European Parliament

Research for TRAN Committee - Overtourism: impact and possible policy responses

Transport and Tourism

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Abstract

This study addresses the complex phenomenon of overtourism in the EU. By focusing on a set of case studies, the study reports on overtourism indicators, discusses management approaches implemented within different destinations and assesses policy responses. It concludes that a common set of indicators cannot be defined because of the complex causes and effects of overtourism. Avoiding overtourism requires custom-made policies in cooperation between destinations' stakeholders and policymakers.

This document was requested by the European Parliament's Committee on Transport and Tourism (TRAN).

CONTENTS

LIST OF ABBREVIATIONS

ABTS   Assembly of Neighbourhoods for Sustainable Tourism

ADB   Asian Development Bank

ANOVA   Analysis of variance, a statistical test to compare differences between groups

AT   Austria

AU   Australia

B&B   Bed and Breakfast (accommodation type)

BE   Belgium

BG   Bulgaria

BNGP   Bed Night Growth Percentile Rank

BR   Brazil

CELTH   Center of Expertise for tourism and Hospitality

CH   Switzerland

CIGS   Combined Intensity Growth Score

CLIA   Cruise Lines International Association

CY   Cyprus

CYSTAT   Statistical Service of Cyprus

CZ   Czechia

DE   Germany

DK   Denmark

DMO   Destination Marketing Organisation

DV   Day Visitors

EC_XXX   Economic impact of tourism (see Table 1)

ECST   European Charter for Sustainable Tourism in Protected Areas

EE	Estonia
EL	Greece
ENV_XXX	Environmental impact of tourism (see Table 1)
ES	Spain
ETC	European Travel Commission
FI	Finland
FIT	Free Independent Traveler or Free Independent Tourist
FR	France
GDP	Gross Domestic Product
HR	Croatia
HU	Hungary
HUT	Habitatges ús turísticuse (housing for tourist use)
ICT	Information and Communication Technologies
IE	Ireland
IREFREA	Instituto Europeo de Estudios en Prevención
IS	Iceland
IT	Italy
JICA	Japan International Cooperation Agency
LAC	Limits of Acceptable Change
LT	Lithuania
LU	Luxembourg
LV	Latvia
M_02_BND	Tourism density
M_03_BNP	Tourism intensity

M_04_GAT   Growth air transport (2016)

M_05_SDG   Tourism share GDP

M_06_SAB   Airbnb share of the total of Booking and Airbnb

M_08_DAB   Airbnb average shortest distance to booking.com

M_09_AND   Air transport intensity

M_10_NUW   Number of UNESCO World Heritage Sites

M_11_ALL   Percentile Average significant indicators
AV

MICE   Meetings, Incentives, Conferences and Exhibitions

MSP   Member of the Scottish Parliament

MT   Malta

NL   Netherlands

NO   Norway

NSW   Australian state of New South Wales

NTO   National Tourism Office

NUTS   Nomenclature of Territorial Units for Statistics

OD   Overtourism Drivers

OT   Overtourism

OUV   Outstanding Universal Value

PL   Poland

PT   Portugal

RO   Romania

ROS   Recreation Opportunity Spectrum

SE   Sweden

SET	Southern European Cities against Touristification
SI	Slovenia
SK	Slovakia
SOC_XXX	Social impact of tourism (see Table 1)
STB	Slovenia Tourism Board
SURS	Statistical Office of the Republic of Slovenia
TALC	Tourism Area Life Cycle
TC	Tourism Capacity
TDR	Tourism Density Rate
TI	Tourism Impacts
TIntP	Tourism Intensity Percentile Rank
TN	Tourist Nights
TPR	Tourism Penetration Rate
TR	Turkey
TRAN	European Parliament Committee on Transport and Tourism
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNWTO	United Nations World Tourism Organisation
US	United States
VERP	Visitor Experience and Resource Protection
VUM	Visitor Use Management Framework
WHS	World Heritage Sites
WTCF	World Tourism Cities Federation
WTTC	World Travel and Tourism Council

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EXECUTIVE SUMMARY

Introduction

'Overtourism' is a relatively new term in the public and academic debate on negative consequences of tourism. However, the phenomenon itself is not a new one, as problematic forms of tourism crowding and their effects on local communities and environment have been studied for decades. Yet, there is much evidence that the character of tourism in many locations is changing rapidly.

It is important to realise that overtourism is still at the very beginning of the policy cycle. The policy-cycle theory states that policies develop through a range of stages, of which the first is the agenda-setting stage. Overtourism has developed well into the agenda-setting stage, but did not enter the policy-making stage at the EU level, and only very rudimentarily at the destination level. Therefore, it is not possible, nor desirable, to describe precise and exact policy measures because there is scarce empirical evidence to found such measures on.

The study highlights that while overcrowding is a well-known phenomenon primarily associated with negative experiences emerging from the presence of too many tourists at certain places and times, overtourism is a much broader and more complex phenomenon. In this study we adopt the following definition of overtourism:

> **Overtourism describes the situation in which the impact of tourism, at certain times and in certain locations, exceeds physical, ecological, social, economic, psychological, and/or political capacity thresholds.**

While overcrowding is seen by the industry as an issue that mainly stands in the way of continued growth, the impacts of overtourism can represent an existential risk for destinations around the world. There are many examples where the cultural and natural heritage of a place is at risk, or where costs of living and real estate have substantially increased and caused a decline in quality of life. The spread of overtourism could cause the loss of authenticity and imply a significant risk to the future attractiveness of a destination. Uncontrolled tourism development can cause significant damage to landscapes, seascapes, air and water quality, as well as the living conditions of residents, causing economic inequalities and social exclusion, amongst many other issues.

Aim

This study aims to improve the understanding of the wider and more recent development of overtourism, to identify and assess the issues associated with it, and to propose policies and practices to mitigate its negative effects. The study involves an extensive literature review; the evaluation of 41 case studies; statistical analyses of selected overtourism factors (such as tourism density (bed-nights per km^2) and tourism intensity (bed-nights per resident), Airbnb prevalence, airport proximity, cruise port availability, or UNESCO World Heritage Site status), as well as the critical analysis of relevant policy documents.

Description and overview of overtourism

Many overtourism issues are related to the (negative) perception of encounters between tourists, residents, entrepreneurs and varying tourist groups, due to the perception of high tourist numbers at certain times and places. Root causes of overtourism may relate to low transport costs and technology developments (i.e. digital platforms, social media). Although a lack of available data impedes a thorough analysis of the effects of social media platforms on overtourism, there is evidence of their role

in causing concentration effects of visitor flows in time and space, as well as pushing additional growth in visitors' arrivals.

One of the main results of this study is that the impacts of overtourism can be social, economic, as well as environmental. Perhaps not aligned with the image often portrayed in the media, the case studies' analysis also suggests that **the most vulnerable destinations are not necessarily cities, but rather coastal, islands and rural heritage sites.**

An important complication of any assessment of overtourism is the lack of a commonly accepted set of indicators, hindering the effective evaluation of destinations that are at risk of overtourism or have already entered a 'state of overtourism'. This study is a first attempt to relate a range of statistics at the NUTS 2 (second level of the Nomenclature of Territorial Units for Statistics) regional level to overtourism and to identify regions at risk. In total, over 290 regions were assessed, including 53 with at least one destination already confronted with overtourism. Indicators show widely varying levels for regions at the NUTS 2 level.

Findings from this study suggest that **the most relevant indicators for overtourism** are:

- tourism density (bed-nights per km^2) and intensity (bed-nights per resident);
- the share of Airbnb bed capacity of the combined Airbnb and booking.com bed capacity[1];
- the share of tourism in regional Gross Domestic Product (GDP);
- air travel intensity (arrivals by air divided by number of residents); and
- closeness to airport, cruise ports and UNESCO World Heritage Sites.

Though the means and distributions of the indicator values differ significantly, there is a large overlap in values between the groups of regions with and without overtourism. Yet, it is difficult to assign a general value or threshold to an individual or combination of indicators that could serve as a predictor of overtourism. It is thus suggested to assess the risk of overtourism at the regional level. In the analysis, **a preliminary number of 15 regions not currently recognised as destinations in a state of overtourism were identified as 'at a high risk of overtourism'**. These are the regions of Valencia, Andalucía and the Canarias in Spain, the regions of Languedoc-Roussillon and Bourgogne in France, the province of Trento in Italy, Madeira and the Algarve in Portugal, and the Ionic Isles and the Peloponnesus in Greece. The UK has five regions in the top-15 at risk of overtourism: Cumbria, Cornwall, West Wales and The Valleys, East Wales and North Yorkshire. Before any effective early warning tool can be implemented, comparable indicators and values must be identified in order to enable the assessment of a more comprehensive list of destinations at 'risk of' or 'in a state of overtourism'. Still, **the study provides a preliminary practical check list for destinations or regions to assess whether they may be at risk of overtourism based on a qualitative assessment** (please see section 3.5.3).

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[1] The share of Airbnb bed capacity represents the respective added bed capacities of booking.com and Airbnb. While booking.com almost entirely consists of 'registered accommodation' like hotels or B&B, Airbnb lists private properties – both rooms and entire private homes, as well as homes owned by commercial entities - that are usually not government registered as tourism accommodation. Because Airbnb and booking.com are by far the largest players for unregistered sharing or registered commercial accommodation platforms, the indicator provides representative figures on overall bed capacity.

Case studies

A total number of **41 case studies are discussed in this study**. The selection was based on a set of criteria including 1 case per EU country, an even distribution over the four types of destinations (Rural, Urban, Coastal & Islands, Heritage & Attractions), and 12 iconic non-EU destinations[2]. For each case, a short report provides a general description, some statistics, as well as an overview of tourism developments, impacts and policies. **The case studies highlight that the character of overtourism impacts – environmental, economic and social - depends on the type of destination**. Social impacts prevail in Urban destinations, environmental impacts in Rural, while all three impact categories are relevant in Coastal & Islands and Heritage & Attractions. Impacts were evaluated as a function of, among others, the annual number of tourists per 100 inhabitants (Tourism Penetration Rate, TPR) and the annual number of tourists per km^2 (Tourism Density Rate, TDR), with results markedly differing between the four types of destinations. Results suggest that **especially the combination of a high TPR and TDR, puts a destination at a high risk of overtourism.** This is often the case in destinations of the type Coastal & Islands. Environmental issues often reported are pollution and waste. Social issues often concern overcrowding of transport infrastructure and of tourism sites. None of the economic impacts emerged as very common. **Surprisingly, while social impacts related to overtourism are the ones most often discussed in the media, the case studies indicate that environmental impacts are common as well, but mainly outside of cities.**

The most frequent measures taken by destination management organisations and local governments to soften the negative effects of overtourism are related to spreading visitors in time and space (i.e. aiming at a greater number of attractions over a prolonged season); targeting inappropriate visitor behaviour; or improving the capacity of infrastructure, accommodation and facilities. The above common measures are all in the realm of current tourism management strategies and practices, but are not necessarily the most appropriate. The case studies did not reveal any evaluation or monitoring programmes in any of the destinations, making it difficult to assess the effectiveness of the measures in place.

Issues and actions for TRAN Committee

Overtourism is a complex phenomenon. In order to proactively prevent and/or address its impacts, customised and place-specific tools and measures are needed. The majority of the nine general principles of the current EU tourism policies (please see section 5.4.1) are relevant to overtourism. However, the main problem remains the availability of accurate data for the implementation of effective interventions, as well as destination management measures. Known complicating factors are linked to a growing part of the industry operating outside the control of policy-makers (i.e. sharing economy platforms like Airbnb, Uber) and peer-to-peer platforms such as TripAdvisor, which tend to have an impact on the concentration of tourists in certain destinations and places.

Four key issues emerged from the study. **Firstly**, current (Eurostat) tourism statistics fail to provide all relevant data at the relevant level of detail (NUTS 3 or more detailed is recommended). **Secondly**, the effects of overtourism are potentially severe and both natural and cultural heritage sites are at risk of losing their appeal as desirable tourism destinations due to overtourism. **Thirdly**, most destinations are managed based on a growth-paradigm, mainly valuing growth of visitors' numbers, without considering carrying capacity and other policy goals. **Fourthly**, this study revealed Information and

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[2]   After the selection, Venice and Cinque Terre were added as well-known, highly visited tourism destinations, even though both are located in one country (Italy).

Communication Technologies (ICT), social media and peer-to-peer platforms to often be referred to as primary causes of overtourism. These technologies accelerate the growth and the temporal and geographical concentration of tourism flows and volumes in certain locations. This remains a poorly addressed issue both in the professional and the scientific literature.

Key recommendations to the TRAN Committee include:

- To recommend to conduct **a more systematic research on the overtourism issue** including also rural types of destinations, as well as coasts and islands, and natural and cultural heritage.

- To advocate **commencing data collection, at NUTS 3 level**, on the number of tourists and day-visitors, Airbnb and other new forms of accommodation and transport mode shares.

- To initiate **debates on tourism growth within destinations**, with the goal for destinations to put greater emphasis on qualitative elements of tourism development (profitability; local employment, fair pay rates) rather than continued arrival growth.

- To establish a discussion on **governance of sharing economy platforms**, such as Airbnb, as entities largely outside the control of destinations and policymakers, yet channelling significant financial resource flows from destinations.

- To **involve stakeholders and particularly residents in tourism planning** and development processes on a regular basis in all destinations.

- To support **monitoring the 'sentiments' of both tourists, hosts and (other) residents** in order to have an early warning of the psychological and social forms of overtourism developing.

- To encourage **creation of a cross-EU 'Task Force on overtourism'**. The Task Force should report to the European Commission (EC), provide management recommendations emerging from a constructive dialogue between all parties involved, and develop a monitoring system to detect the causes and impacts of overtourism. This EU-wide Task Force could be a useful benchmark model to be implemented at the destination level.

1 INTRODUCTION AND DEFINITION

KEY FINDINGS

- **Overtourism** is a more complex and multifaceted phenomenon than **overcrowding**.

- The term Overtourism in this study is defined as: the situation in which the impact of tourism, at certain times and in certain locations, exceeds physical, ecological, social, economic, psychological, and/or political capacity thresholds.

- These interrelations are **best understood in conceptual models**, as developed in the chapters of this study.

- Overtourism is still in the **first policy-cycle stage** of **agenda-setting**.

1.1 Introduction, aim and objectives

Over the past six decades, the tourism industry has become one of the fastest growing sectors in the world. Globally, it is one of the key drivers of socio-economic development through its contribution towards employment, infrastructure development and export revenue. According to the United Nations World Tourism Organisation (UNWTO) international tourist arrivals grew by 7% in 2017 to reach a total of 1,322 million (UNWTO, 2018c). 'Led by Mediterranean destinations, Europe recorded extraordinary results for such a large and rather mature region. International tourist arrivals in Europe reached 671 million in 2017, a remarkable 8% increase following a comparatively weaker 2016. Growth was driven by the extraordinary results in Southern and Mediterranean Europe (13%). Western Europe (7%), Northern Europe and Central and Eastern Europe (both 5%) also recorded robust growth' (UNWTO, 2018c, p. 9). Please also see Figure 1.

The overtourism issue only emerged in its current problematic form a couple of years ago. Therefore, the phenomenon is still at the very beginning of the policy cycle. The policy-cycle theory states that policies develop through the following stages: agenda-setting, policy formulation, decision making, implementation and evaluation (Wegrich & Jann, 2006). As this study reveals, overtourism has just started agenda-setting, certainly at the EU-level. Therefore, it is not possible to provide much more than indication of directions for policy-making in the area of overtourism. Systematic research is still too scarce to be more precise and definitive.

Figure 1: **Growth in arrivals and receipts, 2017 compared to 2016**

Northern Europe
+6% tourist arrivals
+8% tourism receipts

Western Europe
+6% tourist arrivals
+5% tourism receipts

Southern / Mediterranean Europe
+12% tourist arrivals
+11% tourism receipts

Central Eastern Europe
+5% tourist arrivals
+7% tourism receipts
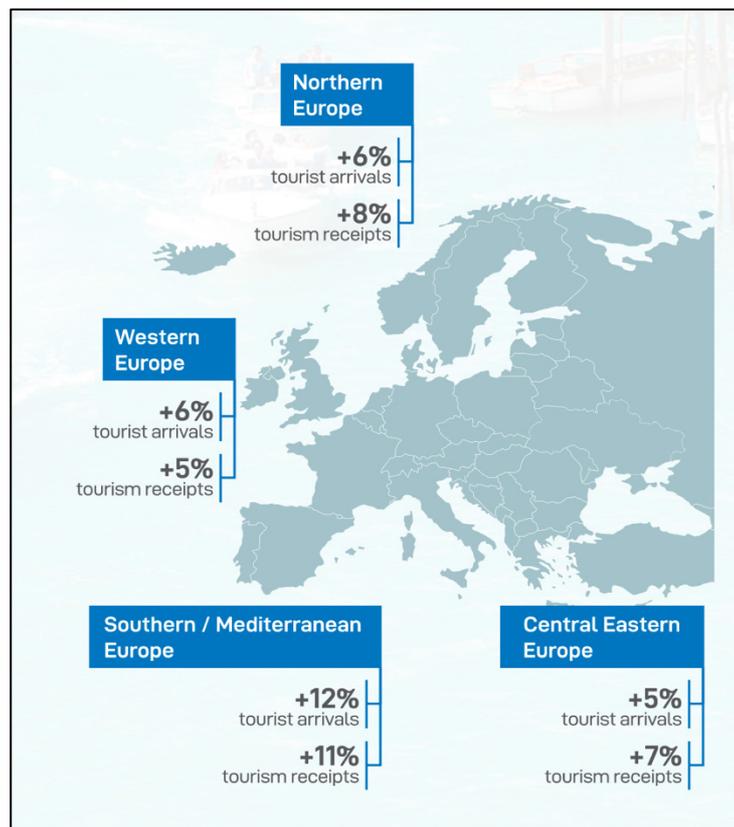
Source: UNWTO (2018c, p. 9)

However, the fact that growth of tourism carries some disadvantages is a well-known issue in both the academic and professional literature. Higher consumption of resources, increased noise, air and water pollution and a more pronounced role of tourism as a cause of climate change are examples of some of the sector's problematic effects (Gössling & Peeters, 2015). One growing phenomenon affecting destinations worldwide has recently and recurrently been referred to as 'overtourism' (IPK International, 2018).

This study aims to forge a better understanding of the overtourism phenomenon, to assess the spread and severity of the issues associated with it and to identify policies and practices to mitigate its negative effects. Ultimately, this study has the following purposes:

- Providing Members of the European Parliament's Committee on Transport and Tourism (TRAN) with a comprehensive overview of the situation in the European Union (EU). This overview will offer exhaustive information on the countries and destinations most affected by overtourism.

- Categorising and describing the major effects of tourists' influx to EU destinations by investigating the challenges faced by local communities, the natural and built environments and local economies as are a result of an excessive inflow of tourists.

- Exploring the situation throughout EU Member States to extract best practices with respect to actions aimed at minimising the negative effects of overtourism. The most popular non-EU tourist destinations are also considered to identify best practices in managing tourism growth.

- Proposing a set of criteria to be used by policymakers to identify early-stage symptoms and threats of overtourism in the EU, with specific attention to capital cities, as well as some of the most popular tourist destinations in the EU.

- Suggesting measures to be considered by policymakers, particularly at the EU level, to assist Member States, regional and local authorities in implementing more coordinated and effective tourism management policies and practices.

- Highlighting the key issues likely to be of concern to Members of the TRAN Committee and indicating possible broad actions that might be taken by the TRAN Committee, including follow-up with the European Commission and/or other major stakeholders.

1.2   Report outline

Chapter 1 of this study provides a definition of overtourism (1.3) and a conceptual model in section 1.4. Chapter 2 provides a literature review discussing the origin of the term 'overtourism' (section 2.1), the causes (section 2.2) and a general overview of the many faces of overtourism (section 2.3). The impacts of overtourism as experienced by members of the European Tourism Commission (ETC) are described in section 2.4. The impacts of overtourism on tourism is the subject of section 2.3.2 and the impacts of overtourism on residents and environment of section 2.5. Chapter 0 provides a range of data, graphics and maps and seeks to provide statistical relationships that may predict a state of overtourism. Methods are shortly discussed in section 3.2. Section 3.3 reports the extent of overtourism, while section 3.4 presents maps and data for a range of indicators for overtourism. Section 3.5 discusses the possibilities and challenges of an early warning tool, but nevertheless lists 15 European regions that run a high risk of developing destinations in a state of overtourism. Chapter 4 is dedicated to an analysis of the 41 case studies. Each case study is reported in detail in Annex IV. The initial and final choices of cases are presented in section 4.1 and compared with the sites listed by the destination managers from the ETC (European Tourism Commission) in section 4.2. Section 4.3 analyses some statistics of density and intensity of tourism at the 41 case destinations. Section 4.4 analyses impacts of overtourism as reported by the case studies and section 4.5 the policy measures at the destinations. Chapter 0 is dedicated to policies and measures to avoid overtourism or alleviate its impacts. Section 5.2 shortly describes the policies taken so far to avoid overtourism. Section 5.3 discusses the ETC survey results regarding measures proposed by some of ETC's members taken at (sub)national level. Subsequently, section 5.4 analyses 121 destination measures categorised into 17 policy responses. The full list can be found in Annex V. The final Chapter 6 discusses the results and conclusions of the study in response to its aims (sections 6.2, 6.3 and 6.4) and provides a list of issues and actions proposed to the TRAN Committee (section 6.5).

1.3   Definition of overtourism

A clear definition of overtourism is not readily available. By its very nature, the overtourism phenomenon is associated with tourist numbers, the type and time frame of their visit, and a destination's carrying capacity. Perspectives on overtourism may include those of various stakeholders, such as residents, tourists, or businesses. According to a recent study, (McKinsey & Company & World Travel & Tourism Council, 2017), challenges associated with overtourism may relate to alienated residents, a degraded tourist experience, overloaded infrastructure, damage to nature, or threats to culture and heritage. Currently, an increasing number of cities, such as Berlin, Prague, Santa Monica, Hong Kong, Belfast, Venice, Rio de Janeiro, Barcelona, Shanghai, Amsterdam, Palma de Mallorca, Lisbon, Reykjavik and Dubrovnik (Colomb & Novy, 2016b; Milano, 2017b, 2018), have been reported to suffer from overtourism phenomena. For the purpose of this study, overtourism is defined as follows:

> **Overtourism describes the situation in which the impact of tourism, at certain times and in certain locations, exceeds physical, ecological, social, economic, psychological, and/or political capacity thresholds.**

Psychological capacity refers to the capacity of people (residents and/or other visitors) to emotionally cope with crowding effects. Political capacity implies the incapability of local governments to grasp, manage, and govern excessive tourism growth consequences, jeopardising host community quality of life. This definition includes all forms of stress caused by high growth and volumes of visitors. It includes social (hosts, guests, citizens), physical (infrastructure, space), economic (tourism commercial zones) and ecological (noise, air quality, water use, water quality, waste, etc.) aspects. From a broader perspective, overtourism can be framed within the domain of tourism impact studies. Tourism studies have traditionally approached this from a single angle: tourism impacting the destination socially, economically or environmentally (Postma (2013). More recently, stakeholders have increasingly realised the following issues:

- Social, economic and environmental impacts should not be assessed independently, but rather interdependently, in a more systemic way.

- The assessment of tourism impacts should take into account a voice of the residents and their understanding of the phenomenon.

- Academia should bridge the gap between business studies and social sciences perspectives to forge a better understanding of tourism impacts.

- Tourism impacts should not be seen as a unidirectional phenomenon but as an encounter that is continually changing because of the interaction between tourism and the destination.

To assess these encounters, Postma (2013) introduced the concept of 'critical tourism encounters'. The notion of 'critical' can be interpreted here in relation to the ecology of a 'system' in which tourism occurs. In our study, we assume a critical encounter to be one in which one or more thresholds are crossed, causing undesirable impacts. Such impacts range from depopulation of the city centre to the development of protests by the inhabitants or the loss of heritage, environmental appeal and authenticity in rural, coastal and islands' settings.

1.4   Conceptual model

As presented in Figure 2 below, the conceptual model attempts to connect and summarises the main aspects of the overtourism phenomenon. This includes all elements named in our definition of overtourism (please see section 1.3). The conceptual model forms a comprehensive overview of the main elements important to overtourism. The general definition of overtourism is that it exceeds thresholds. The model covers all elements of overtourism that affect the destination and its physical environment, economy, residents, heritage, environment and even visitors. Figure 2 shows the full model.

Figure 2 :   **Conceptual model of overtourism**

General overtourism model
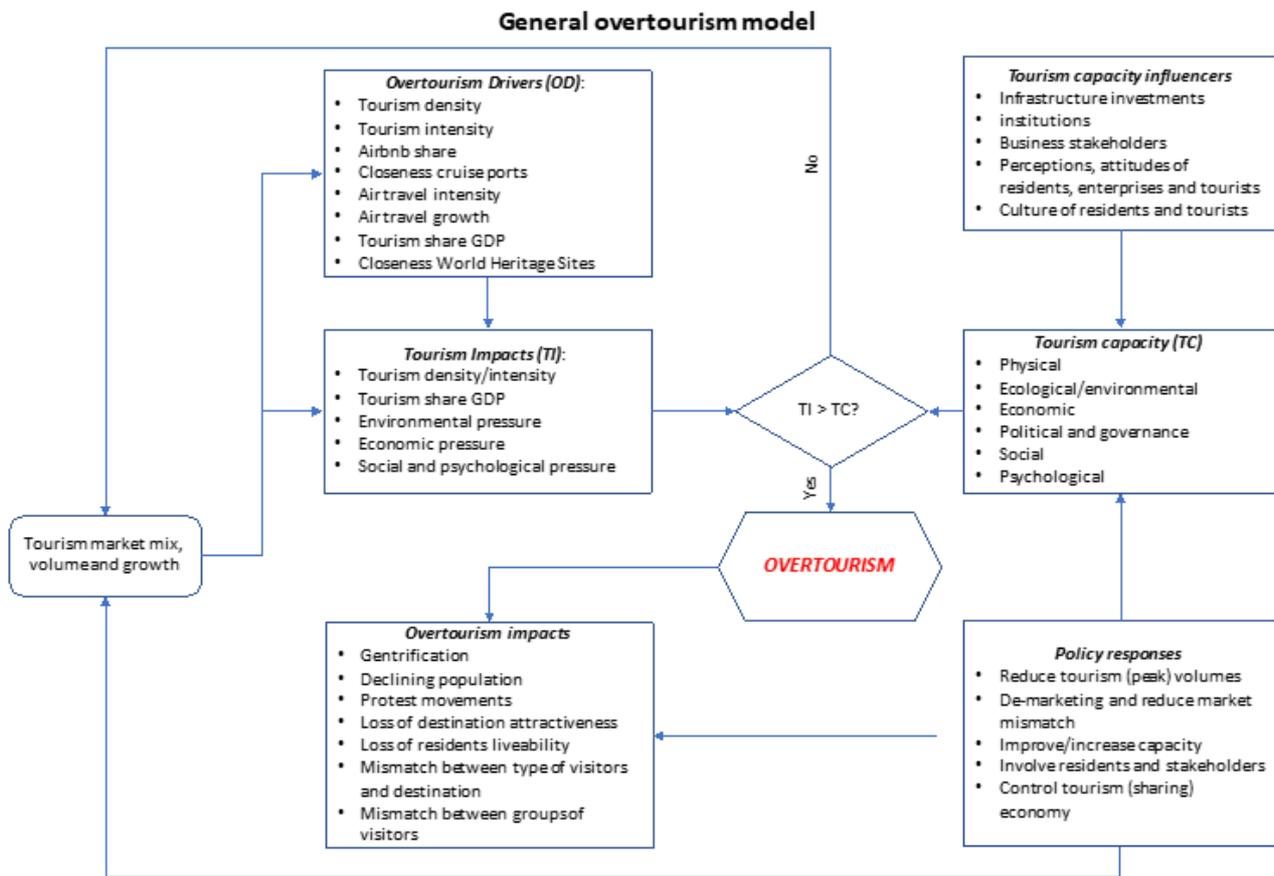
Source: elaborations of this study
Note: OD = Overtourism Drivers, TI = Tourism Impacts and TC = Tourism Capacity

Figure 2 highlights that each destination has an existing 'tourism market mix, volume and growth'. Various developments can contribute to overtourism, such as tourism density or the share of Airbnb beds in the accommodation sector. Drivers cause tourism impacts, which are interdependent with tourism density, environmental pressure, and the lack of policies. For each impact domain, complex thresholds exist. These thresholds are not constant or equal for each destination. As further discussed in Chapter 0, thresholds vary, for instance, because of infrastructure investments and the developing perceptions and attitudes of residents. Even if only one of these thresholds is exceeded, the destination turns to a state of overtourism. If not, the destination will follow its current course of growth. If a destination reaches a state of overtourism, this could result in gentrification[3] as well as social and/or cultural conflicts between visitors and residents. Policy responses can address the impact of tourism market mix, in terms of volume and growth, as well as the overtourism in relation to destinations' carrying capacity and multifaceted impacts of overtourism impacts.

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3   Gentrification is a process by which middle-class people take up residence in a traditionally working-class area of a city, changing the character of the area (Collins English Dictionary: https://www.collinsdictionary.com/dictionary/english/gentrification).

2 OVERTOURISM: CURRENT KNOWLEDGE

KEY FINDINGS

- **Overtourism is ultimately a result of tourism strategies focused on volume growth**, as currently pursued throughout the world, and it mostly reflects residents' perspectives on tourism.

- Most overtourism issues are related to the **(negative) perception of encounters between tourists, residents and entrepreneurs**, because of perceived excessively high numbers of tourists at certain times or in certain places.

- Overtourism develops when one or more of the ecological, physical, social, psychological or economic **capacities in a destination is exceeded**.

- Overtourism may be related to **declining transport costs, rising incomes** and the concentration of tourism in certain places and during specific times.

- **Overtourism is also associated with the speed of change**. Some destinations and attractions have seen rapidly rising tourist numbers because of social media or media platforms' advertisements.

- Overtourism is **often associated with cities and urban tourism**, but is also a common phenomenon in rural, coasts and islands' settings, and at natural and cultural heritage sites and large attractions.

- Six environmental, five economic and seven social **impacts of overtourism** are identified.

- Destinations pursue various strategies to address the negative impacts of overtourism, but **the underlying reason for overtourism, volume growth, is rarely discussed**.

- Destinations may have to put greater emphasis on the optimisation of tourism benefits, and reconsider their focus on growth.

2.1 The origin of the term 'overtourism'

Overtourism is a complex phenomenon that strongly affects the liveability of a place, as well as the experiences of residents, visitors and different stakeholders who are either directly or indirectly involved with or affected by tourism (Bellini et al., 2016; McKinsey & Company & World Travel & Tourism Council, 2017; Milano, 2018; Postma, 2013). Consequently, there cannot be an easy 'top-down' or 'easy-fix' approach to tackle overtourism and to identify and implement effective management solutions. Solutions require shared responsibilities between stakeholders and tailored actions according to the specific characteristics of a destination (Milano et al., 2018) appropriate to the specific situation in a given destination.

The term overtourism is relatively new, with most writings dating back to 2017 and an increasing number of grey literature publications emerging in 2018. However, this does not mean that the phenomenon is a new one. In fact, studies exploring the pressure of tourism on local communities emerged in the 1970s (Boissevain, 1977; T. A. Williams, 1979), alongside discussions of the risks of destination saturation (UNWTO, 1983). For instance, an important contribution in the impact studies

domain is Doxey's 'Irritation Index' (Doxey, 1975), which defined four emotional stages residents may experience with increasing tourist numbers. The final stage is 'antagonism between hosts and guests'. Another key contribution is the Tourism Area Life Cycle (TALC) by Butler (1980), according to which 'tourism destinations suffer from their own success'. None of these publications referred to overtourism, but they clearly revealed the potentially negative impacts of a rapidly growing tourism sector.

This may be the reason that Dredge (2017) wonders whether 'coining the term "overtourism" [means] simply resetting the clock on well-established debates'. As Dredge (2017) highlights, 'The Club of Rome's Limits of Growth, conceptualisations of Limits of Acceptable Change (LAC), carrying capacity and, more recently, planetary boundaries, are among a long line of well-established efforts that quash the idea that unbounded growth and unlimited resource consumption can be achieved without life threatening consequences'.

Across the globe, the increasing politicisation from below as a cause of unease concerning tourism development (Colomb & Novy, 2016b) has helped to shed light on the social unrest, protest and resistance against tourism in most European cities. The negative impact of tourism development has recently been associated with terms such as anti-tourism movements, tourism-phobia, tourist-phobia and overcrowding. Notably, the term tourist-phobia was used for the first time more than a decade ago by Delgado (2008), a Spanish anthropologist attempting to explain a mixture of repudiation, mistrust and contempt of tourists. More recently, a related concept, tourism-phobia, has been described together with overtourism as a direct result of 'the growing evolution of unsustainable mass tourism practices' (Milano, 2017a, p. 5).

In studies adopting a mainly numerical approach and from the perspectives of both tourists and residents, overtourism has also been identified as referring to localised situation 'in which hosts or guests, locals or visitors, feel that there are too many visitors and that the quality of life in the area or the quality of the experience has deteriorated unacceptably. It is the opposite of responsible tourism, which is about using tourism to make better places to live in and better places to visit. Often, both visitors and guests[4] experience the deterioration concurrently and rebel against it' (Goodwin, 2017, p. 1). Similarly, from the view of a tour operator, overtourism might be seen as a situation in which 'visitors outweigh locals', which becomes 'an issue for their cost of living and therefore quality of life' (Intrepid, 2018, p. 16). Yet another approach is to define overtourism as 'the excessive growth of visitors leading to overcrowding in areas where residents suffer the consequences of temporary and seasonal tourism peaks, which have enforced permanent changes to their lifestyles, access to amenities and general well-being' (Milano et al., 2019; forthcoming).

Overtourism is consequently associated with visitor numbers. However, 'crowding' and 'overcrowding' should not be confused with density. Crowding generally refers to a psychological response to density, that is, to feelings of having a lack of privacy, or unwanted interactions (Crothers et al., 1993; Gove & Hughes, 1980; Gray, 2001). Crowding may be associated with over-population as an excess of people in an area, which places pressure on resources or has an impact on broader economic or social goals (Johnston et al., 2005). For instance, 'the problems associated with overcrowding can vary, from alienated local residents to overloaded infrastructure. The issues can affect both established and emerging destinations of all kinds. Countries, regions, cities, and individual sites, such as parks, beaches, and museums, may all be affected' (McKinsey & Company & World Travel & Tourism Council, 2017).

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[4]   It is assumed this should not be 'guests', but 'hosts'.

Saturation and carrying capacity have a strict relation with the overtourism phenomenon. Similar to studies conducted in the 1980s, these phenomena can be investigated in three types of spaces: the tourist-generating zone, the transit zone and the receiving or destination zone (UNWTO, 1983). Currently, rapid tourism growth is provoking many discussions on destinations' carrying capacity and their capacity to handle the overwhelming inflow of visitors versus maintaining a balance with residents' numbers. Again, this debate recalls issues that have emerged from earlier studies, such as a study on tourism in European heritage cities that clearly highlighted issues of tourism growth, balance at the destination and carrying capacity (van der Borg et al., 1996).

The carrying capacity approach attempts to understand the ability of tourist places to withstand the use (and overuse) of their resources. This concept is also inherent to the notion of sustainability. In simple terms, the carrying capacity concept proposes that for any environment, whether natural or artificial, there is a capacity (or level of use) which, when exceeded, is likely to trigger environmental changes and promote varying levels of damage and/or to be associated with reduced levels of visitors' satisfaction (S. Williams, 2009).

In 1981, carrying capacity was defined as the threshold of tourist activity beyond which facilities are saturated (physical capacity), the environment is degraded (environmental capacity) or visitor enjoyment is diminished (perceptual or psychological capacity) (D. G. Pearce, 1981). The role of local population was not included in the definition of carrying capacity in the early 1980s. But in 1987, with the growth of the sustainable development concept, the key role of local communities was acknowledged. Furthermore, bottom-up approaches to policy and planning were promoted, including calls for more participatory approaches to the development of tourism (Postma, 2013). Thus, a revisited carrying capacity concept included the role of local residents (Mowforth & Munt, 2003, p. 224). This focus is as follows:

- **Ecological-environmental capacity:** the level of tourist development or recreational activity beyond which the environment (as previously experienced) is degraded or compromised.

- **Physical-facility capacity:** the level of tourist development or recreational activity beyond which facilities are saturated, or physical deterioration of the environment occurs through overuse by tourists or inadequate infrastructural network.

- **Social-perceptual capacity:** the level reached when groups of residents of an area no longer want tourists because they are destroying the environment, damaging the local culture or crowding residents out of local activities.

- **Economic carrying capacity:** the ability to absorb tourist functions without squeezing out desirable activities. This concept assumes that any limit to capacity can be overcome at a cost – ecological, social, cultural or even political.

- **Psychological capacity:** the individual ability to cope with overcrowding. This capacity is exceeded when a resident and/or tourist is no longer comfortable in the destination area for reasons that may include residents' perceived needs to adapt their habits due to the overwhelming presence of tourists and/or perceived negative attitudes of the locals or other tourists by the a tourist, crowding of the area (traffic jams) or deterioration of the physical environment.

'The result of carrying capacity measurements will always depend on the context of the situation being measured and that this context will vary not just with the physical and social environments, but also with the values of those asking the questions and establishing the conditions for measurement' (Mowforth & Munt, 2003, p. 223). This implies that any location will have multiple capacities, not only in terms of the balance between the different categories of carrying capacity but also within these categories (S. Williams, 2009).

2.2 Causes of overtourism

The drivers of the overtourism are specific to urban, rural and coastal areas as much as to islands, attractions and heritage sites. To date, most studies have focused on causes and drivers, mostly in urban settings. According to a study on Managing Tourism Growth in Europe (Jordan et al., 2018) evaluating European cities, overtourism causes might be driven by factors such as:

- the accessibility and affordability of travel,

- the traditional policy focused on promoting volume,

- an increases in international arrivals,

- the urbanisation pressure,

- the gentrification and increasing prices in city centres and new neighbourhoods,

- the proliferation of unregulated tourist accommodations, and

- the concentration of large groups of tourists.

Equally, according the same study, the overtourism consequences of tourism growth might also be identified as the threshold which may cause overtourism. Some of them may be related to the frustration of those who live in a host destination, which can result from:

- the increased congestion,

- the pressure on infrastructure,

- the growth in energy and water demand,

- the pollution,

- the visitors' behaviour,

- the environmental degradation,

- the damage to historical sites and monuments,

- the loss of identity and authenticity,

- the increases in living costs for local residents, and

- the increasing inequality among local residents' (Jordan et al., 2018).

In a comparative study of European and non-European destinations as diverse as Baku (Azerbaijan), Cozumel (Mexico), Great Barrier Reef (Australia), Juist (Germany), Kasane (Botswana), Lombok (Indonesia), Muskoka (Canada), Ohrid (Macedonia), Rigi (Switzerland), Soweto (South Africa) and Vienna (Austria), different drivers of overcrowding emerged. These drivers are divided into two categories: some are related to environmental conditions, and others are related to tourism itself. While the former are characterised by the impacts of growth of the travel industry on the quality of for instance nature, air, and water, the latter are based on the nature of new and existing attractions, improved accessibility and marketing efforts (Weber et al., 2017). The comparative study by Weber et al. (2017) concluded that every country has tourism hot spots with visitor numbers far above the average during peak times and that crowding effects can become causes of overtourism depending on the level of carrying capacity. Goodwin (2017, pp. 5-6) lists a wide range of causes of overtourism that are often linked to specific destinations and that are rarely of a single nature:

- The decreasing cost of travel and the increasing volume of low-cost airlines and cheap coach travel, causing more people to take city breaks with multiple short-haul flights each year.

- Sharing economy platforms (such as Airbnb) are creating problems in the housing market and forcing rents up.

- The use of public space is free for visitors, but maintenance and repair costs must be met by residential taxpayers.

- Distribution policies that spread tourists to less visited (often residential) areas, which may inadvertently deteriorate the situation by bringing more tourists into residential areas not fit for tourism.

- Strong seasonality that concentrates numbers over time to unsustainable levels.

- Low-paid tourism jobs that are temporary, casual and insecure without prospects.

- Emerging markets with substantial numbers of additional tourists travelling internationally and domestically.

- Reduced cost and travel time of transportation. Better, including faster and larger aircraft as well as coaches that deposit more passengers with each arrival and arrive more often.

Based on qualitative research in three EU cities, Barcelona (field research), Berlin and Venice (desk research), Milano (2017a, 2018) provides several elements and causes of discontentment concerning overtourism:

- Congestion of public spaces in city centres.

- Privatisation of public spaces.

- Rise in real estate prices.

- Increase in cruise ships and high numbers of cruise passengers in a short time.

- Loss of residents' purchasing power.

- Unbalanced number of inhabitants compared to visitors.

- Commercial gentrification.

- Environmental deterioration, including waste, noise, air quality and water quality issues.

Causes of overtourism also include the global growth of tourism hotspots beyond the most famous destinations. On the most fundamental level, overtourism is directly linked to growth in tourist arrivals, reflecting the global tourism growth paradigm that has characterised the sector's development since the 1960s. Today, even those destinations placing limits on tourist numbers, such as the Seychelles, Bhutan or Grand Cayman (Gössling et al., 2002; Johnson, 2002; Nyaupane & Timothy, 2010), have subsequently lifted or adapted these limits (Hall, 2008). More recently, this has led to the question as to whether destinations should continue to pursue volume growth strategies (Gössling et al., 2016; Hall, 2009). This currently remains an academic debate, given that there are few examples of destinations that have decided to implement caps or arrival limits, air passenger duties and departure taxes, or even explored de-marketing[5] options (Hall, 2008). However, the literature has both identified a potential for optimisation (rather than maximisation) of tourist systems (Oklevik et al., 2018), as well as identified more critical views in some destinations to move away from mass tourism (Gössling & Scott, 2018).

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[5] De-marketing refers to a situation in which certain qualities of a destination – or product – are kept from the market with the intention to reduce the volume of visitors - or sales.

An additional issue forms the role of the upcoming sharing economy and peer-to-peer platforms. As noted in an earlier study conducted for the TRAN Committee about the sharing economy (P. Peeters et al., 2015), the sharing economy tends to concentrate economic and political power in a small number of companies operating worldwide and disrupting both policies and financial flows. In a later report issued by the Worldbank (Bakker & Twining-Ward, 2018, p. 28), the issues with 'peer-to-peer' accommodation services range from 'often badly matched with existing destination regulations for accommodation' to 'may not be following tax laws'. Also, Bakker and Twining-Ward (2018) observe an important role of the sharing economy (peer-to-peer) platforms in the very strong growth of tourism in a limited number of destinations. This study hypothesises an important role for these platforms in the development of overtourism, but also observes a lack of in-depth studies on this topic.

Often, various trends work in tandem and contribute to the overtourism phenomenon. For example, there is strong evidence that the average length of stay has been declining in most countries in the world by as much as 15% on average over the period 1995-2015 (Gössling et al., 2018). When tourists visit for shorter periods of time, they are more likely to focus on the most important attractions, which leads to a concentration of tourist flows in time and space (García-Palomares et al., 2015; Ram & Hall, 2017), specifically when social media rankings are used to identify the 'best' rated attractions. McKinsey & Company and World Travel & Tourism Council (2017, p. 14) hypothesise that social media could play a role in concentrating tourists to a limited number of places causing overcrowding. The same report finds that millennials[6] are more likely than previous generations to use social media and technology. "On the one hand, this could lead to them choosing to have non-traditional travel experiences, which they say they value, and thus lead them away from the most popular destinations. On the other hand, it may nudge them toward already-crowded sites, given their ability to quickly check and navigate review" (McKinsey & Company & World Travel & Tourism Council, 2017, p. 14). Overall, there is a lack of knowledge about the effects of social media on the way certain destinations become very popular or even 'hype' (Zeng & Gerritsen, 2014).

2.3   Overtourism and destinations

In this section, the different characteristics of overtourism are discussed. First, we discuss the relationships between overtourism and residents (2.3.1) and overtourism and tourists (2.3.2). This is followed by a description taking the main four types of destinations – (i) Urban, (ii) Coastal & Islands, (iii) Rural, and (iv) Heritage & Attractions, as the point of view.

2.3.1   Overtourism and residents

In the mid-1990s, countries such as Spain, Italy, Malta and France saw protests against mass tourism (Boissevain, 1996). In the last two decades, 'touristification' appeared on the agendas of social movements next to more traditional issues like workers' conditions, social exclusion, gender inequality and sexual discrimination (Milano, 2018). Numerous grassroots associations and social movements are articulating their concerns regarding the steadily growing number of tourists visiting the European continent (Seraphin et al., 2018). Anti-tourism campaigners have been particularly powerful in Spain (Milano, 2017b, 2018; Albert Ariens Sans & Russo, 2016), France (Gravari-Barbas & Jacquot, 2016), Germany (Füller & Michel, 2014; Novy, 2016) and Italy (Vianello, 2016). Such social unrests has led to the creation of organisations such as the Assembly of Neighbourhoods for Sustainable Tourism (ABTS) in Barcelona and the Network of Southern European Cities against Touristification (SET) (Milano et al., 2018).

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[6]   'The term Millennials is usually considered to apply to individuals who reached adulthood around the turn of the twenty-first century' (Corbisiero & Ruspini, 2018, p. 3).

In January 2017, the social movement *Morar em Lisboa* from Lisbon, in association with more than 30 local associations, denounced in an 'open letter' the excessive dependency of the Lisbon economy on real estate speculation and tourism. On the 18th of June 2017, a social movement called *No Grandi Navi* organised a popular referendum in Venice to ban the passage of large cruise ships through the Giudecca canal and St Mark square. The referendum resulted in 17,874 residents voting to reject the ships, which was an overwhelming 99% of all who voted (Milano, 2017a). Since the Costa Concordia sank off the island of Giglio, concern about the proximity of cruise ships has been increasing. According to the *Venezia Terminal Passeggeri S.P.A.*, Venice received 1,427,812 cruise passengers and 466 cruise ships in 2017[7]. On May 18th and 19th, 2018, social movements and neighbourhood associations from 16 southern European destinations (Venice, Valencia, Seville, Pamplona, Palma de Mallorca, Malta, Málaga, Madrid, Lisbon, Florence, Ibiza, Girona, San Sebastian, Canarias, Camp de Tarragona and Barcelona) met in Barcelona for the Forum 'Tourism reflections on Barcelona and Southern Europe', from which the Network of Southern European Cities against Touristification (SET Network) was born.

The rise of anti-tourism in many European destinations shows that when tourism is not managed properly, it has the potential to cause considerable damage and disruption (Coldwel, 2017). While visitors initially may be welcomed by the resident population because of the income they generate, as visitor numbers increase, local people may feel that their quality of life is threatened and become less welcoming to tourists (Croes et al., 2017). The protests themselves have raised concerns among local business owners, who fear that they may become targets of the residents' anti-tourism sentiment (Philip L. Pearce, 2018), especially if they demand the introduction of new policies that would limit visitor numbers and potentially impairing their business profitability and growth. In some cases, anti-tourism sentiment turned violent against bicycles and busses (Burgen, 2017). If such acts become more common they may become more damaging to business than a cap on visitor numbers.

2.3.2   Overtourism and tourists

Overtourism directly impacts not only destinations, tourist attractions and the local infrastructure and residents (see section 2.3) but also tourists themselves. Tourists are also potential losers because as anti-tourist sentiment rises, not only is poor service likely to prevail but covert hostility may also evolve into direct aggression (Waller (2011). These pressures on tourism destinations are not entirely new, nor are they understudied (Jafari, 2005; Lew et al., 2004; Mathieson & Wall, 1982; Murphy, 1985; Smith, 1978). According to a survey of 29,000 international travellers in 24 countries in Europe, Asia and the Americas conducted in September 2017 by the World Travel Monitor (IPK International, 2017), approximately 25% of all international tourists felt that their destination had been "overcrowded" at the time the study was conducted. In addition, 9% of tourists stated that this overcrowding had impacted the quality of their outbound trip. At 13%, families with children and young people under 34 constituted a relatively numerous group among those who felt impacted by overcrowding. The share was different according to visitors' specific region of provenance but independent of their destination: 15% of Asians, 9% of North Americans and 8% of Europeans said their holiday experience had been negatively affected by excessive visitor numbers (IPK International, 2018, p. 17).

While residents' attitudes towards crowding have been investigated in various cultural and geographical contexts, there is surprisingly little research on the role that crowds play in tourists' experiences (Popp, 2012). Despite the focus on cities in the recent debate on overtourism, this research gap is even more evident in the area of urban tourism (Popp, 2012). Studies of crowding at leisure and outdoor recreation sites are relatively more abundant (Bell et al., 2011; Kim et al., 2016; Shelby et al.,

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[7]   Retrieved from https://www.vtp.it/azienda/statistiche/

1989; Usher & Gómez, 2017; Vaske & Shelby, 2008). Overall, the existing literature provides useful insights regarding crowding and tourists' responses in terms of perceptions of crowding, consequences on tourists' satisfaction and coping mechanisms.

There are a number of definitions of tourist experience. However, from the perspective of tourists themselves, a tourist experience comprises the thoughts, feelings, and behaviours that characterise a tourist (Bastiaansen et al., 2019; Scott & Le, 2017). Experiences arise from internal stimuli, such as past experiences and expectations, and external stimuli, such as the destination tourists visit, which are experienced through their five senses (Bastiaansen et al., 2019). Crowding has been defined by Shelby et al. (1989) as a negative evaluation of a certain density or number of encounters with other visitors. Thus, the term crowding is used to refer to the tourist experience, while the term visitor density is used to describe the number of people objectively present, calculated per unit of physical space.

Studies of crowding have not yielded consistent results (Absher & Lee, 1981; Budruk et al., 2002; Lee, 1975). It has thus been suggested that the perception of crowding is influenced by more than visitor density. Although density normally is a necessary precursor of crowding, it is not a sufficient cause (Stokols, 1972). According to (Bryon & Neuts, 2008, p. 11), 'crowding is a psychological state, characterised by stress' and a 'psychological construct' rather than an objective reality (Neuts et al., 2012, p. 651). Therefore, perceptions of crowding are largely individual (Li et al., 2017).

Several factors can explain variation in crowding under similar levels of visitor density. These include the following:

- nationality and cultural backgrounds: tourists generally are more tolerant of visitor density when visiting a culture other than their own (Jin et al., 2016; Li et al., 2017);

- demographics, including education, age and gender (Rasoolimanesh et al., 2017; Zehrer & Raich, 2016);

- characteristics of the area or type of activity (Klanjscek et al., 2018; Manning et al., 2000; Tarrant et al., 1997);

- interaction with the local community, wherein more interaction leads to an increased perception of crowding because of competition for facilities or, conversely, increased empathy (Neuts & Nijkamp, 2012; Rasoolimanesh et al., 2017)

- individual preference regarding what level of crowding is acceptable or considered the norm (Bell et al., 2011; Navarro Jurado et al., 2013)

- motivations for the visit (Alazaizeh et al., 2016; Jin et al., 2016; Marin et al., 2011). Specifically, tourists motivated by an authentic traditional cultural experience were found to be more sensitive to crowding in Jin et al. (2016), Marin et al. (2011), and, in the context of heritage tourism, Alazaizeh et al. (2016).

Perceived crowding can influence the way in which visitors construct, recall, and retell their tourist experience, often negatively (Zehrer & Raich, 2016), by reducing their enjoyment of the destination (Budruk et al., 2002; Jin et al., 2016). Visitors who experience crowding can damage the image of the destination (Li et al., 2017), discouraging revisits and recommendations with impacts on the number of tourism arrivals (Navarro Jurado et al., 2013; Rasoolimanesh et al., 2015). Nevertheless, tourism and event studies have also found cases of 'good crowding', or positive tourist perceptions associated high visitor density in relatively little physical space (Kim et al., 2016; Popp, 2012). In those cases, crowding contributes positively by creating an exciting atmosphere (Kim et al., 2016). Good crowding is associated with situations in which tourists expect or even demand the presence of many fellow

visitors, such as during events and festivals (Mowen et al., 2003; Wickham & Kerstetter, 2000). Similar findings exist in urban tourism research. For instance, Neuts and Nijkamp (2012, p. 2148) concluded that in the city of Bruges, 'the semantic negativity of crowding should not be taken as a given.' Popp (2012) documented experiences of good crowding in Florence, where participants enjoyed the combination of crowding, architecture and art, which enhanced their feelings of being 'at the right place' (Popp, 2012). However, Popp (2012, p. 66) specified that 'there is often only a fine line between good and negative crowding.'

The effects of crowding on evaluations of the experience, such as satisfaction, are similarly complex. According to Li et al. (2017), relationships between crowding perceptions and visitor satisfaction are not as yet clear. Some authors report that perceptions of crowding can affect visitor satisfaction (Jin et al., 2016; Usher & Gómez, 2017; Zehrer & Raich, 2016), especially in the case of sun and sand destinations (Alegre & Garau, 2010). Other studies report that although an increasing perception of crowding can have a negative effect on the quality of the tourist experience, it does not necessarily diminish visitors' satisfaction (Klanjscek et al., 2018; Li et al., 2017). Analysing the urban context of Bruges, Bryon and Neuts (2008) noted that 'crowding does not show to be negative in itself, whereby a number of visitors acknowledge high crowding levels on the crowding scale while giving a positive evaluation of the situation.' This may be linked to the above-mentioned good crowding. Positive experiences in crowded places may also be the result of tourists' coping mechanisms and their attempts to have the best experience possible despite perceptions of negative crowding (Li et al., 2017; Popp, 2012).

