics group within Oxford Economics. Tourism Economics combines an understanding of traveler dynamics with rigorous economics in order to answer the most important questions facing destinations, investors, and strategic planners. By combining quantitative methods with industry knowledge, Tourism Economics designs custom market strategies, destination recovery plans, forecasting models, policy analysis, and economic impact studies.

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