Reviewing the literature on coping mechanisms, Popp (2012) distinguishes behavioural strategies (visiting at another place or time) and cognitive mechanisms (product shift and rationalisation). According to Arnberger and Brandenburg (2007), when tourists experience perceptions of crowding, they may decide to move and make use of different locations within or outside the visited area. They may also decide to change their time of visit (Arnberger & Brandenburg, 2007). Cognitively, tourists might also change their perspective on the experience they were seeking (product shift) or convince themselves that they enjoy the experience more than they actually do (rationalisation) because of the high investment of getting to or staying at the destination (Arnberger & Brandenburg, 2007; Popp, 2012) or because crowding implies the popularity of a destination (Endler & Parker, 1990). Pabel and Pearce (2015) showed that humour is sometimes used to cope with crowding. However, Zehrer and Raich (2016) found that coping behaviours in the specific setting of winter outdoor recreation can be ineffective and even decrease tourists' satisfaction. It is not known whether this effect is equally relevant for urban tourism.

In sum, even though high visitor density can negatively impact the quality of the tourist experience, the literature shows inconsistent results in terms of the relationship between actual density and negative crowding perceptions, which are influenced by a wide range of factors. Furthermore, a high level of crowding does not necessarily imply a lower-quality experience or a lower level of tourist satisfaction. Some crowding is experienced as positive, and some is neutralised by coping behaviours, that reduce the disappointment and stress sometimes associated with crowding. The levels of these effects seem to differ greatly by the individual characteristics of tourists, such as culture and gender, and the tourism context. It is important to keep in mind that unless otherwise noted, the vast majority of the cited works are based on data collected in the context of nature-based recreational tourism, such as hiking, fishing, or cycling. In general, these contexts feature more physical space, lower visitor densities, and more functional conflict (if there are too many visitors, activities are practically impossible rather than merely uncomfortable) than the urban and heritage destinations, that are usually more often than not the subject of European overtourism-related headlines.

2.3.3   Overtourism and urban settings

Due to the rapid and unbalanced growth of the tourism sector, the process of so-called "touristification" has led to changes in socio-spatial patterns at many urban destinations (Dumbrovská, 2017; Pasquinelli & Bellini, 2017). In Europe, urban tourism is experiencing tensions caused by destinations' inability to adequately distribute the space among the residents and tourists, with corresponding reports from Berlin, Prague, Belfast, Venice, Barcelona, Amsterdam, Lisbon, Berlin, Reykjavik and Dubrovnik (Colomb & Novy, 2016b; Milano, 2017b, 2018). Over the last decade, managing visitor pressure in urban settings has taken centre stage in many city councils and regional government political agendas.

What is new and may play an important role is the strong growth of numbers of tourists from Asia to key European destinations. This stretches existing intra-European visitor pressure to a new group of culturally different tourists, who may be less sensitive or attuned to local uses and customs (Philip L Pearce & Wu, 2016). A certain threshold may exist that separates a city that partly lives on tourism from a typical tourist city in a strict sense. Generally, tourists benefit from services that normally exist to serve residents. When the threshold is exceeded, the situation turns around and may force residents to use the services that are optimised for tourists (d'Eramo, 2017).

2.3.4   Overtourism and cultural and natural heritage

Heritage sites, historical centres, natural parks and protected areas are usually strong travel motivators. In such areas, the potential impacts, protection and preservation of natural/cultural conditions should be carefully evaluated, and carrying capacity measures should be implemented effectively. For instance, ecologically vulnerable protected areas (i.e. National Parks), as well as cultural and heritage sites would normally require the spatial-temporal management of visitor flows, not only to minimise potential negative impacts but also to maximise positive tourist experiences (Coccossis & Mexa, 2017).

While cultural events, monuments and cultural sites have always been identified as a tourist attraction, these have been a market focus within the so-called cultural tourism special interest segment for only a few decades (Richards, 2018). Historic city centres play a key role in European cultural heritage, and while many are preserved by countries' legislation, some are preserved by the United Nations Educational, Scientific and Cultural Organization (UNESCO) list of World Heritage Sites (García-Hernández et al., 2017). Nevertheless, they often suffer from overcrowding despite the measures put in place.

There is a vast literature on visitors' impact in national, protected areas and on the wide range of negative effects that tourism produces on local communities, including the economic, social and environmental challenges of sustainability (Marion & Reid, 2007; Strickland-Munro et al., 2010). Natural parks and protected areas, as important assets for tourism in many countries, do not escape this phenomenon (Monteiro, 2017). After all, the reasons for protecting a natural place are often the same reasons for its popularity.

In a recent study (Balmford et al., 2015), it was estimated that the world's national parks and nature reserves receive approximately 8 billion visits per year. The average spending varies between different groups of visitors, with contributions to the local economy also varying significantly. However, the impact of visitors is primarily a function of the volume and, to a lesser extent, the type of visitors or their exact activities. Several studies show that rising visitor numbers may increase income but also cause overuse of the natural environment (Balmford et al., 2015; Bateman et al., 2011; Monteiro, 2017; Stemberk et al., 2018). 'Unpredicted visitation growth might create two-folded negative impacts, firstly on the biophysical attributes, to local communities' life quality and to the existing infrastructures; and secondly a decline in the quality of visitor experience that sites are expected to provide' (Monteiro, 2017, p. 22).

The negative impact of tourism on cultural heritage ranges from over-used infrastructure (i.e. public toilettes) to social impacts (i.e. residents' intolerance, inter-cultural issues, increased prices, unaffordable housing, employment seasonality, criminality) and undesired visitor behaviour (i.e., noise, cultural misunderstandings) (Weber, 2017). Furthermore, there is evidence of cultural sites becoming victims of their own popularity due to rising visitor use levels (Monteiro, 2017). To address some of the negative impacts of tourism, such as environmental degradation and the disruption of ecosystems, the European Charter for Sustainable Tourism in Protected Areas (ECST) provides a way to manage Protected Areas. The ECST is a practical management tool with the aim of preserving protected areas and improving sustainable development and tourism activities while bearing in mind the environment, communities and pre-existing economic activities. The ECST might be considered as an eco-label rather than an approach and a methodology that might be useful for a wide range of protected areas[8].

2.3.5   Overtourism and coastal areas and islands

The literature about tourism development in coastal areas and islands describes the overuse of water resources and economic and environmental vulnerability (Andriotis, 2004; Ioannides & Holcomb, 2001; Royle, 2001). Some of these conflicts have been described in relation to the excessive dependency on leakage rates of foreign exchange earnings and the uncontrolled tourism development in Greek insular regions (Andriotis, 2004). Also, the water recourse overuse and landscape transformations in Palma de Mallorca (Garcia & Servera, 2003), as well as the lack of resource diversity and dependence on imports in Cyprus and Malta (Ioannides & Holcomb, 2001) have been mentioned among the sourves of conflicts.

Furthermore, Postma (2013) investigated critical encounters in tourism development on four small islands from the perspective of the residents. This research involved two island in the Caribbean (Bonaire and Curacao, both Dutch municipalities by special appointment), and two island in the Netherlands (Terschelling and Ameland). The research examined a range of events, incidents, processes and issues with respect to local residents and tourists and found annoying, irritating, frustrating, and unexpected incidents in which the residents were personally involved and that they remembered well. These occurrences were analysed in detail, including their causes, the emotional effects and the behavioural responses. The three main (negative) causes identified were:

- stakeholder encounters (concerns the power and attitude of tourism stakeholders such as politicians, government, hotel guards, tour guides, bus drivers),

- direct encounters (concerns the way tourism manifests itself directly in the physical, economic and social environment; the social environment includes crowding and tourist behaviour), and

- indirect encounters (concerns the way tourism interacts with daily personal and family life).

With regard to emotional responses four levels were identified. Level 1 - showing understanding and toning down the incident; Level 2 - being upset, surprised, or taken off-guard; Level 3 - being slightly annoyed or irritated; and Level 4 - being highly irritated and highly critical of the encounter. Similarly, **four levels of behavioural response were identified**. Behavioural response Level 1 - incident is accepted, no action; Level 2 - respondents adapt their behaviour to avoid the problem (e.g. shopping at a different time or place); Level 3 - appeal to the initiator of the problem, whether it is a person or an organisation; and Level 4 - attempt to change the policy and the public opinion (e.g. protest marches, petitions).

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[8]   For further information, please see https://www.europarc.org/library/europarc-events-and-programmes/european-charter-for-sustainable-tourism/.

2.3.6 Overtourism and cultural heritage and attractions

The relationship between tourism and cultural heritage destinations is multifaceted. On the one hand, cultural heritage is regarded as a resource that attracts tourists. Through a process of the commodification of heritage resources into tourism products, cultural heritage has become a strong driver of tourism development (Ashworth & Tunbridge, 1990). Many world-famous cultural World Heritage Sites (WHS), such as the Taj Mahal (India), Machu Picchu (Peru), the Trulli of Alberobello (Italy) and Angkor Wat (Cambodia), and historic cities, such as Amsterdam, Venice, and Dubrovnik, attract millions of visitors a year.

Most policymakers primarily regard tourism-attracting heritage as a means to contribute to the social, cultural and, especially, economic development of their region or destination. For example, studies conducted by O'Leary et al. (1998) and Herbert (1995) found that heritage is regarded as one of the fastest-growing components of tourism (both cited in Jimura, 2011). This growing interest in heritage among both residents and tourists is further reflected in the growth of regional music festivals and cultural events. In regions with economic problems, cultural heritage and tourism development are considered a means for stimulating economic activity (Bowitz & Ibenholt, 2009).

Many studies focus on the benefits of cultural heritage and tourism development in terms of value creation, increased employment, and new income opportunities. Consequently, this policy of tourism development has led to an enormous increase in competition between places of interest and historic cities in attracting tourists. However, the relationship between World Heritage Site (WHS) and tourism interests might drive the overcrowding and congestion of such sites. Therefore, a management plan to mitigate those impacts, such as saturation and overuse, is required to maintain the site's significance and overcome the lack of grassroots participation (Landorf, 2009).

In general, the clash between overtourism and cultural heritage sites is especially strongly visible at WHS sites, such as the Islet of Mont Saint-Michel, Dubrovnik and Venice historical city centres or the Ruins of Pompeii, among other EU WHS. Some of the proposed strategies to avoid crowding and ecological impacts are measuring and controlling visitors to reduce ecological impacts, limiting the length of stay at a site, increasing visitor fees and other charges to reduce visitor numbers, closing a determined area to protect or restore environmental quality or implementing quotas (Pedersen, 2002).

These sites tend to become major tourism attractions after their designation as WHS. Many cultural WHS, as defined by UNESCO, are located in and around historical cities. Russo (2002) describes the concept of the 'vicious circle' in the development of tourism and heritage cities. The development of most destinations follows a cyclic process (Russo, 2002) like that of the Tourist Area Cycle of Evolution initially described by (Butler, 1980). The concept of a vicious circle 'describes the self-feeding linkage between the emerging class of excursionist tourists in the later stages of a destination lifecycle, and the decline in a city's attractiveness' (Russo, 2002, p. 165). The original vicious cycle model was designed for medium-sized cities where tourism and other urban functions are initially mixed but become overturned by tourism-dedicated functions at the cost of resident-dedicated ones. Though Russo (2002) assumed that large cities would always be able to cope with this problem, current overtourism has spread to larger cities such as Amsterdam, Barcelona and Venice.

The negative impacts of tourism development that many popular historic EU cities are currently experiencing may be a warning to many other destinations. Some places are cautious and reluctant to develop heritage tourism. A study by (Suchet & Raspaud, 2010) conducted in Abondance, a small town and ski resort in the French Alps, illustrates this very well. The local population in this town is very cautious regarding the promotion of any further heritage tourism. The criticism focuses mainly on a lack of trust in the managers, the 'old' image of heritage and the danger of increased traffic flows. A

common way to govern heritage sites where too many tourists try to visit is by capping the volume through 'a daily limit on visitor numbers in enclosed visitor attractions (e.g., the Alhambra, Granada), disembarkations from cruise ships (e.g. Santorini) and tour buses, or the number of visitors who enter an enclosed urban space (e.g. Cinque Terre, Italy, or Dubrovnik old town, Croatia)' (Jordan et al., 2018, p. 25).

What emerges from these studies in general is the complexity of the problem. The similarities relate in particular to concepts, such as congestion and overcrowding in relation to the experience of tourists, residents and other users. On the one hand, this emphasises the importance of and the need for thorough planning and management aimed at avoiding overtourism in which all stakeholders participate. On the other hand, it becomes clear that each destination is unique and that there is no standard, ready-made solution on how to deal with overcrowding at popular tourist heritage destinations. Finally, overtourism seems to have more potential technical solutions, measures and strategies at sites with low numbers of inhabitants and no functions other than conservation of the natural and cultural heritage, as shown in some studies (Jordan et al., 2018; McKinsey & Company & World Travel & Tourism Council, 2017; Pedersen, 2002).

2.4   Overtourism concerns from ETC members

In order to better understand the overtourism in the EU from the perspective of destination managers, 26 national Destination Marketing Organisations (DMOs) were contacted for the purposes of this study through the European Travel Commission[9] (ETC). The ETC had made an official decision on 3 July 2018 to participate in the study research (the 89th Board of Directors, Brussels). A semi-structured questionnaire was sent to ETC members in early July, and it was followed up on by reminders sent in August and September 2018. A total of seven responses were received, including the perspectives of the Netherlands, Finland, Hungary, Cyprus, Slovenia, Slovakia and Portugal. The results are reported in section 4.2 (overtourism in destinations as reported by ETC) and 5.3 (policy and management responses). Given the limited number of responses, the results are only indicative of destinations, even though the reported problems and management approaches are similar in scope and direction.

The managers outlined that tourism-related problems were often a result of seasonal arrival peaks, and not yet felt in all countries. In relation to both Portugal and Slovakia, it was underlined that overtourism was not yet considered a serious issue by destination managers. However, evidences from all countries confirmed that if their tourist arrival numbers were to grow in the future, this would take place where overtourism problems already existed, making the issue persist or even worse.

Evidence emerged also concerning problems associated with the speed of change in tourist arrivals witnessed in recent years, as some attractions had become popular within very short periods of time. It was acknowledged that problems had accumulated because the perspectives of local residents had been ignored over long periods of time. In some cases, DMOs felt that the cost and benefits of tourism were no longer in balance. Even though destination managers indirectly questioned as to whether increasing arrival numbers in some areas were indeed desirable, further tourist growth was considered unavoidable despite the risks of overtourism.

Destination managers emphasised that tourism pressure is a result of concentration in time and space: as a result of seasons, events, or specific attractions. Notably, tourist pressure can be felt both in winter (e.g. Northern Finland) and in summer (i.e. Lake Balaton). Pressure can characterise 'must see'

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9   The ETC is a non-profit organisation comprising 32 European national tourism organisations as members, which aims at promoting Europe as a tourist destination.

attractions, as well as areas where accommodation is popular, but even 'new' attractions in smaller communities, where even modest growth in tourist numbers can exceed local limits.

Destination managers outlined a number of specific overtourism issues, most of these mirroring issues as identified in the literature review.

Issues related to tourist numbers were:

- Ratio of tourists to local residents,
- Infrastructure limits,
- Impact of Airbnb on residential housing markets,
- Visitation of specific attractions.

Issues related to the physical or built environment included:

- Erosion and noise in protected areas,
- Littering and waste generation,
- Traffic density (congestion, stop-and-go, parking disruptions),
- Decline in traffic safety,
- Fresh water and electricity demand growth.

Socio-cultural issues included:

- Changes in place identity,
- Local tensions (proponents/opponents of tourism),
- Antisocial behaviour of tourists,
- Filming and taking photographs of native people, without permission.

Socio-economic issues included:

- Decline in services for local residents (shops, schools),
- Infrastructure predominantly and increasingly catering to tourists,
- Residents forced out of certain areas in larger cities,
- Employees in tourism facing less favourable working conditions,
- Rising cost of food & beverages for locals,
- Influx of foreign labour as a result of seasonally high labour demand.

Tourist perspectives on tourists included:

- Commercialisation of nature experiences,
- Perceptions of crowdedness.

2.5   Overview of the impacts of overtourism

This section assesses the main impacts of overtourism, which are also discussed in relation to their prevalence in the case studies in section 4.4. The impacts are summarised in Table 1 below with consideration of their key domain (environmental, economic or socio-cultural) and the processes (drivers) leading to them. The impacts categories are given a code for use in Chapter 4.

Environmental impacts are mainly the result of increased usage (e.g. of resources, infrastructure, facilities and/or touristic sites). Some of this 'usage' can be of a sudden or temporary nature, such as the visit of a cruise ship, a short tourist season or a specific event. The effects vary from pollution and damage to congestion and overcrowding.

Economic impacts are (also) caused by increased demand (e.g. for goods and services or infrastructure and real estate). In the context of the latter, gentrification is a recurrent issue. Residents face a degradation or reduction of community-specific infrastructure or facilities and/or inflated costs in all types of services and products, forcing them to leave a certain area. Furthermore, seasonality and tourism employment can lead to economic (over)dependence and degradation of other sectors. A rather different type of economic impact is the degradation of the destination image as perceived by tourists. This image is adversely affected through negative visitor experiences stemming from heightened awareness of non-residents present in large quantities at the destination, i.e. tourists feeling disturbed by tourism overcrowding and congestion.

Increased demand and visitation also lead to a number of **socio-cultural impacts**, including the spread of tourists into formerly residential neighbourhoods and the marginalisation of the resident population as well as, due to the different values and behaviour of tourists, modification of all kinds of traditions, sites and activities. Diminished authenticity and a loss of cultural identity are the results of the latter. The different values and behaviour of tourists also frequently lead to a range of issues, including uncivilised behaviour and cultural misunderstandings, as well as stronger forms of host-visitor hostility. Value differences between visitors and residents tend to increase with distances travelled and, as such, with disproportional long-haul markets (though there are many nearby exceptions). A large long-haul share may also be linked to increased greenhouse gas emissions and impact on climate change, but this impact exceeds the destination-oriented definition of overtourism.

Comparing this list of impacts with our case studies shows that a limited number of impacts prevail and that there are some differences resulting from the destination category applied (see section 4.4 for the full analysis). Many of the processes listed in Table 1 may be monitored through quantitative indicators, allowing for diagnostic modelling such as that proposed by McKinsey and the World Travel and Tourism Council (McKinsey & Company & World Travel & Tourism Council, 2017). These indicators are discussed in Chapter 3.

Table 1:   Main impacts of overtourism

Impact (Code[10])	Processes	Impacts
Environmental		
Pollution (ENV-POL)	Increasing usage of natural resources (land, water, and energy)	Strong and noticeable contribution to pollution of water, land, air and noise and/or solid waste disposal problems
Infrastructure (ENV-INFR)	Increasing (sometimes sudden) demand for and usage of (tourism-directed) infrastructure, facilities and (commercial) activities	Tourism-generated investments in tourism-specific infrastructure impair the investments in infrastructure needed by residents and the wider destination community

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[10]   These cods are used later in the Chapter 4 of the study.

Impact (Code[10])	Processes	Impacts
Visual (ENV-VPOL)	(Construction of) tourism infrastructure like airports, cruise ports and hotels disturb natural or cultural landscapes	Visual (aesthetic) pollution of natural or cultural landscapes
Congestion (ENV-CONG)	Tourists' concentration on and in a limited number of routes, activities and facilities. Tourists tend to go to move over a limited number routes, causing congestion on these routes	Overcrowding of infrastructure (congestion), facilities and at (commercial) activities
Damage (ENV-DAM)	Increased visitation of natural, historical, and architectural sites	Damage to natural, historical and architectural sites
Overcrowding (ENV-CROW)	High numbers of tourists at natural, historical, and architectural sites	Overcrowding at natural, historical, and architectural sites
Economic		
Inflation (EC-INFL)	Increasing demand for certain specific tourism goods and services and production factors (intermediaries, land, capital, labour, real estate (gentrification) causing increased prices and disappearance of supply for inhabitants	Inflation of prices and reduction of the availability of certain goods, services, and factors of production aimed at inhabitants and for other sectors and functions (industry, agriculture, housing, etc.).
Economic dependence on tourism (EC-DEP)	Seasonal changes in tourist visitation and/or change in forms and types of jobs created/demanded	Economic dependence on tourism, including being strongly impacted by seasonality and the degradation of other sectors/types of employment
Infrastructure cost (EC-INFR)	Increasing (sometimes sudden) demand for (tourism-directed) infrastructure, facilities and (commercial) activities	Reduction of the quality and increase in the maintenance cost for infrastructure, facilities and (commercial) activities specifically directed at inhabitants
Accessibility (EC-ACCS)	Overcrowding leading to a reduction of accessibility of infrastructure, sites and facilities	Reduced accessibility of infrastructure, sites and facilities for both residents and visitors, inhibiting the regular performance of activities of both residents and visitors may not be able to reach for instance shops or work in their daily local travel
Destination image (EC-IMAG)	Increasing awareness of non-residents at the destination, possibly leading to negative visitor experiences	Degradation of destination image as perceived by visitors
Socio-cultural		
Degradation of infrastructure (SOC-INFR)	Increasing demand for (tourism-directed) infrastructure, facilities and (commercial) activities (including gentrification)	Degradation of infrastructure, facilities and (commercial) activities specifically directed at residents

Impact (Code[10])	Processes	Impacts
Touristification of residential areas (SOC-RES)	Tourism accommodation and services spreads into residential areas, such as through Airbnb	The character of residential areas changes in such a way that they become less suitable for residents
Marginalisation of residents (SOC-MARG)	Increasing number of visitors vs. residents	Marginalisation of resident population (excessively high number of tourists per resident)
Hostility (SOC-HOST)	Increasing number of visitors vs. residents differing from the population in terms of ethnicity, age, gender, wealth, and political, social, religious and/or moral values	High possibility of misunderstanding, leading to varying degrees of host/visitor hostility (conflicts, protests, etc.), more pronounced with higher 'exotic' visitor shares
Criminality (SOC-CRIM)	Some forms of tourism tend to attract misbehaving and even criminal guests thus increasing crime at the destination	Degradation of (perceived) safety due to increased crime and violence and problems related to uncivilized behaviour, alcohol usage, prostitution, gambling and drug trafficking
Modification of recreational area (SOC-MOD)	Increasing visitation by non-residents of sites, events, and activities	Modification of events, activities, and architectural and historical sites to accommodate visitors and based on commercial interest
Loss of cultural identity (SOC-TRAD)	Changes in the structure, values and behaviour of resident population (incl. family structures and consumption patterns)	Relinquishment/weakening of cultural traditions, values and moral standards leading to a loss of community spirit and pride and a loss of cultural identity

3 MEASURING OVERTOURISM AND ITS RISKS

KEY FINDINGS

- The **current way of measuring tourism is inadequate** to cover the risk of overtourism at the destination level. This study has calculated the risk at the NUTS 2 regions level.

- There is a significant relationship between eight indicators for NUTS 2 regions and the chance that destinations within the region develop overtourism. **The five main indicators are: tourism intensity, tourism density, air transport density, share of Airbnb, and share of tourism in the economy.**

- Three more indicators, namely **closeness to cruise ports, airports and World Heritage Sites (WHS), show significant relationships with overtourism**. These are conditional: if an airport, WHS or cruise port is close to a destination, there is a higher chance of overtourism to develop.

- The five main indicators show an extreme variation of up to several orders of magnitude for both regions with and without cases of overtourism. Therefore, it is **impossible to set a certain 'early-warning limit'** for these indicators.

- Not all regions with a high density of airports, cruise ports or WHS's are in a state of overtourism, but 63 out of 66 European overtourism destinations are close to that state at least one of these and in most cases multiple ones.

- Both **the share of Airbnb** and its location far from conventional accommodations in residential areas **increase the risk of overtourism**.

- An **early warning tool for destinations cannot be developed**, because of the complex multifaceted causes for overtourism, and an overall lack of reliable and well-defined indicators with clear thresholds.

- However, in section 3.5 a **checklist** is presented to help both regions and destination to assess the risk of overtourism.

3.1 Introduction

Simple questions such as 'how many destinations are in a state of overtourism?' and 'which destinations are at risk of suffering from overtourism?' are difficult to answer for a range of reasons. First, as mentioned in Chapter 2, there is no widely accepted definition of overtourism. The definition adopted for this study, which refers to overtourism as "the situation in which the impact of tourism, at certain times and in certain spaces, exceeds the physical, ecological, social, economic, psychological, and/or political capacity threshold(s) of a destination", is rather broad. Despite the broadness of this definition, what is evident is the obvious quantitative nature of the phenomenon, which is based on the assumed existence of a range of indicators (yet to be identified) associated with the volume and growth of tourism and critical thresholds above which a destination reaches a 'state of overtourism'.

The lack of an agreed-upon set of indicators makes it impossible to clearly qualify and quantify the number of destinations in a 'state of overtourism'. Some destinations are regularly featured in the media with stories of residents' groups openly protesting tourism or even attacking tourists. However, the hidden and most serious repercussions of overtourism, such as residents being forced out of their

neighbourhoods or the effects of gentrification, are often silent manifestations that existed long before protests were clearly voiced or heard. Equally, the impact of overtourism on the attractiveness of a destination is often ignored and remains unchallenged and difficult to measure. Often, the effect of overtourism becomes visible when tourism masses start to shift away from destinations in a 'state of overtourism'. These tourists go to other places at a time when it is too late to do anything about the situation and the problem is recreated elsewhere.

This study identified 105 potential cases and presents a set of 41 detailed case studies (please see Chapter 4) to provide an overview (not an exhaustive list) of the state of overtourism in the EU Member States. It becomes apparent, however, that the type and severity of overtourism varies greatly between the destinations listed, with some level of caution warranted in determining whether all of the mentioned examples truly suffer from overtourism. This chapter provides a set of readily available data and attempts to define key indicators that may contribute to a critical understanding of the overtourism phenomenon.

3.2   Methods and data sources

A 'state of overtourism' can be defined in relation to a wide range of indicators according to which a certain 'capacity/threshold' of a destination is exceeded. These range from environmental to economic and social impacts (see section 2.5). To determine a state of overtourism, McKinsey & Company and World Travel & Tourism Council (2017) suggest a relatively simple diagnostic tool based on a set of metrics to detect the risk of overtourism, some of which were used in this study. This tool is developed for destinations and aims to assess whether a specific destination is at risk of overtourism. Section 3.5, further assesses this tool and compares it with our own tool, which is NUTS 2 region-based. NUTS stands for 'Nomenclature of Territorial Units for Statistics' and forms the geographical unit for almost all EU statistics, ranging from demographics to economics and the environment (Eurostat, 2018c). EU is divided into three levels (NUTS 1, NUTS 2 and NUTS 3), which are sized to represent a certain population. NUTS 2 reflects the regions which have a population between 0.8 and 3.0 million inhabitants (European Council, 2003), totalling 281 regions. This represents, for instance, provinces in Belgium and the Netherlands and a level between the 'region' and 'departement' in France. Many of the maps in this study are based on NUTS 2 (see, for instance, **Map 2**).

This chapter makes use of some statistical analyses for which some understanding is necessary. In the following several common statistical principals are explained. There are several difficulties with the data for the indicators to be investigated on their impact on overtourism. Potential indicators are, for instance, tourism intensity (guest-nights per inhabitant of the destination or region) and share of tourism revenues in the destination's GDP. Table 2 provides some key statistical properties of tourism intensity for all 281 NUTS 2 regions. **Figure 3** additionally shows the high 'skewness' and 'kurtosis' (both terms explained in **Figure 3**) for this indicator. And that causes some challenges for ranking the NUTS 2 regions in terms of their risk to develop destinations with overtourism and to analyse the differences between NUTS 2 regions with and without destinations in a state of overtourism. These issues are further explored below.

Table 2: **Some statistical properties of tourism intensity (bed-nights/resident)**

Statistical property	Value	Comment
Number of cases	290	Number of regions with a valid value for tourism intensity
Mean	7.56	The average of all values
Median	4.47	The most common value
Minimum	0.340	The minimum value
Maximum	70.7	The maximum value
Std. Deviation	10.5	The standard deviation, a measure for the spread of values from the mean value
Skewness	3.60	An indicator for the symmetry of the distribution of the values around the mean value. The symmetry is perfect when skewness is zero (please see **Figure 3**)
Kurtosis	14.3	Kurtosis is an indicator for the thickness of the 'tail' of a distribution. For a normal and symmetric distribution kurtosis is zero, but in this case, it is a high number because there are relatively many outliers at the high and of values as shown in **Figure 3**

Source: deliberations of this study

Figure 3: **Distribution of the values for tourism intensity (bed-nights/resident)**

Histogram of the distribution of Tourism Intensity
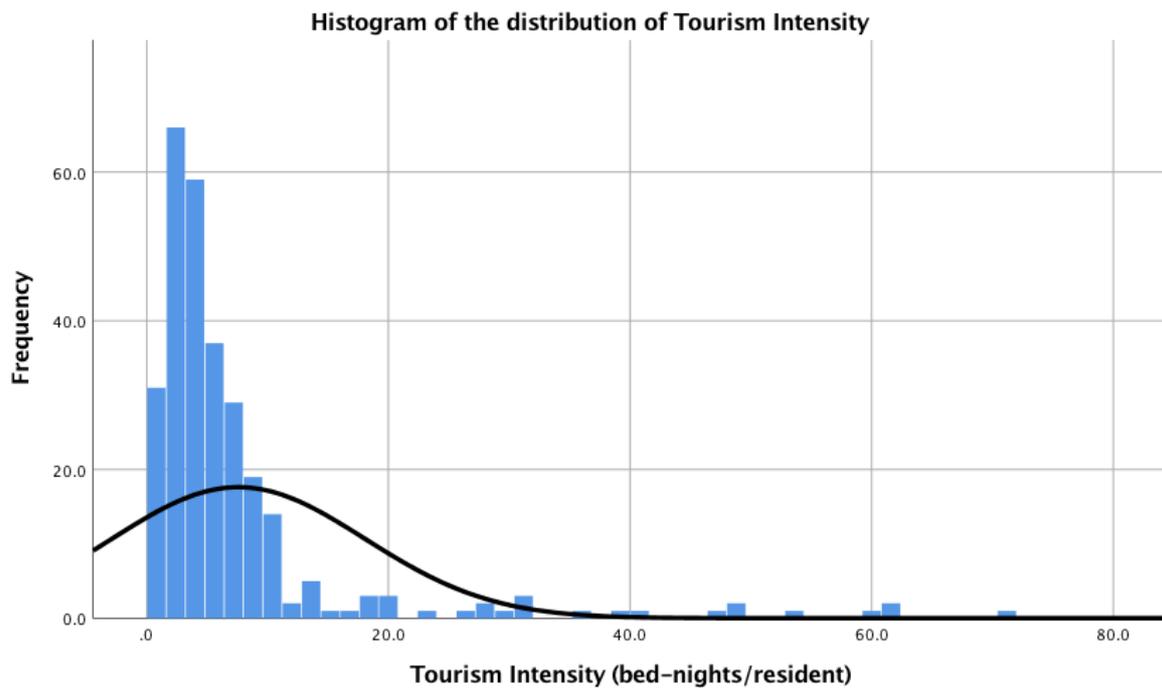
Source: deliberations of this study

To be able to rank NUTS 2 regions for their risk of developing overtourism, this study follows the same method as proposed by McKinsey & Company and World Travel & Tourism Council (2017), who divided the data over five equally sized ranges. This study uses for this the fifth percentile method, meaning that the NUTS 2 regions are combined for five groups and given a specific rank number. The 20% of regions with the lowest indicator value are ranked '1', the 20% with the highest indicator value are given a ranking of '5'. The three groups in between get the rankings '2', '3' and '4' (please see **Table 4** in section 3.4.1 for an overview of the resulting indicator ranking-class boundaries for tourism intensity). In this way, all indicators were translated to equal units (of 5th percentile rank). The ranking numbers were also used to calculate the average for the group of NUTS 2 regions with and without destinations in a state of overtourism and plotted to show the difference in means (please see **Figure 6** in section 3.4.1 for an example).

Though these average rank graphs show a difference, this difference could be by chance or because of some statistical relationship between the two groups for that specific indicator. To assess the significance of a difference between groups, generally, the means are compared using method like a 't-test' or an 'Analysis of variance' (ANOVA) test. Unfortunately, such tests work not accurately with skewed data with a high kurtosis value, like all indicators for overtourism are. For such data-distributions a 'non-parametric' test is required. A parametric test assumes for instance non-skewed normal distributions, while a non-parametric test is better suited to handle non-normal distributed with high skewness and kurtosis coefficients. In the following analyses, the Mann-Whitney U test was used. This test requires mutual independence meaning that in the case of this study a NUTS 2 region can only have one or more destinations in a state of overtourism or not. Furthermore, it requires an ordinal measurement scale for the indicator that is to be tested. In SPSS[11], the ranking of the samples is done automatically. The 5th percentile is directly an ordinal value. It appeared that using the real values or the 5th percentile ranks did not affect the result in terms of significance of the difference between the distributions between the two groups – with and without destinations in overtourism - of NUTS 2 regions. The significance of the difference is typically indicated by a 'significance level'. In the cases described below, this is a 'two-tailed significance', meaning that the level is calculated for the distribution left and right of the median (most common) value. Furthermore, 95% confidence level, attached to a level value of 0.05 or less, means that there is only 5% chance the two groups have an equal distribution.

In this study, indicators associated with the presence of Airbnb (Airbnb, 2018), UNESCO World Heritage Sites (WHS) (UNESCO, 2018), and with the density of air transport (air transport passengers per guest night) were also considered. As Airbnb is often mentioned as a cause of overtourism (e.g. García-Hernández et al., 2017; Goodwin, 2017; Milano et al., 2018; Albert Arias Sans & Quaglieri, 2016), the share of total bed capacity and the average shortest distance between each Airbnb and the nearest commercial accommodation as offered on booking.com (booking.com, 2018) were used as an indicator. The latter indicator, namely the average shortest distance, was intended to provide a proxy for Airbnb entering neighbourhoods not traditionally destined for tourism or accommodation businesses. Also relevant are the examples by Colomb and Novy (2016a) of destinations where the designation as WHS accelerated the risks of overtourism Colomb and Novy (2016a). This information was utilised for the purpose of this study in two ways: by counting the density of WHS in a region and by assessing the vicinity of WHS to destinations considered to be in a state of overtourism. All indicators used for this study were operationalised by assessing the indicators per NUTS 2 region.

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[11]   SPSS is a software widely used for statistical analysis in social science.

3.3   The extent of overtourism in the world

All over the world, a total of 105 destinations in a state of overtourism were identified that are divided more or less evenly over the four destination categories – Rural, Urban, Coastal & Islands, and Heritage & Attractions - with an emphasis on Europe and the EU (please see Figure 17 in section 4.2). The list of destinations in a state of overtourism is certainly not exhaustive. As no systematic registration of destinations in a state of overtourism exists, it can only be assumed that those identified may provide a representative set of cases.

The two maps in **Map 1** plot all 105 destinations in a state of overtourism and the density per country for all tourism arrivals (domestic plus international). From the maps, one may conclude that density has a better relationship than intensity, which contrasts with the results of. However, the maps may be misleading due to the varying size of countries. For instance, the blue on the intensity map for Russia dominates the graphic representation despite representing only one point (one country, namely, Russia) in the database. The maps also show a concentration of overtourism cases in Europe and, to a much smaller extent, in the US, China, Australia and New Zealand. In other parts of the world, the phenomenon seems not to exist or is not discussed in the media.

Map 1: Global tourism density (upper map; tourist arrivals per km²) and tourism intensity (lower map; tourist arrivals per inhabitant) for international plus domestic tourism in 2016 [12]

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[12]   Please note that the maps show the destinations in a state of overtourism as identified in this study.

Cases and tourism intensity (int+dom; absolute values)
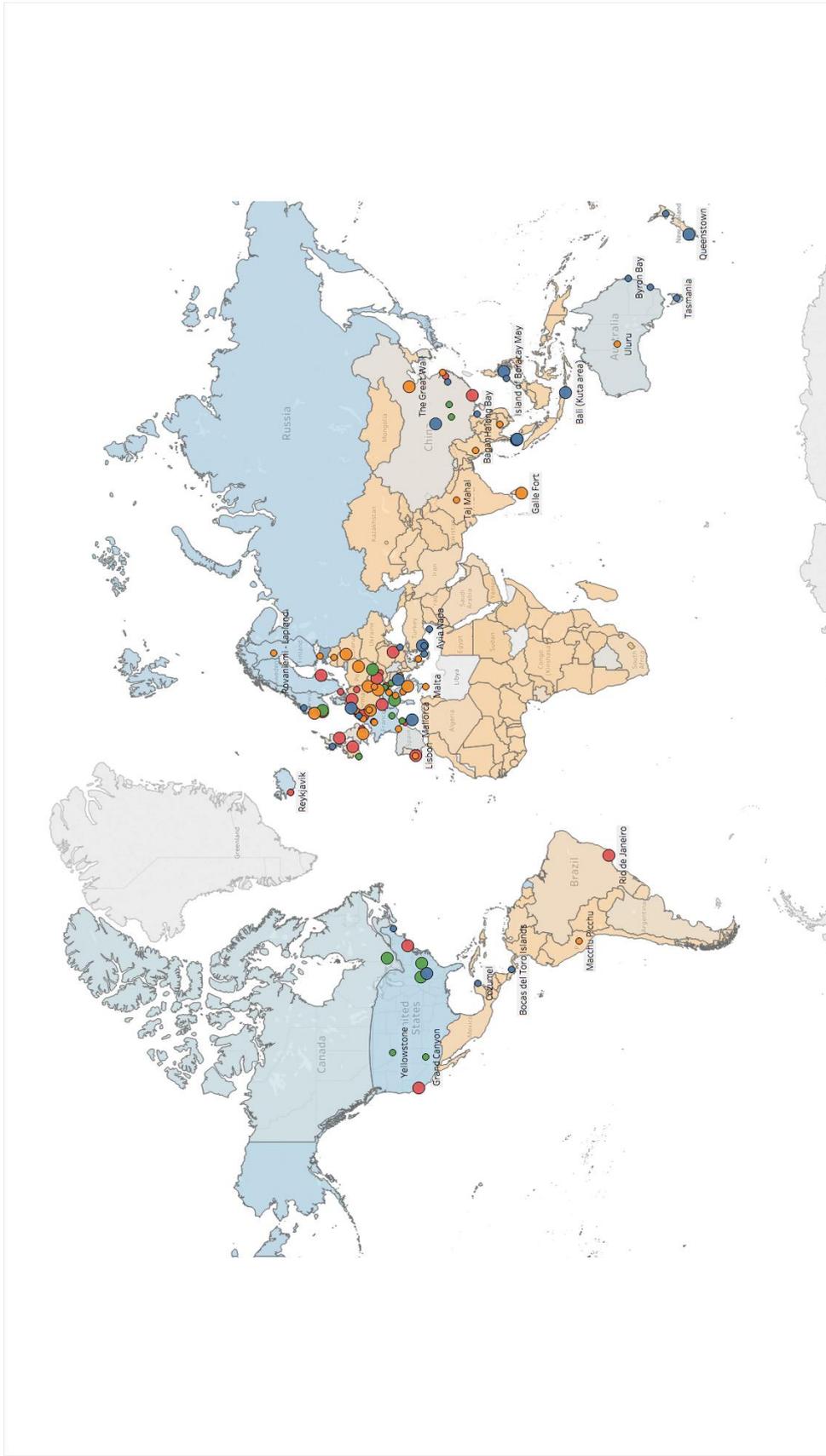
Tourist intensity

0.000   6.651

Dest type
- Coastal & Islands
- Heritage & Attractions
- Rural
- Urban

Sources: adapted from international arrivals from UNWTO (2018a); country-area data from World Bank Group (2018); population data from United Nations (2018); and domestic tourism data (for 2005) based on P. M. Peeters and Eijgelaar (2014), with a correction for China (National Bureau of Statistics of China, 2018).

Note: the colour scale has a strong bias to the low values.

Another way to examine the overtourism phenomenon is by analysing trends in related terms on social media. To this end, data were collected through a data mining exercise with the use of Coosto, a Dutch online social media monitoring platform (Coosto, 2018). This platform was founded in 2010 and offers an integrated tool for delivering social media customer service, measuring social media, monitoring online reputation and performing analyses with social media data. It routinely collects and categorises social media messages and assigns sentiment scores to them. The infrastructure provided by Coosto monitors online channels in 150 languages and in 200 countries (Crunchbase, 2018), including the large global social media platforms (e.g. Facebook, Twitter, Instagram, LinkedIn, YouTube, Pinterest) as well as thousands of other sources, such as international review sites (e.g. Expedia, TripAdvisor), online communities (e.g. Reddit, Quora), and large Russian and Asian social networks (e.g. Vkontakte, Renren). Strings related to overtourism were searched (i.e. overcrowding, overvisiting, visitor pressure, and hostility towards tourists) and also queries were tested that may be associated with overtourism such as waiting line(s), big crowd(s), wheeled suitcase. Unfortunately, this did not render enough and/or reliable results to draw substantiated conclusions. Only the monthly number of mentions of the term "overtourism" held some meaning and showed an increasing trend as of 2011 (please see **Figure 4**).

Figure 4:   Monthly overview of 'overtourism' social media mentions on social media channels
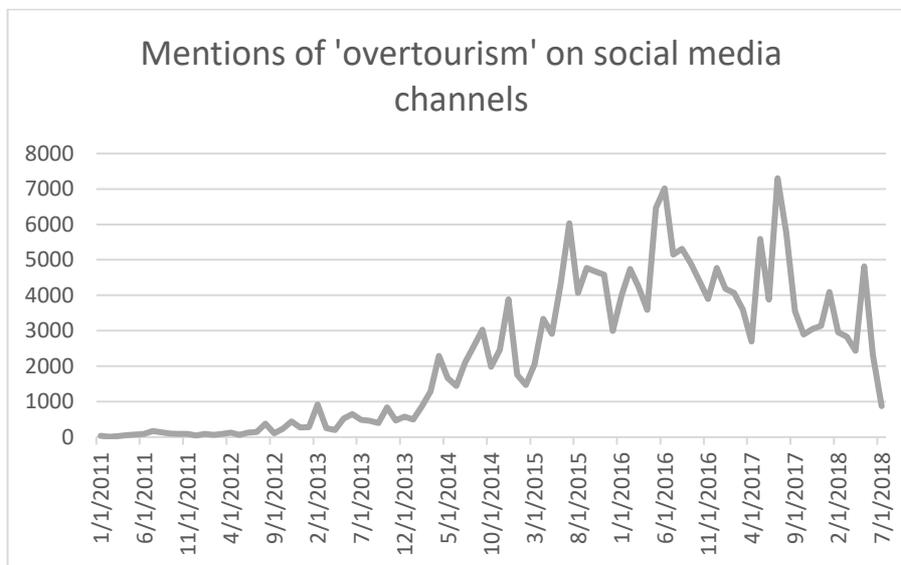
Source: Coosto Social Media Monitoring Dashboard, August 2018 (Coosto.com)

Thus, since overtourism may be considered as a quite technical term, the majority of messages related to overtourism on social media channels were posted by media, news/press agencies or organisations/initiatives dealing with overtourism from a professional perspective and not from a consumer's perspective. For instance, the account @*overtourism* on Twitter started its activities in June 2017 and appears to have engaged in more than 1,100 tweets since then (please see http://twitter.com/overtourism). Consumer mentions on social media related to overtourism are not likely to contain the term itself, but are indirectly referred to with a wide variety of other wordings, such as the ones listed above (e.g., waiting line(s), big crowd(s), 'swarming with people', etc.). Moreover, these wordings are often used in other contexts than overtourism such as theme park visits, sports events or music festivals. As noted, the variety in these wordings in combination with different contexts hinders a reliable and thorough analysis of the overtourism phenomenon on social media from a consumer's perspective.

The general opinion is that the increasing availability of Airbnb hosts may be one of the drivers of overtourism (please see e.g. Cesarani & Nechita, 2017). This sentiment about Airbnb was assessed through social media messages/presence in addition to the content and metadata of social media messages. Baccianella et al. (2010) also automatically determine the sentiment of the collected messages. This determination results in messages to which a positive, negative or neutral label is assigned. Neutral messages exhibit no apparent sentiment (e.g. objective text). The positive or negative sentiment of messages is assigned by Crunchbase (2018). In general, automated sentiment analysis renders results that have the same level of accuracy as manual coding.

With regard to the term 'Airbnb', Figure 5 below shows patterns in the number of positive and negative social media mentions. The number of positive labelled mentions of Airbnb per month declined in 2014, while the number of negative mentions increased. Although this is not a clear measure of overtourism, the declining sentiment towards Airbnb on social media is a proxy of the increasing societal disaffection with Airbnb's activities among the general public.

Figure 5:   Sentiment about Airbnb mentions on social media channels
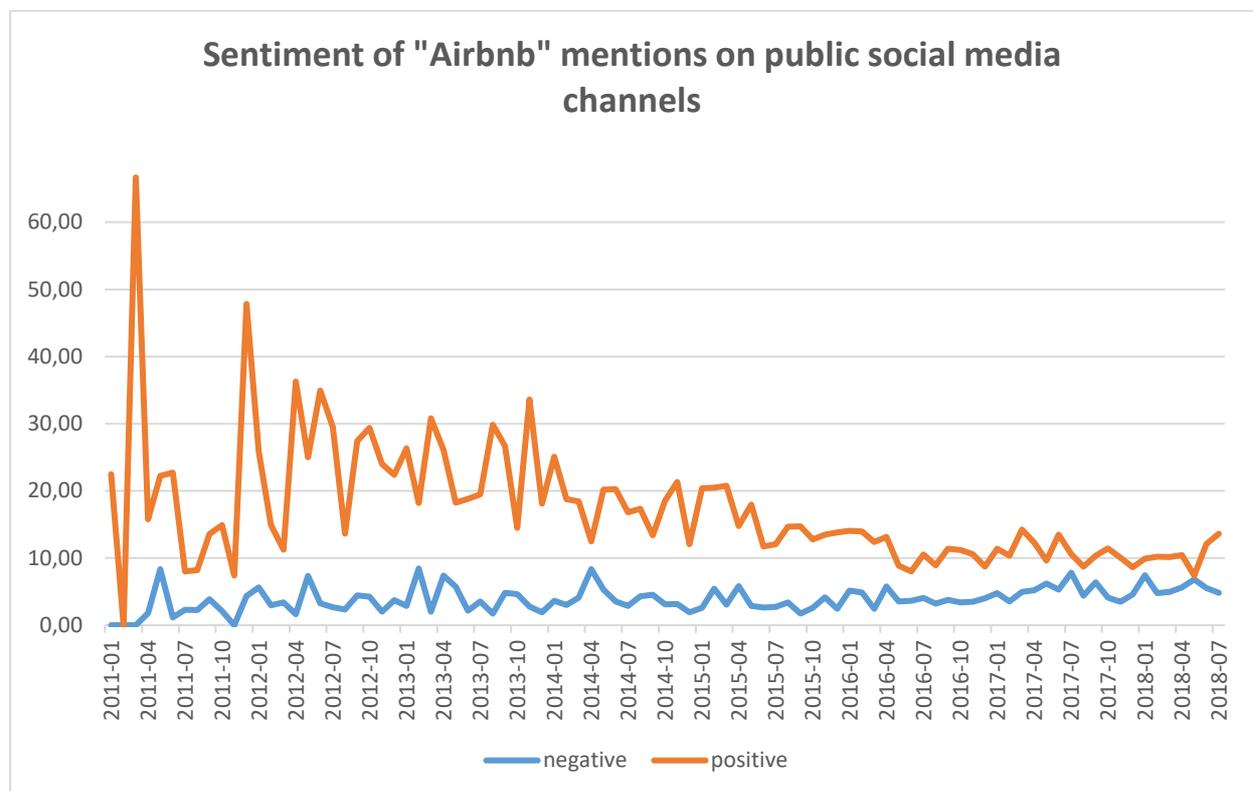
Source: Coosto Social Media Monitoring Dashboard, August 2018 (Coosto.com)

3.4   Indicators of overtourism

This section first explores whether a range of quantitative indicators provide thresholds for overtourism. Following McKinsey & Company and World Travel & Tourism Council (2017) a heat map was constructed (please see section 3.5.2), but not for cases of destinations in a state of overtourism, but for all EU NUTS 2 regions. This is necessary to determine the differences in indicators for regions with overtourism destinations and those without any, and in concequence, to be able to determine a specific value as a threshold. Although this exercise proved that all indicators vary over a very large range making them less suitable for determining a specific value as threshold, it demonstrated its usefulness in creating a checklist for regions and destinations to assess the risk of overtourism.

3.4.1 Tourism density and intensity

The density and intensity of tourism are considered the main causes of overtourism. To explore this hypothesis, tourism intensity is defined as the annual number of bed-nights per inhabitant of the destination, and tourism density is defined as the annual number of bed-nights per km^2. Table 3 provides some general data regarding these indicators. At the national level, the density varies between 6 and 726,000 bed-nights/km^2 for Mongolia and Monaco, respectively.

As previously mentioned, the term overtourism is used interchangeably with overcrowding and is associated with **tourism density (tourists per km^2)** and **tourism intensity (tourists per inhabitant),** but it is a far more complex phenomenon. Nevertheless, these densities do matter, at the global level, as shown below. The extent to which the selected destinations had high levels of tourism density and intensity was tested using data on international arrivals from the (UNWTO, 2018a), country area data from World Bank Group (2018) and population data from the United Nations (2018). Domestic tourism data are difficult to obtain, so an old data set for 2005 based on data by P. M. Peeters and Eijgelaar (2014) was used as a benchmark, with a correction for China (National Bureau of Statistics of China, 2018). The number of overtourism cases per country ranged from zero to eight. Most countries have between zero and four cases of overtourism. Therefore, the number of overtourism cases was aggregated into five classes (0, 1, 2, 3, and '4 and over'). For each class, the average densities in **Figure 6** were plotted. Clearly, the relationship between densities and the number of overtourism (OT) cases within the country, is best for the cases with all tourist arrivals (domestic plus international) and is stronger for intensity than for density. Section 3.4.1 further examines the tourism intensity and density for the EU.

Figure 6:   Number of overtourism (OT) cases per country in the world as a function of some indicators
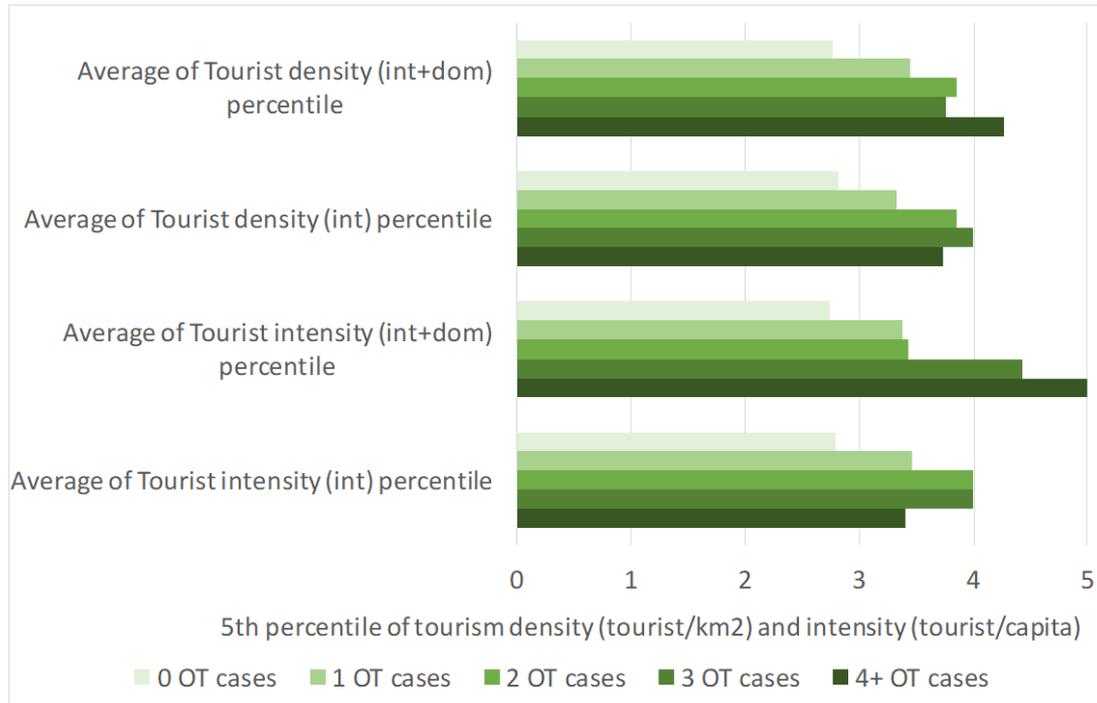
Sources: adapted from international arrivals from UNWTO (2018a); country-area data from World Bank Group (2018); population data from United Nations (2018); and domestic tourism data (for 2005) based on P. M. Peeters and Eijgelaar (2014), with a correction for China (National Bureau of Statistics of China, 2018).

Note: national tourism density is measured in tourist arrivals/km^2 and intensity in tourist arrivals per inhabitant. 'Int' means international and 'dom' means domestic arrivals. As also suggested by McKinsey & Company and World Travel & Tourism Council (2017) in this study, indicators are translated to their 5th percentile. For this calculation all subjects (e.g. NUTS 2 regions) values of the indicator are ordered from low to high and then grouped into five equally sized groups, containing the same number of subjects. So a 5th percentile value of 1 means that the subject falls in the group with the lowest values and a 5th percentile of 5 means the subject falls in the group with the highest values.

For the NUTS 2 regions, the relation between tourism density and the number of overtourism cases ranges between 26 and 37,300. This is a difference of between three and five orders of magnitude. The distribution of the data is considerably skewed[13], with the majority of regions showing small densities. The same occurs for the relation between tourism intensity and the OT cases, which varies between 0.34 and 70.7 bed-nights/capita, which is between two and three orders of magnitude. This skewed distribution causes problems in the interpretation of maps based on the data. Therefore, the method proposed by McKinsey & Company and World Travel & Tourism Council (2017) to divide the values of the indicators for the NUTS regions into five percentile groups with equal numbers of subjects (i.e. NUTS regions) was employed. Table 4 below shows the boundaries per percentile group. This table reveals that 85%-95% of the total range of values falls within the 5th percentile group. Also, the table shows enormous variation in densities and intensities per country and per NUTS 2 region and provides some sense for the kind of values involved.

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[13]   A skewed distribution means that the mean value is not close to the middle of the lowest and highest value but at an asymmetric point (please see also section 3.2).

Table 3:   Overview of tourism densities and intensities for countries and EU NUTS 2 regions for 2015/2016 and domestic plus international tourists

Indicator	Value	Three countries/NUTS 2 regions with lowest or highest values
Tourism density (bed-nights/km²)		
Global	181.8	
Minimum global	6.4	**Mongolia**, Mauritania and Afghanistan
Maximum global	725,900	Singapore, San Marino and **Monaco**
EU28+[14]	629.3	
Minimum EU28+	26.1	**Övre Norrland (SE)**, Severozapaden (BG), Nord-Norge (NO)
Maximum EU28+	37,300	Prague (CZ), Berlin (DE) and **Vienna (AT)**
Tourism Intensity (bed-nights/capita)		
Global	3.31	
Minimum global	0.00013	**British Virgin Islands**, Cayman Islands and Zimbabwe
Maximum global	26.65	French Polynesia, Japan and **Estonia**
EU28+	5.77	
Minimum EU28+	0.34	**Sud-Muntenia (RO)**, Nord-Est (RO) and Severozapaden (BG)
Maximum EU28+	70.73	Illes Balears (ES), Ionian Islands (EL) and **Southern Aegean (EL)**

Source: Eurostat (2018e); P. M. Peeters (2017); World Bank Group (2018)
Note: bold countries are those that have the minimum or maximum value whatever is appropriate at that row of the table

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[14]   EU28+ is EU28 plus Switzerland, Iceland and Norway.

Table 4: **Overview of the percentile minimum and maximum values for the EU28+ NUTS 2 regions for tourism density and intensity**

Percentile	Tourism density (bed-nights/km²)	Tourism intensity (bed-nights/capita)
1st	160 - 407	0.34 -3.18
2nd	407 - 719	3.18 – 4.49
3rd	719 - 1,174	4.49 – 6.30
4th	1,174 - 2,278	6.30 – 9.58
5th	2,278 - 37,290	9.58 – 70.73

Source: Eurostat (2018e); P. M. Peeters (2017); World Bank Group (2018) and elaborations by the authors

Figure 7 below shows the average percentile ranking for NUTS 2 regions with zero, one or two overtourism (OT) cases within their bounds. Both density and intensity seem to have an impact on the development of overtourism. However, the growth of the number of bed-nights does not appear to have an impact on the number of overtourism cases. There might be two issues with this indicator. Firstly, the growth was for one year only (2016 over 2015), and secondly, the impact of growth may be correlated with the density itself. The timing issue can only be assessed with exact knowledge of the time (date) when the state of overtourism in a certain destination was reached. However, such data are simply not available. The correlation between intensity and growth was tested by calculating the indicator depending on the level of the tourism density or the tourism intensity. After some experimenting, it was found that this combined intensity and growth indicator could best be taken equal to the intensity part as long as the intensity percentile rank was below 4. For an intensity percentile rank of 4 and 5, the combined indicator was calculated as the average of both the percentile ranks for intensity and growth. **Figure 7** shows that the tested method provides a relatively good correlation in the sense that the average percentile rank of the combined intensity and growth increases for regions with a higher number of OT destinations.

Figure 7: **Number of overtourism (OT) cases as a function of tourism density (tourist arrivals/km²) and intensity (tourist arrivals per inhabitant)**
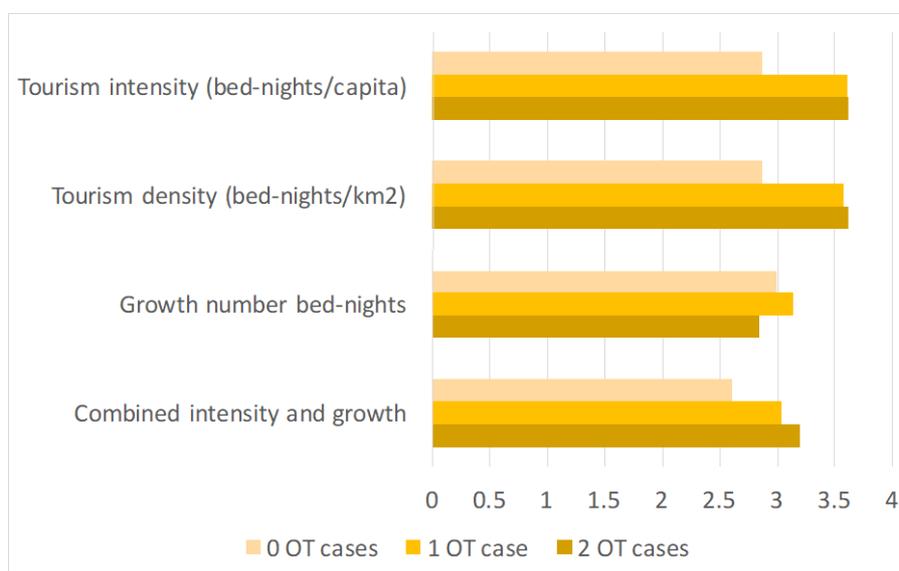
Source: Eurostat (2018e)

As presented in Table 5 below, three of the four indicators – tourism intensity, tourism density and combined intensity and growth - show that the groups of regions with and without destinations in a state of overtourism show a statistically significant group difference based on the Mann-Whitney U test[15]. Only the growth of bed-nights does not significantly affect the number of OT destinations (i.e. its significance level is above 0.05).

Table 5: **Overview of the significance of group differences between NUTS 2 regions with and without OT-destination(s) and four tourism density and intensity indicators.**

Tourism density and intensity indicators	Average for destinations without overtourism	Average for destinations with overtourism	Statistical significance level[16]
Growth of number of bed-nights	0.0508	0.0582	0.557
Tourism density (bed-nights/km^2)	1500	4150	0.000[*)]
Tourism intensity (bed-nights/resident)	6.78	11.04	0.001[*)]
Combined intensity and growth	2.60	3.08	0.004[*)]

[*)] Significant at the 95% confidence because the indicated level is <0.05

Map 2 and **Map 3** show how different the patterns of tourism intensity and density are. Still, both show a highly significant relationship with the existence of one or two OT-destination in the region. Specifically, large NUTS regions such as those in Scandinavia show very low densities but high intensities of tourism.

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[15] The Mann-Whitney U test is used because it compares differences between two independent groups when the dependent variable is not normally distributed. In our case, the indicators are much skewed as shown above. Please see also section 3.2.

[16] Asymptotic Significance. Significance level of ≤0.05 (2-tailed)

Map 2:   Tourism density (5th percentile ranks of bed-nights/km²) for the EU28+.

Bed-nights density (number/km2)
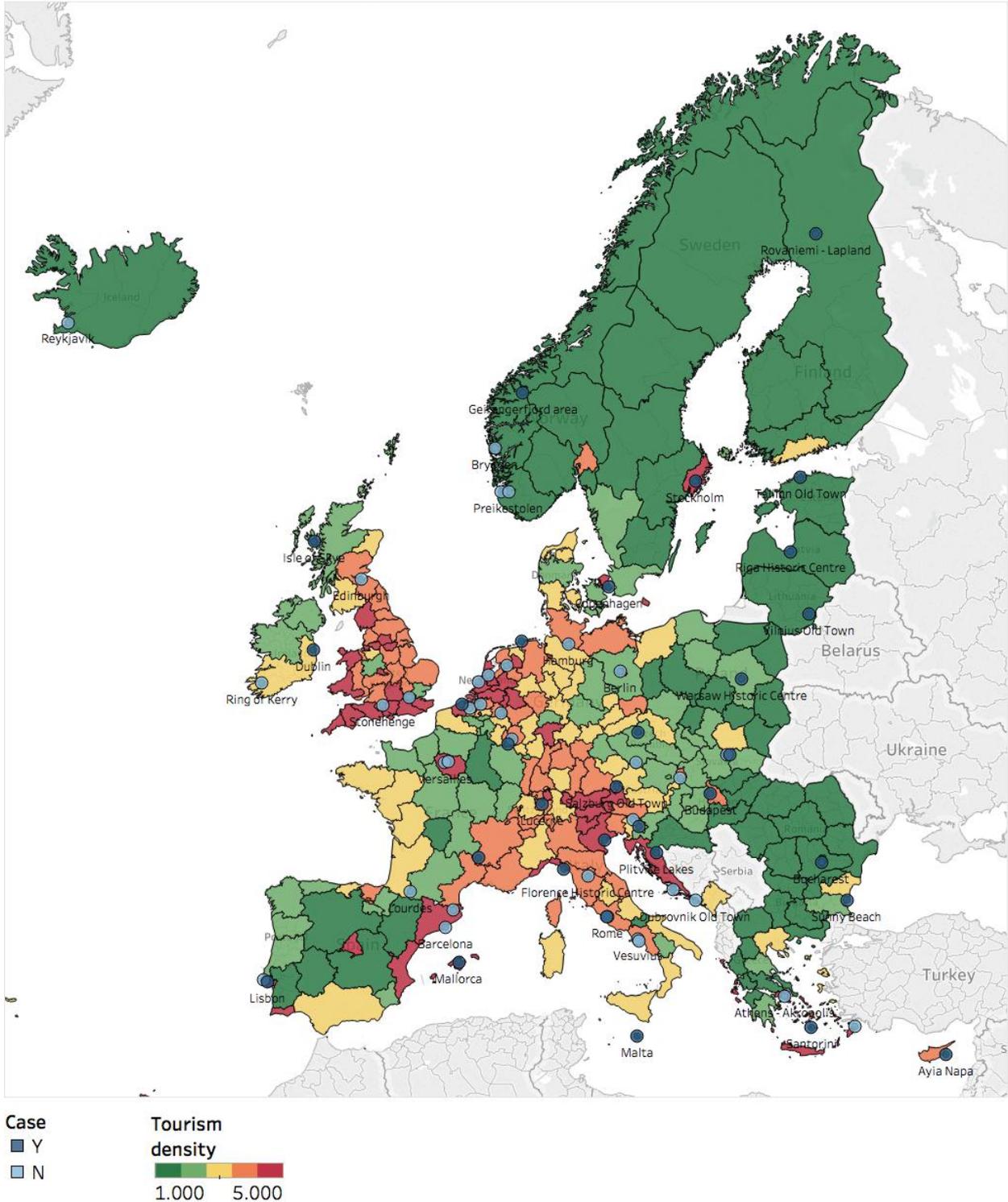
Source: Eurostat (2018e)
Note: the blue circles show the location of the regions with destinations in a state of overtourism. Dark blue circles indicate cases in this study.

Map 3:   **Tourism intensity (5th percentile ranks of bed-nights/resident) for the EU28.**

Bed-nights intensity (number/citizen)
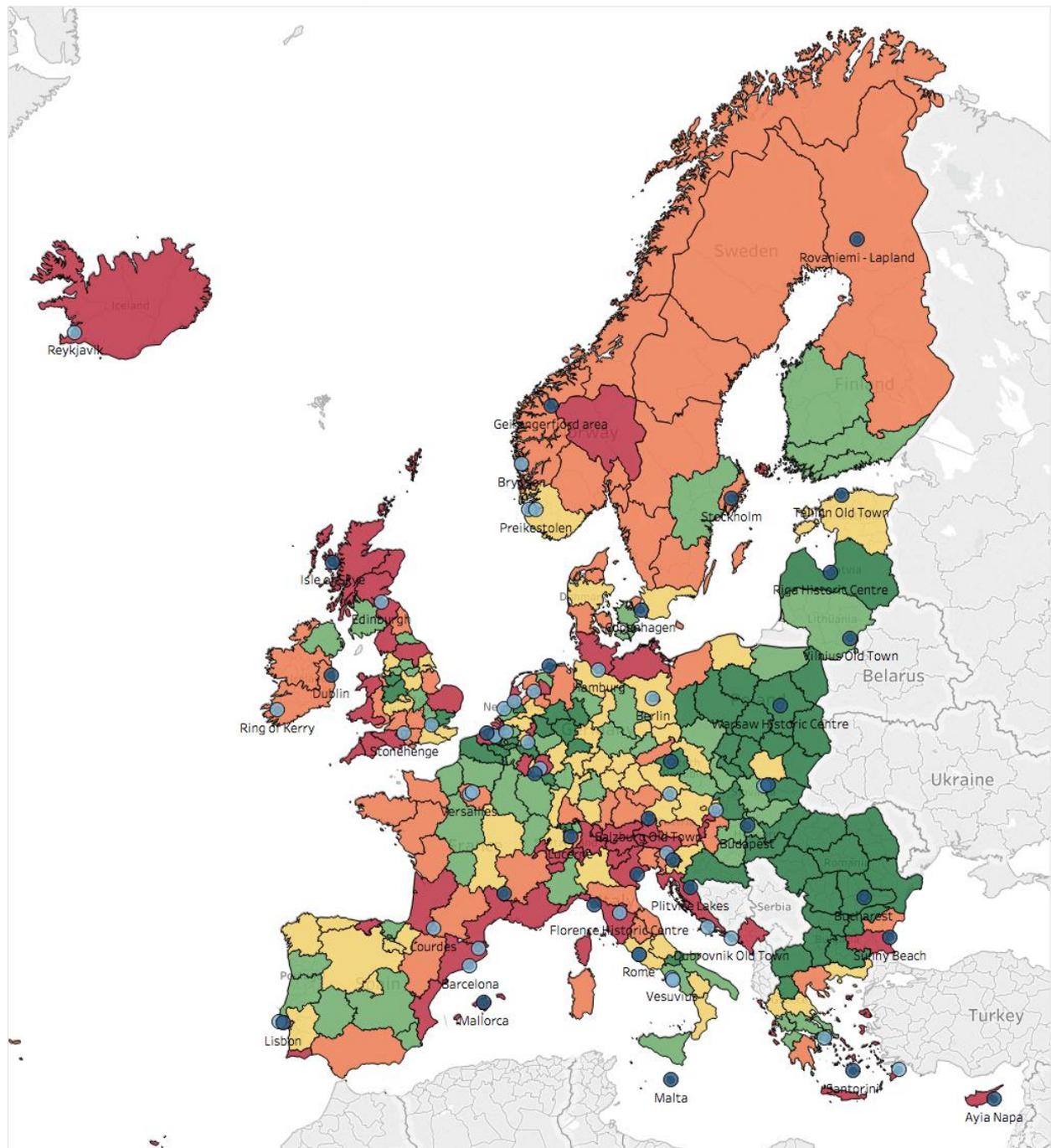
Source: Eurostat (2018e)
Note: The light and dark blue circles show the location of the regions with destinations in a state of overtourism. The dark circles are cases in this study. See Annexes 0 and 0 for maps showing growth of bed-nights respectively combined growth and intensity

3.4.2 Sharing economy: Airbnb

The sharing economy has affected many services in tourism, including private homes for rental (e.g. Airbnb) and transport services (e.g., Uber). Drivers of the sharing economy revolution are technology (platforms enable worldwide sharing between people who do not know each other), economics (lower costs), digital trust generating institutions, and environmental pressures (sharing cars and homes means less cars and building space). P. Peeters et al. (2015) show that the importance of these initially idealistic goals of sharing platforms is reduced because of 'the winner takes all' principle in unregulated ICT (Information and Communication Technologies) platform development, which causes the private platforms to become large monopolistic companies. Furthermore, P. Peeters et al. (2015) discusses how these platforms cause increasingly conflicts with established enterprises. In this study, Airbnb is analysed in more detail as this platform is very large and has been identified by other studies to play a role in overtourism (please see section 2.2).

With the help of Tom Slee (2018b), who maintains a website providing Airbnb web crawling data (Slee, 2018a), relevant information was gathered for this study. The original worldwide database contained over 4.5 million records of Airbnb offerings. The types of rooms were mainly entire homes (71.2%) and private rooms (27.3%), and the remaining 1.5% were shared rooms. This dataset was first refocused to European sites by restricting its coordinates to a square around the European Union. From this database, a 25% random sample was identified to reduce further processing times. A main challenge was to attach NUTS 2 codes to this database that contained only geo-coordinates but not country, region or place names. This process was performed in two steps. First, the postal codes available in the European booking.com database (booking.com, 2018) were used to generate NUTS codes from postal-NUTS conversion tables (Eurostat, 2018a). This was a successful method for approximately 96% of all addresses. Second, for each geo-code pair of the sample of Airbnb, the nearest entry for booking.com was located. From this entry, the NUTS code, booking geo-coordinates and place name were then added to the Airbnb record. All Airbnb entries with a great circle distance between the original Airbnb location and the nearest booking.com location larger than 100 km were removed to further clear the database of non-EU countries. The result was checked by plotting both series on a map using the original Airbnb and booking.com geo-coordinates, which showed relatively good distribution within the NUTS 2 regions (please see Map 15 in Annex 0), with some issues in mid-Italy and the UK. The issues with the latter were caused by the fact that the UK has an extremely detailed postal code system, with approximately 1.5 million different postal codes that are not always geographically close when truncated to less significant positions in the code. In this way, approximately 80% of all codes in the UK were identified, but 20% failed to do so and were lost for this study's analysis.

The main effects of Airbnb on overtourism are associated with its uncontrolled spatial distribution within destinations, uncontrolled growth, and unfair competition. The latter is caused by the lack of regulations for safety, environment and quality common in the commercial hospitality sector. Additionally, Airbnb hosts generally pay less or no taxes (P. Peeters et al., 2015). Listings of booking.com and Airbnb were mapped for all of Europe (please see **Map 4**) and six cities in a state of overtourism (please see **Map 5**). The European heat map shows that both types of accommodations occur all over Europe, but the density of Airbnb seems to be particularly high in France, Switzerland, parts of Italy, all of the Spanish and Croatian coasts, and all Mediterranean island coasts and is scattered throughout Belgium, the UK, the Netherlands and the western part of Germany.

Map 4: **Relative distribution of Airbnb (orange; left map on top) and conventional accommodation (green; right map on top, represented by listings in booking.com)**

Europe Airbnb and booking.com densities   Europe booking.com and Airbnb densities
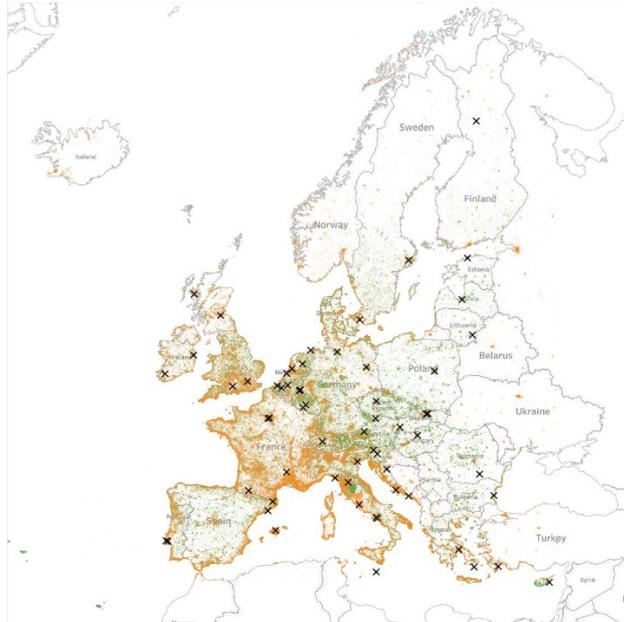
Type
■ Airbnb
■ Booking.com
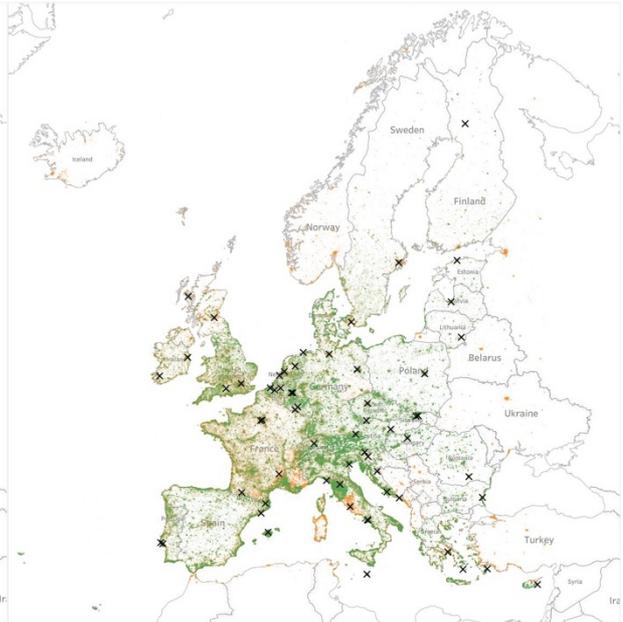
Type
■ Booking.com
■ Airbnb

Source: Airbnb data download June 2018 by Slee (2018b) and booking.com data download at November 2015 by bookdifferent.com

Note: the black crosses show the location of the destinations in a state of overtourism identified in this study. Note that the booking.com database has no entries for Norway, Iceland, and non-EU countries in the Balkans

Map 5: **Six examples showing the distribution of conventional accommodations (booking.com in blue) and Airbnb addresses (in orange)**
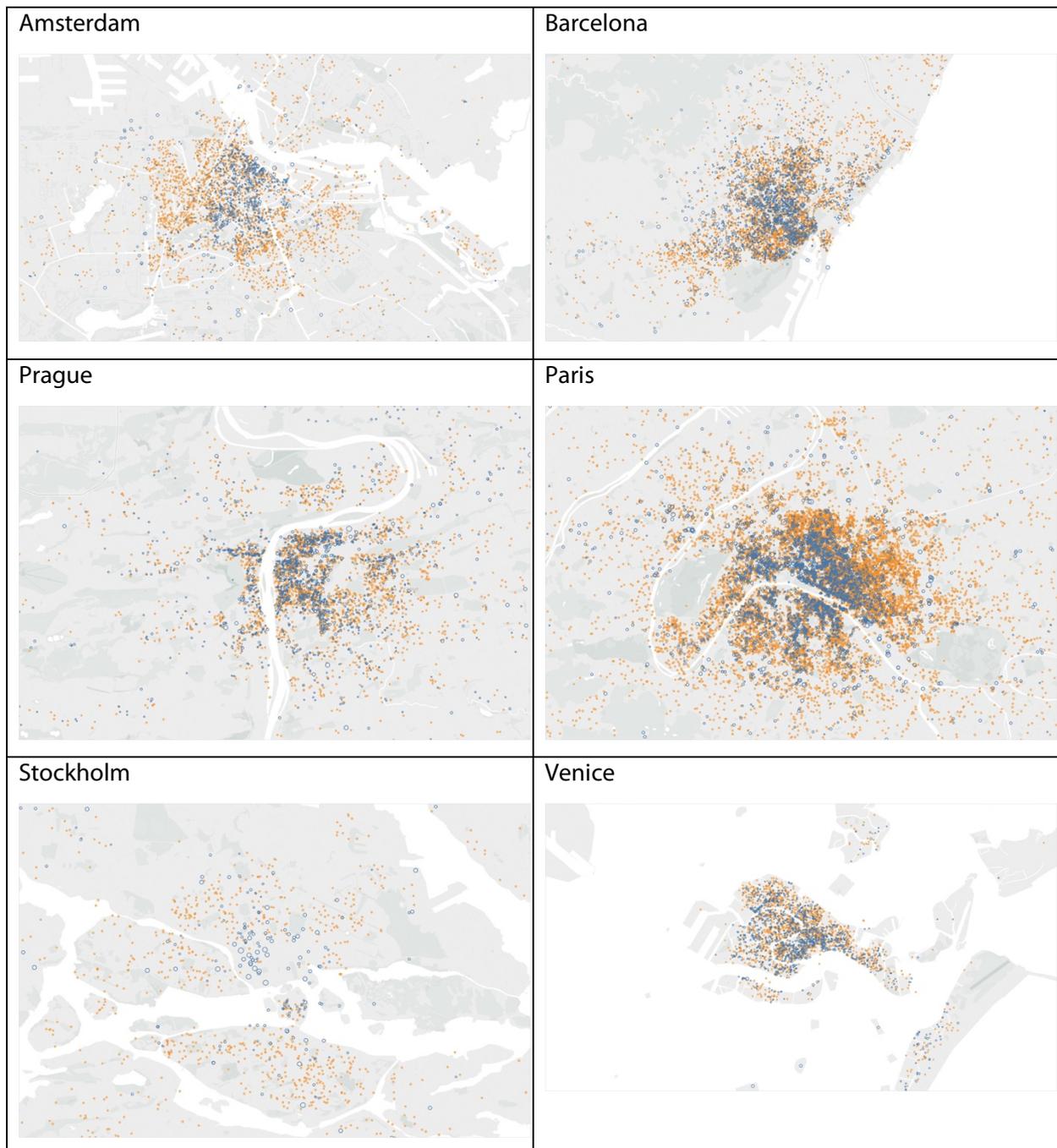
Source: booking.com (2018); Slee (2018b)
Note: the Airbnb sample shows 25% of all 2018 listings, while the booking.com sample shows 96% of the 2015 listings

From the six examples presented in **Map 5**, it is evident that in all of these, Airbnb is more evenly distributed over the cities than conventional accommodations, though locations are more often located in city centres. Furthermore, in cities with relatively strong spatial planning, such as Amsterdam, Paris and Stockholm, the segregation of Airbnb and commercial accommodations is stronger, and inevitably this affects residential estates that are not fit for commercial accommodation. This may be an important reason for overtourism because it directly affects the livelihoods of many citizens living in quiet neighbourhoods and not used to the noise and liveliness of tourists during nights. Also, for each NUTS 2 regions the number of destinations in a state of overtourism per region

and the average 5th percentile score for the average shortest distance between booking.com and Airbnb addresses were plotted. The idea was that when this distance was smaller, the distribution of Airbnb would be close to that of the distribution of conventional accommodation. And that would mean that residential areas would not see many Airbnb listings.

Figure 8: **Impact of Airbnb bed-capacity share of all accommodation and distance to commercial accommodation on the number of destinations in state of overtourism (OT cases)**
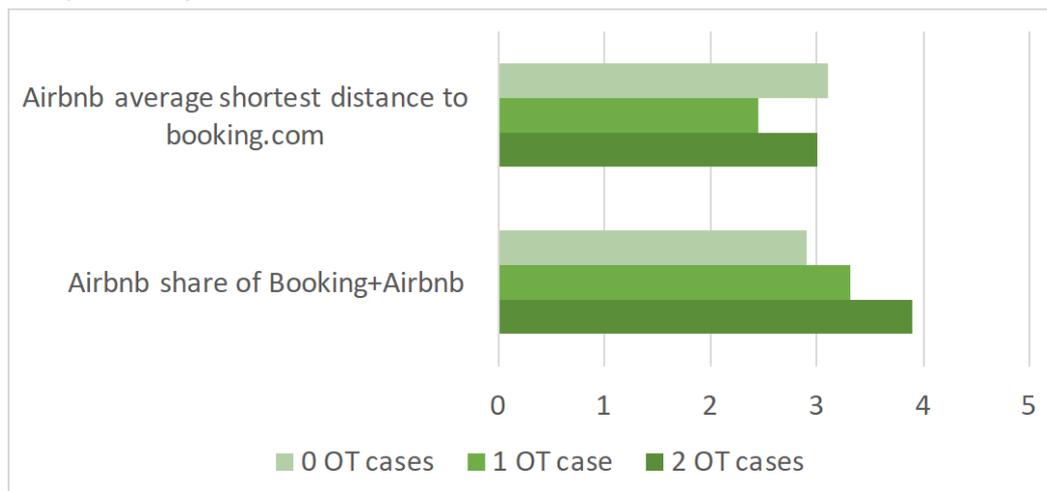
Source: Airbnb data download June 2018 by Slee (2018b) and booking.com data download at November 2015 by bookdifferent.com

Note: the X-axis gives the average of the 5th percentile for all NUTS 2 regions with 0, 1, or 2 destinations in state of overtourism

Figure 8 seems to suggest that only when measured in percentiles, the Airbnb share shows a clear relationship with the number of overtourism (OT) destinations. However, based on a Mann-Whitney U test (please see Table 6 below), it was found that significant group differences between the groups of regions with and without destinations in state of overtourism exist. It is worth noting that an increased chance of one or two OT destinations within the region relates to an increased share of Airbnb. Furthermore, a *decreased* physical distance between Airbnb listings and their nearest booking.com listing increases the chance of the existence of an OT destination within the region. So the more Airbnb is located independent from conventional accommodation areas and into residential areas, the higher the chance that overtourism develops. This is in line with the hypothesis that both the share of Airbnb and its location in residential areas increase the risk of overtourism.

Table 6: **Overview of the significance of group differences between NUTS 2 regions with and without OT destination(s) and two Airbnb-related indicators**

Tourism density and intensity indicators	Average for destinations without overtourism	Average for destinations with overtourism	Statistical significance level[17]
Airbnb share of booking+Airbnb	0.444	0.508	0.016[*)]
Airbnb average shortest distance to booking.com	2.38	1.62	0.006[*)]

[*)] Significant at the 95% confidence because the indicated level is <0.05

Source: analysis of this study

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[17] Asymptotic Significance. Significance level of ≤0.05 (2-tailed).

The rate of growth of Airbnb is potentially an important parameter for to inform any reflection on the social overtourism impacts of overtourism, and there might be a certain level of Airbnb presence that triggers social action. Figure 9 below shows Google searches on 'Amsterdam+Airbnb' averaged per month (as are the Airbnb data points). The main conclusion is that both grew quickly but not necessarily in a closely related way. Additionally, it is not clear whether the combined 'Amsterdam+Airbnb' search count in Google indicates concerns and not simply people looking for an 'Airbnb in Amsterdam'.

Figure 9: **Overview of number of Airbnb listings and search counts for 'Airbnb' between December 2014 and summer 2018 for the city of Amsterdam, the Netherlands**
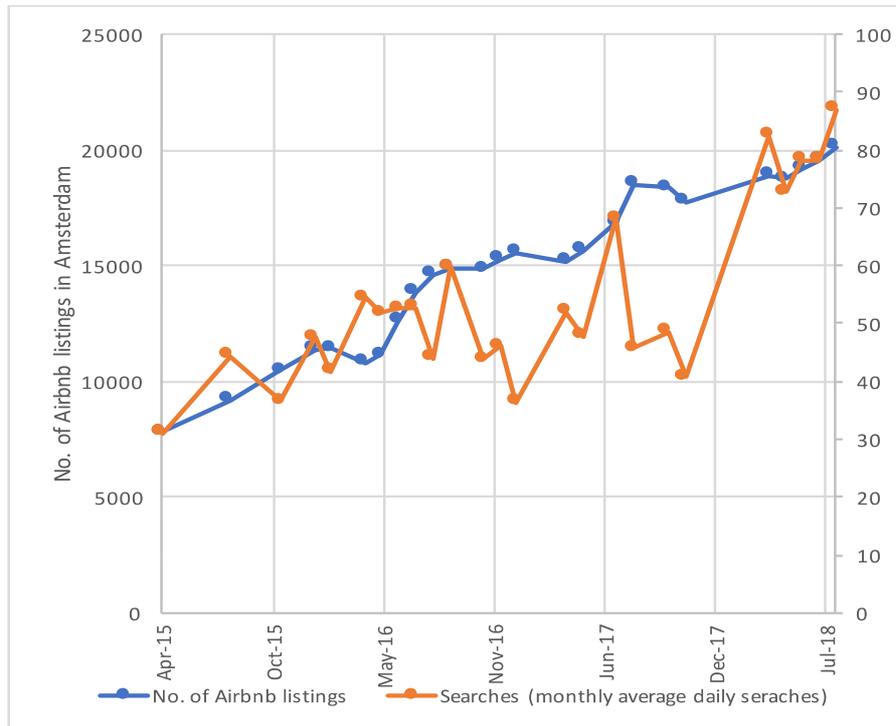
Source: searches with google and (Slee, 2018a)

3.4.3 Air transport

Transport infrastructure is essential for any destination. Worldwide, 48% of all tourists (domestic plus international) travel by car, 22% travel by air, and 30% use other means of transport, such as busses and trains (P. M. Peeters, 2017). In the EU, the shares of both car and air transport are somewhat higher. Nevertheless, air transport is considered to play a crucial role in causing overtourism development. Air transport is able to relatively quickly accommodate different flows of passengers compared to roads and railways. Furthermore, air transport increases the potential market, as do large international hubs.

The rapid development of low-cost air carriers has increased the potential markets of many destinations. And this higher potential market causes that some destinations profit most of this, partly due to peer-to-peer platforms (i.e. TripAdvisor). Thus, low-cost carriers enable a mechanism concentrating large numbers of visitors to a relatively small number of destinations. This also may cause a greater physical and cultural distance between guests and hosts as well as strong fluctuations, including increases, greater inflows of visitors and a concentration of visitors rather than spreading them over more places, and more dense transport systems.

The overall share of air transport to a region is likely an important parameter. As no modal split data exist for tourism arrivals, this study defined an indicator in terms of air transport intensity as the ratio

of the number of air passengers and the number of bed-nights. **Map 6** shows the result. The map reveals that a high air transport intensity is not always leading to overtourism as relatively many overtourism destinations are in 'green' NUTS 2 regions.

Map 6: **Air transport intensity (5th percentile ranks per NUTS 2 region in air passengers per bed-night)**

Air transport intensity (pax per bed-night)
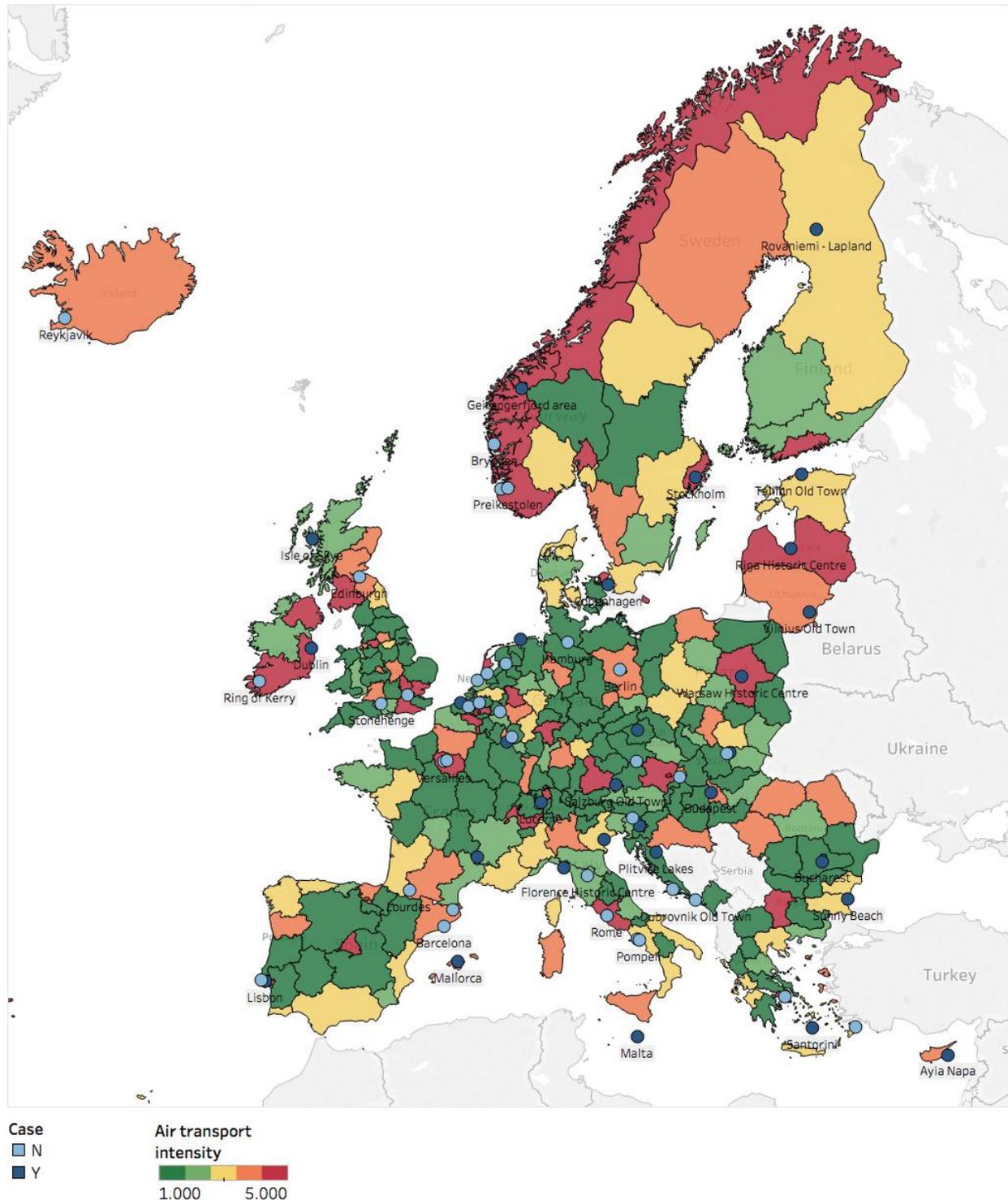
Source: Eurostat (2018e); openflights.org (2018)
Note: density is measured in air passengers/bed-night, growth of air transport in %/year and air transport seasonality as the ratio of the highest and the lowest traffic month. The destinations in a state of overtourism are indicated by dark blue dots (for case study destinations) and light blue ones (other overtourism destinations)

Map 7: **Overview of the position of destinations in state of overtourism with respect to airports**

Airports and overtourism destinations
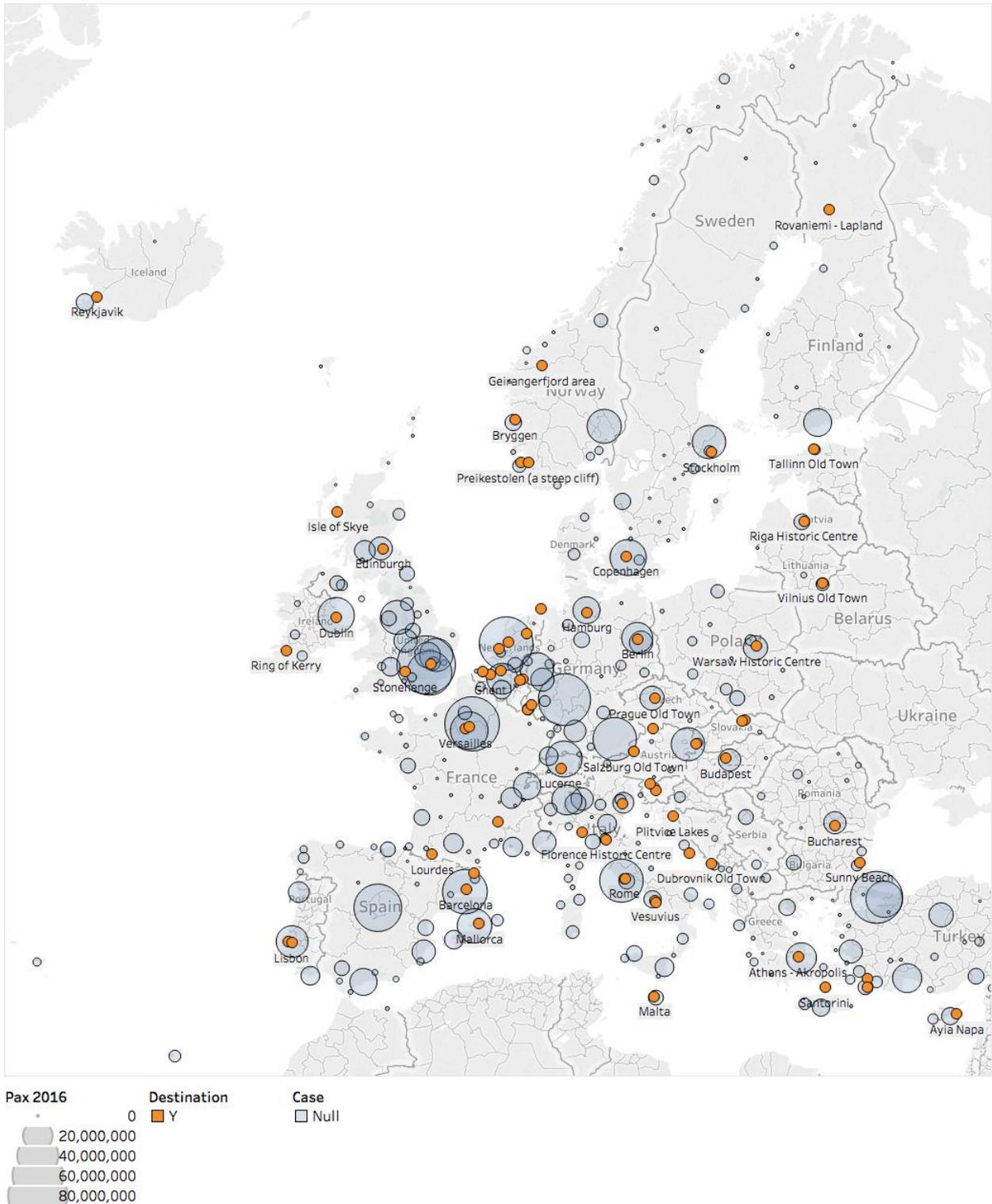
Source: openflights.org (2018)
Note: the size of the blue airport circles represents the number of annual passenger movements (landing plus take-off). The size is also a proxy for the catchment area of each individual airport Destinations are indicated in orange.

Map 7 above shows how destinations in state of overtourism are positioned with respect to the main commercial airports in Europe. It also includes the size of the airport in terms of passenger movements in 2016. The map shows that almost all destinations in state of overtourism are close to an airport, but not all large airports have an identified destination in state of overtourism nearby (e.g. Frankfurt, Munich, Madrid). This finding means that an airport is almost a necessary condition for the development of overtourism, but not a sufficient cause of it.

Most destinations in state of overtourism are located close to these 'catchment' areas. This proximity is also clear from Figure 10 below, which shows the share of destinations in state of overtourism within a certain distance from the airport. Almost 50% of these destinations have an airport within 15 km (great circle), and this share increases to 80% within 50 km. Additionally, the number of airports increases from 0.48 airports within 15 km to 1.10 airports within 50 km.

Figure 10:   Share of destinations in state of overtourism within a certain distance of at least one airport
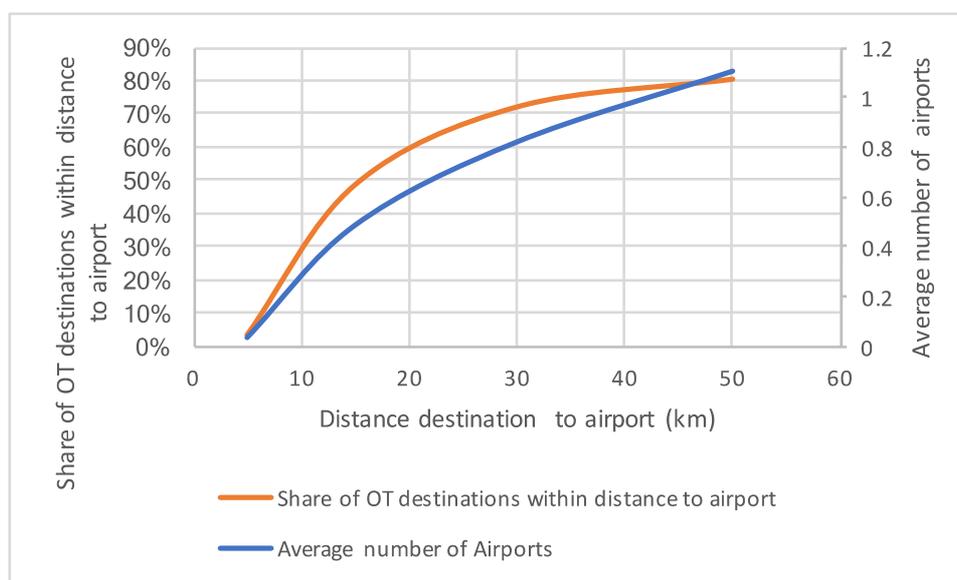
Source: openflights.org (2018)

Three NUTS 2 regional indicators were defined with respect to air transport: air transport density (passengers/bed-night), air transport seasonality (maximum/minimum monthly passengers), and air transport growth in 2016 (%/year). Figure 11 below shows that air seasonality has no predictive power for the amount of overtourism cases, and air transport growth has only moderately predictive power. Air transport intensity, which is basically a proxy for the share of air transport in the whole mix of transport, shows the strongest predictive power. Please see also the maps in Annex 0 (density), Annex 0 (growth) and Annex 0 (seasonality).

Figure 11: Number of overtourism (OT) cases as a function of air transport indicators
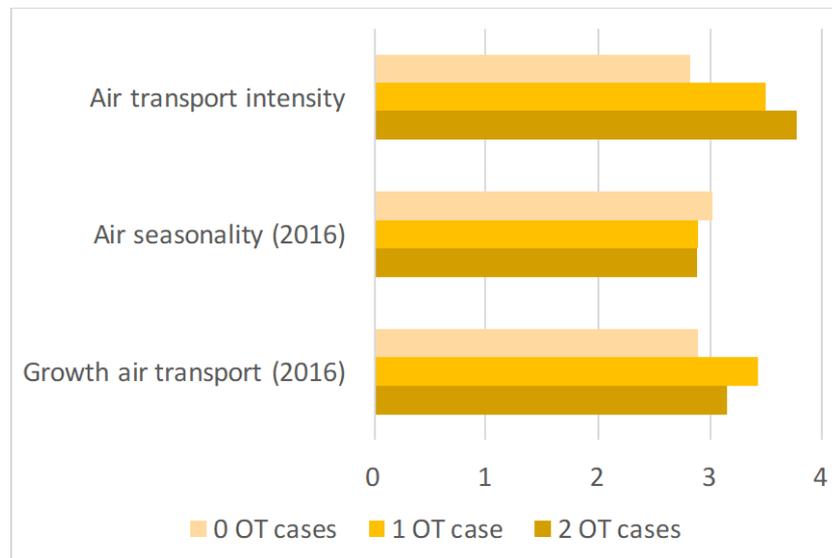
Source: Eurostat (2018e); openflights.org (2018)
Note: density is measured in air passengers/bed-night, growth of air transport in %/year and air transport seasonality as the ratio of the highest and the lowest traffic month

Subsequently, the indicator variances have been tested to see if they were significantly different between NUTS 2 regions with one or two destinations in state of overtourism and those with none. Because of the abnormal distribution of the three indicators, the difference between the group of ports/regions with and without a destination in state of overtourism was tested, for all the indicators using a Mann-Whitney U Test (please see Table 7 below). This revealed that the group of NUTS 2 regions with destinations in a state of overtourism differ significantly from the group without overtourism for the 2016 growth of air transport and for air transport intensity. Air seasonality had no significant relationship with overtourism, even though the absolute means of the two groups differed considerably.

Table 7: Overview of the significance of group differences between NUTS 2 regions with and without OT destination(s) and three air transport-related indicators

Tourism density and intensity indicators	Average for destinations without overtourism	Average for destinations with overtourism	Statistical significance level[18]
Growth air transport (2016; %/year)	4.95	9.28	0.025[*)]
Air seasonality (2016; highest/lowest month)	4.83	2.90	0.891
Air transport intensity (air passenger/bed-night[**)])	0.797	0.827	0.005[*)]

[*)] Significant at the 95% confidence because the indicated level is <0.05
[**)] A proxy for the share of air transport; the real transport mode shares in number of trip per transport mode are not registered by Eurostat

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[18] Asymptotic Significance. Significance level of ≤0.05 (2-tailed).

3.4.4   Cruises

Cruises are often mentioned as one of the causes of overtourism (please see section 2.2). This is most relevant for sea cruises, with single ships sometimes carrying more passengers (up to 5,000), than number of inhabitants of the cruise port they visit (e.g. many Norwegian ports in the Fjord area). Cruise ports are only relevant for destinations within reach of a seaport, so the analysis was restricted to destinations with or close to (less than 50 km) a seaport with passenger transport facilities. This analysis produced a list of 36 destinations in state of overtourism.

A major challenge is to find reliable data about cruises. A range of sources, among which those from Cruise Lines International Association (CLIA), were combined (Central Statistics Office, 2018; CLIA, 2018; Cruise Norway, 2015, 2017, 2018a, 2018b; CruiseBaltic, 2018; CruiseEurope, 2018; Eurostat, 2018d; GreekCruise, 2018; MedCruise, 2018) to compile a list of 214 cruise ports, 190 of which are within Europe. **Map 8** below shows the cruise ports with more than 10,000 passengers per year (2016) and the relevant destinations in state of overtourism in coastal environments[19]. There are only a few coastal destinations in state of overtourism that are not close to a cruise port (e.g. Edinburgh in the UK and Sunny Beach in Bulgaria).

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[19]   Note that this includes not only all destinations in a state of overtourism of the type Coastal & Islands but also from several other types, such as Urban (Lisbon) and Rural (Cinque Terre), at coastal locations.

Map 8:   Main European cruise ports

Cruises combined data

Sources: Central Statistics Office (2018); CLIA (2018); Cruise Norway (2015, 2017, 2018a, 2018b); CruiseBaltic (2018); CruiseEurope (2018); Eurostat (2018d); GreekCruise (2018); MedCruise (2018).
Note: the destinations in a state of overtourism are indicated as red crosses. Bubble size (indicated by the bars in the legend) represents the annual number of passengers between 10,000 and 2.7 million (Barcelona)

Figure 12 below shows that 34% of the coastal destinations in state of overtourism are within 5 km of a cruise port, increasing to 90% within 50 km. However, most cruise ports are not known as destinations in state of overtourism. **It seems that a nearby cruise port, just as an airport, is conditional for the development of overtourism, but not a singular cause of it.**

Figure 12: Share of destinations in a state of overtourism within a certain distance to a cruise port
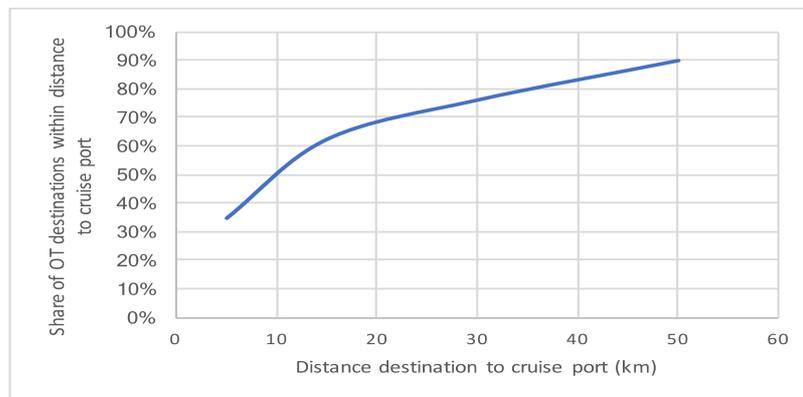
Source: authors' own elaboration

To further analyse the effect of cruise passenger intensity, each NUTS 3 region code was assigned to each cruise port using the 'keep-eu' country and region statistics search engine (keep.eu, 2018) and then the two cruise passenger intensities were calculated. These intensities are namely:

- Local population cruise intensity: number of annual 2016 cruise passengers per inhabitant of the port municipality (City Population, 2018); and

- NUTS 3 region cruise intensity number of annual 2016 cruise passengers per inhabitant of the NUTS 3 region in which the port is situated (Eurostat, 2018e).

Again, the indicators show extensive variation at an order of magnitude between five (NUTS 3 region intensity) and six (local density). Because of the non-normal distribution of the two indicators, the difference between the group of ports/regions with and without a destination in state of overtourism for the indicators were tested. This revealed statistically significant that OT destinations are located close to cruise ports with a high NUTS 3 cruise intensity (high significance level of 0.000) and for the local cruise intensity (slightly less significance level at 0.048). Figure 13 graphically confirms this conclusion, showing that for both indicators, the destinations in state of overtourism cluster at the higher values of the intensity, but that this is more the case for the NUTS 3 intensity.

Figure 13: Overview of the local and NUTS 3-based cruise passenger density for all cruise ports and those close to a destination in a state of overtourism
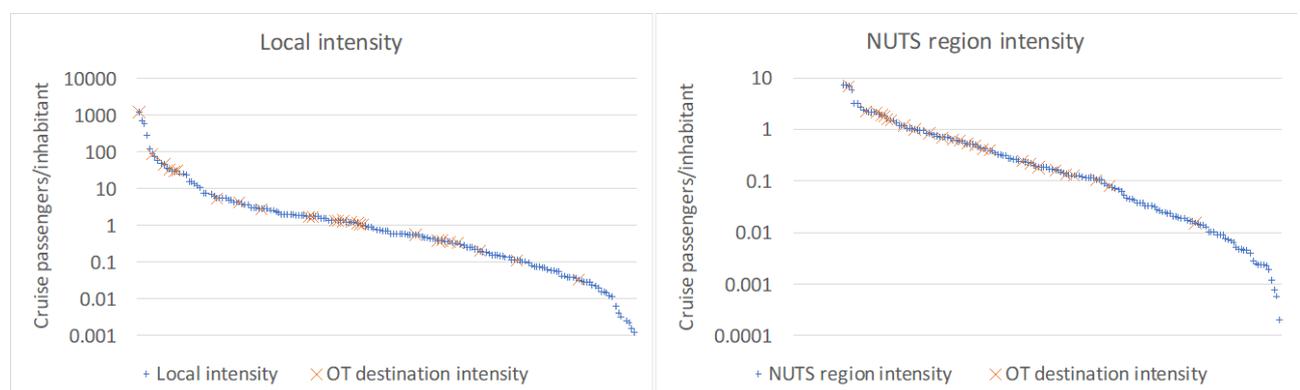
Note: the logarithmic scale on the vertical axis

For the most relevant indicator, NUTS 3 cruise passenger intensity, Map 9 reveals potential cruise intensity-induced overtourism areas in regions such as, for example, Gotland in Sweden and Kalamata in Greece.

Map 9:   NUTS 3 cruise passenger intensity at cruise ports (5th percentile ranks of cruise passengers per inhabitant)

Cruise intensity NUTS3 population

NUTS 3 cruise intensity

1.000   5.000

Sources: Central Statistics Office (2018); City Population (2018); CLIA (2018); Cruise Norway (2015, 2017, 2018a, 2018b); CruiseBaltic (2018); CruiseEurope (2018); Eurostat (2018d, 2018e); GreekCruise (2018); MedCruise (2018).
Note: The black crosses show the nearby destinations in a state of overtourism.

3.4.5   Role of World Heritage Sites (WHS)

UNESCO acknowledges 1,092 properties on its World Heritage List (UNESCO, 2018), which lists both cultural (77%) and natural (23%) sites. Many of these sites are or have become popular touristic attractions, and obtaining WHS status generally tends to increase tourism numbers (Su & Lin, 2014). Map 10 shows both the locations of WHS and the destinations in a state of overtourism identified in this research for the European region. 52 out 60 destinations in state of overtourism contain or are close to one or more WHS sites. The yellow circles are approximately 100 km in diameter.

Map 10:   All European OT destinations (large yellow circles) and World Heritage Sites (small green circles)

WHS, Airports & Cruise harbours
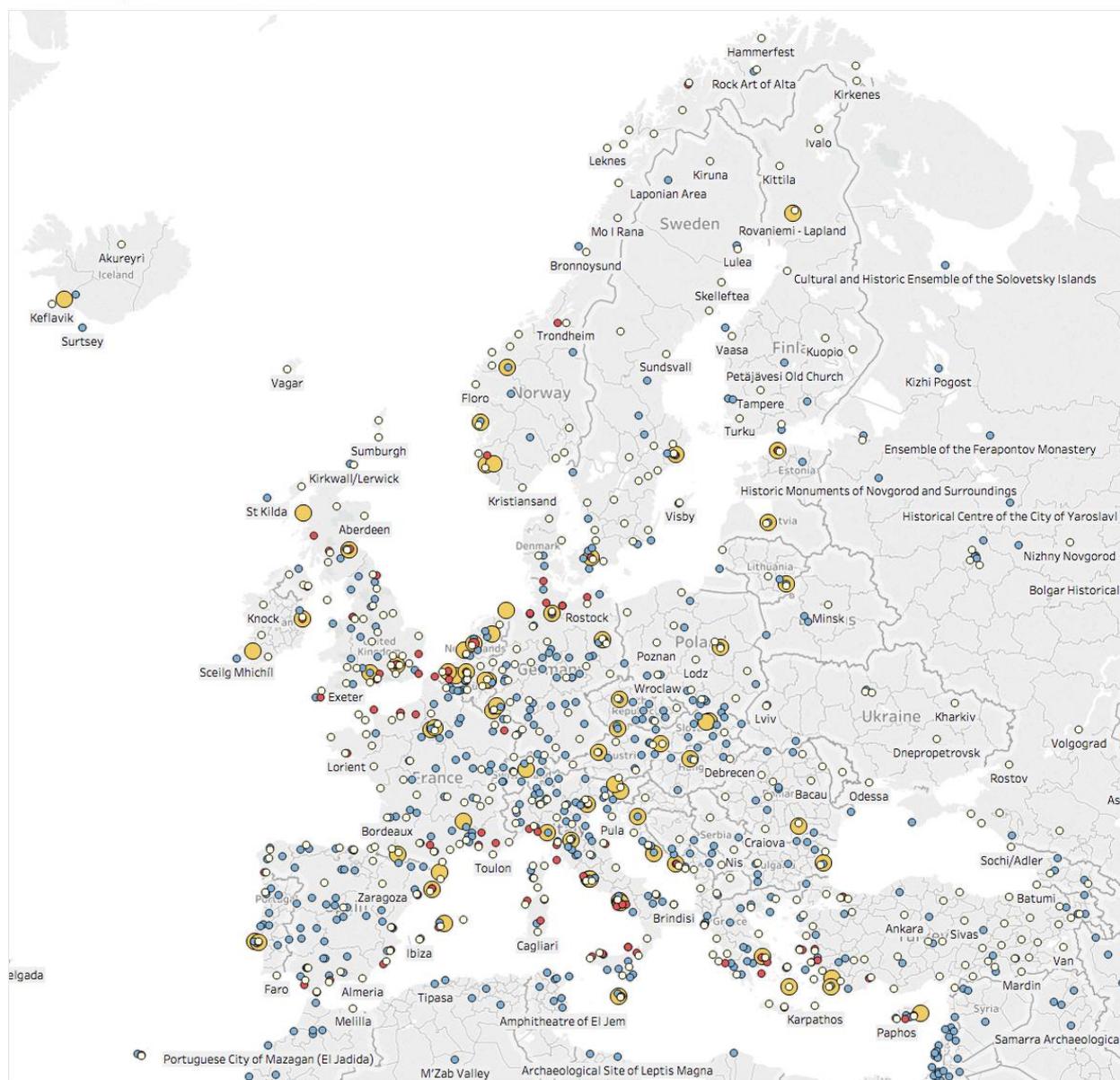
Category
- ☐ Airport
- ◼ Cruise harbour
- ◼ UNESCO Wolrd Heritage
- ☐ Overtourism destination

Source: UNESCO (2018) and the list of destinations in state of overtourism prepared for this study

The number of WHS per NUTS 2 region was calculated based on the average number for regions with and without any destinations in state of overtourism from the gross list. NUTS 2 regions with a destination in a state of overtourism contain 1.96 WHS sites, while other regions list on average 1.16 sites. The group difference is tested to be significant (significance is 0.003).

Figure 1 shows that the share of destinations in state of overtourism increases from 52% for destinations with a WHS listing within 5 km to 80% for destinations within a range of 50 km to/from WHS.

Figure 14: Share of destinations in state of overtourism within a certain distance of a World Heritage Site
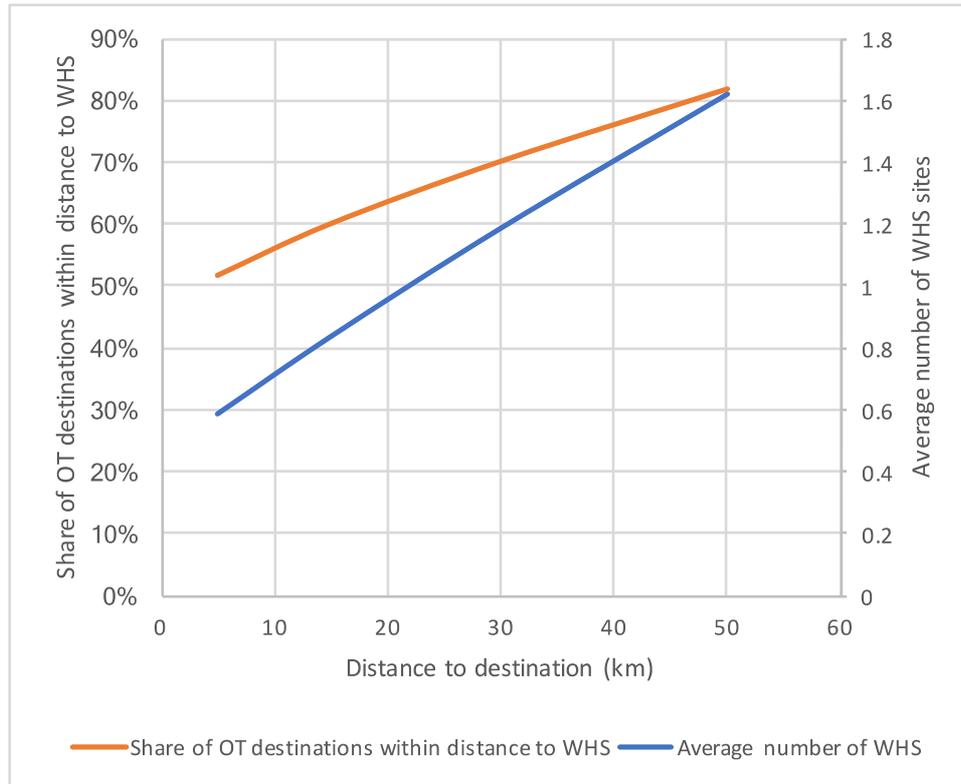
Source: elaborations of the authors and UNESCO (2018)

3.4.6   Economic impacts of overtourism

According to McKinsey & Company and World Travel & Tourism Council (2017), the economic dependency of a destination on tourism revenues may be a predictor of overtourism because it will shift political power towards the interests of the tourism industry, and away from residents not directly benefitting from tourism[20]. In fact, this indicator is a third form of the density and intensity indicators as it provides an 'economic intensity'. However, there are several conflicting issues regarding tourism dependence. The well-known effect in which residents who depend on the tourism industry perceive its negative impacts as much less severe (Muler Gonzalez et al., 2018) may cause tourism – and overtourism - to be more accepted in an economy that is highly dependent on tourism. On the other

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[20]   The share of tourism in the destination's economy also depends on the intensity of tourism. But in case a destination reaches a state of overtourism, the share of tourism in the economy will not specifically step-change to a higher value.

hand, this could also increase the differences between residents who benefit and those who do not benefit directly from tourism.

The economic dependency of a destination on tourism was measured for each NUTS 2 region by dividing its tourism revenues by its GDP[21].

Figure 15:   Number of overtourism (OT) cases as function of tourism's share in regional (NUTS 2) GDP

Figure 15 shows the relationship between tourism's share in the regional economy and the number of OT destination in the region. The difference in tourism's share of regional GDP between the group of regions with and without a destination in state of overtourism was also tested. Again, a Mann-Whitney Test was used and found a significant difference in the NUTS 2 region share of tourism in GDP (significance of 0.019); the mean share of the tourism economy in the regional economy without an OT destination is 3.7% and mean with an OT destination is 6.6%). **Map 11** shows the share of tourism in the regional GDP and the location of destinations in a state of overtourism. The statistical test and the map show that a high share of tourism in the regional economy increases the chance overtourism will develop.

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[21]   As tourism revenues are only known at the country level (Eurostat, 2018f), first the average revenues per bed-night per country were calculated and then multiplied by the NUTS 2 number of bed-nights to find a proxy for the NUTS 2 tourism revenues. The indicator was calculated by dividing these revenues by the NUTS 2 GDP (Eurostat, 2018e).

Map 11:   Share of tourism revenues in the NUTS 2 regional GDP (5th percentile ranks)

Revenues share GDP
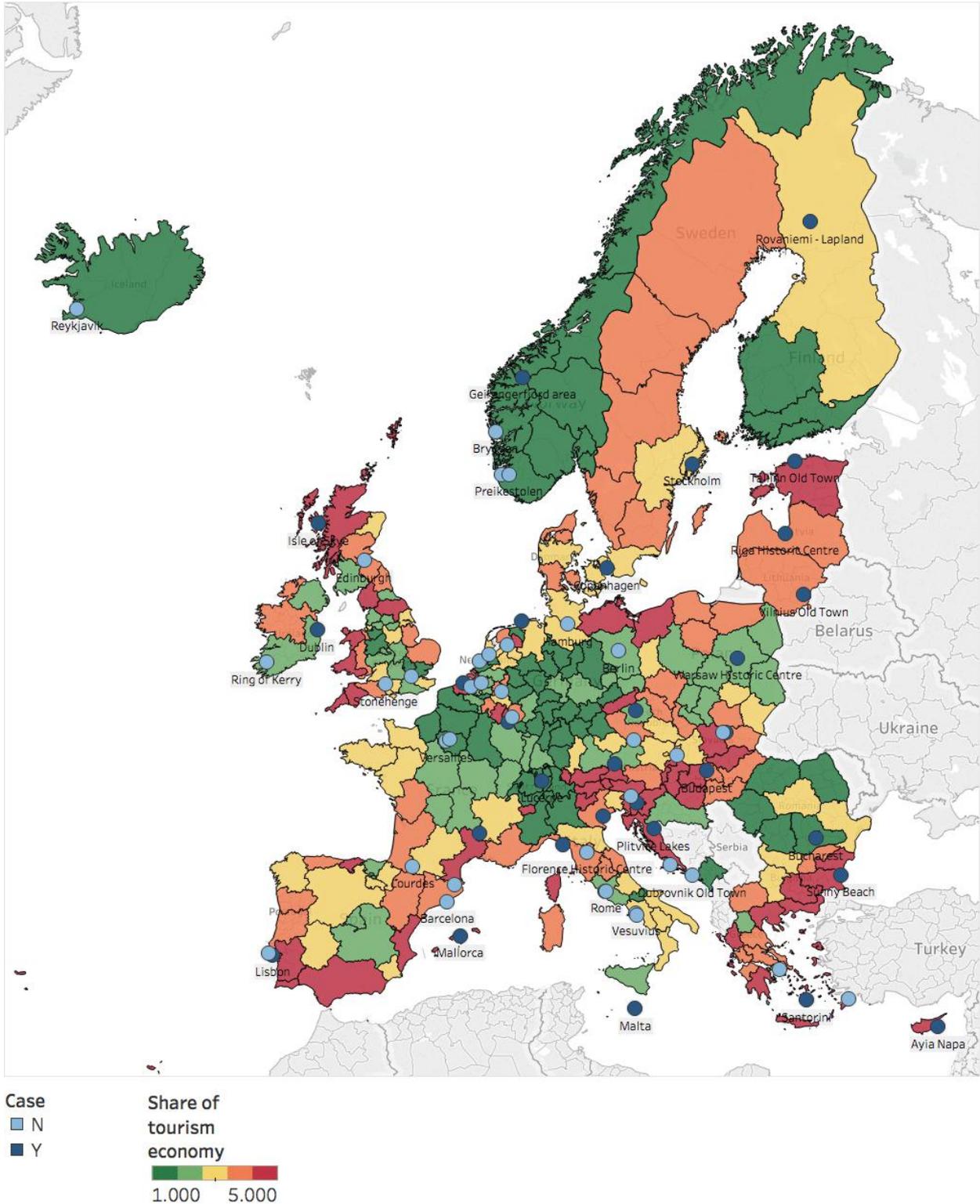
Sources: Eurostat (2018e, 2018f)
Note: the destinations in a state of overtourism are indicated by dark blue circles (case study destinations) and light blue (other overtourism destinations)

3.5 Early warning tool

There are, in principle, two ways to create an early warning tool for overtourism and they are described in detail in two subsequent sections below.

3.5.1 An assessment of predefined indicators - the first method to creating an early warning tool

The first method assesses certain indicators for individual destinations and divides these into 5th percentiles on a scale of 1 to 5, where 5 means a high risk of overtourism developing. Such a tool was developed by McKinsey & Company and World Travel & Tourism Council (2017) and was published as a 'diagnostic tool'. This tool composed of nine indicators has been used to assess 68 cities worldwide, of which 17 are located within a NUTS 2 region. Table 8 below presents an overview of the nine indicators used by McKinsey & Company and World Travel & Tourism Council (2017) plus the indicators proposed by this study.

Although the method developed by McKinsey & Company and World Travel & Tourism Council (2017) is a good first attempt to obtain better insight into the factors that play a role in the development of overtourism, it has some disadvantages. The first is that the 'McKinsey tool' is dedicated to cities, although other types of destinations are affected by overtourism as shown in our study. Second, the list is limited to destinations with a perceived form of overtourism, which makes it impossible to compare these with destinations with no overtourism issues. Therefore, it is difficult to set a balanced threshold for certain indicators above which the risk of overtourism becomes tangible. A third issue is a problem with local data: often, local statistics are incomplete and difficult to compare. This phenomenon occurred when some density data were gathered for this study's 41 cases (please see section 4.2). Finally, it was found that the choice of indicators combining both causes of overtourism (e.g. visitor densities and growth) and the effects of overtourism (e.g. negative TripAdvisor reviews, low air quality) were not sufficiently significant (i.e. air transport seasonality).

Table 8:   List of variables used in this study to assess the risk of overtourism

Indicator code	Indicator name	Unit	McKinsey	This study
M_05_SGD	**Tourism share GDP**	**%**	**Yes**	**Yes**
	Growth of number of arrivals	%/year	Yes	No
M_01_GBN	Growth of number of bed-nights	%/year	No	Yes
	Visitor area density	number/km^2	Yes	No
M_02_BND	**Tourism density**	**bed-nights/km²**	**No**	**Yes**
	Visitors population density	number/ resident	Yes	No
M_03_BNP	**Tourism density**	**bed-nights/ resident**	**No**	**Yes**
	Share of negative TripAdvisor reviews	%	Yes	No

Indicator code	Indicator name	Unit	McKinsey	This study
M_07_ASE	Air transport seasonality 2016 (ratio between highest and lowest monthly arrivals by air transport)	-	Yes	Yes
	Share of reviews limited to top 5 attractions	%	Yes	No
	Annual mean PM10 concentration	µgram/m^3	Yes	No
	Share of top 20 TripAdvisor attractions that are historic sites	%	Yes	No
M_04_GAT	***Growth of air transport (2016 over 2015)***	**%**	***No***	***Yes***
	World heritage site closeness	number within 30 km	No	Yes
	Cruise harbour closeness	number within 10 km	No	Yes
	Airport closeness	arrivals within 50 km	No	Yes
M_08_DAB	***Airbnb average shortest distance to booking.com addresses***	***km***	***No***	***Yes***
M_06_SAB	***Airbnb share of booking.com plus Airbnb***	**%**	***No***	***Yes***
M_09_ATI	***Air transport intensity***	***air passengers/ bed-night***	***No***	***Yes***
M_10_NUW	***Number of UNESCO World Heritage Sites***	***number***	***No***	***Yes***
M_11_CIG	Combined intensity growth score	-	No	Yes

Source: authors own elaboration
Note: the criterion is the 5th percentile of all NUTS2 region's average values. The significant indicators for this study are highlighted in **bold-italic**. The indicators suggested by McKinsey & Company and World Travel & Tourism Council (2017) were also added

3.5.2 An EU wide assessment based on NUTS 2 regions - the second method of creating an early warning tool

An alternative method was therefore developed to assess the risk of overtourism based on the characteristics of all NUTS 2 regions in the EU for which comparable Eurostat data are available. In the previous section of this chapter, it was shown that the eight indicators differ significantly between regions with and without overtourism. The 5th percentiles of these eight indicators were averaged and plotted into Map 12 below. The map clearly shows a number of NUTS 2 regions that have a 'high-risk' profile with respect to overtourism (dark and light red) but do not yet have perceived cases of overtourism within their boundaries.

Map 12: **Average of the 5th percentile of the nine significant indicators and location of the destinations in state of overtourism from the initial gross list of destinations**

Average significant indicators

Case
■ Y
□ N

Average of significant indicators

1.400   4.900
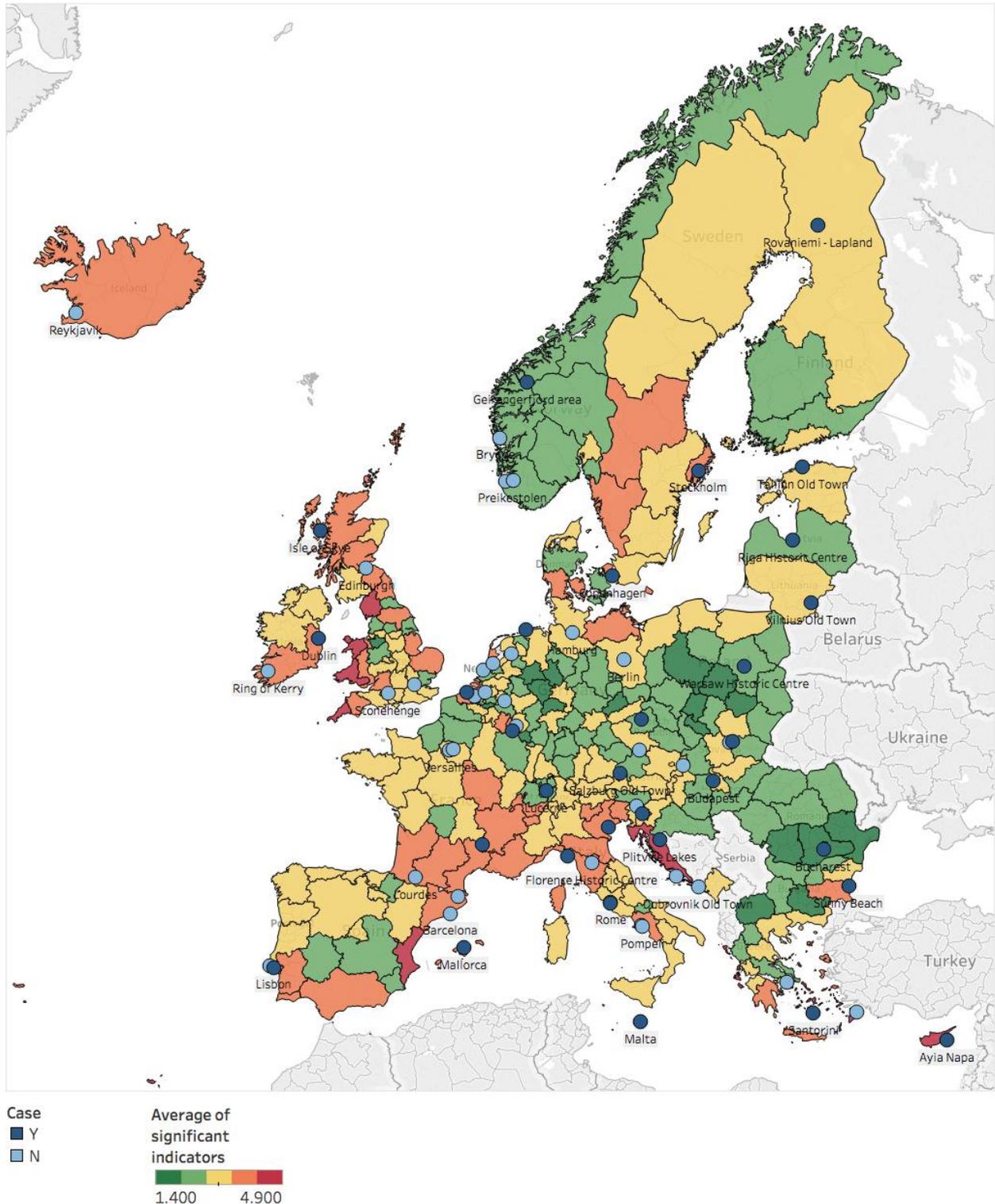
Source: elaboration of this study based on all data used as outlined in the previous analysis presented in this chapter of the study

Note: The destinations in a state of overtourism are indicated by dark blue dots (for case study destinations) and light blue (other overtourism destinations).

To check the relation between the city-based method by McKinsey & Company and World Travel & Tourism Council (2017) and the region-based method developed in this study, the results of the overall average percentile scores were plotted against each other. The relationship is not very strong, but it does exist (please see Figure 16), which can be observed when looking at the two coefficients shown for the trend line: both have a coefficient of over 0.9, which is close to the 1.0 expected with an exact relationship. But the 'clouds of dots' show that it is not very 'strong'.

Figure 16: Relationship between the city-based method by McKinsey & Company and World Travel & Tourism Council (2017) and the regional method of this study, for all indicator percentiles averaged and only the comparable (equal) indicator percentiles
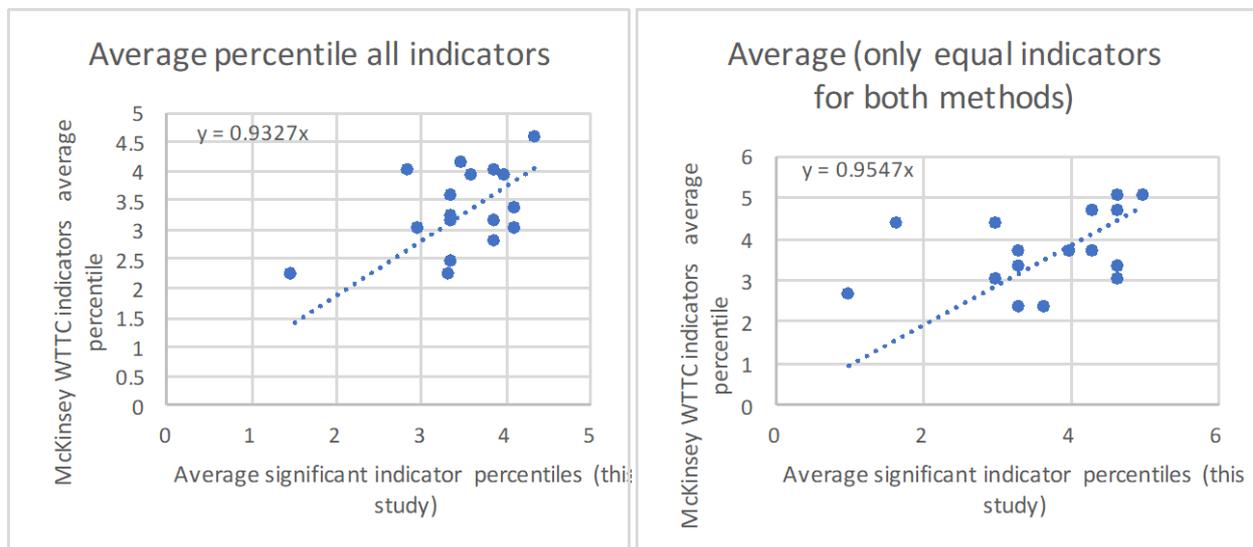
Source: authors' own elaboration

Table 19 in Annex II provides a full 'heat map' of the eight indicators for all NUTS 2 regions. The table was sorted from high to low risk for the average of the 5th percentiles for all eight significant indicators and then grouped for regions with 2, 1 or 0 overtourism cases. A criterion was added according to which the share of highest percentile (5th, red) of all indicators with a value was counted. In both cases, the twelve regions without any destinations in state of overtourism, but with the highest risk scores were selected.

Table 9 below lists the 15 most vulnerable regions at the NUTS 2 level. The United Kingdom has five regions at risk, two of which are in Wales and two that are relatively close to Wales (Cumbria and Yorkshire). Most other regions are in the south of Europe.

Table 9:   **The 15 NUTS 2 regions most vulnerable to overtourism**

NUTS2	Region	Number of indicators at the highest risk scores
ES52	Comunidad Valenciana	2
ES61	Andalucía	2
ES70	Canarias	2
FR81	Languedoc-Roussillon	2
ITH2	Provincia Autonoma di Trento	2
PT30	Região Autónoma da Madeira	2
UKD1	Cumbria	2
UKK3	Cornwall and Isles of Scilly	2
UKL1	West Wales and The Valleys	2
EL62	Ionic Islands	1
EL65	Peloponnesus	1
FR26	Bourgogne	1
PT15	Algarve	1
UKE2	North Yorkshire	1
UKL2	East Wales	1

Source: authors' own elaboration
Note: this list excludes all regions where overtourism is already an identified issue.

The analysed data show that several indicators have significantly different values for regions with overtourism compared to regitableons without any identified destination in state of overtourism within their bounds. These include tourism intensity, tourism density, shares of air transport and share of Airbnb (as a proxy for platform-based accommodation), and the share of tourism in the economy. However, the values of the indicators show very large ranges of up to six orders of magnitude, and the relationships are generally not very strong. This means that it is impossible to assign a general value or threshold to an indicator at which a state of overtourism is likely to develop. The combination of several indicators, local circumstances and some conditional indicators, such as the proximity of a cruise port, airport or World Heritage Site, makes this difficult. Before such an early warning tool can be developed, the quantitative thresholds of a destination in a state of overtourism should be determined and a more complete list of such destinations must first be established. Furthermore, it is advisable to develop a guideline for tourism statistics to be gathered at the NUTS 3 level because the NUTS 2 level is too coarse to successfully develop such an early warning tool.

3.5.3   Checklist to assess overtourism risk

Regions or destination that want to assess whether they are vulnerable to overtourism are advised to consider the following checklist. This list should be considered as being preliminary. It is recommended to further develop it in collaboration with tourism managers from destinations, including some that are in a state of overtourism. A quick way to assess the risk is by evaluating the NUTS 2 region of a given destination in Table 19 in Annex II. Is this destination, according to the second last column of this table, in a region that is not entirely indicated green (and with an index 1 or 2) or has it already one or more destinations defined as being in a state of overtourism (the last column is not zero)? In that case, there may be a risk, and therefore it is recommended to proceed to answering the following questions. All instances with a positive answer should be counted. The higher this number, the higher the risk and the more urgent the need to further investigate the situation and take measures:

- Is your destination less than 30 km from an airport?

- Is your destination less than 15 km from a cruise port?

- Is your destination less than 20 km from a World Heritage Site?

- Do you use a volume growth-oriented (e.g. tourist arrival numbers, bed-nights) set of indicators to evaluate the success of your destination, excluding opportunities for optimisation (e.g. spending per day, liveability for residents)?

- Is you marketing strategy focused on medium and long-haul, rather than closer markets?

- Are resident sentiments ignored in destination development?

- Do you ignore social media (for both residents and visitors) discussing overcrowding, negatively discussing tourists and other indicators for overtourism?

- Are Airbnb and similar sharing-economy accommodation unregulated nor monitored?

- Are Airbnb and similar sharing-economy' accommodation excluded from (tourism) taxes as paid by hotels, B&B and other contemporary accommodation types?

- Do stakeholders from air transportation and/or cruise ports have a decisive influence on your tourism management and planning?

4 OVERVIEW OF CASE STUDIES

KEY FINDINGS

- The impacts of overtourism depend on the type of destination: social impacts prevail in Urban destinations, while environmental impacts prevail in Rural destinations. All three impact categories are found in Coastal & Islands and Heritage & Attractions.

- **Impacts are a function of the number of tourists per 100 inhabitants (TPR) and the number of tourists per km² (TDR)** and differ markedly between the four types of destinations. In particular, the combination of a high TPR and TDR, as in the case of Coastal & Islands, puts a destination at a serious risk of overtourism issues.

- The **most frequent impacts** found are the overcrowding of (transport) infrastructure, overcrowding of (tourism) sites, pollution and waste-related problems.

- Overall, **negative environmental impacts of overtourism were found to dominate**, while negative economic impacts of overtourism have least relevance.

- The most frequent **measures** applied by the local authorities (but not necessarily the most appropriate) are those related **to limiting the number of people at hotspots** (by spreading them to other areas), **ensuring that people there behave in certain ways** (by rules and regulations), and **improving the capacity of the destination** to deal with large numbers of people (by improving the capacities and efficiency of infrastructure, facilities and services).

- In destinations of the **Coastal & Islands** type, a **broad range of measures** is used, reflecting the broad range of impacts that these destinations face.

- Some case studies revealed that **policies** like including sustainability in policy plans, capping the number of cruise ships, limiting the number of restaurants, spreading tourists over the city, and strong waste prevention schemes **did have positive effects, but did not prevent all symptoms of overtourism**.

4.1 Introduction

In academic literature and popular media outlets, there are a number of destinations that are often mentioned when referring to overtourism, such as Venice, Barcelona, Machu Picchu, and Vatican City. In this chapter, 41 case studies are identified as having to address overtourism issues. Some are well known, while others have appeared less prominently in the overtourism narrative. The 41 cases were selected from a list of 105 destinations, including all EU Member States, as well as destinations on all other continents (except for Africa). The case studies focus on four types of destinations – Urban, Rural, Coastal & Islands, and Heritage & Attractions.

The wider list emerged from a consultation of academics involved in this study as well as a request sent to experts in their network. Colleagues were asked to send (1) the name of the destination, (2) the type of destination, (3) a description of why they believe the case is relevant to include, and (4) suggestions for where to find further relevant material.

The final selection of 41 case studies was based on five criteria. First, the 41 cases should together provide a good overview of the issues related to overtourism in the EU and elsewhere. Second, the

cases should highlight approaches to manage overtourism and should illustrate both successes and failures. Third, there should be sufficient data available to write the case study. Fourth, all 28 Member States should have one case[22], with 12 cases outside the EU. Fifth, there should be a proper division among the four types of destinations.

The case studies are discussed in detail in Annex IV. Each case study follows a standardised structure composed of an introduction, available statistics, main impacts, measures taken, and the (future) development of overtourism, followed by additional information and relevant references to facilitate further reading[23].

The case studies are presented in alphabetical order and include a box highlighting the type of destination (Urban, Rural, Coastal & Islands, or Heritage & Attractions) the region and the researcher reporting the case. The designation of the type of destination was not always unequivocal. For several destinations, more than one type might apply. For the purpose of this study, the type 'Urban' is assigned when entire cities form the destination (i.e. Barcelona). 'Heritage & Attractions' refers to a specific part of a city (i.e., Prague Old Town) or the city as a whole when it can be classified as heritage (i.e. Venice and Valetta) or smaller places visited because of specific heritage and attractions (i.e. Echternach, Giethoorn and Rovaniemi). The 'Coastal & Islands' category includes cases that are located near or at a shore or in the water. These may often be destinations associated with beach tourism. One exemption was made – the coastal destination Cinque Terre – because this area is mostly known for its natural beauty and hiking opportunities in a rural setting; thus, the destination was assigned to the rural type. The fourth category, 'Rural', refers to rural areas that are mostly visited because of their natural settings (i.e. rural areas, such as Plitvice Lakes). It also includes one small city (Bled).

4.2   The ETC survey list

A survey was distributed among all 26 ETC members in July 2018. Though answers were received from only seven ETC-members, out of which five reported overtourism, the responses were very valuable for this study.

Table 10 below compares destinations as identified by ETC member states and considered as case studies. The combined list includes 22 destinations in the five countries, out of which three in the case study list are not listed by ETC members. Vice versa, 13 destinations in a state of overtourism and attractions listed by ETC members were not considered in the case study list. The cross comparison shows that it would have been of interest to receive answers from all ETC member countries.

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[22]   For Italy, it was decided to include a second destination, so there are a total of 29 EU cases.
[23]   Please note that these case study references are not integrated in the main study reference list for reasons of readability and quick access to the references.

Table 10: **Overview of destinations in a state of overtourism indicated by the ETC survey and found on the list of 105 destination in a state of overtourism**

Destination	Country	Destination type	List of 105 destinations	ETC
Ayia Napa	Cyprus	Coastal & Islands	Yes	Yes
Various coastal areas	Cyprus	Coastal & Islands	No	Yes
Rovaniemi - Lapland	Finland	Heritage & Attractions	Yes	Yes
Arctic Lapland	Finland	Rural	No	Yes
Suomenlinna, Helsinki	Finland	Heritage & Attractions	No	Yes
Porvoo, Korouoma Nature Reserve	Finland	Heritage & Attractions	No	Yes
Nuuksio National Park	Finland	Heritage & Attractions	No	Yes
Ivalo	Finland	Rural	No	Yes
Budapest	Hungary	Urban	Yes	Yes
Lake Balaton	Hungary	Rural	No	Yes
Various smaller towns	Hungary		No	Yes
Scheveningen	Netherlands	Coastal & Islands	Yes	No
Giethoorn	Netherlands	Heritage & Attractions	Yes	Yes
Amsterdam	Netherlands	Urban	Yes	Yes
Maastricht	Netherlands	Urban	Yes	No
Kinderdijk	Netherlands	Heritage & Attractions	No	Yes
Zaanse Schans	Netherlands	Heritage & Attractions	No	Yes
Bled	Slovenia	Rural	Yes	No
Ljubljana	Slovenia	Urban	Yes	Yes
Postojna Cave	Slovenia	Heritage & Attractions	No	Yes
Portorož	Slovenia	Urban	No	Yes
Upper Soča river valley	Slovenia	Rural	No	Yes

Source: elaborations of the authors

4.3   Statistical analysis of case studies

Figure 17 shows the division of the cases among the four categories. In terms of the number of cases, Heritage & Attractions is the dominant category (15 cases). As discussed in section 0, the risk of overtourism increases when a destination includes - or is close to – high-quality heritage sites, such as the UNESCO World Heritage Sites. The least common destinations are the type Rural (7 case studies). The case studies clearly show that overtourism also occurs in rural destinations.

Figure 17:   Overview of shares of overtourism case study destination types (left) and regional distribution (right)
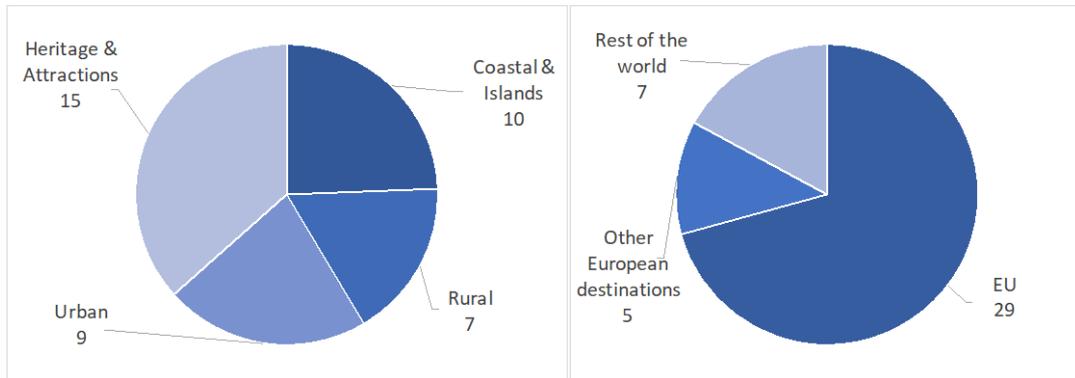
Source: elaboration of this study

As shown in Figure 17 above, the sample consists of 29 case studies from the EU, five from other European countries, and seven from the rest of the world. For destinations in the rest of the world, a selection of well-known tourism hotspots was chosen. These include Bagan (Myanmar), Byron Bay (Australia), Grand Canyon (United States), Machu Picchu (Peru), Maya Bay (Thailand), Rio de Janeiro (Brazil), and Yellowstone (United States). Map 13 below shows the geographical distribution of the cases throughout the world, and Map 14 shows the ones within Europe. The destination types are indicated with colours. The 41 cases are shown as large circles.

Map 13:   Overview of all 105 destinations in a state of overtourism identified
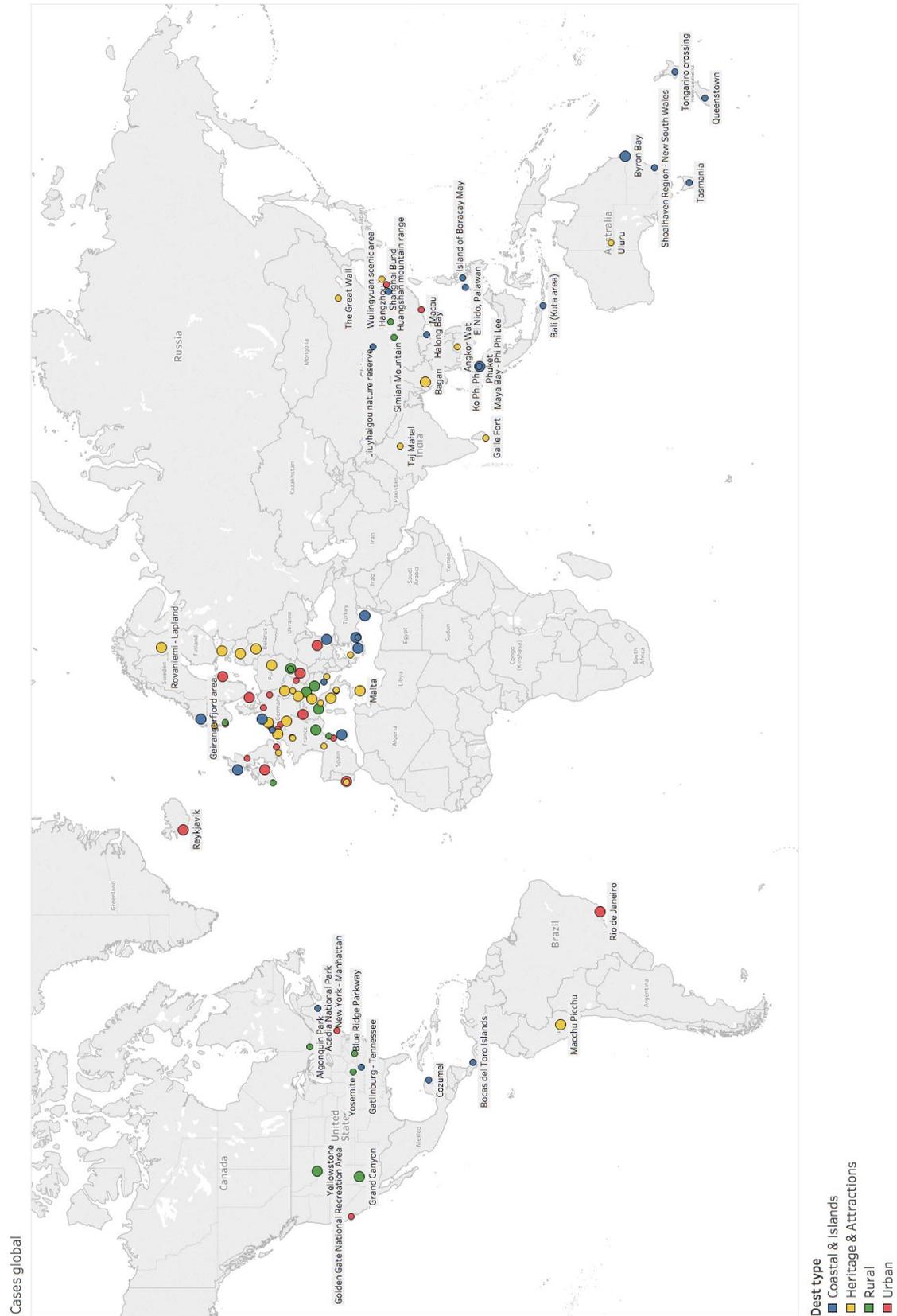
Source: elaborations of the authors
Note: colours indicate the type of destination; the 41 overtourism case studies are indicated with large circles

Map 14: **Overview of the European destinations in a state of overtourism**

Cases EU

Dest type
- ■ Coastal & Islands
- ■ Heritage & Attractions
- ■ Rural
- ■ Urban

Source: elaborations of the authors
Note: colours indicate the type of destination; the 41 overtourism case studies are indicated with large circles.

Table 20 in Annex III summarises the most important properties and statistics for the 41 cases:

- The type of destination,

- The number of visitors (subdivided into tourist and day visitors),

- The tourism penetration rate (TPR; number of visitors per 100 inhabitants per day),

- The tourism density rate (TDR; the number of visitors per km^2 per day),

- The importance of the destination in relation to the country in which it is situated (the number of visitors, tourists, tourists nights, or rooms in the destination as a percentage of the same number on a national level),

- The degree to which the destination is visited by international visitors,

- The high season period.

4.3.1   Urban destinations

Based on Table 20, it is clear that **urban destinations attract high numbers of tourists and day visitors.** Examples of cities with very high visitor numbers are Copenhagen (8.1 million overnights and 7.4 million day visitors), Dublin (9.6 million overnights), Lisbon (11.2 million overnights), Lucerne (1.3 million overnights and 8.2 million day visitors), and Stockholm (9. 6 million). This translates into high TDRs as a large number of visitors is concentrated in a relatively small geographical area. As residents make use of the same area, this creates the potential for overcrowding, congestion, tensions, and other issues associated with overtourism. In this sense, a high TDR is an important signal.

The TDRs are particularly high for the cities of Copenhagen (316 tourists per km^2 per day) and Lucerne (898 tourists per km^2 per day). It should be noted, however, that these were the only two cases for which the number of day visitors was known and could be used in the calculations. If these numbers were known for the other urban cases as well, their TDRs would be substantially higher. Therefore, for the TDR to truly function as a signal of (potential) overtourism, it is important that the underlying statistics are reliable, complete and comparable.

The TPRs of the urban destinations are relatively low, with the exception of the (smaller) city of Lucerne (32.5). Lower TRPs could be expected given that cities are populated, leading to a lower ratio of tourists to residents. Tourists are unlikely to become the dominant group in the population, at least not in a quantitative sense and on the level of the entire city. The average TDRs and TPR for the 9 urban destinations[24] are 221 and 6.3, respectively. Table 20 in Annex III shows the TDR and TPR for the four types of cases.

4.3.2   Heritage & Attraction destinations

Most of the case studies included in the category Heritage & Attractions are located in a city of substantial size (with the exceptions of Echternach, Giethoorn, and Machu Picchu). For all of these, visitor numbers, included in Table 20 in Annex III, are related to the whole municipality in which they are located, and the TPRs and TDRs are also calculated on the whole municipality level. Among this group, several cities with a high TDR were found, which include: Bruges (140.0), Prague (99.4), Salzburg

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[24]   In the cases of Budapest and Rio de Janeiro, the number of tourist nights was not known, making it difficult to estimate the number of tourists per km^2 and per inhabitant *per day*, i.e., the TDR and TPR. On average, tourists stay in a city for 2-3 nights, and this was the number that was used to translate the number of tourists into the number of days they were present in the destination. The same method was applied for the cases of Bagan, Tallinn Old Town, Warsaw historical centre, and Turkish Riviera.

(396.3), Tallinn (117.7), Venice (158.4), and Warsaw (175.3). The case of Vatican City stands out as receiving an enormous number of visitors (11 million) for its small size (0.44 km^2), leading to a TPR of 68,490. These figures greatly depend on the definition of the city size in km^2. In some cases the affected city size (for instance only the old inner city) is used in others the area of the whole city/municipality that may even include large stretches of rural areas and villages close to the city. Also, it's possible that in a huge city tourists are concentrated on just a few km^2 where the attractions are. This all makes it difficult to define indicators that are standardised for all destinations and provide a singular threshold for overtourism.

Table 11: **The tourism density rate (TDR, number of visitors per km^2 per day) for each type of destination and the average tourism penetration rate (TPR, number of visitors per 100 inhabitants per day)**

	Average TDR	Average TPR
Rural	41.0	N.A.
Heritage & Attractions	104.3[25]	12.0
Urban	221.4	6.3
Coastal & Islands	306.3	279.4

Source: elaborations of the authors based on the local statistics used for description of the case studies (please see Annex IV for all references per case study)

4.3.3 Coastal & Islands destinations

Within the category Coastal & Islands, there are a number of cases with a high TDR (i.e., Juist Island, Maya Bay, Santorini, and Cinque Terre) and/or a high TPR (i.e. Geirangerfjord, Ayia Napa, Juist Island and Santorini). Both the average TDR and the average TPR are relatively high (306.3 and 279.4, respectively). This combination puts these destinations at a serious risk of overtourism. Given the numerical dominance of tourists, the services and facilities they require and the high demands in relation to the available limited space, there is a risk of marginalizing the residents and creating a situation where their specific needs are no longer addressed.

4.3.4 Rural destinations

In the Rural case studies, the TPR is only known for Cinque Terre and Bled (the other cases do not have any residents), while the average TDR is the lowest of the four categories (41.0). The large range of TDRs and TPRs is also showing that the threshold to reach a state of overtourism varies significantly in the different types of destinations and case studies. Furthermore, it is clear that a high absolute number of visitors per inhabitant and/or per km^2 is certainly not the only cause of overtourism. The TPRs are relatively low for cities and the TDRs are relatively low for rural areas, which does not mean that these regions do not face overtourism. Nevertheless, the TDR or DPRs are an important sign and can give an indication of the type of problems a destination faces (as will be further discussed in section 4.4), as long as one takes into consideration the type of destination and the quality and comparability of the underlying statistics.

Table 20 in Annex III also provides information about the degree to which tourism is concentrated and the degree to which the cases receive international visitors. In several of the case studies presented in this study, it was found that these are the tourism hotspots of their respective countries. For instance,

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[25] Excluding the extreme case of Vatican City.

Riga, Vilnius, Ayia Napa, and Bled all accommodate more than 80% of the tourists or tourist nights of their respective countries. Furthermore, where a pronounced high season corresponds with the European summer period, this situation attracts the largest number of tourists. The exception is Rovaniemi (i.e. Santa Claus Village), where tourists are attracted in the European winter season, especially prior to and during the Christmas period.

4.4 Impacts of overtourism based on the case studies

Table 12 presents an overview of the negative types of impact emerging from impacts of overtourism, with related abbreviations and explanations. The table is based on section 2.5.

Table 12:   Impacts of overtourism (codes and descriptions)

Abbreviation	Type of impact
ENVIRONMENTAL IMPACTS	
ENV-CONG	Overcrowding of infrastructure (**congestion**), facilities and (commercial) activities
ENV-CROW	**Overcrowding** at attractions, including natural, historical, and architectural sites
ENV-POL	Strong/noticeable contribution to **pollution** of water, land, air and noise, and/or solid waste disposal problems
ENV-DAM	**Damage** to natural, historical and architectural sites
ENV-VPOL	**Visual pollution**, related to the aesthetics of the tourism infrastructure, facilities and activities
ENV-INFR	Tourism-generated investments in **tourism-specific infrastructure** impair the investments in infrastructure needed by residents and the wider destination community
EC-INFL	**Inflation** and/or reduction of the availability of goods, services, and factors of production for other sectors and functions (such as **industry, agriculture, and housing**), possibly leading to exodus of residents
ECONOMIC IMPACTS	
EC-INFR	**Degradation of commercial** infrastructure and **activities specifically directed at residents**
EC-IMAG	**Degradation of destination image** (in the case of negative visitor experiences)
EC-DEP	**Economic dependence on tourism**, including being strongly impacted by seasonality and the degradation of other sectors/types of employment
EC-ACCS	Crowdedness leading to a reduction of **accessibility**
SOCIAL IMPACTS	
SOC-MARG	**Marginalisation** of resident population (excessively high number of tourists per resident)

SOC-CRIM	Degradation of (perceived) **safety** due to increased crime and violence and problems related to uncivilized behaviour, alcohol usage, prostitution, gambling, and drug trafficking
SOC-RES	**Spread into / touristification of / transformation of former residential neighbourhoods**
SOC-INFR	**Degradation of (social) infrastructure and facilities specifically directed at residents**
SOC-HOST	High possibility of misunderstanding, leading to varying degrees of **host/visitor hostility** (for instance, social conflicts and protests), more pronounced with higher 'exotic' visitor shares
SOC-MOD	**Modification of events, activities, and architectural and historical sites** to accommodate visitors and based on commercial interest, diminishing authenticity
SOC-TRAD	**Relinquishment/weakening of cultural traditions, values and moral standards** leading to a loss of community spirit and pride and a loss of cultural identity

Source: elaborations of the authors

Table 13 presents an overview of the impacts identified in the case studies. The numbers indicate the percentages of cases in which a certain type of impact occurs. The last row of percentages shows the overall percentages for all 41 cases. Of all the cases, 51% deal with environmental pollution. The second row shows the percentages for the Urban cases, the third for Heritage & Attractions, and so on. Of the social impacts, for example, marginalisation of the resident population occurred in 44% of the Urban cases.

The impact types are ordered from left to right based on their overall occurrence in the cases. Within the environmental category, for example, the impact type occurring in most cases (68%) is congestion. The dark grey shading indicates percentages that are particularly high (≥ 50%)

It is important to note that the percentages are based on the presence of impacts in the available literature on the cases, as identified during our investigation. The absence of an impact from the case study description does not mean that an impact does not appear; it is just not obvious from the literature. The analysis below should be considered in this light.

Table 13:   Percentage of cases in which impacts occur

	Environmental impacts						Economic impacts					Social impacts						
	ENV-CONG	ENV-CROW	ENV-POL	ENV-DAM	ENV-VPOL	ENV-INFR	EC-INFL	EC-INFR	EC-IMAG	EC-DEP	EC-ACCS	SOC-MARG	SOC-CRIM	SOC-RES	SOC-INFR	SOC-HOST	SOC-MOD	SOC-TRAD
Urban	44	44	22	11	0	11	44	44	11	0	0	44	22	56	44	22	11	0
Heritage & Attractions	80	60	27	20	7	13	60	33	27	0	20	40	60	27	20	20	20	0
Coastal & Islands	70	50	90	70	20	0	50	30	50	30	20	60	40	20	20	10	10	30
Rural	71	100	86	86	29	14	0	14	43	43	0	29	14	14	0	0	0	0
Overall	68	61	51	41	12	10	44	32	32	15	12	44	39	29	22	15	12	7

Of the 18 types of impacts listed, only three are found in at least half of all cases (> 50%). These are overcrowding of (transport) infrastructure (68%), overcrowding of (tourism) sites (61%) and pollution- or waste-related problems (51%). All of these factors belong to the category of environmental impacts.

Overcrowding of (transport) infrastructure is experienced across all destination types but is especially prominent in the Heritage & Attraction cases (80%). The lowest percentage for this impact (44%) is found in the Urban settings. In the Heritage & Attractions cases, overtourism is often blamed for congestion of (transport) infrastructure, caused by large numbers of tourists travelling to and from specific tourism hotspots. Additionally, in Coastal & Islands and Rural settings, crowding of (transport) infrastructure is present in many cases. Here, tourists may cause pressure on infrastructure not built for large volumes.

Overcrowding at natural, historical, and architectural sites also occurs across all destination categories (61% of all cases), but it occurs most strongly in Rural cases (100%). Pollution issues were identified in 51% of all cases. These are most important in Coastal & Island and Rural cases and are much less important in Urban and Heritage & Attractions. Although tourism in an Urban context is likely to cause pollution as well, the relative number of tourists (in comparison to locals, i.e., a lower TPR) makes this a much more prominent feature of overtourism in the Coastal & Islands and Rural cases. Furthermore, in these cases, pollution might occur in locations that are more vulnerable, such as forests, beaches, lakes and other natural areas.

The fourth type of environmental impact (ENV-DAM - damage to natural, historical, and architectural sites) appears to be most prominent in the Coastal & Islands and Rural cases. In some of these cases, this may be related to the fact that tourism occurs in highly vulnerable locations. In some Heritage & Attractions cases, this problem also emerged. Here, one could think about tourists causing damage to historical sites as a consequence of inappropriate behaviour or simply because of the number of people entering a site. Overall, this is an issue in 41% of all cases.

In relation to the economic impacts, inflation or reduction of the availability of goods and services is seen in all categories (44% of all cases) except for Rural. In most Rural cases, tourism occurs at a location where there are fewer (than in Urban settings) or no residents. Tourists may not necessarily reside in

the rural location itself but rather in an adjacent Urban location. Their activities may be (geographically) separated from the activities of the residents and they may buy goods and services to contribute the local rural economy. Therefore, residents are less likely to be affected by the tourists' presence. Although the outcome is clear for our 41 case studies, it is worth noting that there are Rural tourism destinations where tourism has created economic inflation and access issues. Examples include the Tuscan or Apulian countryside of Italy. In the case of Heritage & Attractions and Coastal & Islands, the activities of tourists take place close(r) to the daily lives of the residents; here, tourism could lead to an increase in the price level and/or competition for some goods and services between tourists and residents. The residents will notice this effect, especially when tourism is seasonal. In the case of Coastal & Islands, the relative presence of tourists (represented by a high TPR) can create substantial upward pressure on prices.

The risk of degradation of infrastructure, facilities, and (commercial) activities specifically directed at residents (32% overall) is present in only one Rural case (14%), Cinque Terre. As explained above, tourism in the rural cases is, at least in a geographical sense, less intertwined with the daily lives of the residents. In 32% of all cases, the image of the destination as perceived by tourists is affected by negative impacts of overtourism impacts. Especially in the Coastal & Islands cases, this is a prominent feature (50%). Of the social impacts, marginalisation of the resident population occurs throughout all destination categories (44% of all cases) but is particularly present in Coastal & Islands cases. Degradation of (perceived) safety and antisocial behaviour, present in 39% of all cases, is mostly a Heritage & Attraction problem (60% of cases). Spread into residential neighbourhoods (29% overall) is generally not a Rural case issue (present in only one case, or 14%) but is experienced in more than half of the Urban cases (56%). Words such as touristification and gentrification are used to describe the processes at play in these locations.

Figure 18 below shows the type of impacts occurring in each case study. The figure indicates that in the Urban cases, socio-cultural impacts prevail. In light of the above discussion, this should not come as a surprise. In the Heritage & Attraction cases, the most frequently identified impacts were environmental, closely followed by social impacts. Economic impacts were identified somewhat less often. In the Coastal & Islands cases, environmental impacts dominated, although there were also many economic and social issues identified. This indicate therefore that this type of destination is particularly sensitive to many different types of overtourism impacts, which require a broad range of measures (explored further in the next section). In the Rural cases, it is clear that environmental concerns dominate, which is not a surprising conclusion. Overall, the negative environmental impacts of overtourism were identified most often and the negative economic impacts of overtourism were identified least.

Figure 18:   Overview of the impacts occurring in all 41 overtourism cases
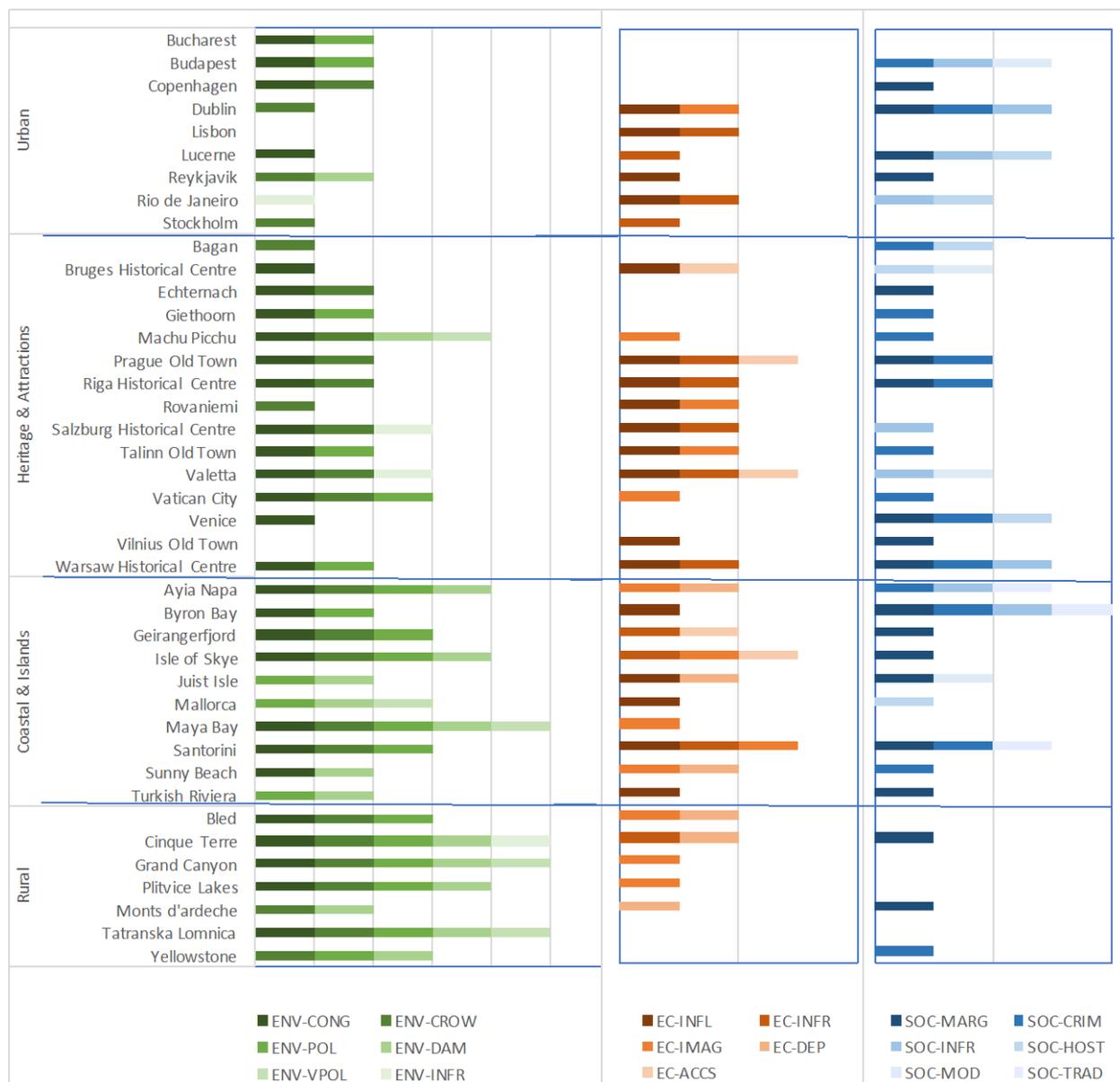
Source: case studies

Table 14 is comparable to Table 13 on page 90, except that focus is on the 29 cases from the EU. It is clear that excluding the cases outside of the EU does not lead to significant differences in the percentages. Some of the percentages are slightly higher (and therefore there are more percentages ≥ 50%), which is because each category now includes fewer cases. Also, at the lower percentages, the overall order is not anymore exactly the same (e.g. ENC-VPOL and ENV-INFR swap places. But this and the other differences mentioned do not affect the conclusions discussed above.

Table 14:   Percentage of cases in which impacts occur (only EU cases)

	Environmental impacts						Economic impacts					Social impacts						
	ENV-CONG	ENV-CROW	ENV-POL	ENV-DAM	ENV-VPOL	ENV-INFR	EC-INFL	EC-INFR	EC-IMAG	EC-DEP	EC-ACCS	SOC-MARG	SOC-CRIM	SOC-RES	SOC-INFR	SOC-HOST	SOC-MOD	SOC-TRAD
Urban	50	50	33	0	0	0	33	33	17	0	0	33	33	50	33	0	17	0
Heritage & Attractions	83	50	25	17	0	17	75	42	17	0	25	50	50	33	25	17	25	0
Coastal & Islands	67	50	83	83	17	0	50	33	67	50	17	50	50	17	17	17	17	33
Rural	80	100	80	80	20	20	0	20	40	60	0	40	0	20	0	0	0	0
Overall	69	59	48	41	7	10	48	31	31	21	10	48	38	34	17	10	14	7

Source: elaborations of the authors

4.5   Measures taken by local authorities

Table 15 below presents an overview of overtourism measure categories. The list was created by reviewing the measures as included in the case studies and generalising these to meaningful categories.

Table 15:   Overview of measures as found in the 41 cases

Measure code	Measure category description
MS 1	Laws and law enforcement directed at tourists (e.g. related to alcohol and drug consumption, forbidding access to certain locations/at certain times)
MS 2	Distributing tourists to other places, such as via promotion, new attractions, better transportation options, and tours
MS 3	Increasing capacities of the destination to deal with higher numbers of people by e.g. improving traffic management, security measures and waste management
MS 4	Increasing prices (at specific times, places or for specific groups), e.g. via taxation, used to mitigate negative impacts
MS 5	Reducing seasonality (via promotion and new attractions)
MS 6	'Green measures' such as eco-certification, environmental taxes (payable by tourists or accommodation providers), green fuel, and green buildings
MS 7	Stop certain developments; prevent uncontrollable development by measures such as zoning systems, laws, and stops on hotel and Airbnb capacity extensions.
MS 8	Improve stakeholder involvement in tourism marketing and development

Measure code	Measure category description
MS 9	(Real-time) information for tourists on, e.g. crowdedness, transport options, and other times to visit
MS 10	Promoting high-quality tourism (adjusting the tourism offers and attracting different types of tourists)
MS 11	Stimulate developments directed at residents by, e.g. safeguarding availability of affordable housing, shops catering to residents and improved living working conditions in tourism
MS 12	(Dynamic) caps on access to the destination / attraction
MS 13	Less / No promotion
MS 14	Awareness campaign to prevent / stimulate certain behaviour (directed at tourists)
MS 15	Improved monitoring
MS 16	Conduct research

Source: elaborations of the authors

Table 16 below presents an overview of the measure categories implemented to address overtourism, as identified in the case studies. The numbers indicate the percentage of cases in which a certain type of measure is used. The last row of percentages shows the overall percentages for all 41 cases. Of all the cases, 49% are working with laws and law enforcement directed at tourists (MS1). The first row shows the percentages for the Urban cases, the second one for Heritage & Attractions, and so on. Measure 2, distribution visitors to other places, for example, occurred in 44% of the Urban cases. As seen from the table, the measures are ordered from 1 to 16 based on their occurrence in the cases. The grey shading indicates percentages that are particularly high (≥ 33%).

Table 16:   Percentage of cases in which measures are used (n = 41 cases)[26]

	MS1	MS2	MS3	MS4	MS5	MS6	MS7	MS8	MS9	MS10	MS11	MS12	MS13	MS14	MS15	MS16
Urban	44	44	44	11	11	11	11	11	0	22	22	0	11	0	0	0
Heritage & Attractions	60	20	33	20	13	13	27	20	20	7	7	7	0	13	0	0
Coastal & Islands	40	50	30	40	40	30	10	0	0	20	10	10	20	0	0	0
Rural	43	29	29	0	0	14	14	29	29	0	0	29	0	14	14	14
Overall	**49**	**34**	**34**	**20**	**17**	**17**	**17**	**15**	**12**	**12**	**10**	**10**	**7**	**7**	**2**	**2**

Source: the case studies

Table 16 clearly demonstrates the relatively widespread use of measures 1 to 3. This refers to the cases in total and to the four categories of cases. Measures 1 to 3 involve (1) limiting the number of people in hotspots, (2) ensuring that visitors respect local rules, and (3) increasing the capacity to deal with visitors. Only for the Rural cases are the latter two measures used slightly less often, but they still apply to 29% of the cases.

Measures 4 (price incentives) and 5 (reducing seasonality) are used in more than 33% of the Coastal & Islands cases, while measure 6 (green measures) is used in 30% of these cases. The broader range of measures used in Coastal & Islands is a reflection of the broader range of impacts these destinations face. Furthermore, the application of some measures might be possible because this category includes locations that are smaller and more clearly delimitated and whose access can be monitored and controlled. This makes it possible to target measures at specific locations and target groups, which can be difficult in the case of cities or large rural areas. In the above line of reasoning, it should be noted that the range of measures used in the rural cases seems quite varied (with five different types of measures used in 29% of the cases), but that 29% refers to only 2 cases.

Figure 19 below shows the occurrence of each measure as a percentage of all measures taken. The importance of Measures 1 to 3 – representing almost 50% of all measures taken – is confirmed.

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[26]   The numbers in this table are minimum values because this study's methodology mainly uses official reports and scientific literature but not local sources, for instance from news outlets.

Figure 19: Overview of frequency of occurrence of measures found in the 41 case studies
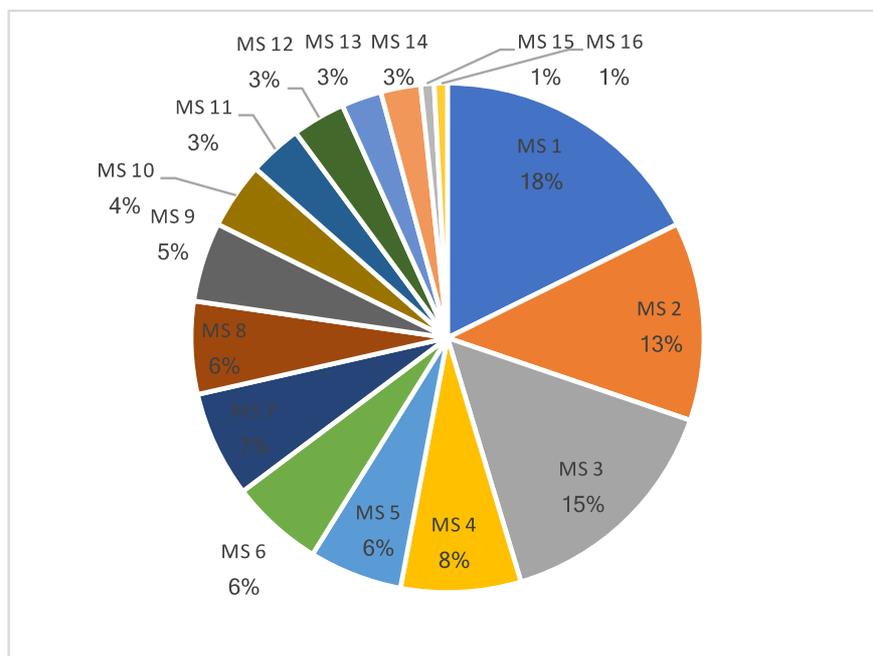
Source: the case studies

Table 17 below is comparable to Table 16 on page 95, except that it is based only on the 29 cases from the EU. Contrary to the case for the impacts, the comparison of Table 16 and Table 17 shows some important differences in the percentages. The main difference is that the percentages of measures taken in EU destinations in a state of overtourism are generally higher than for all 41 cases of the world. The conclusions discussed above for all 41 cases do not change markedly, with the exception of the importance of eco-certification (MS6) and a stop to certain developments (MS7) for Heritage & Attraction-type destinations and for Coastal & Islands. Additionally, MS10 (promotion of high-quality tourism) and MS11 (stimulate certain developments) are now relevant in Urban destinations, and the former is relevant in Coastal & Islands.

Table 17:   Percentage of cases in which measures are used for the European cases (n=29)

	MS1	MS2	MS3	MS4	MS5	MS6	MS7	MS8	MS9	MS10	MS11	MS12	MS13	MS14	MS15	MS16
Urban	67	50	33	17	17	17	17	17	0	33	33	0	0	0	0	0
Heritage & Attractions	67	33	50	25	17	17	33	33	25	8	8	0	0	8	0	0
Coastal & Islands	50	33	33	33	50	33	17	0	0	33	17	17	0	0	0	0
Rural	20	0	40	0	0	20	20	40	20	0	0	20	0	0	20	20
Overall	**49**	**34**	**34**	**20**	**17**	**17**	**17**	**15**	**12**	**12**	**10**	**10**	**7**	**7**	**2**	**2**

Source: elaborations of the authors

Figure 20 presents an overview of the measures per case. In this table, there are three cases in which no measures have been implemented: Warsaw, Rio de Janeiro, and Bucharest. Here, policies still favour tourism growth and/or the responsible stakeholders have not been able to formulate or implement overtourism measures. Additionally, Lucerne, Turkish Riviera and Tatranska Lomnica all respond to overtourism only by increasing the capacity of accommodation and infrastructure.

Figure 20: **Occurrence of measures in all 41 cases**
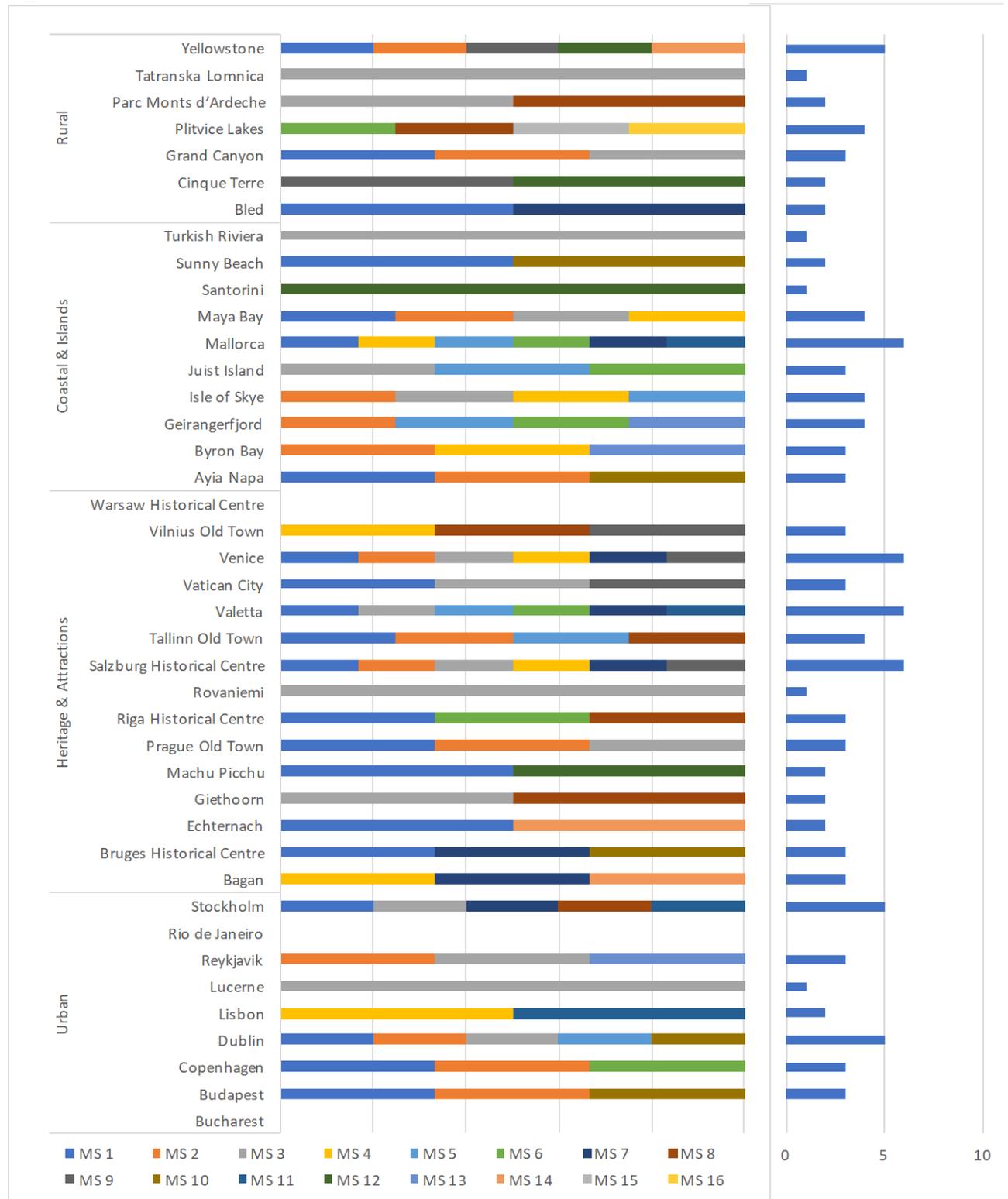
Source: the case studies

Note: colours provide distribution over measure categories; the blue lines indicate the total number of measures taken.

4.6   Best practices

The methodology applied to identify and analyse cases was not aimed at the identification of the best practices. Cases were selected where overtourism symptoms are present, not cases where the phenomenon has successfully been abated. Nonetheless, in a few cases there are sources commenting upon the success of measures taken at the local level. In **Bled (Slovenia)**, the 2009-2020 Municipal Development Strategy is considered successful in the sense that the measures foreseen there prevented a collapse of the social and environmental situation. In another case, **Cinque Terre (Italy)**, sustainability oriented policy measures led to environmental conversation. This is in spite of both destinations dealing with a relentless increase of the number of visitors. In **Santorini (Greece)**, a concrete measure has been a daily cap on cruise passengers, which seems to have been effective in limiting the number of one-day cruise visitors. Copenhagen, Riga, Stockholm and Vilnius are considered as cities that have been quite effective in tackling overtourism. **Copenhagen (Denmark)** uses, among other things, a quite aggressive redistribution strategy (spreading tourists across the city). The municipality also prohibits the establishment of new restaurants in parts of the city, created 'silent areas' in residential neighbourhoods, has a bicycle friendly transportation system. Finally, it strongly increased the eco-certification of hotel rooms and the uptake of green and sustainability initiatives by the tourism industry. In **Riga (Latvia)**, particular attention to the environment led the city centre to be widely considered the cleanest in Europe, while overtourism impacts and related issues have been reduced through specific interventions, e.g. stricter regulations to fight alcohol and sex tourism. According to the city of **Stockholm (Sweden)** "just about everything that happens in Stockholm does so with sustainability in mind". To this end, tourism is included as well. The success of Stockholm in countering overtourism issues depended on factors such as the involvement of a wide range of local stakeholders, traffic limitation in the city centre and the development of an effective public transport system, regulations in terms of private accommodation for tourism purposes, and sustainable urban planning in terms of green areas, water treatment, waste disposal, etc. In **Vilnius (Lithuania)**, the municipality has been active in preventing problems by e.g. utilizing volunteers, equipped with maps and multi-language info-packs, to support visitors and inform them on how to use the public transport and the cycling system, a Vilnius Mobile Tourism App for supporting tourists with information about (alternative) places that can be visited, a network of small tourism information centres spread around the city, promotion of creativity and the emersion of new ideas through continuous consultations with stakeholders and a tourist tax that is used to increase the visibility of the city, improve its international accessibility, promote conference and business tourism, and increase the number of tourist attractions.

For many other cases (such as e.g. Cinque Terre, Giethoorn (the Netherlands), Juist Island (Germany), Prague (the Czech Republic), Sunny Beach (Bulgaria), it was explicitly stated that the effectiveness of measures still had to be determined, reflecting that many measures have only recently been enacted. In other destinations, commentaries point to the lack of success of government interventions, such as e.g. the poor implementation and enforcement of policies in Bucharest (Romania), Dublin (Ireland), Santorini and Warsaw (Poland) and the failure of policies and caps to be effective in limiting the number visitors to Macchu Picchu (Peru) to an acceptable level. Finally, in some destinations (e.g. Rio de Janeiro (Brasil), Rovaniemi (Finland), Sunny Beach, Tatranská Lomnica (Slovakia) and Turkish Riviera) tourism policies and measures are (still) mostly directed towards growth of visitor numbers – thereby ignoring (potential) problems related to overtourism.

5   POLICY RESPONSES TO OVERTOURISM

> ### KEY FINDINGS
>
> - Based on the analysis conducted for the purpose of this study, **17 policy response categories** at the European level and **121 policy measures** at the destination level have been identified.
>
> - Although existing EU policies had been developed before overtourism has been formally recognised as an impact of tourism, five out of nine **general principles of EU tourism policy** were found to be very relevant for abating or avoiding overtourism.
>
> - **Current destination-level measures and policies** aim at accommodating higher volumes by spreading, building and changing tourists' inadvertent behaviours, **failing to include tourism volume and growth management**.
>
> - **Current EU tourism policies do not cover two important overtourism prevention strategies** that are applied by destinations: spreading visitors and making residents benefit from the tourism economy.
>
> - The **most popular responses to overtourism**, emerging both from the case studies and the literature, fall within the more **regular destination management practices**.
>
> - The **lack of monitoring and evaluation** makes the full policy cycle short of implementation.

5.1   Introduction

This chapter provides a summary of 17 policy response categories at the European level containing more than 121 overtourism policy measures implemented at the destination level. These measures were derived from insights as discussed in earlier chapters. Specifically, the case studies, current EU policies and the most recent literature about overtourism were key to the identification of the measures, including more concrete ones such as the 'implementation of a travel card for unlimited local travel'. The chapter provides a comprehensive list of policy measures in section 5.3.

5.2   Approach to the policy assessment

To generate the list of destination measures, four groups of sources were used. First, findings and insights from contemporary European tourism policies were used. These are general tourism policies as issued in communications by the European Commission (European Commission, 2007, 2010, 2012, 2014) and resolutions by the European Parliament (European Parliament and Council, 2011, 2015). Because the overtourism phenomenon was not acknowledged at the time the current EU tourism policies were developed, these policies are not aimed at avoiding overtourism but rather at further developing and growing tourism. However, many of them can potentially help prevent or reduce the risk of overtourism. Second, specific overtourism policies and measures were proposed by a range of very recent studies (Jordan et al., 2018; Koens & Postma, 2017; McKinsey & Company & World Travel & Tourism Council, 2017; Postma et al., 2018; UNWTO, 2018b; Weber et al., 2017), with concrete policy measures aimed at reducing overtourism, which have been considered here. Third, the case studies (please see Chapter 4) provide a review of the policies in place or planned in the 41 case study

destinations. This resulted in identification of 16 groups of measures (as discussed in section 4.5). Fourth, a 'foresight study' was performed to map additional overtourism measures, looking beyond the ones found in the first three source groups. Section 5.3 provides a summary of the results from the ETC-member state survey. Finally, measures and policies as discussed by national marketing organisations are included.

Important note to the reader: there are two listed categories of measures. The first list is based on the case studies and contains 16 destination-level measure categories. Please see Table 15 in section 4.5 for a full list. This list is far from exhaustive, but it catalogues only measures that were found to have been implemented in at least one of the case studies. Hence, we refer to these as 'measures being taken at the destinations'. The second list consists of 17 EU policy responses. These responses indicate that the EU should stimulate or assist national tourism offices and destination management organisations in implementing certain policy measures. These 17 EU policy responses are further outlined in Table 18 in section 5.4.2.

5.3 Policy inputs from the sector

The ETC survey revealed that a key precondition to the implementation of management approaches to address overtourism is that any development is measurable over time. However, as one destination outlined, there is a general lack of indicators to evaluate overtourism phenomena, or even a discussion regarding a suitable set of indicators. Furthermore, in order to assess as to whether destinations move closer to or farther away from their goals of managing overtourism, data would need to be collected on a regular basis. This is considered a precondition for the development of any strategies and management approaches.

Several destination managers also pointed out that efforts to differentiate tourist products and to better distribute arrivals in time and space – the main strategy employed by all destinations - have had limited success. For instance, where sun and sea are the main destination appeal, the idea of de-seasonalising the flows by attracting tourists outside the high season requires the development of new tourism products. A different type of problem associated with overtourism is the need for adequate supplies of fresh water and electricity to keeping pace with tourist demand. These are indeed difficult to address as, even where there are some cases of innovative management approaches, which involved for example the realisation of desalination plants in arid areas, these have proved to be inadequate due to the increase in unreliable rainfall patterns. Such innovative interventions will require financial resources, involve considerable planning efforts and may require a refocus of destination strategies from the observed tourism growth focused objectives to a more sustainable set of priorities.

Some management approaches have shown to be equally problematic as they focus on tourists' redistribution and product diversification strategies, whereby less visited areas are developed and promoted as an alternative to the main tourism hotspots. However, in such locations the impacts may be more easily felt due to either the pristine character of the areas involved or their general lack of preparedness to welcome tourists. Peripheral communities with smaller local populations may also reach states of overtourism more rapidly. Yet, all destinations answering the questionnaire highlighted their efforts in redistributing tourists in time and space, and to increase the length of the season where possible. Considerable marketing efforts had been launched to achieve this. The three main highlighted measures to address overtourism included:

1. Marketing efforts focused on seasonal distribution of tourists,

2. Prolonging of season,

3. Diversification of products to distribute tourists.

Other measures mentioned by Destination Marketing Organisations (DMOs) explicitly focused on aspects of overtourism with local relevance. For example, in order to address negative effects of transportation, the construction of bicycle tracks and the expansion of pedestrian zones were mentioned as measures currently being implemented. However, affected destinations generally acknowledged that efforts were not far-reaching enough, and that more systematic approaches to destination development were needed. Towards this goal, several destinations reported to currently being in the process of developing their "Visions" (generally, Vision 2030 including the call for sustainable development practices in line with the UN Agenda 2030), in order to agree a set of measurable management objectives and strategies a more sustainable future. It will be worth coming back to these to verify if their ambitions will be met by effective actions. A useful additional set of destination perspectives is offered by the World Tourism & Travel Council (WTTC) and provided in Annex VI, which may prove to be of interest for comparability of considered options.

5.4 EU policy response categories to overtourism

In this section, general principles of tourism policies in the EU, EU-level policy responses categories and destination-level measures are discussed with the ultimate objective of identifying ways in which overtourism can potentially be prevented, controlled and/or managed.

5.4.1 General EU tourism policy principles

The general principles listed below are taken from a report by the Tourism Sustainability Group (2007) cited by the European Commission (2007). Though more than a decade old, and not aimed at avoiding overtourism, these principles are still relevant with respect to overtourism. Specifically, principles 3 and 8 are highly relevant because they are at the core of the causes of overtourism. All the principles that follow are relevant for minimising the risk of overtourism. The most relevant ones for mitigating overtourism are highlighted in bold italics.

1. **"**Take a holistic and integrated approach - All the various impacts of tourism should be taken into account in its planning and development. Furthermore, tourism should be well balanced and integrated with a whole range of activities that affect society and the environment.

2. *Plan for the long term* - Sustainable development is about taking care of the needs of future generations as well as our own. Long term planning requires the ability to sustain actions over time.

3. *Achieve an appropriate pace and rhythm of development* - The level, pace and shape of development should reflect and respect the character, resources and needs of host communities and destinations.

4. *Involve all stakeholders* - A sustainable approach requires widespread and committed participation in decision making and practical implementation by all those implicated in the outcome.

5. Use best available knowledge - Policies and actions should be informed by the latest and best knowledge available. Information on tourism trends and impacts, and skills and experience, should be shared across Europe.

6. Minimise and manage risk (the precautionary principle) - Where there is uncertainty about outcomes, there should be full evaluation and preventative action should be taken to avoid damage to the environment or society.

7. ***Reflect impacts in costs*** (user and polluter pays) - Prices should reflect the real costs to society of consumption and production activities. This has implications not simply for pollution but for charging for the use of facilities that have significant management costs attached to them.

8. ***Set and respect limits***, where appropriate - The carrying capacity of individual sites and wider areas should be recognised, with a readiness and ability to limit, where and when appropriate, the amount of tourism development and volume of tourist flows.

9. ***Undertake continuous monitoring*** - Sustainability is all about understanding impacts and being alert to them all the time, so that the necessary changes and improvements can be made."

    Source: (European Commission, 2007, pp. 5-6; italic-bold added by the authors).

The case studies show that more than half of the measures actually taken at the destination level fall within only four categories out of 16 identified as being practised in the cases (please see Figure 20 in section 4.5). These include the following:

- Introducing laws and law enforcement directed at tourists (e.g. related to alcohol and drug consumption, access to certain locations/at certain times),

- Distributing tourists to other places, for instance via promotion, new attractions, better transportation options, and tours,

- Increasing capacities of the destination to deal with higher numbers of people by, e.g. improving traffic management, improving security measures, and improving waste management,

- Raising prices (at specific times and places and for specific groups), e.g. via taxation, are used to mitigate negative impacts.

Only two of the general EU tourism principles are covered by the four most common measure categories applied at the 41 case study destinations. These are the principle that tax should reflect the cost of impacts and the principle that limits should be set to behaviour. The category measures 'redistribution of tourists' and 'building additional capacity to tourism infrastructure and facilities' emerging from the case studies are all aimed at maximising volume growth, which seems not in line with the general principle 3 (appropriate pace and rhythm of development). Moreover, building additional infrastructure and facilities capacity potentially violates general principle 8 in combination with principle 3, as it 'stretches' limits instead of 'respecting' existing limits, and it will always provide an impulse to growth instead of finding an 'appropriate pace and rhythm'. Principles with a holistic approach (1) that involve all stakeholders (4), use best available knowledge (5), precautionary principle (6) and continuous monitoring (9) are not very common in current overtourism policy at the 41 case study destinations.

5.4.2   EU policy response categories

Policy responses are defined at the EU level and can help destination managers and lower-level governments take measures to avoid overtourism. Overtourism is a complex phenomenon. It reduces the liveability of cities and other places, and can cause environmental degradation and congestion. Existing responses and measures at the destination level are summarised in Table 18 below, which is based on the European Commission (2010, 2014); (Jordan et al., 2018); Koens and Postma (2017); McKinsey & Company and World Travel & Tourism Council (2017); Postma et al. (2018); UNWTO (2018b); Weber et al. (2017). Finally, measure categories emerging from the 41 case studies (please see section 4.5) and the results of the foresight study (section 5.2) have been added. The four sources of measures - current EU policies, literature, case studies and the foresight study - provide 17 policy responses

(groups of potential destination-level measures that may be governed by European policies). European policies should, in general, stimulate, facilitate or assist national tourism organisations and destination management organisations. Table 18 lists the short titles for the 17 European policy responses in the first column with Roman numbers[27]. Table 18 also shows the related 16 policy measures, numbered with Latin numbers, which were drawn from the case studies. The case studies only list practically applied or planned measures at the destination level, while the current European policy documents work at a higher level, and the literature and the foresight study also list potential measures even when these are not implemented anywhere. Therefore, the current list forms a broader set of measures than the case studies could deliver on their own.

5.4.3   Overview of EU policy response categories and destination policy measures

The European policy responses partly correspond with the measure categories from the 41 case studies. Table 18 below shows a general overlap of European policy response categories and case study measure categories. However, it also shows that cross-border approaches are not mentioned in the cases while these kind of actions are an element in European policy responses. Secondly, local measures like law enforcement against misbehaviour, reducing seasonality and research are missing in the European categories.

Table 18: Overview of the relationship between the 16 policy measure categories as derived from the 41 case studies and the 17 potential European policy response categories

European policy response category	Case study policy measure category (Chapter 4)
I. Spreading visitors	2. Distributing tourists to other places, for instance, via promotion, new attractions, better transportation options, and tours
II. Time-based rerouting	9. (Real-time) information for tourists on, e.g., crowdedness, transport options, and other times to visit
III Dynamic visitor itineraries	2. Distributing tourists to other places, for instance, via promotion, new attractions, better transportation options, and tours
	12. (Dynamic) caps on access to the destination/attraction
IV. Financial regulations	4. Higher prices (at specific times / places / for specific groups), e.g., via taxation, used to mitigate negative impacts
V. Uniform operational regulations	7. Stop certain developments: prevent uncontrollable development by measures such as zoning systems, laws, and hotel/Airbnb stops
VI. Developing uniform traffic regulations	3. Increasing capacities of the destination to deal with higher numbers of people by, e.g., improving traffic management, improving security measures, improving waste management
VII. Stimulate businesses actively tackling overtourism	8. Improve stakeholder involvement
VIII. Diversified economy less dependent on tourism	13. Less/no promotion

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[27]   The full descriptions can be found in Figure 21.

European policy response category	Case study policy measure category (Chapter 4)
IX. Use the "ladder of sustainable development"[28]	6. 'Green measures' such as eco-certification, environmental taxes (payable by tourists or accommodation providers), green fuel and green buildings
X. Visitor segmentation and target marketing	10. Promoting high-quality tourism (adjusting the tourism offers/attracting different type of tourist)
XI. Cross-border cooperation and alliances between destinations	n/a
XII. Make residents benefit from the visitor economy	11. Stimulate developments directed at residents by, e.g., safeguarding availability of affordable housing, shops catering to residents, and improve working conditions in tourism
XIII. Destination experiences that benefit both visitors and residents	11. Stimulate developments directed at residents by, e.g., safeguarding availability of affordable housing, shops catering to residents, and improve working conditions in tourism
XIV. Development of consistent infrastructure and facilities	3. Increasing capacities of the destination to deal with higher numbers of people by, e.g., improving traffic management, improving security measures, improving waste management
XV. Communicate with and involve visitors	9. (Real-time) information for tourists on, e.g. crowdedness, transport options, and other times to visit
	14. Awareness campaign to prevent / stimulate certain behaviour (directed at tourists)
XVI. Communicate with and involve local stakeholders	8. Improve stakeholder involvement
XVII. Responsive measures in organisation and planning	15. Improved monitoring
n/a	1. Laws and law enforcement directed at tourists (e.g. related to alcohol and drug consumption, forbidding access to certain locations/at certain times)
n/a	5. Reducing seasonality (via promotion and new attractions)
n/a	16. Conduct research

Source: elaborations of this study

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[28] The "ladder of sustainable development" can be understood as a (mandatory) approach to promote sustainable (urban) development. It consists of three steps: 1) seek spaces within urban areas that can be re-used or restructured, 2) seek 'brownfield' sites (former industrial areas, harbours, etc.) for (re)development and 3) seek 'greenfields' (agricultural lands, unbuilt sites), as a last resort. For new medium to large scale development initiatives, this stepwise ' ladder' approach can be followed and motivated (and in the Netherland*s must* be followed and motivated by law - art 3.1.6. ad 2, Bro*)* with the aim to promote reuse and restructuring and avoid unnecessary greenfield development (source: www.infomil.nl/onderwerpen/ruimte/ontwikkelingen/ladder-duurzame/)

Table 21 in Annex V lists the 121 measures gathered from a total of ten sources. These measures are provided as a good source of inspiration for destination managers when coping with overtourism. The differences in the measures provided by the four different types of sources allow us to draw some conclusions based on Figure 21 below. This figure provides an overview of where policy measures were identified and how frequently policies are mentioned in the 17 EU policy responses. The European Commission (2010, 2014) represents current EU policies (red/orange) as far as this study considers these to be relevant for mitigating overtourism. Blue shades represent scientific and grey literature. The green bars represent measures from the 41 case studies investigated in this study, and the yellow ones are from the foresight study. The results show that EU policies do not currently consider two European policy response categories: economic diversification away from tourism (VIII.) and the use of sustainability support tools (Sustainability Ladder) (IX.). EU policies could also encourage businesses to actively tackle overtourism (category VII.), form cross-border alliances (XI.) and increase resident benefits from the tourism economy (XII.). All of these policy response categories refer to more structural changes in the tourism economy, businesses and international approaches.

Figure 21: Shares of measures per source per policy response
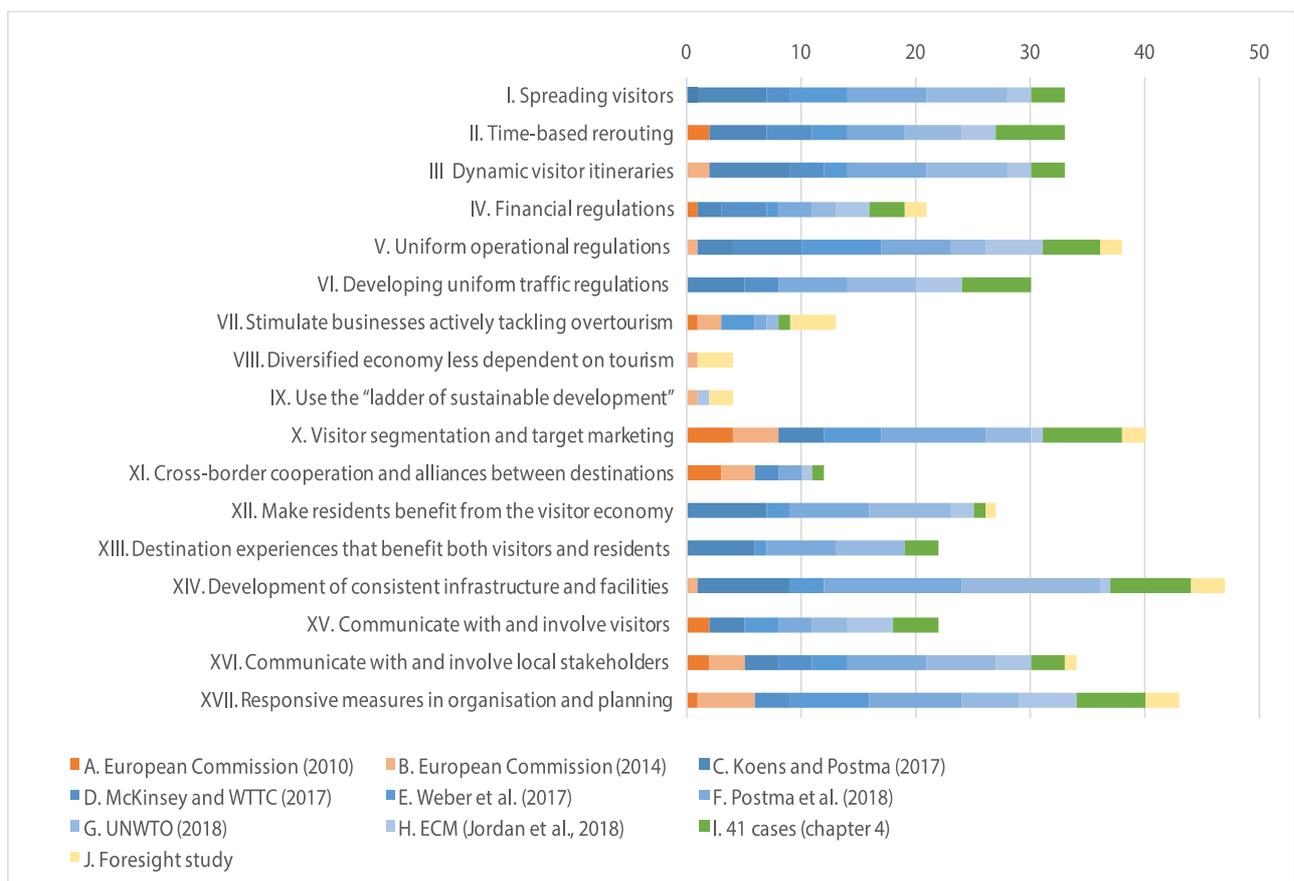
Source: elaborations of the authors

The analysis also reveals that four EU policy responses are currently not covered by EU policies but already happen in practice. These include spreading visitors (I.), developing uniform traffic regulations (IV.), making residents benefit from the tourism economy (XII.), and developing destination experiences that benefit tourists, visitors and residents (XIII.). Of these, spreading visitors is the most popular in current destination policies. The question is whether this would provide an adequate answer to the deeper causes and impacts of overtourism. The EU could attempt to provide guidelines on how and under what circumstances it could be helpful and when not to apply this measure. The

development of policies that help residents benefit more from the tourism economy may raise the acceptance threshold for overtourism. The EU could play a role here as these types of measures, though they do exist, are not yet very common. The foresight study added that making the local economy less dependent on tourism is another important policy response.

Most 'popular responses', emerging from most sources, appear to adopt a uniform operational regulating approach (V.), visitor segmentation (X.), consistent infrastructure and facilities (XIV.) and responsive measures in organisation and planning (XVII.). Interestingly, all these responses fall within the more regular destination management practices. The challenge will be to modify these practices in such a way that they become effective in abating and avoiding overtourism.

The case studies show that although a range of measures have been implemented at the destination level, none are monitored or evaluated, which makes impossible to appraise the effects and costs of such measures. This situation may be partly caused by the fact that overtourism is a relatively new phenomenon and measures have only recently started to be implemented. Additionally, the lack of reliable and established indicators makes any evaluation difficult. This is a serious issue affecting the governance of the overtourism phenomenon and the effectiveness of any policy and practice associated with it. This undoubtedly remains a gap to be addressed.

6 CONCLUSIONS AND RECOMMENDATIONS

KEY FINDINGS

- There is a **serious lack of reliable and detailed data** that hampers the effective identification of a destination's state of overtourism or the risk of *overtourism* for a destination.

- Developments should be monitored on the basis of this data, and evaluation methods and procedures be developed towards commonly accepted performance indicators.

- Although the number of destinations experiencing overtourism is generally still low, **the effects of overtourism are potentially severe**, to a degree that destinations lose their primary functions and appeal.

- There is a **need for a rebalancing of the 'growth paradigm'**, where the measure of success is not only centred on visitor arrivals, but on the value that such presence brings to a destination in terms of profitability, local employment or fair pay.

- The development of platforms such as Airbnb as entities existing largely outside the control of destinations and policymakers, as well as the revenue loss that is associated with these platforms, deserves greater attention.

- **Economic policies that improve socio-economic benefits for residents**, specifically those not directly involved in the tourism economy are needed. These might include interventions like taxing visitors so they support the cost of local infrastructure, public transport and municipal services like street lighting.

- Social policies that alleviate the burdens placed on residents are necessary. These might comprise policies, such as imposing limitation of Airbnb rental periods, a cap on bed numbers in specific areas, or efforts to better distribute tourist pressure.

- It is recommended to **set up a European Overtourism Task Force** to monitor destinations at risk of or in a state of overtourism and to report annually on trends, with recommendations on specific interventions at the macro-level.

6.1 Introduction

This chapter provides an overview of the study findings and a set of recommendations with the purpose of forging a better understanding of the overtourism phenomenon, assessing the spread and severity of the issues associated with it and identifying policies and practices to mitigate its negative effects. Section 0 lists six objectives of this research. Issues associated with the overtourism phenomenon have been assessed both qualitatively and quantitatively, and on the basis of evidences from case studies and specific destinations' practices and from current policies. Section 6.2 provides qualitative answers based on a literature review, while section 6.3 describes the significant indicators for overtourism at the NUTS 2 regional level. Section 6.4 describes the answers provided by the 41 case studies, while section 6.5 lists the main issues and recommended actions for the TRAN Committee.

6.2 Overview of the overtourism situation in the EU

The main objective of this study is to provide the Members of the TRAN Committee with a comprehensive overview of the situation in the EU. This overview not only offers a substantial set of information on the countries and destinations most affected by overtourism (please see section 6.4), but also categorises and describes the major effects of tourists' influx to EU destinations, by investigating the challenges faced by local communities, the natural and built environments and local economies, as a result of an excessive inflow of tourists. A comprehensive literature review was undertaken (please see Chapter 2). This revealed that all EU Member States are affected to a certain extent by cases of overtourism, with variable levels of severity. For instance, although the list of cases is not exhaustive, seven cases were identified in Italy, and only one in Austria. As previously evidenced, the term overtourism is relatively new. But important characteristics associated with the phenomenon, like overcrowding and elaborations on the environmental impact of tourism have a much longer history. It is worth noting that, in all cases of overtourism, there is a mismatch between tourism volumes and growth and the carrying capacity of the destination. Overtourism develops when one or more of the ecological, physical, social, psychological or economic capacities is exceeded. Most overtourism issues are related to the (negative) perception of encounters between tourists, residents, entrepreneurs and tourists because of perceived "too high numbers" of visitors at certain times and places.

The causes of overtourism are complex and emerge from reduced transport costs (both travel cost and travel time), increased income, and the concentration of tourism in certain places and times because of social media, the growth of peer-to-peer accommodation platforms and ICT hyping a small number of destinations. Reduced travel times have largely increased access for new markets where these were traditionally confined to short-haul market segments. This much broader potential market, combined with an ICT- driven tendency to concentrate tourist interests and flows, increases the risk of overtourism. Overtourism is generally associated with cities and urban locations and refers to negatively experienced encounters between tourists and residents. However, the study revealed that overtourism is also a common phenomenon in rural areas, coasts and islands, at natural and cultural heritage sites and large attractions. Apart from seven social impacts (e.g. gentrification and changes in the structure, values, and behaviour of the resident population), the study also revealed six environmental (e.g. pollution, congestion), and five economic impacts (e.g. rising prices, increasing infrastructure maintenance cost). An important indirect cause of overtourism is linked to destinations development and management approaches based on a volume growth paradigm, rather than strategies that would seek to optimise existing tourism systems.

6.3 Overtourism indicators based on the data-study

One goal of the study was to define a set of criteria to be used by policymakers to identify early symptoms and threats of overtourism in the EU, with specific attention given to capital cities as well as some of the most popular tourist destinations in the EU. As discussed in Chapter 4, results of the analysis suggest that 16 of the Member States' capitals show symptoms of overtourism. Given that the idea was to provide at least one specific case study per EU Member State and to distribute the cases evenly over the four types of destinations – Urban, Rural, Coastal & Island and Heritage & Attractions, a selection of ten capitals are included in the case studies. These results are further discussed in section 6.4.

The availability and quality of data was a major challenge encountered in the assessment. At local level, much of the data adopt incoherent definitions or are non-existent, and those available do not say much about overtourism. Even more serious is that there is no agreed set of indicators to clearly qualify and quantify the number of destinations in a state of overtourism. From the literature, it emerged that

indicators regarding density, intensity, growth, seasonality, peer-to-peer platform and social media usage were considered to be most relevant. To adopt a more coherent approach and assess a range of the mentioned indicators, the Eurostat data at the NUTS 2 regional level (290 regions) was taken as a baseline. By comparing the statistical distribution of the indicators for NUTS 2 regions, with and without destination in a recognised state of overtourism, this allowed the identification of six indicators with a statistically significant relationship. These significant indicators were:

- tourism density and intensity,
- growth of bed-nights (when combined with intensity),
- share of Airbnb accommodation,
- share of tourism contribution to GDP,
- air travel intensity, and
- closeness to airports, cruise ports and World Heritage Sites.

However, it was impossible to assign a general value or threshold to any of the indicators at which a state of overtourism is diagnosed. At this point, the definition of overtourism is still too vague, and the indicators this study developed lack well-defined thresholds to quantitatively define when a state of overtourism is reached. Still, it was possible to identify the top-15 NUTS 2 regions at high risk of overtourism (please see section 3.5). Also, this study's analyses allowed to create a checklist to attain a rough assessment of the risk of overtourism or a destination or (NUTS 2) region (please see section 3.5.3).

6.4   Case study conclusions

Chapter 4 is dedicated to 29 EU case studies and 12 additional cases from other non-EU countries. This provided an overview of the situation across different geographical areas and made it possible to identify best practices in respect to actions aimed at minimising the negative effects of overtourism. Non-EU most popular tourists' destinations were included in the study to identify comparable practices in other parts of the world. For each case, a brief report was drafted to take into account some general statistics, main impacts, measures taken and the development expected in the near future. Given the relatively novel use of the term overtourism, it appeared that almost none of the studied cases and related practices specifically referred to overtourism and its impacts. Therefore, 'best practices' could not be explored in a literal sense, but rather in a broader sense to provide a nevertheless rich set of information (please see Annex IV). For instance, the general conclusion that specific characteristics defining a state of overtourism depend on the type of destination became evident, with social impacts prevailing in Urban destinations, environmental impacts in Rural, while all three types of impacts (social, environmental and economic) characterised Coastal & Islands as well as Heritage & Attractions.

For each case, the number of tourists per 100 inhabitants (TPR) and the number of tourists per km^2 (TDR), was calculated. These numbers differed markedly between the four types of destinations. Especially, the combination of a high TPR and TDR, as in the case of destinations of the type Coastal & Islands, appeared to place a destination at a serious risk of overtourism. Most frequent impacts are overcrowding of (transport) infrastructure and of (tourism) sites, pollution and waste-related problems. On the other hand, negative economic impacts of overtourism were mentioned least. Most frequent measures (but not necessarily the most appropriate/effective) are those related to limiting the number of people at hotspots (by spreading them to other areas), making sure that visitors respect rules and regulations, and improving the capacity of the destination to deal with large number of people (by increasing capacities, efficiency of infrastructure, facilities and services). In Coastal & Islands

destinations, a broad range of measures are applied, reflecting the broad range of impacts these destinations are confronted with.

Regarding non-EU destinations, it emerged that the differences between EU and non-EU in terms of overtourism occurrences are small. Very similar patterns of impacts and measures were found.

6.5 Key issues likely to be of concern for EP TRAN Committee

The ultimate goal of the study was to suggest measures to be considered by policymakers particularly at EU level, to assist Member States, regional and local authorities in implementing more coordinated and effective tourism management policies and practices. In order to do this, the study focused on key issues likely to be of concern to Members of the TRAN Committee and possible broad actions that might be taken by the TRAN Committee, including follow-up with the European Commission and/or other major stakeholders. However, it needs to be noted that the overtourism only emerged in its current worrying form a couple of years ago. Therefore, the issue is still at the very beginning of the policy cycle. The policy-cycle theory states that policies develop through the following stages: agenda-setting, policy formulation, decision making, implementation and evaluation (Wegrich & Jann, 2006). As this study reveals, overtourism has just started agenda-setting, certainly at the EU-level. Therefore, it is not possible to provide much more than indication of directions for policy-making in the area of overtourism. Systematic research is still too scarce to be more precise and definitive. The following recommendations, therefore, had to be kept rather vague and theoretical. Subsequently, the main suggestion is to continue more systematically and thoroughly researching the phenomenon.

From the analyses in this study, the following key issues emerged:

I. A serious lack of reliable and detailed data hampers the effective identification of a destination's state of overtourism or the risk of overtourism for a destination. Current Eurostat tourism statistics fail to provide all relevant data.

II. Although the number of overtourism destinations is generally still low, the effects of overtourism are potentially severe, to a degree that causes cities to lose their primary function as residence. In addition to this, both natural and cultural heritage sites are at risk of losing their appeal as desirable tourism destinations due to the emergence of overtourism.

III. Many authorities manage their destinations based on a growth-paradigm, valuing growth of visitors' number and are unable to identify and mitigate states of overtourism.

IV. The role of ICT, social media and peer-to-peer platforms are often referred to as amongst the primary causes of overtourism, as they accelerate the growth and the temporal and geographical concentration of tourism flows and volumes in certain locations. This remains a poorly addressed issue both in the professional and the scientific literature.

Therefore, Members of the European Parliament may consider the following recommendations for action:

- **Promote overtourism monitoring and identification of its evaluation methods and procedures**. Such methods should include not only volume and tourism density/intensity measures, but also measures related to data collection on the number of tourists and day-visitors, Airbnb and other new forms of accommodation and transport mode shares.

- **Advocate inclusion of additional overtourism relevant statistics in the current Eurostat tourism statistics monitoring system.** It is desirable to increase the level of detail within economic indicators such as revenues from tourism to the NUTS 2 and NUTS 3 levels (now at

national level). Furthermore, the scope of tourism statistics should be extended from overnight-stays to also include day-visitor accounting. Important indicators to be included are bed-nights, visitors-days, length of stay, capacity of and revenues from all visitors specified to not only conventional tourism accommodation and attractions, but also peer-to-peer accommodation like Airbnb, transport mode use including the share of air transport arrivals, and cruise tourism flows/arrivals.

- **Encourage rebalancing of a 'growth paradigm' with a 'regional development paradigm'**, where the measure of success is not only centred on visitors' arrivals measures, but on the value that such presence brings to a destination. Destinations do not necessarily need to increase day visitor numbers or guest nights to increase tourism's economic benefits, as optimisation strategies focusing on extending length of stay or encouraging spending have so far remained largely unexplored. Growth of tourist arrivals, particularly those by air and cruises, will also have to be questioned from a climate change viewpoint. There is much evidence that continued growth in arrivals, along with the expansion of airports, will make it more difficult to meet climate change mitigation objectives that already appear unattainable in the transport sector.

- Emphasise that tourism management strategies of destinations should rather focus on the management of tourism volume (growth) rather than only on distribution of visitors over space and time. Destination policies should aim at better monitoring commonly agreed performance indicators. Destinations should also identify and promote good practice, and support national legislation designed to address the overtourism phenomena.

- Encourage the development of a dedicated set of EU policies aiming at alleviating the vulnerability of 'Coastal & Island' destinations and 'Heritage & Attractions' addressing the lack of attention towards these areas compared to the general attention given to urban areas. These EU policies should be based on studies assessing overtourism in these types of destinations with a focus on environmental carrying capacity and way to govern large numbers of visitors. One issue causing overtourism is the strong competition between destinations strengthening the growth paradigm in most DMO's. Therefore, some form of cooperation that helps to distribute visitors within the carrying capacity of these destinations, is recommended.

- **Support a thorough assessment of the role of social media, digital and peer-to-peer platforms in causing overtourism**. There are signs (confirmed also by the analysis of this study) that these lead to the concentration of tourist flows, but further research is needed to better understand these interrelationships. This is necessary to better **govern sharing economy platforms,** with regard to their effects on tourist flows (concentration in certain locations; decline in length-of-stay), competition, and tax evasion.

- Stimulate identification of actions at various levels that look beyond the assumption that overtourism is directly linked to seasonality, and that decentralisation, spreading of visitors and decongestion policies would provide the solutions. These measures may relocate the problem to another area, but they do not solve the underlying problem of constantly growing tourist arrival numbers above the carrying capacity of destinations.

- **Emphasise the need to develop economic policies,** in the form of taxes or incentives and by way of improving economic benefits for residents, specifically those not directly involved in the tourism economy.

- **Advocate setting up of a European Overtourism Task Force** to monitor destinations at risk of or in a state of overtourism and to report annually on trends, with recommendations of

specific interventions at the macro-level. The Task Force should involve main stakeholders from the tourism (i.e. public, private and third sector) and the transport sectors (i.e. automotive, air transport, rail transport and cruises), and residents' organisations. This Task Force should facilitate a constructive dialogue between all parties involved and facilitate their involvement in the development of an effective monitoring system and identification of innovative and effective governance solutions. This Task Force could be seen as a model to be replicated at the destination micro-level.

- Encourage national governments in implementing regulations that restricts official license in the housing for touristic use in congested areas.

- Propose the creation of executive boards in Destination Management Organisations, to include residents' representing associations, neighbourhoods' entities and grassroots organisations, and to enable them to proactively contribute to policies' decision-making forums, particularly focused at tourism destinations' planning and management.

REFERENCES

Absher, J. D., & Lee, R. G. (1981). *Density as an incomplete cause of crowding in backcountry settings*. Leisure Sciences, 4(3), 231-247.

Airbnb. (2018). *About Us*. Retrieved from https://press.airbnb.com/.

Alazaizeh, M. M., Hallo, J. C., Backman, S. J., Norman, W. C., & Vogel, M. A. (2016). *Crowding standards at Petra Archaeological Park: a comparative study of McKercher's five types of heritage tourists*. Journal of Heritage Tourism, 11(4), 364-381. doi:10.1080/1743873X.2015.1113977.

Alegre, J., & Garau, J. (2010). *Tourist Satisfaction and Dissatisfaction*. Annals of Tourism Research, 37(1), 52-73. doi:10.1016/j.annals.2009.07.001.

Andriotis, K. (2004). *Problems of island tourism development: The Greek insular regions*. In B. Bramwell (Ed.), Coastal mass tourism: Diversification and sustainable development in Southern Europe (pp. 114-??). Clevedon: Channel View publications.

Arnberger, A., & Brandenburg, C. (2007). *Past on-site experience, crowding perceptions, and use displacement of visitor groups to a peri-urban national park*. ENVIRONMENTAL MANAGEMENT, 40(1), 34.

Baccianella, S., Esuli, A., & Sebastiani, F. (2010). *Sentiwordnet 3.0: an enhanced lexical resource for sentiment analysis and opinion mining*. Paper presented at the Lrec.

Bakker, M., & Twining-Ward, L. (2018). *Tourism and the Sharing Economy: Policy & Potential of Sustainable Peer-to-Peer Accommodation*. Washington, D.C.

Balmford, A., Green, J. M. H., Anderson, M., Beresford, J., Huang, C., Naidoo, R., Walpole, M., & Manica, A. (2015). *Walk on the Wild Side: Estimating the Global Magnitude of Visits to Protected Areas*. PLOS Biology, 13(2), e1002074. doi:10.1371/journal.pbio.1002074.

Bastiaansen, M., Lub, X., Mitas, O., Jung, T., Passos Acenção, M., Han, H., Moilanen, T., Smit, B., & Strijbosch, W. (2019). *Emotions as core building blocks of an experience*. International Journal of Contemporary Hospitality Management, 31.

Bateman, I. J., Abson, D., Beaumont, N., & Darnell, A. (2011). *Economic values from ecosystems UK National Ecosystem Assessment: Understanding Nature's Value to Society* (Technical Report). Cambridge.

Bell, C. M., Needham, M. D., & Szuster, B. W. (2011). *Congruence Among Encounters, Norms, Crowding, and Management in a Marine Protected Area*. Environmental Management, 48(3), 499-513. doi:10.1007/s00267-011-9709-1.

Bellini, N., Go, F. M., & Pasquinelli, C. (2016). *Urban Tourism and City Development: Notes for an Integrated Policy Agenda* Tourism in the City (pp. 333-339): Springer International Publishing.

Boissevain, J. (1977). *Tourism and development in Malta*. Development and Change, 8(4), 523-538.

Boissevain, J. (1996). *Coping with tourists: European reactions to mass tourism* (Vol. 1). Providence, Oxford: Berghahn Books.

booking.com. (2018). *About Booking.com™*. Retrieved from https://www.booking.com/content/about.en-gb.html.

Bryon, J., & Neuts, B. (2008). *Crowding and the tourist experience in an urban environment: a structural equation modeling approach*. Retrieved from

http://www.steunpunttoerisme.be/main/files/nieuwsbrief/oktober_2008/paperNVVS_bart_n
euts.pdf.

Budruk, M., Schneider, I. E., Andreck, K. L., & Virden, R. J. (2002). *Crowding and Satisfaction Among Visitors to A Built Desert Attraction*. Journal of Park & Recreation Administration, 20(3), 1-17.

Burgen, S. (2017). *Barcelona anti-tourism activists vandalise bikes and bus* Retrieved from https://www.theguardian.com/world/2017/aug/01/barcelona-anti-tourism-activists-vandalise-bikes-and-bus.

Butler, R. W. (1980). *The concept of a tourist area cycle of evolution: implications for management of resources*. The Canadian Geographer/Le Géographe canadien, 24(1), 5-12.

Central Statistics Office. (2018). *TBA10: Cruise Ships and Passenger Visits to Irish Ports by Irish Ports, Year and Statistic*. Retrieved from https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=TBA10&PLanguage=0.

Cesarani, M., & Nechita, F. (2017). *Tourism and the Sharing Economy. An Evidence from Airbnb Usage in Italy and Romania*. Symphonya. Emerging Issues in Management(3), 32-47.

City Population. (2018). *City Population*. Retrieved from https://www.citypopulation.de/.

CLIA. (2018). *Contribution of Cruise Tourism to the Economies of Europe 2017*. Washington DC, USA: CLIA.

Coccossis, H., & Mexa, A. (2017). *The Challenge of Tourism Carrying Capacity assessments: Theory and practice"*. London: Routledge.

Coldwel, W. (2017). *First Venice and Barcelona: now anti-tourism marches spread across Europe*. Retrieved from https://www.theguardian.com/travel/2017/aug/10/anti-tourism-marches-spread-across-europe-venice-barcelona.

Colomb, C., & Novy, J. (2016a). *Urban tourism and its discontents: an introduction*. In C. Colomb & J. Novy (Eds.), Protest and Resistance in the Tourist City (pp. 15-44). London: Routledge.

Colomb, C., & Novy, J. (Eds.). (2016b). *Protest and resistance in the tourist city*. London: Routledge.

Coosto. (2018). *Social media management software for businesses & organisations*. Retrieved from https://www.coosto.com/en.

Corbisiero, F., & Ruspini, E. (2018). *Guest editorial*. Journal of Tourism Futures, 4(1), 3-6. doi:10.1108/JTF-03-2018-069.

Croes, R., Rivera, M. A., Semrad, K., & Khalizadeh, J. (2017). *Happiness and tourism: Evidence from Aruba. Institute for Tourism Studies*. Orlando.

Crothers, C., Kearns, R. A., & Lindsey, D. (1993). *Housing in Manukau City: Overcrowding, poor housing and their consequences*. Auckland.

Cruise Norway. (2015). *Cruise statistikk for 2014*. Retrieved from https://www.cruise-norway.no/viewfile.aspx?id=4329.

Cruise Norway. (2017). *Statistics and prognosis 2016 - 2017 per 04.01.17*. Retrieved from https://www.cruise-norway.no/viewfile.aspx?id=5309.

Cruise Norway. (2018a). *2017 Cruise calls to Norway*. Retrieved from https://www.cruise-norway.no/viewfile.aspx?id=5425.

Cruise Norway. (2018b). *Day passenger to Norway 2017 and prognosis 2018*. Retrieved from https://www.cruise-norway.no/viewfile.aspx?id=5426.

CruiseBaltic. (2018). *Passengers, calls and turn-arounds per destination: 2018 overview*. Retrieved from https://api.cruisebaltic.ovdal.dk/media/4161/cruise-passengers-calls-turnarounds-2018-overview.pdf.

CruiseEurope. (2018). *Statistics*. Retrieved from https://www.cruiseeurope.com/statistics/.

Crunchbase. (2018). *Coosto*. Retrieved from https://www.crunchbase.com/organization/coosto#section-overview.

d'Eramo, M. (2017). *Il selfie del mondo: indagine sull'età del turismo*. Milano: Feltrinelli Editore.

Delgado, M. (2008). *Turistofobia*. Retrieved from https://elpais.com/diario/2008/07/12/catalunya/1215824840_850215.html.

Doxey, G. V. (1975). *A causation theory of visitor-resident irritants: Methodology and research inferences.* Paper presented at the Travel and tourism research associations sixth annual conference proceedings, San Diego.

Dredge, D. (2017). *"Overtourism" Old wine in new bottles?* Retrieved from https://www.linkedin.com/pulse/overtourism-old-wine-new-bottles-dianne-dredge/.

Dumbrovská, V. (2017). *Urban Tourism Development in Prague: From Tourist Mecca to Tourist Ghetto*. Tourism in the City, 275-283. doi:10.1007/978-3-319-26877-4_19.

Endler, N. S., & Parker, J. (1990). *Multidimensional assessment of coping: A critical evaluation*. Journal of personality and social psychology, 58(5), 844.

European Commission. (2007). *Agenda for a sustainable and competitive European tourism* (COM(2007) 621 final). Brussels.

European Commission. (2010). *Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe* (COM(2010) 352 final). Brussels: European Commision Retrieved from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52010DC0352.

European Commission. (2012). *Implementation and development of the common visa policy to spur growth in the EU*. (COM(2012) 649 final). Brussels: European Commision Retrieved from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52010DC0352.

European Commission. (2014). *A European Strategy for More Growth and Jobs in Coastal and Maritime Tourism*. (COM(2014) 86 final). Brussels: European Commision Retrieved from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52010DC0352.

European Council. (2003). *REGULATION (EC) No 1059/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS)*. Brussels.

European Parliament and Council. (2011). *"Tourism in Europe". European Parliament resolution of 27 September 2011 on Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe (2010/2206(INI))*. Strasbourg.

European Parliament and Council. (2015). *"New challenges and concepts for the promotion of tourism in Europe". European Parliament resolution of 29 October 2015 on new challenges and concepts for the promotion of tourism in Europe (2014/2241(INI))*. Strasbourg.

Eurostat. (2018a). *About the TERCET NUTS-postal codes matching tables*. Retrieved from http://ec.europa.eu/eurostat/tercet/flatfiles.do.

Eurostat. (2018b). *Air passenger transport by main airports in each reporting country*. Retrieved from http://ec.europa.eu/eurostat/web/products-datasets/-/avia_paoa.

Eurostat. (2018c). *NUTS - Nomenclature of territorial units for statistics*. Retrieved from http://ec.europa.eu/eurostat/web/nuts/background.

Eurostat. (2018d). *Passengers embarked and disembarked in all ports by direction - annual data*. Retrieved from http://ec.europa.eu/eurostat/web/products-datasets/-/mar_pa_aa.

Eurostat. (2018e). *Regional statistics by NUTS classification (reg)*. Retrieved from http://ec.europa.eu/eurostat/web/regions/data/database.

Eurostat. (2018f). *Tourism statistics - expenditure* Retrieved from http://ec.europa.eu/eurostat/statistics-explained/index.php/Tourism_statistics_-_expenditure#Accommodation_took_up_the_largest_share_of_the_tourism_budget_of_EU_residents.

Füller, H., & Michel, B. (2014). *'Stop Being a Tourist!' New Dynamics of Urban Tourism in Berlin-Kreuzberg*. International Journal of Urban and Regional Research, 38(4), 1304-1318. doi:10.1111/1468-2427.12124.

Garcia, C., & Servera, J. (2003). *Impacts of tourism development on water demand and beach degradation on the island of Mallorca (Spain)*. Geografiska Annaler: Series A, Physical Geography, 85(3-4), 287-300.

García-Hernández, M., de la Calle-Vaquero, M., & Yubero, C. (2017). *Cultural heritage and urban tourism: Historic city centres under pressure*. Sustainability, 9(1346), 1-19. doi:10.3390/su9081346.

García-Palomares, J. C., Gutiérrez, J., & Mínguez, C. (2015). *Identification of tourist hot spots based on social networks: A comparative analysis of European metropolises using photo-sharing services and GIS*. Applied Geography, 63, 408-417.

Goodwin, H. (2017). *The challenge of overtourism*.

Gössling, S., Hansson, C. B., Hörstmeier, O., & Saggel, S. (2002). *Ecological footprint analysis as a tool to assess tourism sustainability*. Ecological Economics, 43, 199-211.

Gössling, S., & Peeters, P. M. (2015). *Assessing tourism's global environmental impact 1900–2050*. Journal of Sustainable Tourism, 23(5), 639-659. doi:10.1080/09669582.2015.1008500.

Gössling, S., Ring, A., Dwyer, L., Andersson, A.-C., & Hall, C. M. (2016). *Optimizing or maximizing growth? A challenge for sustainable tourism*. Journal of Sustainable Tourism, 24(4), 527-548. doi:10.1080/09669582.2015.1085869.

Gössling, S., & Scott, D. (2018). *The decarbonisation impasse: Global tourism leaders' views on climate change mitigation*. Journal of Sustainable Tourism, in press.

Gössling, S., Scott, D., & Hall, C. M. (2018). *Global trends in length of stay: Implications for destination management and climate change.* . Journal of Sustainable Tourism, in press.

Gove, W. R., & Hughes, M. (1980). *The Effects of Crowding Found in The Toronto Study: Some Methodological and Empirical Questions*. American Sociological Review, 45(5), 864-870. doi:10.2307/2094901.

Gravari-Barbas, M., & Jacquot, S. (2016). *No conflict? Discourses and management of tourism-related tensions in Paris*. In C. Colomb & J. Novy (Eds.), Protest and resistance in the tourist city (pp. 45-65). London: Routledge.

Gray, A. (2001). *Definitions of Crowding and the Effects of Crowding on Health. A Literature Review*. Wellington.

GreekCruise. (2018). *Ports - Cruise statistics per port*. Retrieved from http://www.greekcruise.gr.

Guijt, A. (2016). *Calculating International Tourist Accommodation's Carbon Footprints*. Breda.

Hall, C. M. (2008). *Tourism planning: Policies, processes and relationships* (second ed.). Dorchester: Pearson Education.

Hall, C. M. (2009). *Degrowing Tourism: Décroissance, Sustainable Consumption and Steady-State Tourism*. Anatolia: An International Journal of Tourism & Hospitality Research, 20(1), 46-61.

Herbert, D. T. (1995). *Heritage places, leisure and tourism*. In D. T. Herbert (Ed.), Heritage, tourism and society (pp. 1-20). Newcastle: university of Northumbria.

Intrepid. (2018). *Adventure Travel Index*. Amsterdam.

Ioannides, D., & Holcomb, B. (2001). *Raising the stakes: Implications of upmarket tourism policies in Cyprus and Malta*. In D. Ioannides, Y. Apostolopoulos, & S. F. Sönmez (Eds.), Mediterranean Islands and Sustainable Tourism Development. Practices, Management and Policies (pp. 234-258). Londo: Continuum.

IPK International. (2017). *World Travel Monitor*. Munich.

IPK International. (2018). *ITB world travel trends report 2017 / 2018. Boom or bust? Where is tourism heading?* Berlin.

Jafari, J. (2005). *Bridging out, nesting affield: powering a new platform.[Opinion piece.]*. Journal of Tourism Studies, 16(2), 1.

Jimura, T. (2011). *The impact of world heritage site designation on local communities – A case study of Ogimachi, Shirakawa-mura, Japan*. Tourism Management, 32(2), 288-296. doi:10.1016/j.tourman.2010.02.005.

Jin, Q., Hu, H., & Kavan, P. (2016). *Factors Influencing Perceived Crowding of Tourists and Sustainable Tourism Destination Management*. Sustainability, 8(10), 976. doi:10.3390/su8100976.

Johnson, D. (2002). *Environmentally sustainable cruise tourism: a reality check*. Marine Policy, 26(4), 261-270. doi:https://doi.org/10.1016/S0308-597X(02)00008-8.

Johnston, R. J., Gregory, D., Pratt, G., & Watts, M. (Eds.). (2005). *The Dictionary of Human Geography*. Oxford, UK: Blackwell Publishers.

Jordan, P., Pastras, P., & Psarros, M. (2018). *Managing Tourism Growth in Europe. The ECM Toolbox*. Dijon

keep.eu. (2018). *Search by Countries & Regions*. Retrieved from https://www.keep.eu/keep/nuts/searchByRegion#null.

Kim, D., Lee, C.-K., & Sirgy, M. J. (2016). *Examining the Differential Impact of Human Crowding Versus Spatial Crowding on Visitor Satisfaction at a Festival*. Journal of Travel & Tourism Marketing, 33(3), 293-312. doi:10.1080/10548408.2015.1024914.

Klanjscek, J., Gecek, S., Marn, N., Legovic, T., & Klanjscek, T. (2018). *Predicting perceived level of disturbance of visitors due to crowding in protected areas*. PLoS One, 13(6), e0197932. doi:10.1371/journal.pone.0197932.

Koens, K., & Postma, A. (2017). *Understanding and managing visitor pressure in urban tourism. A study to into the nature of and methods used to manage visitor pressure in six major European cities.* Breda, Leeuwarden.

Landorf, C. (2009). *Managing for sustainable tourism: a review of six cultural World Heritage Sites*. Journal of Sustainable Tourism, 17(1), 53-70.

Lee, R. G. (1975). *The management of human components in the Yosemite National Park ecosystem: Final research report*: Department of Forestry and Conservation, College of Natural Resources, University of California.

Lew, A. A., Hall, C. M., & Williams, A. M. (2004). *The Wiley Blackwell Companion to Tourism*. Oxford: Wiley Blackwell.

Li, L., Zhang, J., Nian, S., & Zhang, H. (2017). *Tourists' perceptions of crowding, attractiveness, and satisfaction: a second-order structural model*. Asia Pacific Journal of Tourism Research, 22(12), 1250-1260. doi:10.1080/10941665.2017.1391305.

Manning, R., Valliere, W., Minteer, B., Wang, B., & Jacobi, C. (2000). *Crowding in Parks and Outdoor Recreation: A Theoretical, Empirical, and Managerial Analysis*. Journal of park and recreation administration, 18(4), 57-72.

Marin, L. D., Newman, P., Manning, R., Vaske, J. J., & Stack, D. (2011). *Motivation and acceptability norms of human-caused sound in Muir Woods National Monument*. Leisure Sciences, 33(2), 147-161.

Marion, J. L., & Reid, S. E. (2007). *Minimising Visitor Impacts to Protected Areas: The Efficacy of Low Impact Education Programmes*. Journal of Sustainable Tourism, 15(1), 5-27. doi:10.2167/jost593.0.

Mathieson, A., & Wall, G. (1982). *Tourism, economic, physical and social impacts*. London: Longman.

McKinsey & Company, & World Travel & Tourism Council. (2017). *Coping with success. Managing overcrowding in tourism destinations*. London.

MedCruise. (2018). *Cruise Activities in MedCruise Ports: statistics 2017*. Piraeus, Greece: MedCruise.

Milano, C. (2017a). *Over-tourism and Tourism-phobia: Global trends and local contexts*. Barcelona.

Milano, C. (2017b). Turismofobia: cuando el turismo entra en la agenda de los movimientos sociales. *Marea Urbana,* 5-8.

Milano, C. (2018). *Overtourism, malestar social y turismofobia. Un debate controvertido*. PASOS. Revista de Turismo y Patrimonio Cultural, 6(3), 551-564.

Milano, C., Cheer, J. M., & Novelli, M. (2018). *Overtourism: a growing global problem*. Retrieved from https://theconversation.com/overtourism-a-growing-global-problem-100029.

Milano, C., Cheer, J. M., & Novelli, M. (Eds.). (2019; forthcoming). *Overtourism: Excesses, discontents and measures in travel and tourism*. London: CABI.

Monteiro, L. (2017). *Are Protected Areas becoming victims of their own popularity? Protected areas in-sight.* . The Journal of the Europarc Federation, Special Edition Overtourism, 21-23.

Mowen, A. J., Vogelsong, H. G., & Graefe, A. R. (2003). *Perceived crowding and its relationship to crowd management practices at park and recreation events*. Event Management, 8(2), 63-72.

Mowforth, M., & Munt, I. (2003). *Tourism and sustainability. Development and new tourism in the third world* (Second edition ed.). London: Routledge.

Muler Gonzalez, V., Coromina, L., & Galí, N. (2018). *Overtourism: residents' perceptions of tourism impact as an indicator of resident social carrying capacity-case study of a Spanish heritage town*. Tourism Review.

Murphy, P. E. (1985). *Tourism: A community approach*. New York: Methuen.

National Bureau of Statistics of China. (2018). *China Statistical Yearbook - 2016; 17-10 Domestic Tourism*. Retrieved from http://www.stats.gov.cn/tjsj/ndsj/2016/indexeh.htm.

Navarro Jurado, E., Damian, I. M., & Fernández-Morales, A. (2013). *Carrying Capacity Model Applied in Coastal Destinations*. Annals of Tourism Research, 43, 1-19. doi:10.1016/j.annals.2013.03.005.

Neuts, B., & Nijkamp, P. (2012). *Tourist crowding perception and acceptability in cities*. Annals of Tourism Research, 39(4), 2133-2153. doi:10.1016/j.annals.2012.07.016.

Neuts, B., Nijkamp, P., & Van Leeuwen, E. (2012). *Crowding Externalities from Tourist Use of Urban Space*. Tourism Economics, 18(3), 649-670. doi:10.5367/te.2012.0130.

Novy, J. (2016). *The selling (out) of Berlin and the de-and re-politicization of urban tourism in Europe's 'Capital of Cool'*. In C. Colomb & J. Novy (Eds.), Protest and resistance in the tourist city (pp. 52-72). London: Routledge.

Nyaupane, G. P., & Timothy, D. J. (2010). *Power, regionalism and tourism policy in Bhutan*. Annals of Tourism Research, 37(4), 969-988. doi:https://doi.org/10.1016/j.annals.2010.03.006.

O'Leary, J. T., Morrison, A. M., & Alzua, A. (1998). *Cultural and heritage tourism: Identifying niches for international travelers*. Journal of tourism studies, 9(2), 2-13.

Oklevik, O., Gössling, S., Hall, C. M., Steen Jacobsen, J.-K., Grøtte, I. P., & McCabe, S. (2018). *Overtourism, optimisation, and destination performance indicators: A case study of activities in Fjord Norway*. Journal of Sustainable Tourism, in press.

openflights.org. (2018). *Airport, airline and route data. Airport database*. Retrieved from https://openflights.org/data.html.

Pabel, A., & Pearce, P. L. (2015). *Highlighting the benefits of tourism humour: The views of tourists*. Tourism Management Perspectives, 16, 357-364. doi:10.1016/j.tmp.2015.10.002.

Pasquinelli, C., & Bellini, N. (2017). *Global Context, Policies and Practices in Urban Tourism: An Introduction*. Tourism in the City, 1-25. doi:10.1007/978-3-319-26877-4_1.

Pearce, D. G. (1981). *Tourist development*. London: Longman Group Limited.

Pearce, P. L. (2018). *Limiting overtourism; the desirable new behaviours of the smart tourist*. Paper presented at the The t-Forum 2018 Global Conference - Tourism Intelligence Exchange @ the Industry-Academia Junction (11-14 March 2018), Palma de Mallorca, Spain.

Pearce, P. L., & Wu, M.-Y. (Eds.). (2016). *The world meets Asian Tourists*. Bingley: Emerald.

Pedersen, A. (2002). *Managing Tourism at World Heritage Sites: a Practical Manual for WHS Managers* (World Heritage Paper).

Peeters, P., Dijkmans, C., Mitas, O., Strous, B., Vinkensteijn, J., & Weston, R. (2015). *Tourism and the sharing economy: Challenges and opportunities for the EU* (ISBN 978-92-823-8466-4). Brussels.

Peeters, P. M. (2017). *Tourism's impact on climate change and its mitigation challenges. How can tourism become 'climatically sustainable'?* (PhD), Delft University of Technology, Delft.

Peeters, P. M., & Eijgelaar, E. (2014). *Tourism's climate mitigation dilemma: flying between rich and poor countries*. Tourism Management, 40, 15-26.

Popp, M. (2012). *Positive and Negative Urban Tourist Crowding: Florence, Italy*. Tourism Geographies, 14(1), 50-72. doi:10.1080/14616688.2011.597421.

Postma, A. (2013). *'When the tourists flew in': critical encounters in the development of tourism.* (PhD), Groningen University, Groningen.

Postma, A., Papp, B., & Koens, K. (2018). *Visitor pressure and events in an urban setting: understanding and managing visitor pressure in seven European urban tourism destinations* (in production). Breda/Leeuwarden/Vlissingen.

Ram, Y., & Hall, C. M. (2017). *Walkable places for visitors: Assessing and designing for walkability* The Routledge international handbook of walking (pp. 311-329): Routledge.

Rasoolimanesh, S. M., Jaafar, M., Marzuki, A., & Abdullah, S. (2017). *Tourist's perceptions of crowding at recreational sites: the case of the Perhentian Islands*. Anatolia: An International Journal of Tourism & Hospitality Research, 28(1), 41.

Rasoolimanesh, S. M., Jaafar, M., Marzuki, A., & Mohamad, D. (2015). *How Visitor and Environmental Characteristics Influence Perceived Crowding*. Asia Pacific Journal of Tourism Research, 21(9), 952-967. doi:10.1080/10941665.2015.1084348.

Richards, G. (2018). *Cultural tourism: A review of recent research and trends*. Journal of Hospitality and Tourism Management, 36, 12-21.

Royle, S. A. (2001). *A Geography of Islands: Small Island Insularity*. London: Routledge.

Russo, A. P. (2002). *The "vicious circle" of tourism development in heritage cities*. Annals of Tourism Research, 29(1), 165-182. doi:10.1016/s0160-7383(01)00029-9.

Sans, A. A., & Quaglieri, A. (2016). *Unravelling airbnb: Urban perspectives from Barcelona*. In A. P. Russo & J. H. Richards (Eds.), Reinventing the Local in Tourism: Producing, Consuming and Negotiating Place (pp. 209-228). Bristol: Channel View publications.

Sans, A. A., & Russo, A. P. (2016). *The Right to Gaudí. What Can We Learn From the Commoning of Park Güell, Barcelona?* In C. Colomb & J. Novy (Eds.), Protest and resistance in the Tourist City (pp. 247-263). London: Routledge.

Scott, N., & Le, D. (2017). *Tourism experience: a review*. In N. Scott, J. Gao, & J. Ma (Eds.), Visitor Experience Design (Vol. 5, pp. 30). Wallingford, Oxfordshire ; Boston, MA: CABI.

Seraphin, H., Sheeran, P., & Pilato, M. (2018). *Over-tourism and the fall of Venice as a destination*. Journal of Destination Marketing & Management.

Shelby, B., Vaske, J., & Heberlein, T. (1989). *Comparative analysis of crowding in multiple locations: Results from fifteen years of research*. Leisure Sciences, 11(4), 269-291.

Slee, T. (2018a). *Airbnb Data Collection*. Retrieved from http://tomslee.net/category/airbnb-data.

Slee, T. (2018b). [*Personal communication and Airbnb world database, June 2018*]. 01-08-2018.

Smith, V. L. (Ed.) (1978). *Hosts and guests: The anthropology of tourism*. Oxford: Blackwell.

Stemberk, J., Dolejs, J., Maresova, P., & Kuca, K. (2018). *Factors Affecting the Number of Visitors in National Parks in the Czech Republic, Germany and Austria*. ISPRS International Journal of Geo-Information, 7(3), 124. doi:10.3390/ijgi7030124.

Stokols, D. (1972). *On the distinction between density and crowding: Some implications for future research*. Psychological review, 79(3), 275.

Strickland-Munro, J. K., Allison, H. E., & Moore, S. A. (2010). *Using resilience concepts to investigate the impacts of protected area tourism on communities*. Annals of Tourism Research, 37(2), 499-519. doi:https://doi.org/10.1016/j.annals.2009.11.001.

Su, Y.-W., & Lin, H.-L. (2014). *Analysis of international tourist arrivals worldwide: The role of world heritage sites*. Tourism Management, 40, 46-58. doi:https://doi.org/10.1016/j.tourman.2013.04.005.

Suchet, A., & Raspaud, M. (2010). *A case of local rejection of a heritage tourism policy: tourism and dynamics of change in Abondance, French Alps*. International Journal of Heritage Studies, 16(6), 449-463. doi:10.1080/13527258.2010.505038.

Tarrant, M. A., Cordell, H. K., & Kibler, T. L. (1997). *Measuring perceived crowding for high-density river recreation: theeffects of situational conditions and personal factors*. Leisure Sciences, 19(2), 97.

Tourism Sustainability Group. (2007). *Action for more sustainable European tourism* (Ref. Ares(2014)78493 - 15/01/2014).

UNESCO. (2018). *World Heritage List*. Retrieved from https://whc.unesco.org/en/list/.

United Nations. (2018). *World Population Prospects: The 2017 Revision*. File POP/1-1: Total population (both sexes combined) by region, subregion and country, annually for 1950-2100 (thousands). Retrieved from https://esa.un.org/unpd/wpp/.

UNWTO. (1983). *Risks of Saturation of Tourist Carrying Capacity Overload in Holiday Destinations*. Madrid.

UNWTO. (2018a). *Compendium of tourism statistics. Data 2008-2016*. (2018 Edition). Madrid.

UNWTO. (2018b). *Overtourism? Understanding and managing urban tourism growth beyond perceptions*. Madrid.

UNWTO. (2018c). *Tourism highlights* (2018 Edition). Madrid.

Usher, L. E., & Gómez, E. (2017). *Managing Stoke: Crowding, Conflicts, and Coping Among Virginia Beach Surfers*. Journal of Park and Recreation Administration, 35(2), 9-24. doi:10.18666/jpra-2017-v35-i2-7596.

van der Borg, J., Costa, P., & Gotti, G. (1996). *Tourism in European heritage cities*. Annals of Tourism Research, 23(2), 306-321. doi:https://doi.org/10.1016/0160-7383(95)00065-8.

Vaske, J. J., & Shelby, L. B. (2008). *Crowding as a Descriptive Indicator and an Evaluative Standard: Results from 30 Years of Research*. Leisure Sciences, 30(2), 111-126. doi:10.1080/01490400701881341

Vianello, M. (2016). *The No Grandi Navi campaign: protests against cruise tourism in Venice*. In C. Colomb & J. Novy (Eds.), Protest and Resistance in the Tourist City (pp. 185-204). London: Routledge.

Waller, I. (2011). *Less law, more order*. Acta Criminologica: Southern African Journal of Criminology, 24(1), I-IV.

Weber, F. (2017). *Overtourism. An analysis of contextual factors contributing to negative developments in overcrowded tourism destinations*. Paper presented at the Proceedings of the BEST EN Think Tank XVII: innovation and progress in sustainable tourism, Mauritius.

Weber, F., Stettler, J., Priskin, J., Rosenberg-Taufer, B., Ponnapureddy, S., Fux, S., Camp, M.-A., & Barth, M. (2017). *Tourism destinations under pressure. Challenges and innovative solutions*. Lucerne, Switzerland.

Wegrich, K., & Jann, W. (2006). *Theories of the policy cycle* Handbook of public policy analysis (pp. 69-88): Routledge.

Wickham, T., & Kerstetter, D. (2000). *The relationship between place attachment and crowding in an event setting*. Event Management, 6(3), 167-174.

Williams, S. (2009). *Tourism geography: a new synthesis* (Second ed.). London: Taylor & Francis.

Williams, T. A. (1979). *Impact of Domestic Tourism on Host Population*. Tourism Recreation Research, 4(2), 15-21. doi:10.1080/02508281.1979.11014981.

World Bank Group. (2018). *World Databank, World Development Indicators*. Retrieved from http://databank.worldbank.org/data/home.aspx.

Zehrer, A., & Raich, F. (2016). *The impact of perceived crowding on customer satisfaction*. Journal of Hospitality and Tourism Management, 29, 88-98. doi:https://doi.org/10.1016/j.jhtm.2016.06.007.

Zeng, B., & Gerritsen, R. (2014). *What do we know about social media in tourism? A review*. Tourism Management Perspectives, 10, 27-36. doi:https://doi.org/10.1016/j.tmp.2014.01.001.

Annexes

I   OVERTOURISM MAPS

I.1   Test NUTS coding Airbnb and booking.com databases

Map 15:   Test map with all Airbnb and booking.com addresses in NUTS2

Test NUTS code generation

Source: (booking.com, 2018; Eurostat, 2018a; Slee, 2018b)
Note: Each NUTS-2 region has a different colour compared to its neighbouring NUTS-2 regions. Some regions are 'polluted' with more than one colour indicating some allocations to be not correct. These problems occur mainly in mid-Italy due to some error in the postal codes database for Italy we were unable to repair. Also the UK shows relatively many errors. This is due to the too detailed postal code system of the UK and the problem that these codes are not always systematically constructed with the first letter indicating the highest level of a region and the last letter the smallest region. Norway is not covered

I.2   Map overview global cases

Map 16:   Overview of globally listed cases of overtourism
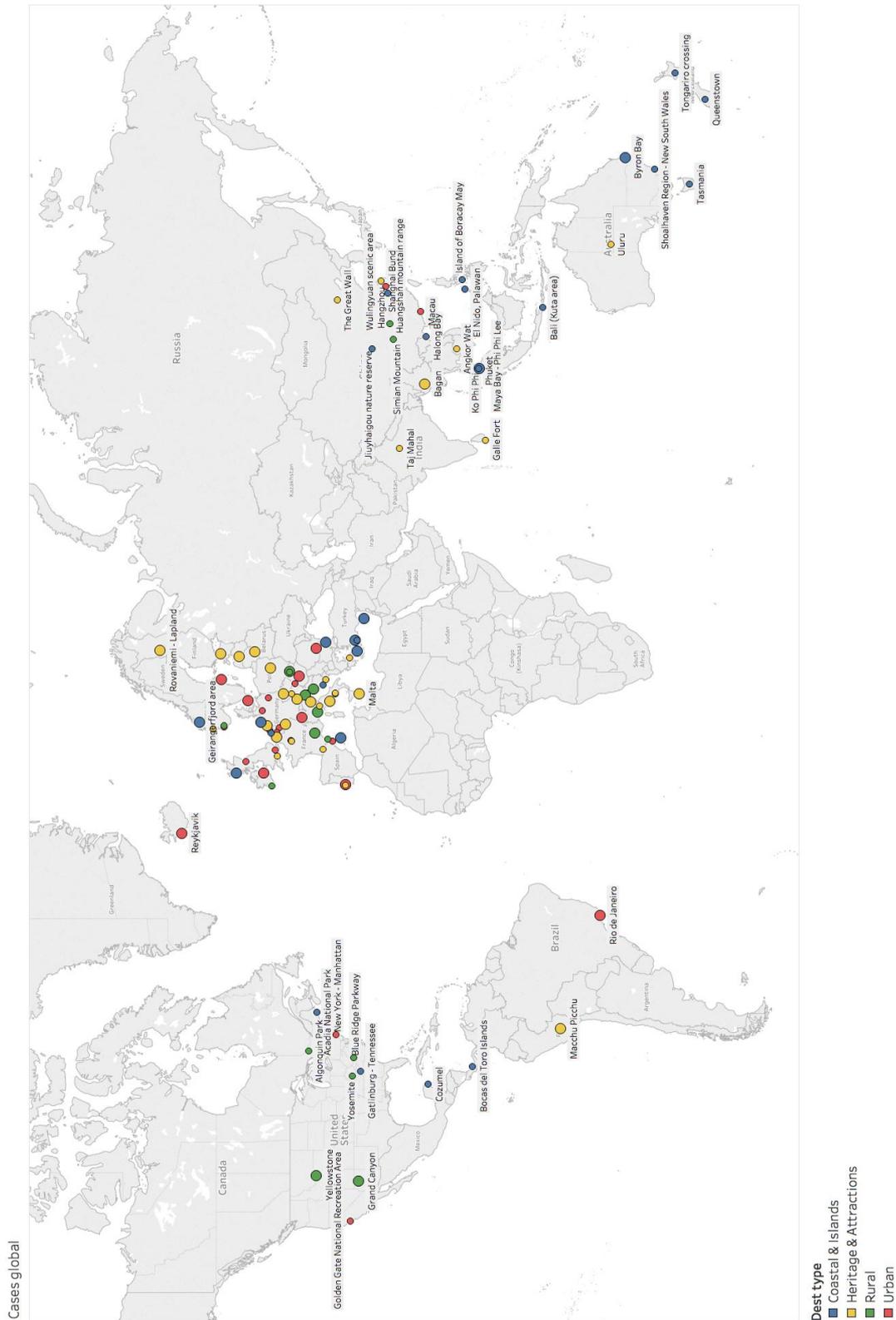
Source: authors' own elaboration based on data from the case study analysis (Chapter 4)
Note: small circles represent cases from the gross-list and large circles are the case-studies.

I.3   Map tourism density

Map 17:   Indicator tourism density in bed-nights per km² (2016) for European NUTS 2 regions
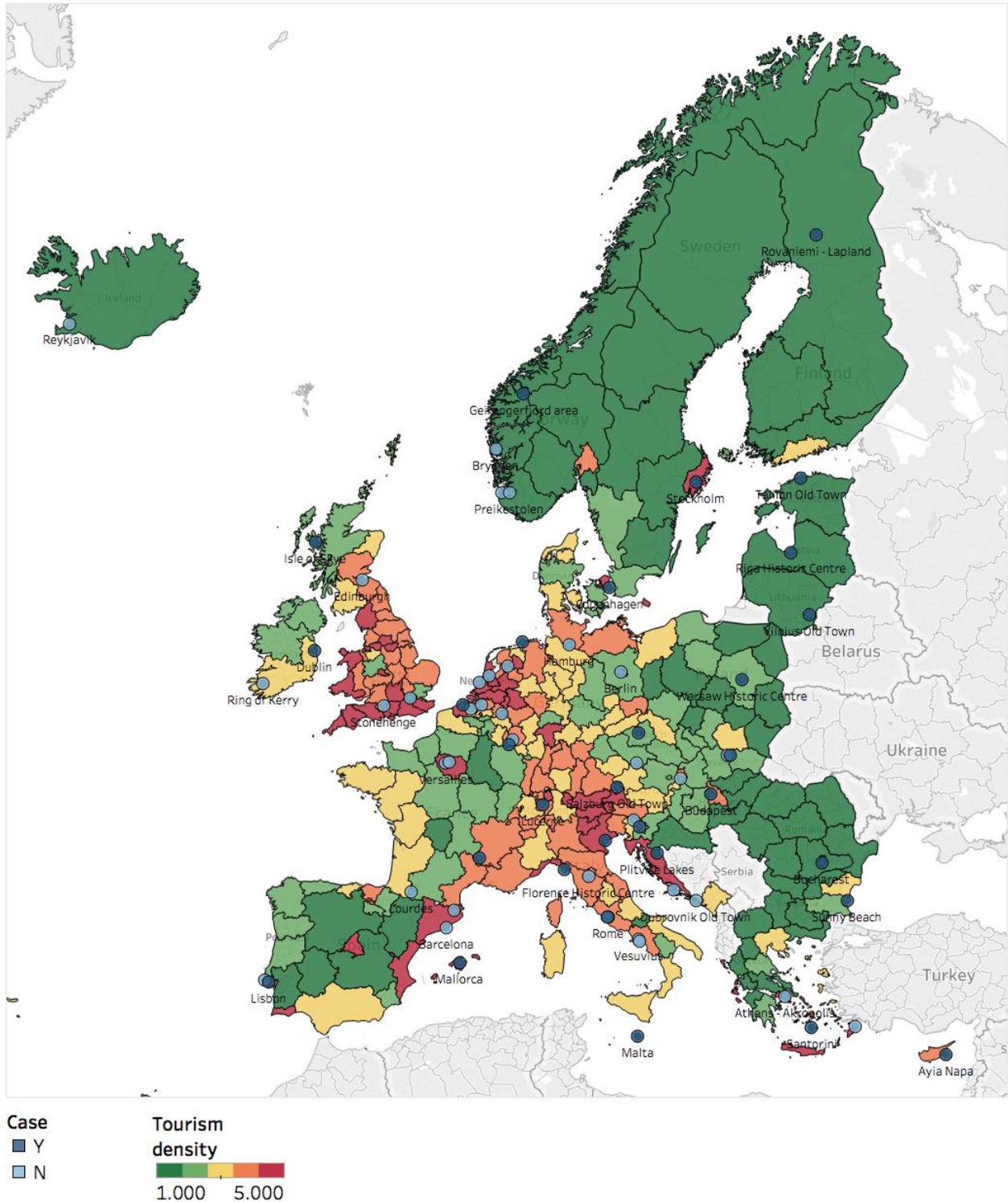
Source: (Eurostat, 2018e) table tgs00112 (bed-nights) and tgs00002 (land area)
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.4   Maps tourism intensity

Map 18:   Indicator tourism intensity in bed-nights per inhabitant for European NUTS 2 regions

Bed-nights intensity (number/citizen)
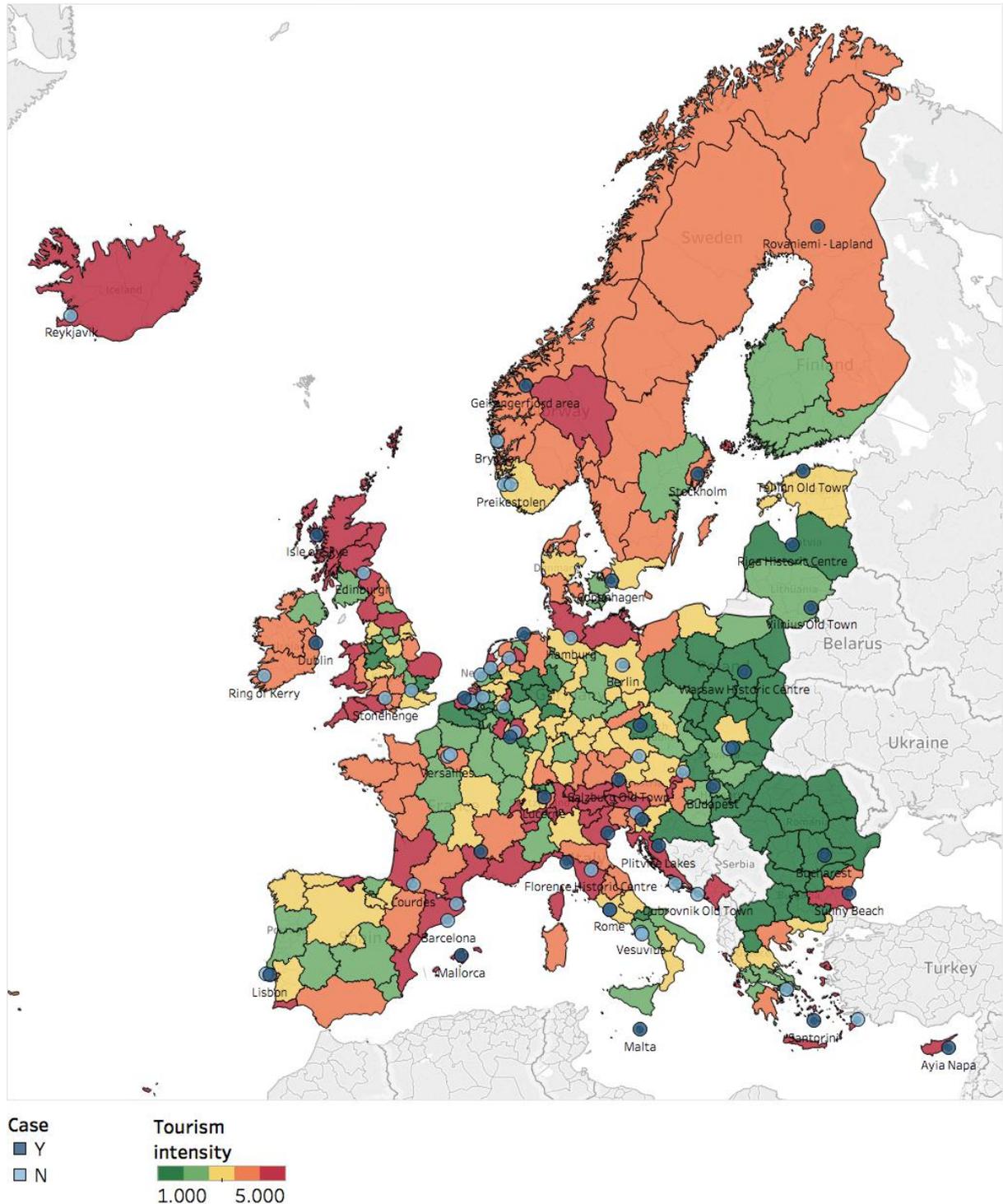
Source: (Eurostat, 2018e) table tgs00112 (bed-nights) and tgs00096 (population)
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.5   Map growth of number of bed-nights

Map 19:   Indicator tourism growth of bed-nights per year (2016 over 2015) for European NUTS 2 regions

Growth of number of bed-nights
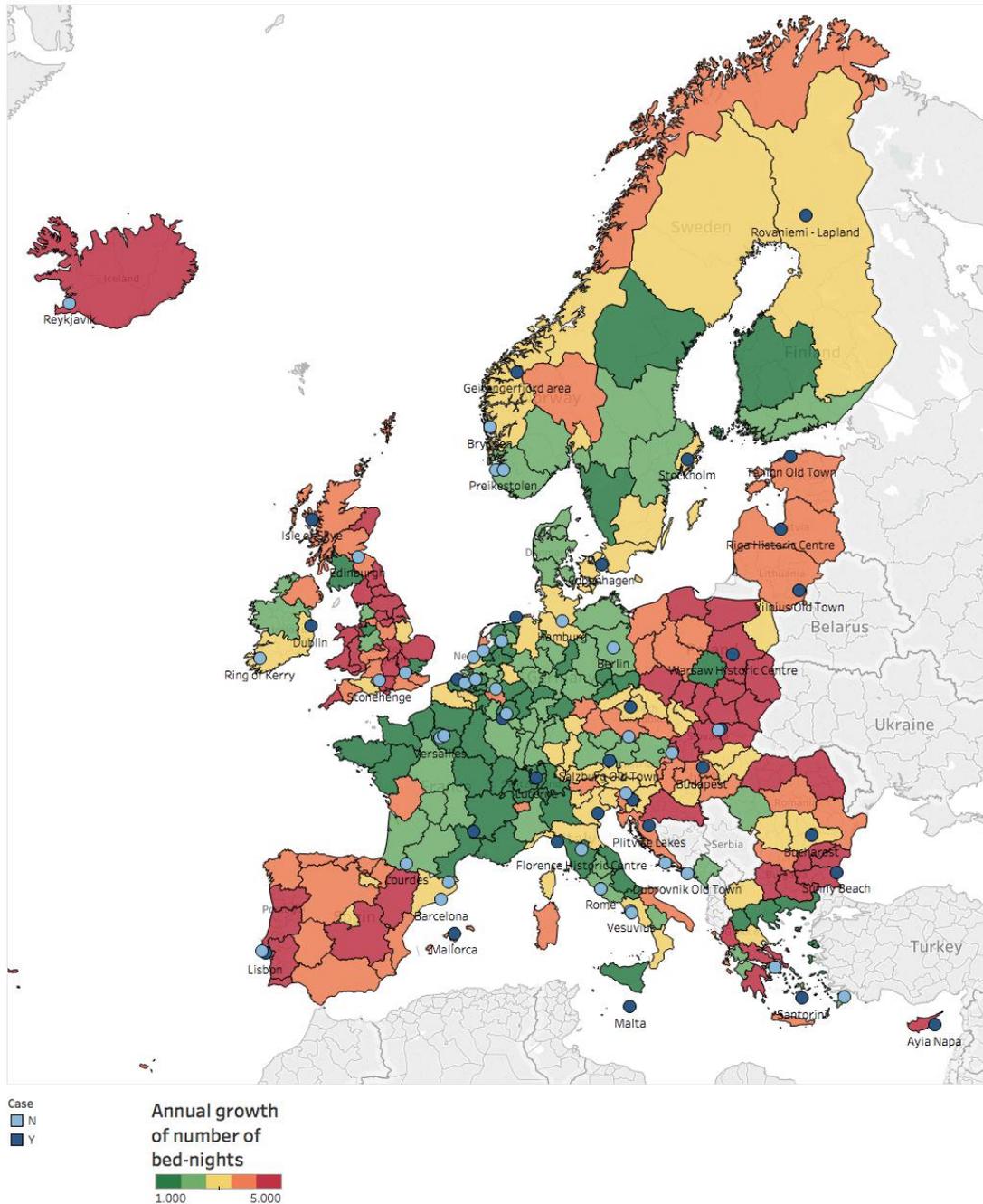
Source: (Eurostat, 2018e) table tgs00112 (bed-nights)
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.6 Map combined bed-nights growth and intensity

Map 20: **Indicator combined tourism density and tourism growth of number of bed-nights per year (2016 over 2015) for European NUTS 2 regions**

Bed-nights intensity growth combination

Case
■ Y
□ N

Combined
intensity
and growth

1.000   5.000
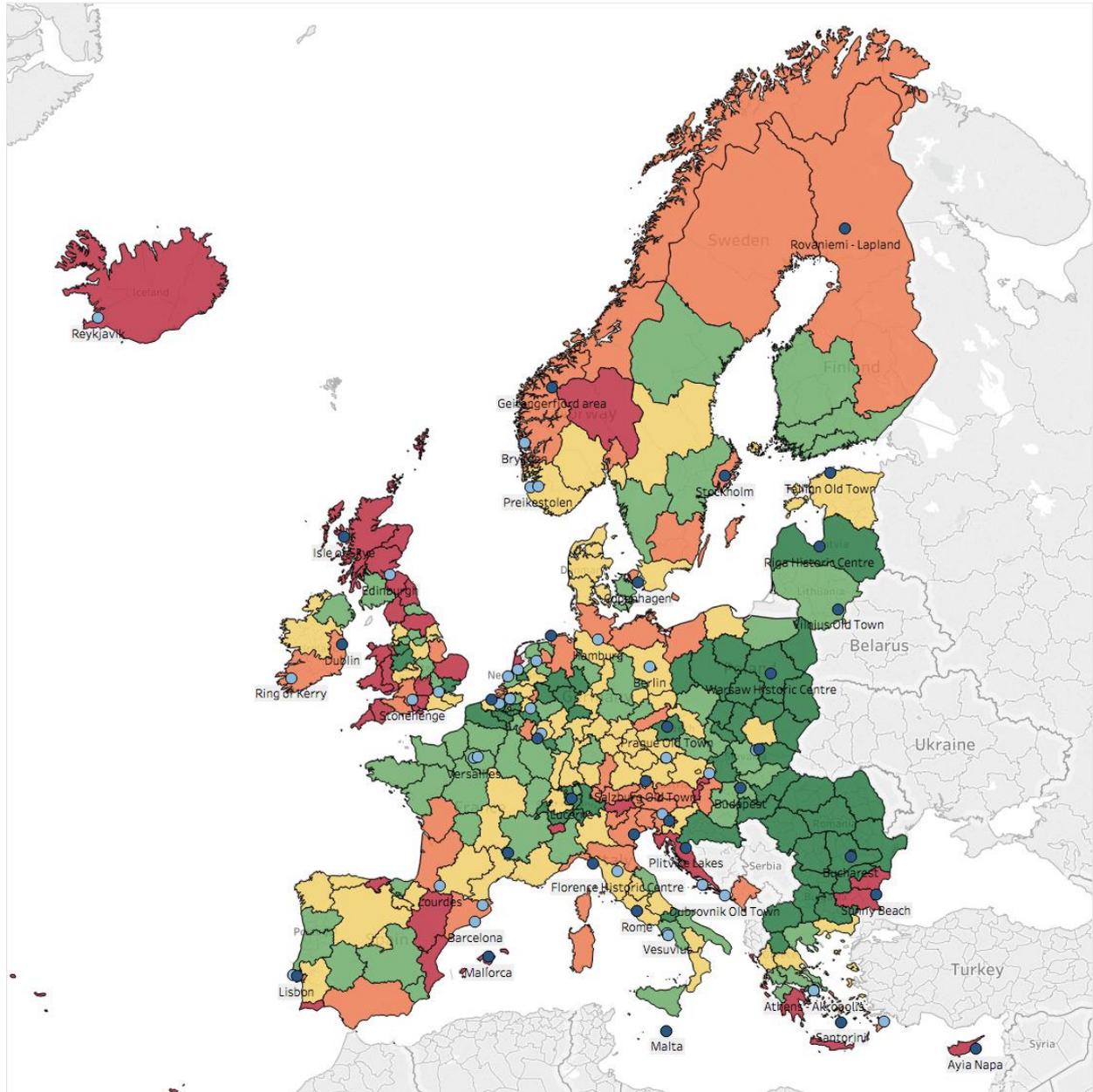
Source: (Eurostat, 2018e) table tgs00112 (bed-nights)
Notes: the two indicators are combined by assuming the intensity percentile rank except when it is 4 or 5 in which case the average percentile rank for growth and intensity is taken. Dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.7   Map share of Airbnb in total accommodation

Map 21:   Indicator share of Airbnb capacity of Airbnb plus booking.com listing for European NUTS 2 regions

Share Airbnb beds
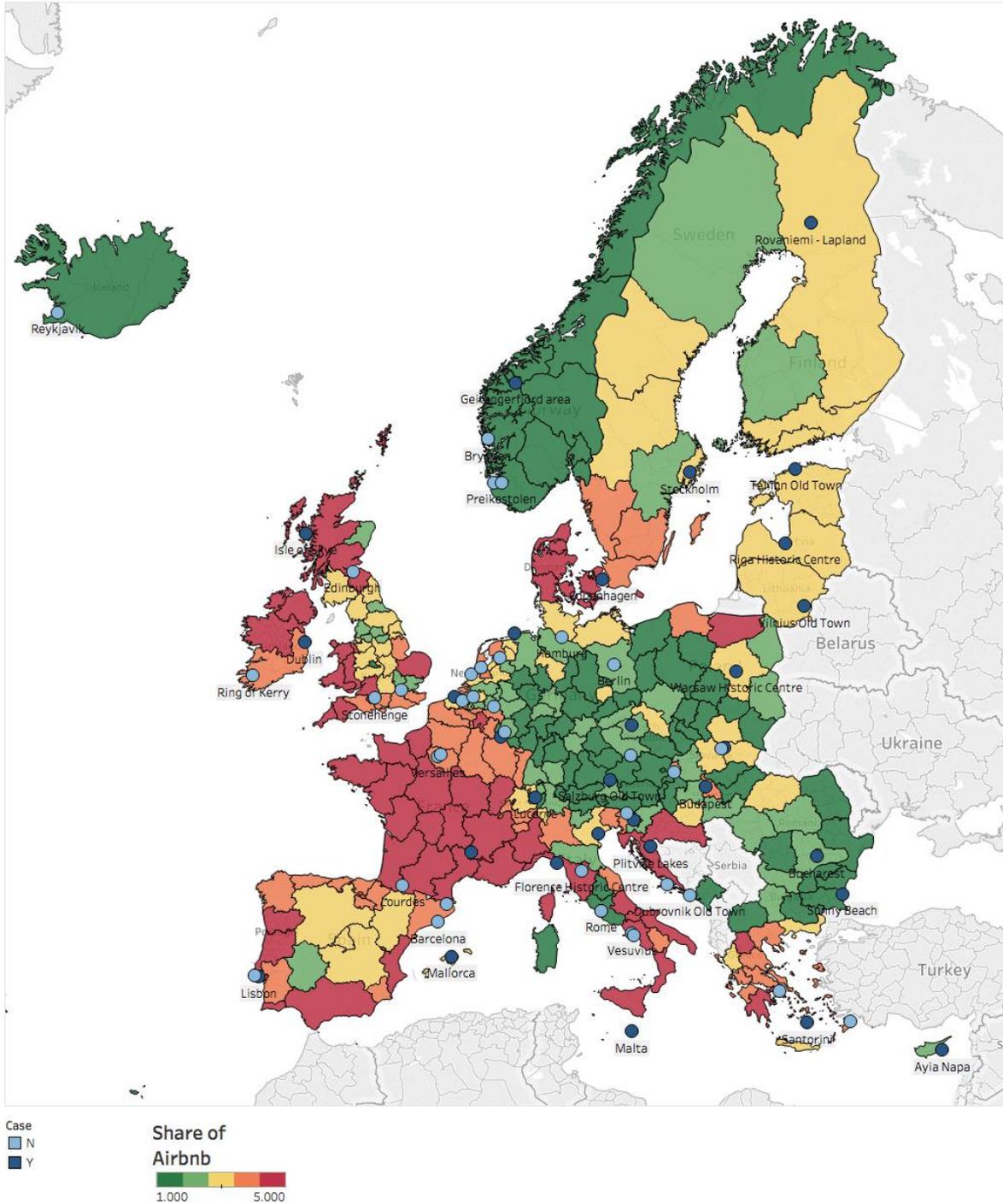
Source: Airbnb download June 2018 from Slee (2018b) and booking.com full download for November 2015 by bookdifferent.com
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.8   Map distance to Airbnb accommodation

Map 22:   Indicator Airbnb average distance with booking.com listings for European NUTS 2 regions

Airbnb average shortest distance to booking
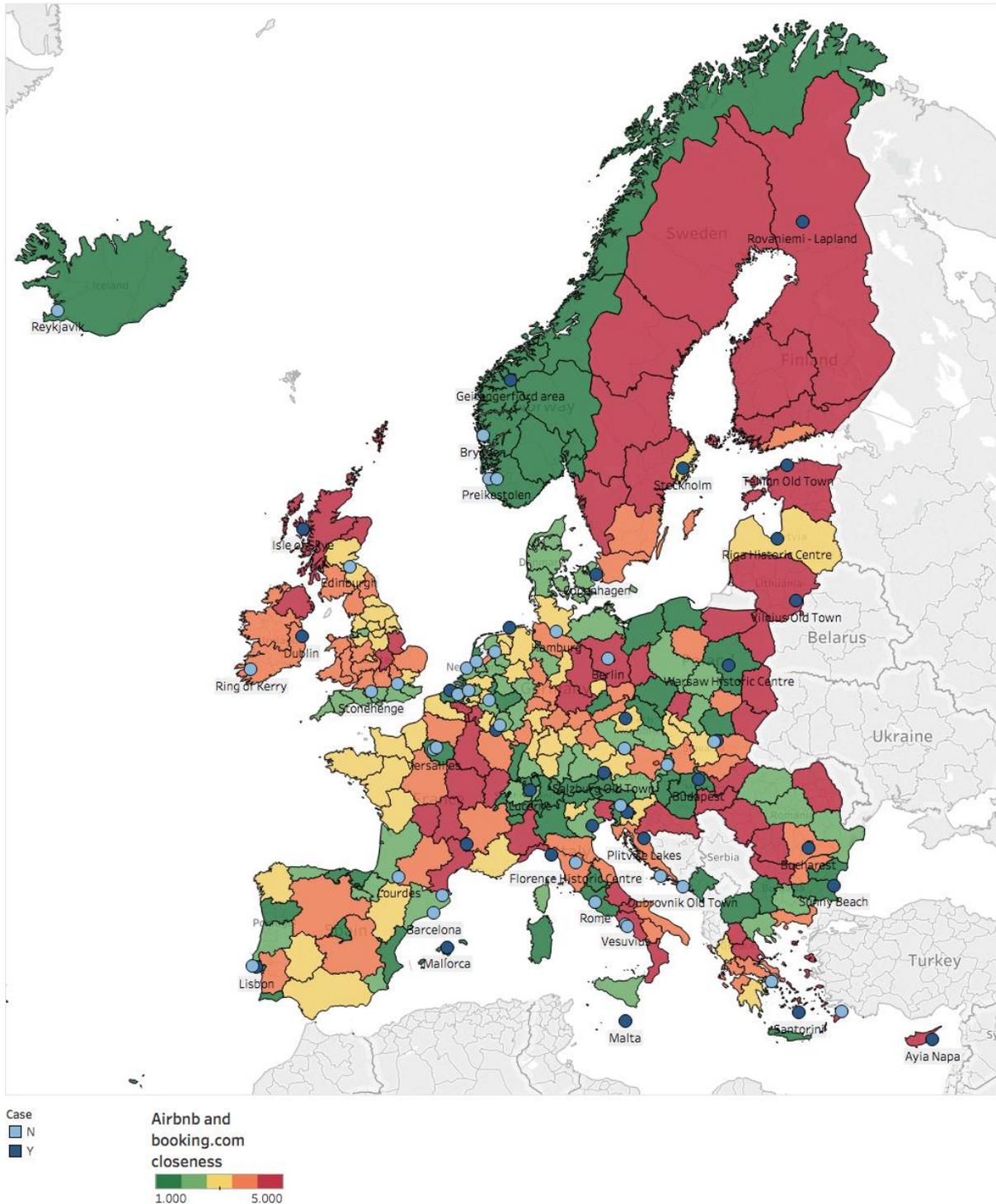
Source: Airbnb download June 2018 from Slee (2018b) and booking.com full download for November 2015 by bookdifferent.com reported in Guijt (2016)
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

i.9 Map air transport intensity

Map 23: **Indicator air passenger density per tourism bed-night for European NUTS 2 regions**

Air transport intensity (pax per bed-night)

Case
☐ N
☐ Y

Air transport
intensity

1.000   5.000
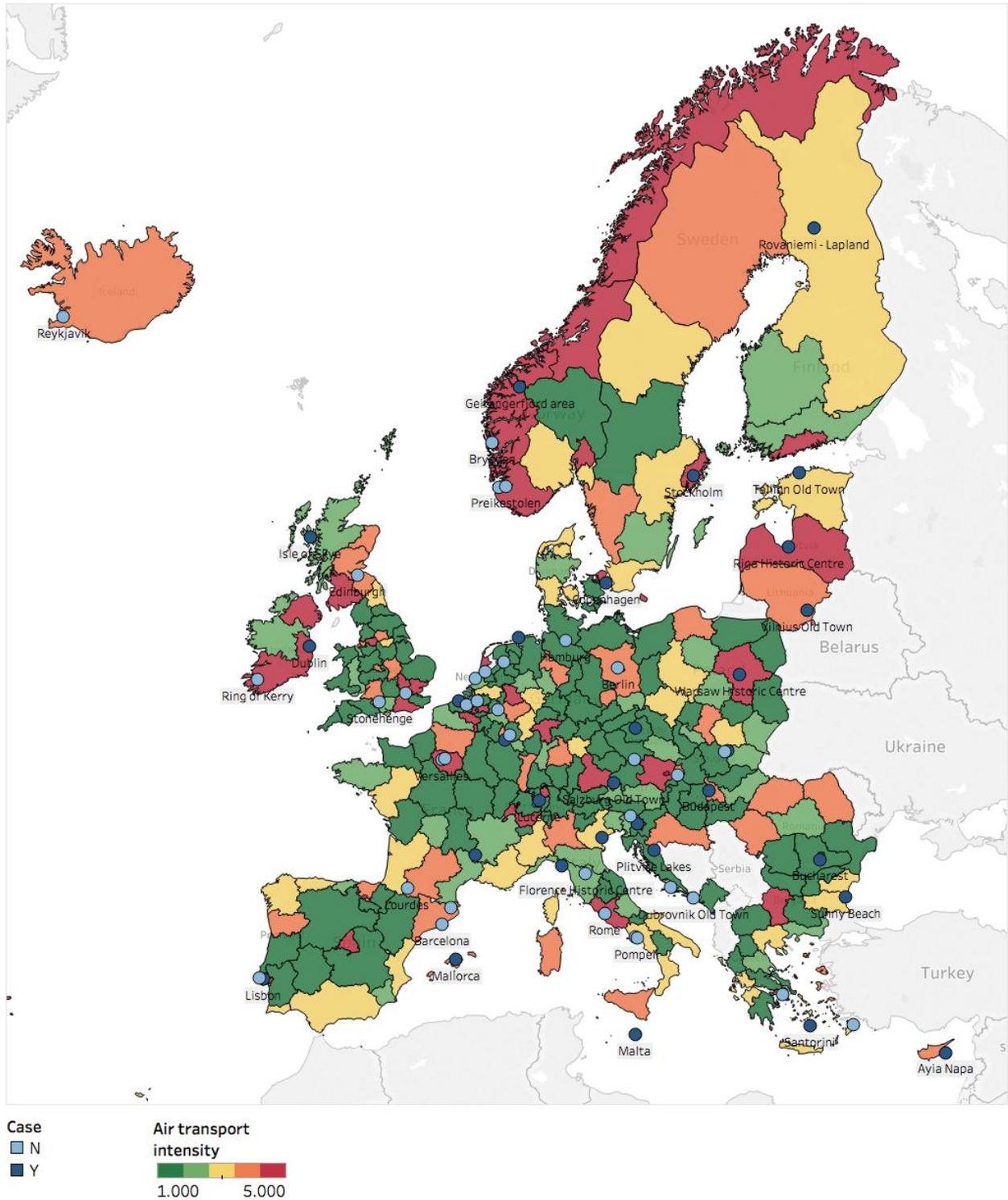
Source: (Eurostat, 2018e) air passenger data from dataset tgs00077 and bed-nights from tgs00111
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.10   Map tourism revenues share of GDP

Map 24:   Indicator share of tourism revenues of GDP for European NUTS 2 regions

Revenues share GDP
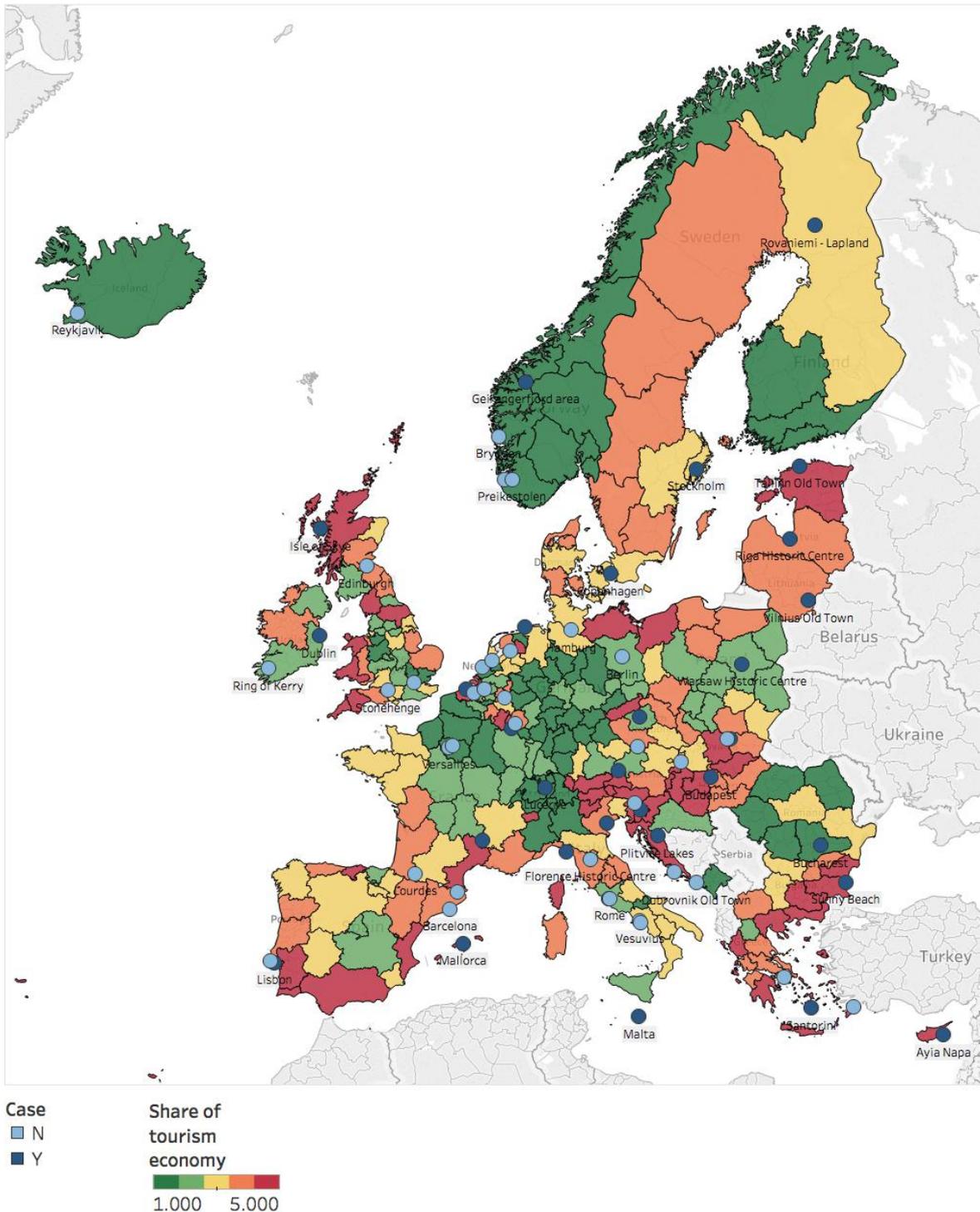
Source: revenues per country (Eurostat, 2018f)., database tgs003 (GDP) and tgs00111 (bed-nights) per NUTS 2 region (Eurostat, 2018e)
Note: revenues were gathered based on national average revenues per bed-night times NUTS 2 bed-night volume. Dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5)

I.11   Map growth of air transport

Map 25:   Indicator tourism growth of air passengers per year (2016) for European NUTS 2 regions

Growth of Air Transport

Case
☐ N
■ Y

Growth of
air transport

1.000   5.000
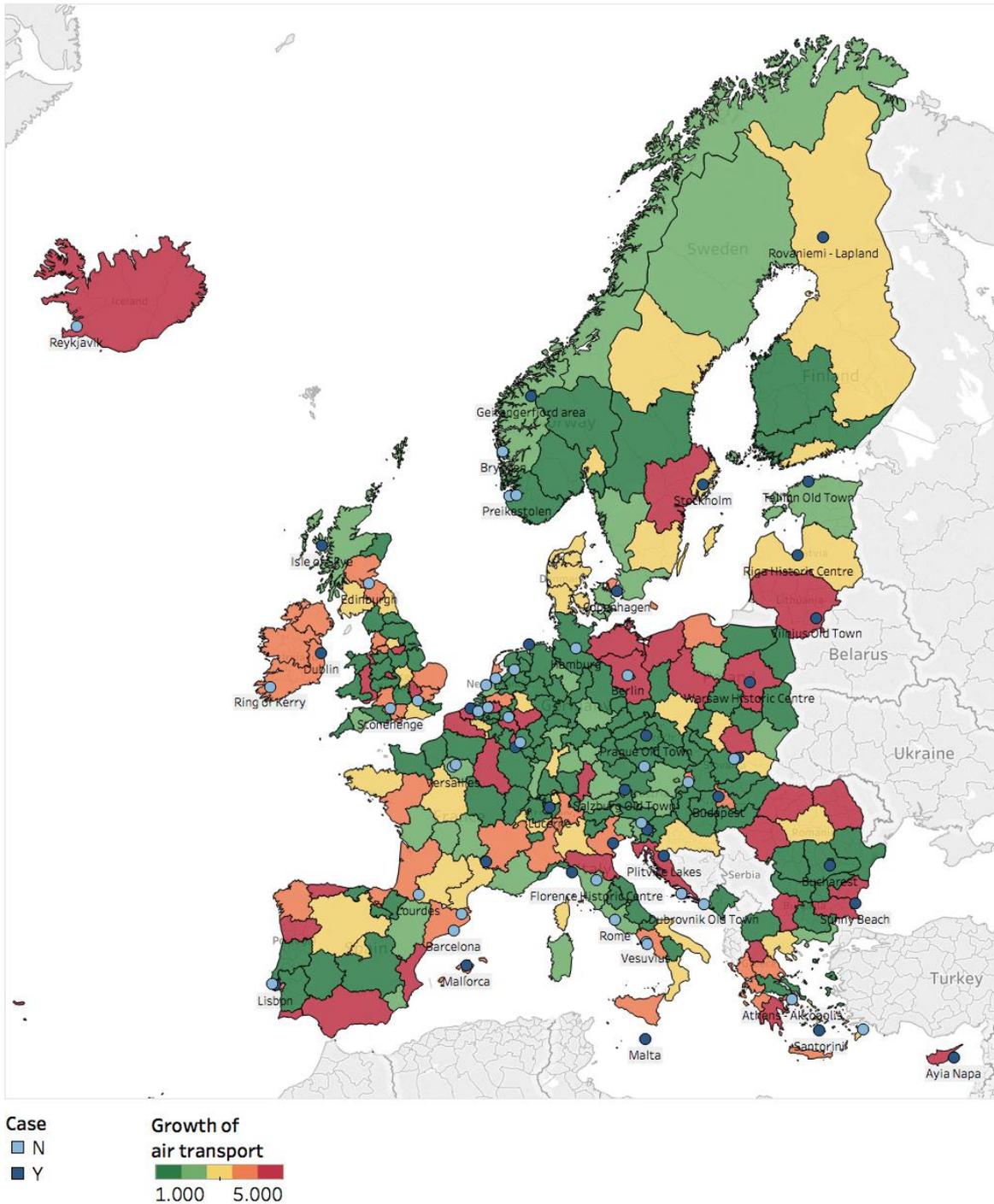
Source: (Eurostat, 2018e) database tgs00077
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.12   Map air transport seasonality 2016

Map 26:   Indicator air passengers seasonality (max month)/(min month) per year (2016) for European NUTS 2 regions
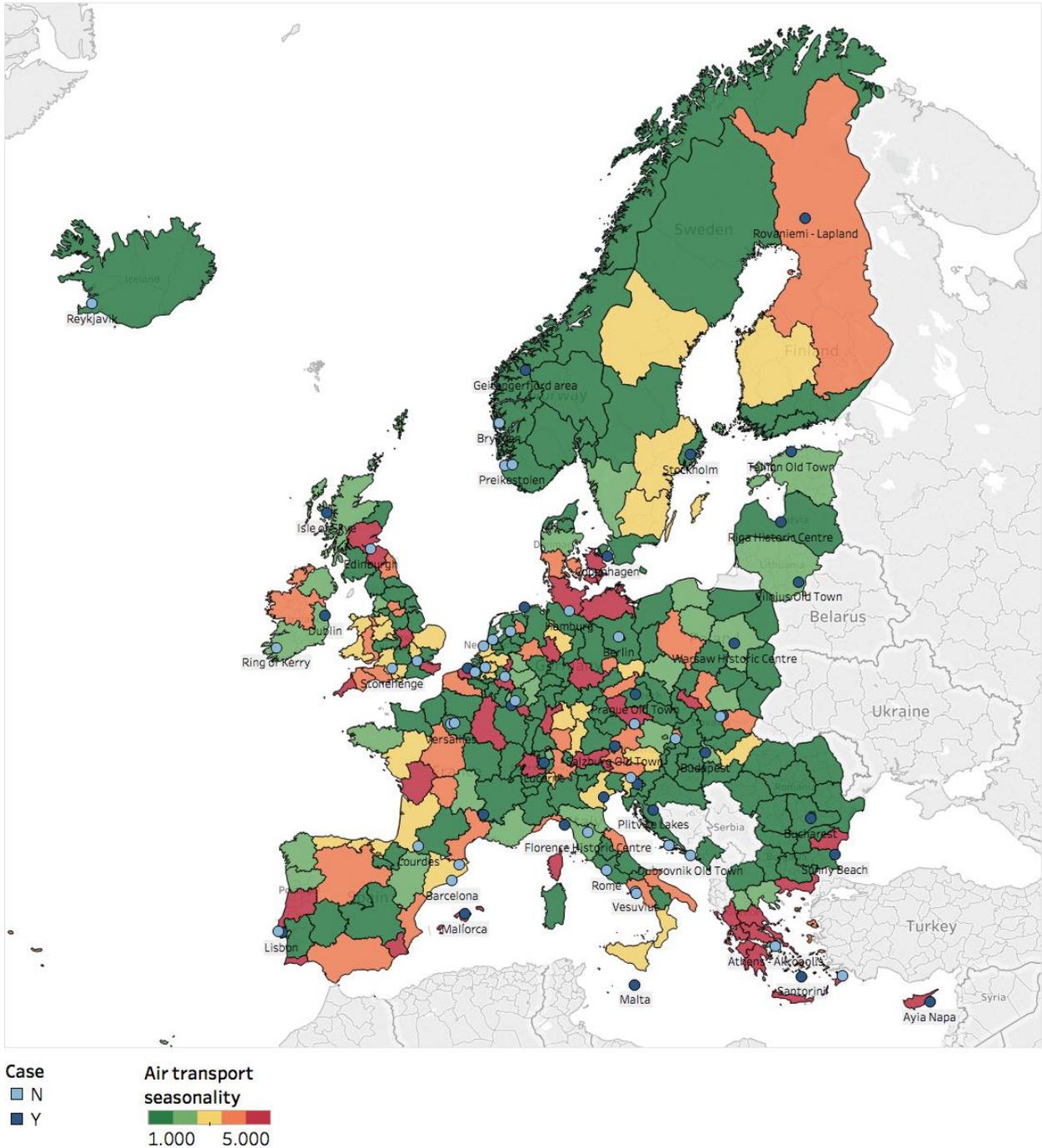
Air transport seasonality 2016

Source: Eurostat (2018b)
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.13   Map air transport seasonality 2017

Map 27:   Indicator for air passengers seasonality (the indicator is calculated by dividing the arrivals in the busiest month by the arrivals in the quietest month per year for 2017) for European NUTS 2 regions
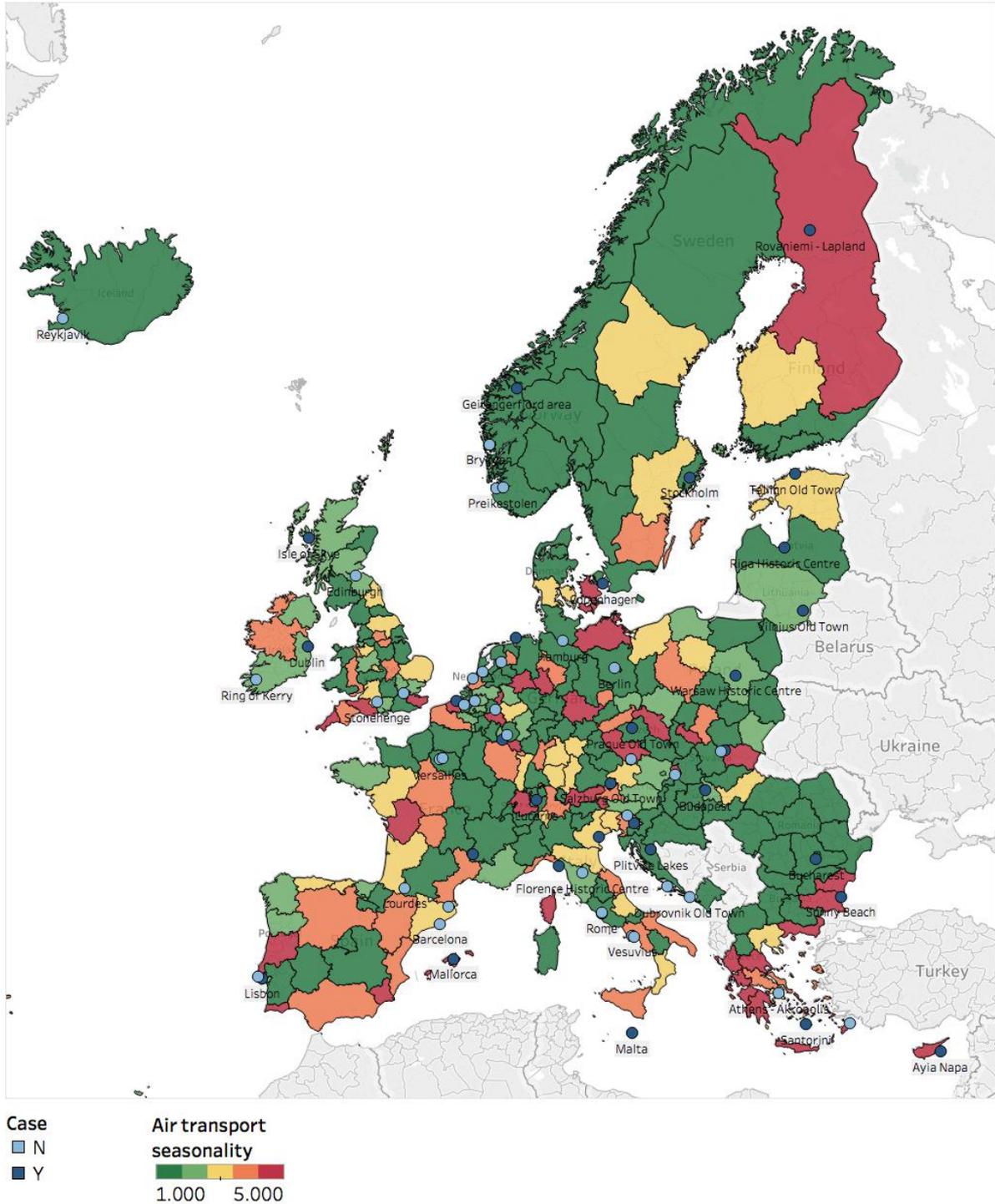
Air transport seasonality 2017

Case
■ N
■ Y

Air transport
seasonality

1.000   5.000

Source: (Eurostat, 2018b)
Note: dark blue circles represent case studies, light blue circles other destinations in a state of overtourism. Unit: 5th percentile rank (1–5).

I.14   Map with airports, World Heritage Sites and OT destinations

Map 28:   **Map showing how destinations in a state of overtourism are located with respect to airports, cruise harbours and UNESCO World Heritage Sites**

WHS, Airports & Cruise harbours
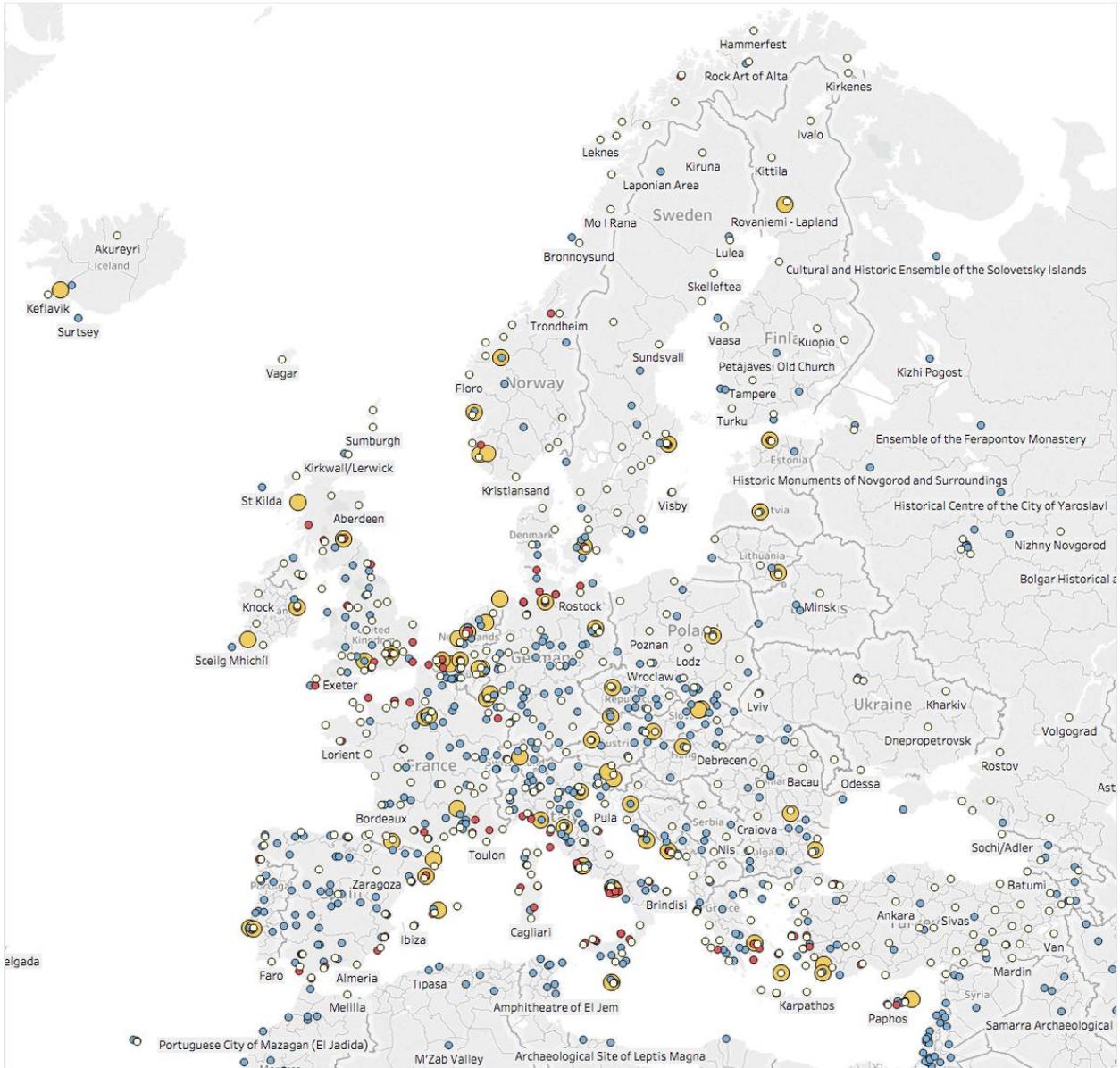
Category
- ☐ Airport
- ☐ Cruise harbour
- ☐ UNESCO Wolrd Heritage
- ☐ Overtourism destination

Sources: cruise harbours (Eurostat, 2018d), UNESCO World Heritage Sites (UNESCO, 2018), and airports (Eurostat, 2018b)

I.15   Map of cases against global tourism density

Map 29:   Global tourism density (tourist arrivals per km²) for international plus domestic tourism in 2016
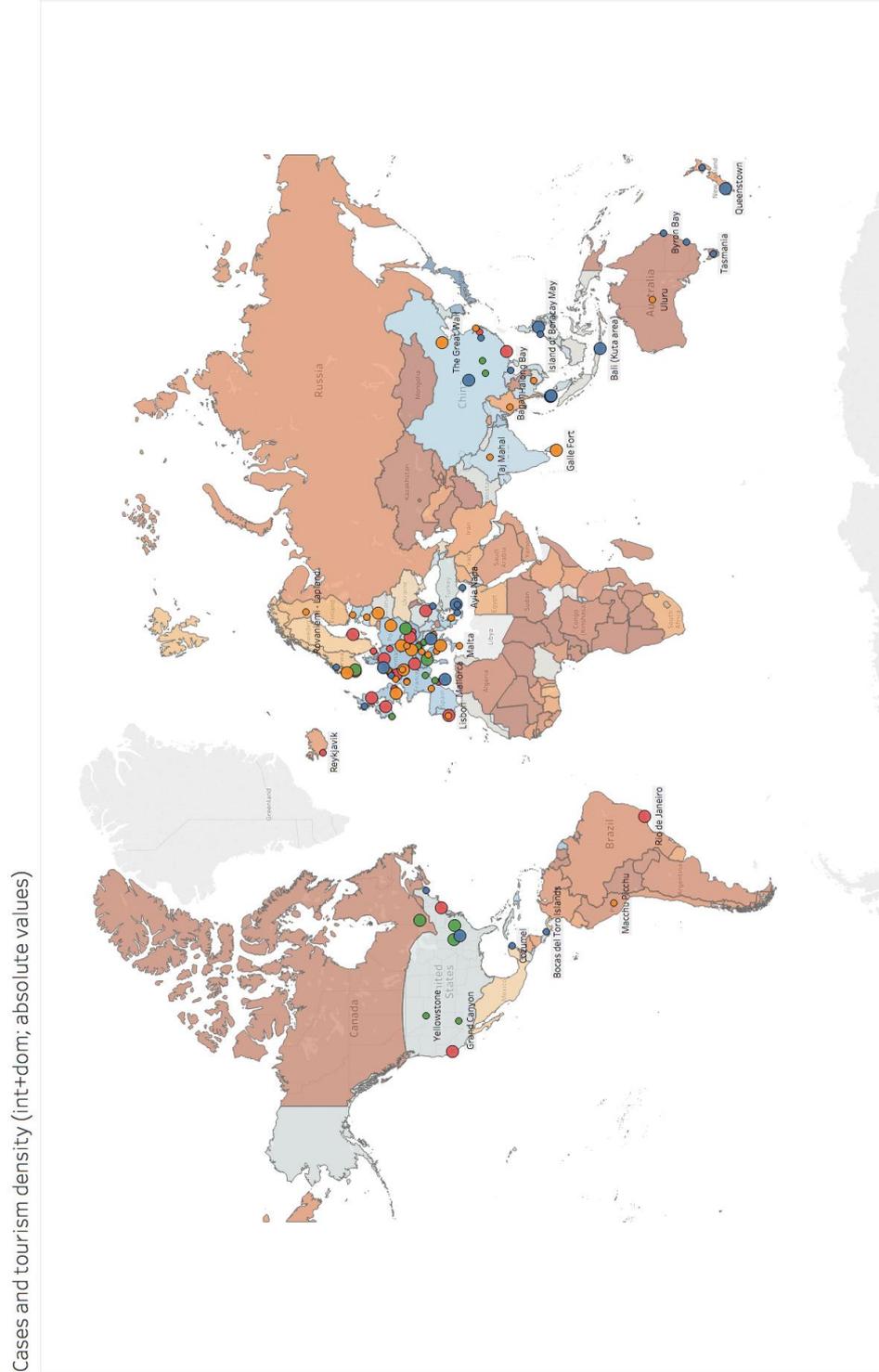
Sources: adapted from international arrivals from UNWTO (2018a); country area data from World Bank Group (2018); population data from United Nations (2018); and domestic tourism data (for 2005) based on P. M. Peeters and Eijgelaar (2014), with a correction for China (National Bureau of Statistics of China, 2018)

I.16   Map of cases against global tourism intensity

Map 30:   **Global tourism intensity (tourist arrivals per inhabitant) for international plus domestic tourism in 2016**
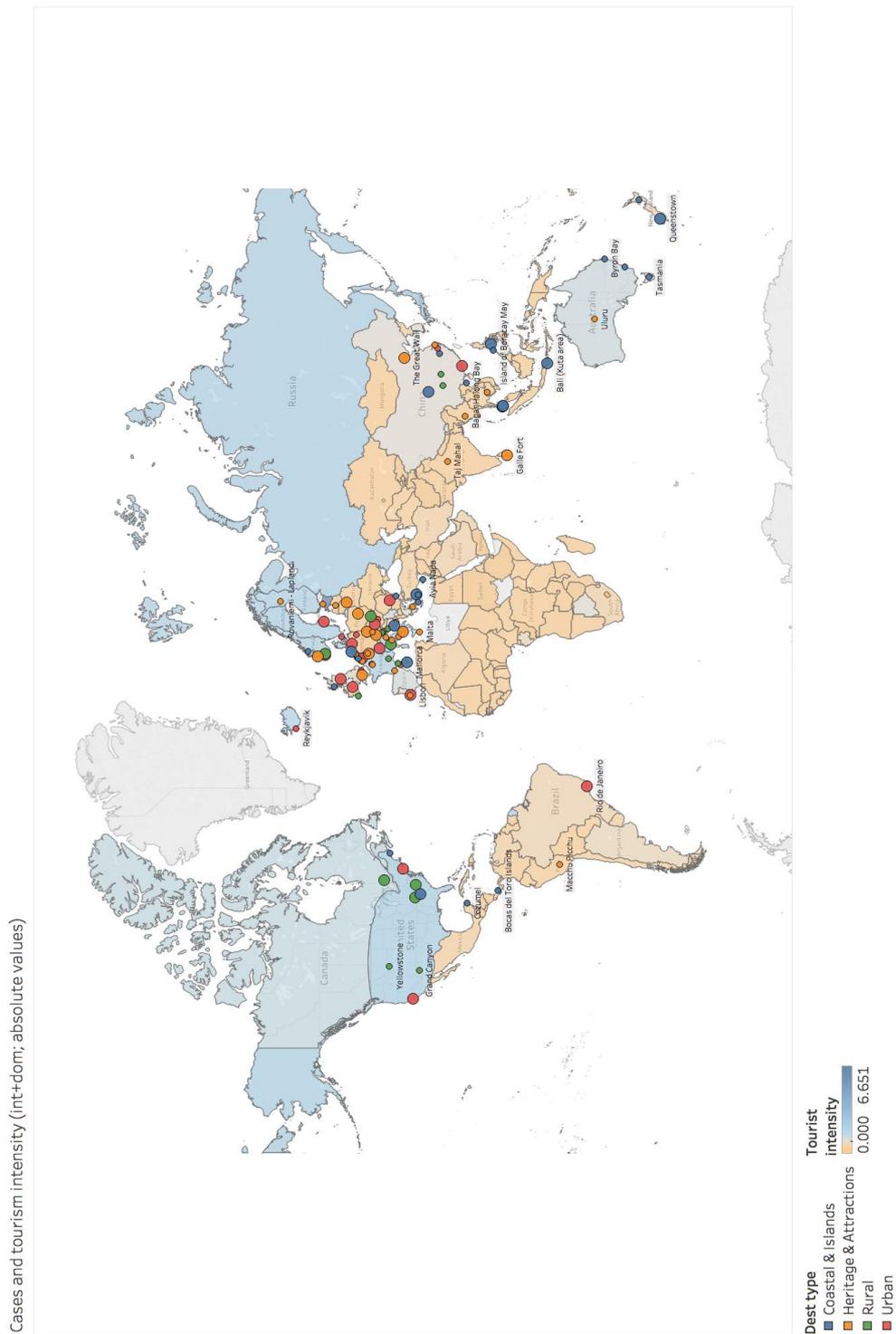
Sources: adapted from international arrivals from UNWTO (2018a); country area data from World Bank Group (2018); population data from United Nations (2018); and domestic tourism data (for 2005) based on P. M. Peeters and Eijgelaar (2014), with a correction for China (National Bureau of Statistics of China, 2018)

II HEAT MAP NUTS 2 REGIONS

Table 19: **Heat map of the significant NUTS 2 regional indicators for overtourism**[29] Colour codes: **dark green** = lowest risk, **orange** = medium risk and **dark red** = highest risk. NUTS 2 codes per country can be downloaded from https://ec.europa.eu/eurostat/web/nuts/nuts-maps-.pdf-.

NUTS 2 Code 2016	NUTS 2 region name	Tourism density	Tourism intensity	Growth air transport (2016)	Tourism share GDP	Airbnb share of Booking + Airbnb	Airbnb average shortest distance to booking.com	Air transport intensity	Number of UNESCO World Heritage Sites	Percentile Average significant indicators	Number of OT Cases within the NUTS 2 region
		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
AT11	Burgenland									3	0
AT12	Niederösterreich									3	0
AT13	Wien									5	0
AT21	Kärnten									2	0
AT22	Steiermark									2	0
AT31	Oberösterreich									1	0
AT32	Salzburg									3	1
AT33	Tirol									2	0
AT34	Vorarlberg									4	0
BE10	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest									4	0
BE21	Prov. Antwerpen									3	1
BE22	Prov. Limburg (BE)									3	0
BE23	Prov. Oost-Vlaanderen									1	1
BE24	Prov. Vlaams-Brabant									1	0

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[29] The table is sorted to the average 5th percentile score of the significant indicators for the groups of regions with 2, 1 or none overtourism cases. White cells do not contain relevant data.

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
BE25	Prov. West-Vlaanderen									5	1
BE31	Prov. Brabant Wallon									1	0
BE32	Prov. Hainaut									4	0
BE33	Prov. Liège									2	0
BE34	Prov. Luxembourg (BE)									5	0
BE35	Prov. Namur									4	0
BG31	Северозападен									2	0
BG32	Северен централен									2	0
BG33	Североизточен									4	0
BG34	Югоизточен									4	1
BG41	Югозападен									3	0
BG42	Южен централен									1	0
CH01	Région lémanique									5	0
CH02	Espace Mittelland									2	0
CH03	Nordwestschweiz									2	0
CH04	Zürich									2	0
CH05	Ostschweiz									3	0
CH06	Zentralschweiz									2	1
CH07	Ticino									3	0
CY00	Κύπρος									5	1
CZ01	Praha									5	1
CZ02	Střední Čechy									1	0
CZ03	Jihozápad									3	1
CZ04	Severozápad									2	0
CZ05	Severovýchod									2	0
CZ06	Jihovýchod									1	0
CZ07	Střední Morava									2	0
CZ08	Moravskoslezsko									1	0
DE11	Stuttgart									1	0
DE12	Karlsruhe									2	0
DE13	Freiburg									3	0
DE14	Tübingen									1	0
DE21	Oberbayern									3	0
DE22	Niederbayern									2	0
DE23	Oberpfalz									2	0
DE24	Oberfranken									3	0
DE25	Mittelfranken									2	0
DE26	Unterfranken									2	0

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
DE27	Schwaben									2	0
DE30	Berlin									4	1
DE40	Brandenburg									4	0
DE50	Bremen									2	0
DE60	Hamburg									3	1
DE71	Darmstadt									3	0
DE72	Gießen									1	0
DE73	Kassel									3	0
DE80	Mecklenburg-Vorpommern									5	0
DE91	Braunschweig									2	0
DE92	Hannover									2	0
DE93	Lüneburg									2	0
DE94	Weser-Ems									3	1
DEA1	Düsseldorf									3	0
DEA2	Köln									3	0
DEA3	Münster									1	0
DEA4	Detmold									1	0
DEA5	Arnsberg									1	0
DEB1	Koblenz									1	0
DEB2	Trier									4	0
DEB3	Rheinhessen-Pfalz									1	0
DEC0	Saarland									1	0
DED2	Dresden									1	0
DED4	Chemnitz									1	0
DED5	Leipzig									2	0
DEE0	Sachsen-Anhalt									2	0
DEF0	Schleswig-Holstein									3	0
DEG0	Thüringen									2	0
DK01	Hovedstaden									5	1
DK02	Sjælland									2	0
DK03	Syddanmark									5	0
DK04	Midtjylland									2	0
DK05	Nordjylland									4	0
EE00	Eesti									4	1
EL30	Αττική									4	1
EL41	Βόρειο Αιγαίο									5	0
EL42	Νότιο Αιγαίο									5	2
EL43	Κρήτη									4	0

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
EL51	Ανατολική Μακεδονία, Θράκη									3	0
EL52	Κεντρική Μακεδονία									5	0
EL53	Δυτική Μακεδονία									3	0
EL54	Ήπειρος									2	0
EL61	Θεσσαλία									4	0
EL62	Ιόνια Νησιά									5	0
EL63	Δυτική Ελλάδα									4	0
EL64	Στερεά Ελλάδα									2	0
EL65	Πελοπόννησος									5	0
ES11	Galicia									4	0
ES12	Principado de Asturias									4	0
ES13	Cantabria									3	0
ES21	País Vasco									3	0
ES22	Comunidad Foral de Navarra									1	0
ES23	La Rioja									3	0
ES24	Aragón									2	0
ES30	Comunidad de Madrid									4	0
ES41	Castilla y León									3	0
ES42	Castilla-La Mancha									2	0
ES43	Extremadura									2	0
ES51	Cataluña									5	2
ES52	Comunidad Valenciana									5	0
ES53	Illes Balears									5	1
ES61	Andalucía									5	0
ES62	Región de Murcia									1	0
ES63	Ciudad Autónoma de Ceuta									4	0
ES64	Ciudad Autónoma de Melilla									4	0
ES70	Canarias									5	0
FI19	Länsi-Suomi									1	0
FI1B	Helsinki-Uusimaa									3	0
FI1C	Etelä-Suomi									1	0
FI1D	Pohjois- ja Itä-Suomi									3	1
FI20	Åland									3	0
FR10	Île de France									4	2
FR21	Champagne-Ardenne									3	0
FR22	Picardie									2	0
FR23	Haute-Normandie									2	0
FR24	Centre									3	0

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
FR25	Basse-Normandie									4	0
FR26	Bourgogne									5	0
FR30	Nord - Pas-de-Calais									3	0
FR41	Lorraine									2	0
FR42	Alsace									3	0
FR43	Franche-Comté									4	0
FR51	Pays de la Loire									4	0
FR52	Bretagne									3	0
FR53	Poitou-Charentes									4	0
FR61	Aquitaine									5	0
FR62	Midi-Pyrénées									5	1
FR63	Limousin									2	0
FR71	Rhône-Alpes									5	1
FR72	Auvergne									3	0
FR81	Languedoc-Roussillon									5	0
FR82	Provence-Alpes-Côte d'Azur									5	0
FR83	Corse									5	0
FRA1	Guadeloupe									2	0
FRA2	Martinique									4	0
FRA3	French Guiana									1	0
FRA4	La Réunion									1	0
FRA5	Mayotte									1	0
HR03	Jadranska Hrvatska									5	2
HR04	Kontinentalna Hrvatska									3	1
HU10	Central Hungary									4	1
HU21	Közép-Dunántúl									1	0
HU22	Nyugat-Dunántúl									3	0
HU23	Dél-Dunántúl									2	0
HU31	Észak-Magyarország									3	0
HU32	Észak-Alföld									2	0
HU33	Dél-Alföld									2	0
IE01	Border, Midland and Western									4	0
IE02	Southern and Eastern									5	2
IS00	Ísland									4	1
ITC1	Piemonte									4	0
ITC2	Valle d'Aosta / Vallée d'Aoste									4	0
ITC3	Liguria									5	1
ITC4	Lombardia									3	0

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11 ALL AV	No. of OT-cases
ITF1	Abruzzo									3	0
ITF2	Molise									2	0
ITF3	Campania									5	2
ITF4	Puglia									4	0
ITF5	Basilicata									4	0
ITF6	Calabria									4	0
ITG1	Sicilia									4	0
ITG2	Sardegna									4	0
ITH1	Provincia Autonoma di Bolzano / Bozen									4	0
ITH2	Provincia Autonoma di Trento									5	0
ITH3	Veneto									5	1
ITH4	Friuli-Venezia Giulia									5	0
ITH5	Emilia-Romagna									5	0
ITI1	Toscana									5	1
ITI2	Umbria									2	0
ITI3	Marche									4	0
ITI4	Lazio									4	2
LI00	Liechtenstein									1	0
LT00	Lietuva									5	1
LU00	Luxembourg									5	2
LV00	Latvija									3	1
ME00	Црна Гора (Crna Gora)									4	0
MK00	Поранешна југословенска Република Македонија (Poranešna jugoslovenska Republika Makedonija)									1	0
MT00	Malta									5	1
NL11	Groningen									1	0
NL12	Friesland (NL)									5	0
NL13	Drenthe									3	0
NL21	Overijssel									2	1
NL22	Gelderland									3	0
NL23	Flevoland									5	0
NL31	Utrecht									2	0
NL32	Noord-Holland									5	1
NL33	Zuid-Holland									2	1
NL34	Zeeland									5	0
NL41	Noord-Brabant									3	0
NL42	Limburg (NL)									2	1
NO01	Oslo og Akershus									4	0

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
NO02	Hedmark og Oppland									1	0
NO03	Sør-Østlandet									1	0
NO04	Agder og Rogaland									1	2
NO05	Vestlandet									2	2
NO06	Trøndelag									2	0
NO07	Nord-Norge									2	0
PL11	Łódzkie									1	0
PL12	Mazowieckie									3	1
PL21	Małopolskie									4	0
PL22	Śląskie									1	0
PL31	Lubelskie									2	0
PL32	Podkarpackie									1	0
PL33	Świętokrzyskie									1	0
PL34	Podlaskie									2	0
PL41	Wielkopolskie									1	0
PL42	Zachodniopomorskie									2	0
PL43	Lubuskie									2	0
PL51	Dolnośląskie									2	0
PL52	Opolskie									1	0
PL61	Kujawsko-Pomorskie									2	0
PL62	Warmińsko-Mazurskie									4	0
PL63	Pomorskie									4	0
PT11	Norte									4	0
PT15	Algarve									5	0
PT16	Centro (PT)									4	0
PT17	Área Metropolitana de Lisboa									5	2
PT18	Alentejo									5	0
PT20	Região Autónoma dos Açores									5	0
PT30	Região Autónoma da Madeira									5	0
RO11	Nord-Vest									2	0
RO12	Centru									1	0
RO21	Nord-Est									2	0
RO22	Sud-Est									1	0
RO31	Sud-Muntenia									1	0
RO32	Bucureşti-Ilfov									2	1
RO41	Sud-Vest Oltenia									1	0
RO42	Vest									3	0
SE11	Stockholm									5	1

		M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
SE12	Östra Mellansverige									3	0
SE21	Småland med öarna									4	0
SE22	Sydsverige									3	0
SE23	Västsverige									5	0
SE31	Norra Mellansverige									5	0
SE32	Mellersta Norrland									3	0
SE33	Övre Norrland									4	0
SI03	Vzhodna Slovenija									2	0
SI04	Zahodna Slovenija									3	2
SK01	Bratislavský kraj									3	1
SK02	Západné Slovensko									1	0
SK03	Stredné Slovensko									4	0
SK04	Východné Slovensko									3	2
UKC1	Tees Valley and Durham									1	0
UKC2	Northumberland and Tyne and Wear									5	0
UKD1	Cumbria									5	0
UKD3	Greater Manchester									3	0
UKD4	Lancashire									2	0
UKD6	Cheshire									1	0
UKD7	Merseyside									4	0
UKE1	East Yorkshire and Northern Lincolnshire									2	0
UKE2	North Yorkshire									5	0
UKE3	South Yorkshire									3	0
UKE4	West Yorkshire									3	0
UKF1	Derbyshire and Nottinghamshire									4	0
UKF2	Leicestershire, Rutland and Northamptonshire									3	0
UKF3	Lincolnshire									5	0
UKG1	Herefordshire, Worcestershire and Warwickshire									3	0
UKG2	Shropshire and Staffordshire									2	0
UKG3	West Midlands									3	0
UKH1	East Anglia									5	0
UKH2	Bedfordshire and Hertfordshire									3	0
UKH3	Essex									2	0
UKI	London									1	1
UKJ1	Berkshire, Buckinghamshire and Oxfordshire									4	0
UKJ2	Surrey, East and West Sussex									4	0
UKJ3	Hampshire and Isle of Wight									4	0
UKJ4	Kent									4	0

			M_02_BND	M_03_BNP	M_04_GAT	M_05_SDG	M_06_SAB	M_08_DAB	M_09_AND	M_10_NUW	M_11_ALL AV	No. of OT-cases
UKK1	Gloucestershire, Wiltshire and Bristol/Bath area										5	1
UKK2	Dorset and Somerset										3	0
UKK3	Cornwall and Isles of Scilly										5	0
UKK4	Devon										5	0
UKL1	West Wales and The Valleys										5	0
UKL2	East Wales										5	0
UKM2	Eastern Scotland										5	1
UKM3	South Western Scotland										3	0
UKM5	North Eastern Scotland										3	0
UKM6	Highlands and Islands										5	1
UKN0	Northern Ireland										5	0

Source: elaborations of the authors

III   CASE STUDY DETAILS

Table 20:   Detailed overview of case data and characteristics. Legend: TN = Tourist Nights, T = Tourists, DV = Day Visitors, CO = Cruises only.

Case	Visitors (1000/year)	Tourists (1000/year)	Nights (1000/year)	Day visitors (1000)	Tourists Penetration Rate	Tourists Density Rate	Basis	Case share country (%)	Basis	Share int (%)	Basis	High season
Urban												
Bucharest		1,900	3,000		0.4	36.0	TN					May, Sept., Oct.
Budapest		4,300			1.5	51,6	T[30]	35	TN			May – Sept.
Copenhagen			8,100	7,400 (CO)	4.0	315.8	TN DV			67	TN	July – Aug.
Dublin		6,680	9,580		4.7	228.2	TN	59	T GDP			
Lisbon			11,200		6.1	306.8	TN	30	TN			
Lucerne		1,343	8,200		32.5	898.2	TN DV	78	TN			Jun. – Aug.
Reykjavik			3,729		4.7	9.6	TN	40	Rooms			
Rio de Janeiro		1,356			0.1	6.8	T[30]			21	V	
Stockholm			9,560		2.8	139.3	TN			44	TN	
Heritage & Attractions												
Bagan		282 (Int.)			12.4 (Int.)	17.1 (Int.)	T[30]					Oct., Mar.
Bruges Hist. Centre	8,750	3,500	1,800	5,250	16.4	140.0	TN DV	17	TN			May, Jul., Aug., Sept.
Echternach		1,116 (Country)	2,892 (Country)		1.3 (Country)	3.1 (Country)	TN					

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[30]   Assuming that tourists spend 2.3 days at the destination.

Case	Visitors (1000/year)	Tourists (1000/year)	Nights (1000/year)	Day visitors (1000)	Tourists Penetration Rate	Tourists Density Rate	Basis	Case share country (%)	Basis	Share int (%)	Basis	High season
Giethoorn				590	58.8		DV			35	DV	
Machu Picchu				1,411	N.A.	N.A.				76	DV	
Prague Old Town	7,650		18,000		3.8	99.4	TN					
Riga Hist. Centre	2,300	1,420	1,950	880	1.2	25.5	TN DV			87 (City)	T	
Rovaniemi	284		631		2.8	0.2	TN					Nov. - March
Salzburg Hist. Centre	8,200	1,700	3,000	6,500	16.8	396.3	TN DV					Summer
Tallinn Old Town	4,500 (Int.)	1,800 (Int.)		2,700 (Int.)	4.2 (Int.)	117.7 (Int.)	T[30] DV	74	Int. V.			Jun. – Aug.
Valetta	2,300 (Int./ Country)		9,200 (Country)	670 (CO)	6.2 (Country)	85.6 (Country)	TN DV					Jul. – Aug.
Vatican City	11,000 (Country)			11,000 (Country)	N.A.	68,490 (Country)	DV					
Venice			10,512	13,490	25.3	158.4	TN DV					
Vilnius Old Town		1,070	1,990		1,0	13.6	TN			82 (City)	T	
Warsaw Hist. Centre	20,600	9,600		11,000	5.2	175.3	T[30] DV			29 (City)	T	
Coastal & Islands												
Ayia Napa		617	4,070			347.2	TN	18	T.	94	TN	
Byron Bay	1,979 (Shire)	972 (Shire)	4,007 (Shire)	1,007 (Shire)	43.5 (Shire)	24.2 (Shire)	TN DV			10	V	
Isle of Skye				>150								

Case	Visitors (1000/year)	Tourists (1000/year)	Nights (1000/year)	Day visitors (1000)	Tourists Penetration Rate	Tourists Density Rate	Basis	Case share country (%)	Basis	Share int (%)	Basis	High season
Geirangerfjord				1,000	1,274		DV					May – Sept.
Juist Island	154	129	984	25	161.7	168.6	TN DV					
Mallorca	> 13,160	11,636	45,712	1,528 (CO)	14.9	35.6	TN DV					
Maya Bay	1.828	N.A.	N.A.	1,825	N.A.	1,333.3	DV					
Santorini	2,000		5,500	620 (CO)	107.8	220.6	TN DV					
Sunny Beach	810		5,300		N.A.							Jun. – Sept.
Turkish Riviera	12,500 (Antalya)				6.5 (City)	55.6 (City)	T[30]					
Rural												
Bled			1,000		33.4	38.1	TN			95	TN	May – Sept.
Cinque Terre	2,500 (Park)		500	2,000	166.3	204.5	TN DV					
Grand Canyon				6,250	N.A.	3.5	DV					
Plitvice Lakes	1,720	N.A.	N.A.	1,720	N.A.	15.9	DV					
Parc Monts d'Ardeche	2,100	1,000	8,000	1,100	N.A.	13,0	TN DV					
Tatranska Lomnica	3,000 (Region)		1,360 (Region)		N.A.	10,9 (Region)	TN					
Yellowstone				4,250	N.A.	1.3	DV					

Source: 41 case studies

IV   CASE STUDIES

IV.1   Ayia Napa, Cyprus

Type of destination: Coastal & Islands

Region: EU

Reported by: Simone Moretti

Ayia Napa is a beach resort located at the south-eastern coast of Cyprus. It has become synonymous for "sun, beach and fun holiday experiences". Extensive golden sandy beaches, equipped with all kind of facilities, attract tourists from all over Europe, especially the UK and Russia (Visit Ayia Napa, 2018). Nevertheless, Ayia Napa is renowned for the well-developed and dynamic nightlife scene, with "hundreds of clubs and bars set up to cater for hedonist-seeking crowds flocking here between June and August" (Lonely Planet, 2018).

Statistics

- Tourist arrivals on Cyprus in 2017: 617,200, meaning an increase of 44% vs 2015 and 48% vs 2011 (CYSTAT, 2018).
- Overnight stays on Cyprus 2016: 4.07 million, meaning an increase of 16.5% vs 2015 and an increase of 19% vs 2011.
- TPR/TDR: Ayia Napa has 3,212 inhabitants (CYSTAT, 2011), meaning a TPR of 348 tourists per 100 inhabitants per day in 2016.
- Source Markets in 2015: 6% of the overnight stays were domestic, while 94% were internationals (The National Herald, 2017). In 2014, the main international markets in terms of arrivals were Russia (36%) and UK (15%) (THR, 2017).
- Tourism Capacity 2015: 14,702 licenced beds, in addition to an estimated 2,200 unlicensed beds (The National Herald, 2017).
- 267 new tourist rooms will be provided by projects that are already in planning or construction in the Ayia Napa area (The National Herald, 2017)
- Ayia Napa in 2015 received 18% of the total visitors to Cyprus (The National Herald, 2017).

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Environmental issues
- Tourists complain about tourists
- Uncivilised behaviour
- Gentrification

Increasing international tourist flows in the last decades generated a heavy tourism pressure on Ayia Napa, which nowadays suffers of many issues typically associated with overtourism. While those impacts are more visible during the summer season, some of them result in year-around effects on the destination, its image and its local community. Problems reported are mainly related to:

- Physical overcrowding of the resort and its beaches, congestions and traffic, causing a degradation of the tourists' experience as well (Council of Europe, 1996; Saveriades, 2000; Tourist Information Cyprus, 2018).
- Noise pollution and frequent uncivilised behaviour of tourists caused by alcohol abuse and drugs consumption, also causing issues in terms of safety and security at the destination, with negative impacts on the destination's image (KNews, 2018; Prokopis, 2010; Theocharous, Zopiatis, & Philaretou, 2015).
- Overall environmental degradation and damage to the fauna and wildlife population. For instance, sea turtles have been driven from the coastal area because of the excessive tourist development (Prokopis, 2010).
- Waste treatment and disposal. It is estimated for all of Cyprus, that tourists' contribution in terms of waste production is equal to having a 35% more of permanent population, and the destination is having difficulties in keeping the situation under control (Prothom, 2017).
- Constant land-usage and resources (e.g. water) competition between the tourism industry, the local community and the, once stronger, agriculture sector (IREFREA, 2009; Sudesco, 2014);

- Social impacts in terms of quality of job opportunities provided by tourism, leaving no room for balancing intense working schedules in summer with sufficient time for family and for respecting local traditional family-values, while many workers are left unemployed during winter (Prokopis, 2010).
- Socio-economic disruption, as the rapid tourism growth completely transformed Ayia Napa, from a small fishing village with a population of farmers with a deep knowledge in nature, into one of the biggest tourist resorts in Europe, with a population of seasonal tourism workers or non-experienced small tourism enterprise owners. The result is a complete alteration and disappearance of the local identity of the population (Saveriades, 2000; Sudesco, 2014).

Measures taken

The discussion about what type of tourists Ayia Napa should attract and what to offer is going on for many years. Already ten years ago, the municipality was trying to tackle issues related to alcohol abuse and drug consumption in order to restore the damaged image of the destination (IREFREA, 2009). Those efforts continued along the years, so far without effective results, as media every summer report similar issues. Recently, the Mayor of Ayia Napa, announcing the vision 2030 for the destination and its new strategic tourism development plan, made some resolute declaration of being against low quality youth tourist and in favour of a more cosmopolitan nightlife. "The City Council collectively discussed the issue with its citizens, its professional associations, its political parties and all related stakeholders and has unanimously decided that this type of product is not welcome any more in our City" (Ayia Napa Municipality, 2018). A strong commitment towards preventing negative effects and enforcing law has been announced as well. Other measures planned to deal with overcrowding tourism issues are aimed at better distributing of tourism along the entire island (The National Herald, 2017) and easing the environmental pressure. For example, the municipality aimed to offer organic waste collection from hotels by spring 2018. Recycling bins have been installed in the major tourist hotspots (The National Herald, 2017) and street cleaning is planned to be improved (The National Herald, 2017). Even though maintaining its character of "party destination", the intention of the municipality, on paper, is to incorporate some sustainability principles in destination development. The multiple impacts of massive tourist flows are increasing the awareness, among the stakeholders, of the overtourism issues and how those problems are damaging the destination image, the environment and the social fabric. Nevertheless, at the moment it is still not possible to assess the effectiveness of those measures.

The future of overtourism

Projections show that by 2030 Ayia Napa will grow to 1 million tourist arrivals per annum, of which 75% are expected to be international tourists (The National Herald, 2017). That would mean an increase of about 350,000 visitors compared to the arrivals in 2017.

Sources and links

Ayia Napa Municipality. (2018). City of Ayia Napa – against low quality youth tourist product - city announcement. [Facebook status update]. Retrieved August 2, 2018, from https://www.facebook.com/AyiaNapaMunicipality/posts/1467977683325016

Council of Europe. (1996). *Sustainable Tourism Development: Proceedings, Colloquy Organised by the Council of Europe (Directorate of Environment and Local Authorities), the Cypriot Ministry of Agriculture, Natural Resources and Environment and the Office of Tourism of Cyprus, Larna*. Council of Europe Publishing. Retrieved from https://books.google.nl/books?id=fBVBKu8QlhUC

CYSTAT. (2011). Statistical Service - Population Census 2011. Retrieved August 2, 2018, from http://www.mof.gov.cy/mof/cystat/statistics.nsf/census-2011_cystat_en/census-2011_cystat_en

CYSTAT. (2018). Statistical Service - Tourism. Retrieved August 2, 2018, from http://www.cystat.gov.cy/mof/cystat/statistics.nsf/services_71main_en/services_71main_en?OpenForm&sub=1&sel=1

IREFREA. (2009). *Qualitative Report on nightlife in tourist resorts. Five insights on Southern European tourist destinations*. Retrieved from http://www.algarvetouristguide.com/

KNews. (2018). Ayia Napa mayor wants to bring the noise down. Retrieved August 3, 2018, from http://knews.kathimerini.com.cy/en/news/ayia-napa-makes-noise-again

Lonely Planet. (2018). Welcome to Agia Napa. Retrieved August 2, 2018, from https://www.lonelyplanet.com/cyprus/the-republic-of-cyprus/agia-napa

Prokopis, C. (2010). *Achieving guest satisfaction through the agritourism experience: The case of Cyprus*. Retrieved from http://irep.ntu.ac.uk/id/eprint/48/1/196867_Thesis of Prokopis Christou.pdf

Prothom, A. (2017). Cyprus struggles to manage waste as tourist numbers soar. Retrieved August 2, 2018, from

https://www.travindy.com/2017/10/cyprus-struggles-to-manage-waste-as-tourist-numbers-soar-prothom-alo-english/

Saveriades, A. (2000). Establishing the social tourism carrying capacity for the tourist resorts of the east coast of the Republic of Cyprus. *Tourism Management*, *21*(2), 147–156. https://doi.org/10.1016/S0261-5177(99)00044-8

Sudesco. (2014). *The Ayia Napa project. Studio Brief.* Retrieved from http://www.frederick.ac.cy/sudesco2014/pdf/studio_all.pdf

The National Herald. (2017). Record Number of Cyprus Tourists Leaving Behind Big Waste Problem. Retrieved August 3, 2018, from https://www.thenationalherald.com/179571/record-number-cyprus-tourists-leaving-behind-big-waste-problem/

Theocharous, A., Zopiatis, A., & Philaretou, A. G. (2015). The Social Construction of Male Tourism Deviance: The Case of Agia Napa (AN), Cyprus. *Sexuality & Culture*, *19*(4), 816–834. https://doi.org/10.1007/s12119-015-9293-2.

IV.2 Bagan, Myanmar

Type of destination: Heritage & Attractions

Region: Rest of the world – Southeast Asia

Reported by: Bernadett Papp

The Bagan archaeological zone, located in the Mandalay region, consists of 104 km², while the Bagan heritage site covers 26 km² within the zone. Over 2,230 stupas and pagodas can be found here. (Ministry of Hotels and Tourism, 2018) Bagan, being one of the flagship destinations in the country, receives a large proportion of all international arrivals (Ministry of Hotels and Tourism, 2013). The key market segments in FIT (Free Independent Traveller or Free Independent Tourist) are couples, friends and families (C9 Hotelworks, 2017). The Bagan heritage site is currently on the tentative list of UNESCO (UNESCO, 2018).

Statistics

- In Myanmar, the economy, including the tourism sector is developing at a fast pace. In 2017, there were 3.4 million international arrivals; a 68% growth compared to 2013 (C9 Hotelworks, 2017).
- In 2016, Bagan welcomed 282,387 international visitors, representing a 12% average annual growth rate (C9 Hotelworks, 2017).
- Bagan has 88 accommodation facilities with 2,960 rooms. The average occupancy rate in 2016 was 52%. The yearly growth rate of the hotel supply increased from 3% (2015) to 15% in 2016 (C9 Hotelworks, 2017). Numerous hotel and investment projects are being carried out in the area. It is estimated that an additional 804 rooms will be completed in the next 12 months (C9 Hotelworks, 2017).
- The main gateway to Bagan is Nyaung U Airport. It accounts for 44% of all foreign arrivals. However, due to improved connections between Mandalay International Airport and Bagan, a shift can be seen towards land transport. This segment registered an increase from 24% in 2013 to 38% in 2016 (C9 Hotelworks, 2017).
- Concerning seasonality, most international tourists arrive between October and March, while domestic tourism peaks in April (C9 Hotelworks, 2017).
- Based on a size of the region of 104 km² and 20,000 inhabitants[31], the TPR is 12.4 tourist per 100 inhabitants per day and the TDR is 7.1 tourists per km² per day.

Main impacts

- Overcrowding and heritage degradation
- Child exploitation
- Misbehaviour of tourists

One of the major issues is related to the physical carrying capacity of the site. The most popular pagodas become overcrowded at certain times of the day. The busiest period is sunset and sunrise when hundreds of tourists climb the pagodas to watch the phenomena. This causes irreversible damage to the ancient structures (Crabolu, 2015). Impacts on the local community are significant: Youngsters dropping out of school in order to work in tourism (as guides or selling souvenirs) is getting more and more common. An even more serious issue is child sex exploitation. The problem has already been recognised in the area, it is however not yet as prominent as in other parts of South-East Asia (Crabolu, 2015). Wearing inappropriate clothes, drinking alcohol, spraying graffiti on the walls of the pagodas, as well as climbing them are some of the most frequent examples of tourists' misbehaviour (Crabolu, 2015).

Measures taken

Measures taken include the following:

- Development plans: The Bagan heritage site is publicly owned and managed by the Department of Archaeology of the Ministry of Culture (Ministry of Culture, 2013). The tourism development plan of the heritage site is lacking, as it is currently under development. The development plan will focus on 3 main areas: "tourism management and administration", "tourism infrastructure" and "tourism human resources". Work on the conservation plan of the heritage site is also in progress (JICA, 2014).

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[31] Source: https://ww2.ibge.gov.br/home/default.php

- Zoning system: The area is divided into three zones: the ancient monument zone (further development is strictly prohibited), ancient zone (development is strictly regulated) and protection and preservation zone (further development is permitted). Furthermore, a hotel zone and an urban area zone have also been designated (JICA, 2014).
- Heritage protection: The entrance fee for the Bagan Archaeological zone is €20, while domestic tourists can visit the zone for free. The zone fee system is used to monitor the number of foreign arrivals and some of the revenue is used for heritage protection and preservation (Crabolu, 2015).
- Awareness campaigns: In order to raise awareness of plastic pollution, a "plastic campaign" was launched. 220 bins were donated, 40 banner maps were placed in the most popular areas and 22 billboards were installed promoting the campaign (Nagata, 2017). In 2012, a booklet (including a website and social media platform) named "Dos and Don'ts for Tourists" has been published by Tourism Transparency, educating travellers about local etiquette, habits, culture and responsible behaviour (Tourism Transparency, n.d.).

The future of overtourism

According to the Asian Development Bank, Myanmar has the potential to become a very competitive destination on the global marketplace due to its unique cultural and natural resources. (ADB, 2015). Due to the rapidly changing environment (urbanisation) and economic development (democratisation and economic open-door policy) (JICA, 2014) arrival numbers are expected to grow further (Ko & Supinit, 2016). While demand is rising enormously in Bagan, the supply of accommodation facilities is expected to stabilise in the near future (C9 Hotelworks, 2017), which may lead to accommodation shortage. Steps have been taken towards efficient visitor management at the Bagan archaeological zone, however, as discussed above, structured development and management plans are lacking.

Sources and links

ADB. (2015). Myanmar: Long-term scenarios for sustained macroeconomic growth. Manila: Asian Development Bank.

C9 Hotelworks. (2017). Market research. Bagan Myanmar Tourism market review. Retrieved from https://www.c9hotelworks.com/downloads/bagan-myanmar-tourism-market-review-2017-06.pdf

Crabolu, G. (2015). Visitor management at the Bagan heritage site. An evaluation of the current status with related recommendations. (Master's thesis). Retrieved from http://www.myanmarresponsibletourism.org/learning-resources/#

JICA. (2014). The detailed planning survey on establishment of the pilot model for regional tourism development in the Republic of the Union of Myanmar. Final report. International Development Centre of Japan Inc., Oriental Consultants Co., Ltd., H.I.S.Co., Ltd.

Ko Ko, W., & Supinit, V. (2016). Perspective of tourist in Bagan relating to heritage site in Myanmar. International Journal of Social Science and Humanities Research, 4, 429-435.

Ministry of Culture. (2013). Department of Archeology National Museum and Library. Functions. Retrieved from http://www.culture.gov.mm/DANML/Functions/default.asp

Ministry of Hotels and Tourism. (2017). Publications. Myanmar Tourism Statistics 2016. Retrieved from http://tourism.gov.mm/en_US/publications/myanmar-tourism-statistics/

Ministry of Hotels and Tourism. (2018). Attractions. Destinations. Bagan. Retrieved from http://tourism.gov.mm/en_US/attractions/destinations/bagan/

Ministry of Hotels and Tourism. (2013). Myanmar Tourism Master Plan 2013-2020. Nay Pyi Taw.

Nagata. (2017). Report on university workshops in Myanmar and Malaysia for financial year 2016. Workshops on business and sustainable development. So-Tech Consulting Inc.

Tourism Transparency. (n.d.). Dos & Don'ts for tourists. About. Research process. Retrieved from http://www.dosanddontsfortourists.com/about.html

UNESCO. (2018). The list. Tentative lists. Bagan. Retrieved from https://whc.unesco.org/en/tentativelists/819/

IV.3   Bled, Slovenia

Type of destination: Rural

Region: EU

Reported by: Simone Moretti

Bled is renowned for the natural beauty of the alpine landscape, its mild climate, the namesake lake with thermal and curative waters, forming an idyllic and romantic scenery. The tourism product includes natural and cultural sights, summer and winter sports & activities, culinary, wellness & beauty, convention & meeting facilities, events & festivals. Bled claims to attract a variety of different tourism market: "businessmen, artists, athletes, explorers, sport enthusiasts, the old and the young, from all over the world" (Turizem Bled, 2018). After Ljubljana and Piran, Bled is the third most visited place in Slovenia (STB Slovenia Tourism Board, 2017).

Statistics

- Number of overnight stays in Bled increased from 540,480 in 2008, to 684,015 in 2015, with an increase of 26.5% (Binter, Ferjan, & Neves, 2016). Moreover, overnight stays in 2017 are estimated to be around 1 million (The Slovenia Times, 2017), that means an increase of almost 50% in just two years. Considering a local population of only 8,203 inhabitants (SURS, 2018) and a municipality extension of 72 km^2, the TPR is of about 33.4 tourists per 100 inhabitants per day in average, and the TDR is about 38.1 tourists per km^2 per day. Those numbers do not take into consideration the one-day visitors.
- The Bled Caste and Museum alone, in 2012 attracted more than 220,000 visitors (Gosar, 2014), being the second most visited tourist attraction in the country.
- The peak of overnights is registered in August (18% of the annual overnights), that leads to an estimation of 180,000 overnight stays in August 2017, with a TPR of 73 tourists per 100 inhabitants per day in August, and a TDR of 83 tourists per km^2. The period May-September counts for almost 70% of the total overnights (Binter et al., 2016).
- According to Šegota, Mihalič, & Kuščer (2017), almost 95% of overnight stays are by international tourists. The main foreign markets in 2015 were represented by Germany, UK and Italy. The average length of stay is lower than 3 days and the destination is very popular for weekend trips (Binter et al., 2016). The Bled Castle and Museum was the second most visited tourist attraction in Slovenia in 2012, with 221,230 visitors (Gosar, 2014), almost the double than the Ljubljana's Castle, located in the capital.

Main impacts

- High number of tourists per residents
- Environmental issues
- Lack of capacity (actually turn away guests)
- Tourists complain about tourists
- Traffic and public transport congestion

There is a general overall perception among tourists that the destination in the summer is becoming overcrowded and during the weekends there are too many tourists and queues (Walker, 2016; Baker, 2018; Galffy, 2018). Residents are struggling to adapt to an increasing level of visitors and sometimes even start campaigning against it (Mountain Research Initiative, 2018). Their concerns are related to social and environmental consequences of the increasing tourism: pollution, waste, traffic, parking and infrastructure congestion (Šegota et al., 2017; Sežun, 2018) are affecting their daily life. Moreover, residents are concerned by the increasing economic dependence of Bled from tourism, and the social consequences related to the quality of employment opportunities related to tourism (Mihalič, Šegota, Knežević Cvelbar, & Kuščer, 2016).

Measures taken

As reported by Mihalič et al., (2016; p.1495), the overall "Municipality Development Strategy 2009-2020", aims to develop Bled into a green Alpine community for local residents and an attractive destination for visitors. "It considers the preservation of its nature and water quality along with established traffic regulations to reduce congestion, parking space problems and air pollution". "Besides that, tourism is seen as a means to increase the quality of life of local residents…". In principle, the destination management of Bled already acknowledged the need to deal with negative impacts of increasing tourism flows. That was also followed by concrete actions in terms of environmental protection: a special law prohibits new construction on the immediate banks of the lake,

swimming is only allowed in allocated bathing areas, the only boats allowed on the lake are the traditional "pletnas" (Walker, 2016). It would be inappropriate to say that the implementation phase of the 2009-2020 plan is a failure, as the destination is dealing with a fast increase in the number of visitors, while the social and environmental situation is certainly not collapsing. Nevertheless, more effective actions are needed if tourism flows will continue to increase, as forecasted.

The future of overtourism

Overtourism has become a serious concern for the local authorities and will certainly be on their agenda for the next years. The new head of the Bled tourism board, Tomaz Rogelj, who took over the position last January, explained his plan to cope with the situation: dispersing the visitors across the area by providing more alternatives (with more information and logistic services), ease the situations of traffic jams and parking shortages (plans include the construction of the northern and southern bypass, a new multi-storey car park and additional parking spaces) and avoiding mass tourism through focusing on providing an elite form of tourism (Xinhua, 2017; Sežun, 2018). In general, a stronger involvement of the Bled residents in tourism planning and a better collaboration among the various organisations involved, might be helpful to cope with tourism development in Bled and its impacts (Mihalič et al., 2016; Šegota et al., 2017).

Sources and links

Baker, M. (2018). Slovenia: Bled vs Bohinj. Retrieved July 24, 2018, from https://markbakerprague.com/bled-vs-bohinj/

Binter, U., Ferjan, M., & Neves, J. V. (2016). Marketing mix and tourism destination image: The study of destination Bled, Slovenia. *Organizacija*, *49*(4), 209–223. https://doi.org/10.1515/orga-2016-0019

Galffy, A. (2018). Day Trip to Lake Bled from Ljubljana. Retrieved July 24, 2018, from https://travelnotesandbeyond.com/lake-bled-day-trip/

Gosar, A. (2014). Il turismo in Slovenia. *Risposte Turismo*, *1*. Retrieved from http://www.risposteturismo.it/Public/lePaginediRT/uno2014_lePaginediRT_A.Gosar.pdf

Mihalič, T., Šegota, T., Knežević Cvelbar, L., & Kuščer, K. (2016). The influence of the political environment and destination governance on sustainable tourism development: a study of Bled, Slovenia. *Journal of Sustainable Tourism*, *24*(11), 1489–1505. https://doi.org/10.1080/09669582.2015.1134557

Mountain Research Initiative. (2018). Two Sides of the Tourism Coin. Retrieved July 24, 2018, from http://www.mountainresearchinitiative.org/en/mri-news/two-sides-of-the-tourism-coin

Šegota, T., Mihalič, T., & Kuščer, K. (2017). The impact of residents' informedness and involvement on their perceptions of tourism impacts: The case of Bled. *Journal of Destination Marketing and Management*, *6*(3), 196–206. https://doi.org/10.1016/j.jdmm.2016.03.007

Sežun, J. (2018). Komu cveti turizem na Bledu? Retrieved July 24, 2018, from http://revijazarja.si/clanek/odklenjeno/5af94fb367827/komu-cveti-turizem-na-bledu

STB Slovenia Tourism Board. (2017). *Tourism in numbers 2016 - Slovenia*. Retrieved from https://www.slovenia.info/uploads/dokumenti/raziskave/2017_06_sto_tvs_2016_a4_ang_web_2.pdf

SURS. (2018). Bled - Slovene regions and municipalities in numbers. Retrieved July 24, 2018, from http://www.stat.si/obcine/en/2013/Municip/Index/6

The Slovenia Times. (2017). Bled set to pass tourism milestone this year. Retrieved July 24, 2018, from http://www.sloveniatimes.com/bled-set-to-pass-tourism-milestone-this-year

Turizem Bled. (2018). About Bled. Retrieved July 23, 2018, from http://www.bled.si/en/about-bled

Walker, J. (2016). Morning on Slovenia's Lake Bled. Retrieved July 24, 2018, from https://perceptivetravel.com/blog/2016/10/10/morning-slovenias-lake-bled/

Xinhua. (2017). Slovenia to re-direct tourism at country's most popular tourist site - Xinhua. Retrieved July 24, 2018, from http://www.xinhuanet.com/english/2017-12/22/c_136845962.htm

IV.4   Bruges Historic Centre, Belgium

Type of destination: Heritage & Attractions

Region: EU

Reported by: Bernadett Papp

Bruges is the capital and the largest city in West Flanders, a Flemish region of Belgium. The historic city centre of Bruges is a UNESCO World Heritage Site and is considered to be one of the best preserved medieval towns in Europe (Visit Bruges, 2018). The unique reputation of Bruges has turned the city into one of the most visited tourist destinations in Flanders (Visit Flanders, 2017).

Statistics

- Bruges has been experiencing record number of arrivals in the past 10 years. In 2015, the city received a total of 8.75 million visitors. Approximately 60% of these visitors were day-trippers, 25% stayed overnight (2.2 million) and 15% made recreational visits. (Westtoer & Proximus as cited in Nijs, 2017).
- Between 2004 and 2015 there was a 56% increase in the number of overnights. The increase in the number of arrivals for the same period was 64% (Westtoer & Proximus as cited in Nijs, 2017).
- The number of accommodation facilities has been growing rapidly. In 2016, a total of 334 establishments (10,761 beds) were registered in Bruges, indicating a 7.4% increase compared to the previous year (Visit Flanders, 2017).
- Seasonality affects the tourism industry of Bruges. In the past few years, the situation has improved due to efficient marketing and events organised in the shoulder months. The busiest months are: May, July, August and December (Westtoer & Proximus as cited in Nijs, 2017).
- Based on a size of 138 km^2 and 118,000 inhabitants the TPR of Bruges is 16.4 visitors per 100 inhabitants per day and the TDR is 140 visitors per km^2 per day.

Main impacts

- High concentration of visitors
- Congestion and mobility problems
- Rising living costs
- Touristification

In Bruges, most of the tourism activities take place in the confined Egg Market (Eiermarkt). The highest concentration of sites, attractions, accommodation and catering facilities is in an even smaller area, the so called "Golden Triangle". As a consequence pressure is most visible in this area (Nijs, 2017). Due to the high concentration of visitors, overcrowding and mobility problems often arise. Cruise tourists and group tourists form the core of the problem. It has been pointed out that further increase in the number of arrivals may lead to conflicts between the residents and the tourists (Nijs, 2017). The Port of Zeebrugge receives more than 150 cruise ships and 300,000 passengers annually. Besides cruise tourists, the port operates several ferry lines across the channel to England. As Zeebrugge is mostly a transit port, cruise tourists spend only a few hours in the city resulting in no or minimum contribution to the local economy. The number of cruise tourists is expected to grow further in the near future (Port of Zeebrugge, 2017). One of the most significant economic implications are the rising value of real estate and the increasing living costs (Nijs, 2017). It has been reported that the medieval city scape is slowly changing. The high number of souvenir stores and chocolate and beer shops has led to annoyance amongst the residents (Papp, Postma & Koens, 2018).

Measures taken

- Concentration model: The first significant measures were taken in 1996. The so called "concentration model" was put in place in order to release pressure on the outskirts of the city by forcing all tourism related developments to take place within the ''Golden Triangle'' (Neuts & Nijkamps, 2012).
- Hotel stop: The "concentration model" was followed by the "hotel stop". The hotel stop was implemented in order to protect the liveability of the city and to ensure affordable homes for the locals (WES, 2012).
- Organised walking tours: The provision of walking tours is regulated by law. Only licensed tour guides can operate in the city. Further regulations, for instance, are: Groups larger than 25 people need to use earphones during the guided tour, sound amplification is forbidden, and un-allowed behaviour can result in €250 fine (Visit Bruges, n.d.).

- Airbnb: Airbnb owners are obligated to pay tax after their services, just like other official accommodation establishments (Flanders Today, 2015).
- Spatial distribution of visitors: The Bruges City Card provides discounted and combined offers with the aim of stimulating the length of stay, as well as the interest and itinerary of the visitors (WES, 2012).
- Marketing: In order to attract the right target market, Bruges' marketing strategy is focusing on specific segments such as high-end cultural tourists or families. Furthermore, certain events are strategically organised in the shoulder months (WES, 2012).

The future of overtourism

In Bruges, visitor numbers are expected to grow further in the near future. The regulation of day-tourists is considered to be a priority as they represent the largest threat (e.g. discount offers, stimulation of itineraries etc.). Expending the tourism offer by strengthening the connection between the harbour area (Port of Zeebrugge) and the inner city is planned, in order to distribute the visitors more evenly and to release the pressure on the Golden Triangle (Papp, Postma & Koens, 2018). Zeebrugge is currently a transit port, meaning that cruises stop here for day excursions. As the number of cruise tourists is expected to increase in the coming years, the port aims to become an ''arrival/departure port'' in order to stimulate tourism as well as the local economy in Bruges (Port of Zeebrugge, 2017).

Sources and links

Flanders Today. (2015). *Belgian tax authorities to check Airbnb hosts.* Retrieved from http://www.flanderstoday.eu/business/belgian-tax-authorities-check-airbnb-hosts

Papp, B., Postma, A. & Koens, K., (2018). *Visitor pressure and events in an urban setting. Understanding and managing visitor pressure in seven European urban tourism destinations (unpublished).* Breda/Leeuwarden: CELTH.

Neuts, B., & Nijkamps, P. (2012). Tourist crowding perception and acceptability in cities. An applied modelling study on Bruges. *Annals of Tourism Research*, 39, 2133-2153.

Nijs, V. (2017). Resident attitudes towards tourism. Testing the resident empowerment through tourism scale (RETS) in Bruges. (Master's thesis). Module University Vienna.

Pickard, R. (2001). *Management of Historic Centres.* London: Spoon Press.

Port of Zeebrugge. (2017). *Cruise. Cruise port*. Retrieved from https://www.portofzeebrugge.be/en/cruise/cruisehaven

Visit Bruges. (2018). *UNESCO World Heritage*. Retrieved from https://www.visitbruges.be/unesco-world-heritage

Visit Bruges. (n.d.). *Municipal by-law concerning organized walking tours for tourists*. Retrieved from https://www.visitbruges.be/en/municipal-by-law-concerning-organised-walking-tours-for-tourists-2

Visit Flanders. (2017). *Tourism in key figures. Edition 2017*. Retrieved from https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents_KENNIS/cijfers/Kerncijfers/2017_Tourism-in-keyfigures.pdf

WES. (2012). *Opmaak van een strategisch plan voor het toerisme in Brugge 2012-2016.* Stad Brugge.

IV.5   Bucharest, Romania

Type of destination: Urban

Region: EU

Reported by: Simone Moretti

Bucharest is the sixth largest EU city in terms of population and is often described as "a place of contrasts", combining the historical soul of the city with a relatively modern identity. Visitors can admire the eclectic profile of the city, a blend of old and historical architectures, more functional communist-era blocks, and modern shining buildings. Bucharest offers some excellent museums, cultural attractions, festivals, and nightlife. Its recently developed trendy, dynamic, and modern character is attracting an increasing number of international tourists. The increase in tourists' number is also facilitated by the relative affordability as a destination, for many foreign visitors (Bucharest Tourism, 2018; Romania Tourism, 2018; Statista, 2018; Urban Adventures, 2016).

Statistics

- Tourists' overnight stays 2016: 3 million, vs 2 million in 2012, meaning an increase of 50% in 4 years (Christie & Co., 2017).
- Tourists' arrivals 2016: 1.9 million, vs 1.4 million in 2012, meaning an increase of 35% in 4 years (Christie & Co., 2017).
- TPR/TDR: Bucharest (city) has 1.92 million inhabitants (Romania Tourism, 2018) and spans an area of 228 km^2 (Romania Tourism, 2018), leading to, in 2016, a TPR of 0.4 tourists per 100 inhabitants per day and a TDR of 36tourists per km^2 per day.
- Hotels capacity: increase of 19% in hotels and 2% in beds in the period 2011-2016, meaning that new hotels tend to be smaller than the existing ones (Christie & Co., 2017).
- Seasonality: Bucharest is a year-round destination, with peaks of overnights in May, September and October, each counting for about 10% of the total overnight stays (Christie & Co., 2017).

Main impacts

- Environmental issues
- Traffic and public transport congestion

The travel company TravelBird, in a recent and widely reported study on overtourism, "looking specifically at how overtourism affects residents' willingness to accommodate and be welcome to visitors", ranked Bucharest with a pretty negative score (TravelBird, 2017). There are overcrowded spots in the city, especially in the most central areas and in terms of traffic and public transport congestion, although the normal activity of the city's residents appears to be the major cause of that (Adventurous Travels, 2018; Romania Tourism, 2018; Wong, 2015). Social and ecological negative consequences on the city are not neglected (Popescu & Zamfir, 2011) and a growing volume of tourism is certainly increasing the pressure on infrastructures and facilities, which sometimes are quite outdated (Iovitu, Radulescu, & Dociu, 2013). Nevertheless, a review of media and academic material did not reveal major protests against tourism or a particularly hostile sentiment against tourism in the city.

Measures taken

Although overtourism has not generated a critical situation yet, Bucharest's tourism planning has been a priority (at least on paper) in recent years, with the aim to use tourism as a means for economic growth and social development. Unfortunately, as reported and detailed by Iovitu et al. (2013) and Popescu & Zamfir (2011), many of the projects and their objectives to enhance tourism and control its negative impacts remained only at the initial stage, on paper. Specifically, they reported issues related to poor enforcement of environmental policies, lack of strategic plans, non-existence of marketing plans, unfinished projects and programmes initiated, unfinished renovation, and enlargement of infrastructures, due to lack of resources.

Local authorities seem to be aware of overcrowding tourism issues, especially in a city which is already overcrowded by the normal activities of its residents. Nevertheless, the concrete implementation of destination development plans and sustainability principles is lacking.

The future of overtourism

Overnight stays grew by 50% in the last 4 years and there is no evidence that the growth will stop any time soon. That might worsen the situation in terms of overtourism impacts, deteriorating even more the environmental condition and the congestion of the city. Local authorities will need to take a more strategic approach in dealing with overtourism issues, in order to preserve the environment, ease the city's congestion and effectively manage the impact of increasing tourism flows.

Sources and links

Adventurous Travels. (2018). Bucharest, Romania - The Real "Paris of the East." Retrieved July 31, 2018, from https://www.adventurous-travels.com/posts/bucharest-romania-the-real-paris-of-the-east

Bucharest Tourism. (2018). Bucharest. Retrieved July 30, 2018, from http://www.tourism-bucharest.com/

Christie & Co. (2017). *Hotel Market Bucharest. A rising star*. Retrieved from https://at.christie.com/christieMediaLibraries/christieAustria/PDFs-Publications/Hotel-Market-Bucharest-ChristieCo.pdf?ext=.pdf

Iovitu, M., Radulescu, C., & Dociu, M. (2013). Tourism Planning in Urban Areas – Trends, Best Practices and Priorities in Bucharest. *Journal of Knowledge Management, Economics and Information Technology*, *III*(5). Retrieved from www.scientificpapers.org

Popescu, R.-I., & Zamfir, A. (2011). *Strategic Role of Ecotourism for Romania's Regional Development*. Retrieved from http://conference.osu.eu/globalization/publ2011/250-258_Popescu-Zamfir.pdf.

Romania Tourism. (2018). Bucharest, Romania. Retrieved July 30, 2018, from http://romaniatourism.com/bucharest.html

Statista. (2018). Tourism worldwide: Cheapest destinations according to price 2018.

TravelBird. (2017). The Most Welcoming Cities in the World. Retrieved July 31, 2018, from https://travelbird.nl/most-welcoming-cities/

Urban Adventures. (2016). How to avoid the tourist traps of Bucharest. Retrieved July 31, 2018, from https://www.urbanadventures.com/blog/avoid-bucharests-common-tourist-traps.html

Wong, M. (2015). Overcrowding on the Bucharest Metro. Retrieved July 31, 2018, from https://www.eurogunzel.com/2015/10/overcrowding-bucharest-metro/

IV.6   Budapest, Hungary

Type of destination: Urban

Region: EU

Reported by: Bernadett Papp

Destination

Budapest is the capital as well as the flagship destination of Hungary. One third of the country's tourist traffic is realised in Budapest (Hungarian Tourism Agency, 2017). The city, together with the banks of the Danube, the castle district, and the Andrássy Avenue are on the UNESCO World Heritage List (UNESCO, 2018). In the past years, the city gained a reputation as a Meetings, Incentives, Conferences and Exhibitions (MICE) destination and it hosted numerous international sport events. Budapest is also a popular health tourism destination (Hungarian Tourism Agency, 2017).

Statistics

- Tourism in Hungary has been reaching record numbers in the past few years. Budapest is Hungary's number one destination for both inbound and domestic tourism. In 2017, 36.0% of all arrivals in Hungary staying at a commercial accommodation and 34.8% of all overnights were registered here (Hungarian Tourism Agency, 2017).
- Budapest's role is especially important when looking at inbound tourism. In 2017, 64.7% of all international arrivals stayed in Budapest, accounting for 59.2% of all overnights (Hungarian Tourism Agency, 2017).
- 330 commercial accommodation (52,479 beds) can be found in Budapest. In 2017, the average occupancy rate of hotels was 74.2%. In 2016, it was 71.0%. In 2017, six new hotels were opened, adding 343 rooms to the hotel offer (Hungarian Tourism Agency, 2017).
- In 2017, 4.3 million guests (4.6% compared to 2016) were registered in commercial accommodations, accounting for 10 million guest nights (8% compared to 2016). Between 2010 and 2017, the number of overnights has gone up 66.2% (Hungarian Tourism Agency, 2017).
- In 2017, the total revenue generated from tourism related services/activities was € 665.9 million, indicating an 18.5% growth compared to the previous year (Hungarian Tourism Agency, 2017).
- Budapest is a congress and conference destination, hosting 80% of all conferences organised in Hungary (2017) (Hungarian Tourism Agency, 2017).
- Visitation is mostly concentrated between May and September, with peaks in July and August (Hungarian Tourism Agency, 2017).
- Based on a size of 525 km^2 and 1,749,734 inhabitants, and assuming that tourists stay 2-3 days, the TPR is 1.5 tourists per 100 inhabitants per day and the TDR is 51.6 tourists per km^2 per day.

Main impacts

- Overcrowding
- Stag-party tourism
- Misbehaviour of tourists
- Out-crowding/touristification
- Changing real-estate market

Visitation in Budapest is concentrated around a few hot spots. As most tourists stay for a short time and want to visit the same attractions the likeliness of congestion problems is rather high (Kádár, 2014). Budapest is a popular stag-party tourism destination. The ruin pubs, popular amongst stag tourists, are located in downtown Budapest (the party district) and significantly contribute to noise pollution (Hungarian Tourism Agency, 2017). The misbehaviour of tourists (drunkenness, noise, littering etc.), mostly in the party district of Budapest, causes conflicts and makes the district unliveable in the long-term (Kádár, 2014). The touristification of the inner city, such as the development of the party district, has resulted in the tourist functions out-numbering local infrastructure.

This phenomena is partly the consequence of the functional monopoly of catering and entertainment establishments (Kádár, 2014). Airbnb has gained high popularity in the past few years. As a consequence of more people buying property for investment purposes (e.g. short-term lets) the real estate market has changed rapidly and real estate prices have increased (Jancsik, Michalkó, & Csernyik , 2018).

Measures taken

- Kisfaludy tourism development programme and the Grand Budapest concept: This is an integrated destination development programme aimed at reducing the spatial concentration of visitors around the capital, reducing seasonality, and extending the average length of stay by developing and promoting new destinations outside the hot spots (Hungarian Tourism Agency, 2017).
- Urban regeneration projects/pedestrian zones: Programmes such as "The Heart of Budapest" or the "Europe's Downtown, Budapest" focused on the extension of the pedestrian network with the aim of connecting fragmented parts of the city, regulating traffic, and improving quality and liveability (Kádár, 2014).
- Regulations: A decree has been issued about the opening times of entertainment facilities in the 7th district (The Municipality of Erzsébetváros, 2013). The popular beer-bike has been permanently banned as well in certain districts (Index, 2017).
- Segmentation: Budapest's marketing strategy is focusing on attracting high-spender quality tourists (Hungarian Tourism Agency, 2017).

The future of overtourism

Budapest's reputation as a MICE tourism destination is likely to grow further. Festivalisation and the organization of international sport events will also further contribute towards higher visitor numbers. The accessibility of the city is likely to improve as projects such as the expansion of Liszt Ferenc International Airport are planned. The development and improvement of the road network connecting Budapest and Hungary to Slovakia, Croatia and Slovenia and the expansion of the train network connecting Budapest to other capitals is expected to increase visitation (Hungarian Tourism Agency, 2017) placing ever-growing pressure on the city.

Sources and links

Hungarian Tourism Agency. (2017). Budapest vendégforgalma 2017. Szakmai háttéranyag. Retrieved from https://mtu.gov.hu/documents/prod/Budapest_vendegforgalma_2017_3.pdf

Hungarian Tourism Agency. (2017). Nemzeti Turzimusfejlesztési stratégia 2030. Retrieved from http://www.kormany.hu/download/8/19/31000/mtu_kiadvany_EPUB_297x210mm%20-%20preview.pdf

Index. (2017). Belföld. A VI. kerület is kitiltotta a beer-bikeokat. Retrieved from https://index.hu/belfold/budapest/2017/06/29/a_vi._kerulet_is_kitiltotta_a_beerbike-okat/

Jancsik, A., Michalkó, G., & Csernyik , M. (2018). Megosztás megosztottság nélkül - az Airbnb és a budapesti szálláshelypiac átalakulása. Közgazdasági Szemle, 259-286.

Kádár, B. (2014). Pedestrian space usage of tourist-historic cities. Comparing the tourist space systems of Vienna and Prague to Budapest. (doctoral dissertation). Budapest: Budapest University of Technology and Economics .

KSH. (2018). 6.1.1 A lakónépesség nem szerint, január 1 (2001-*). Retrieved from http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_wdsd003b.html

The Municipality of Erzsébetváros. (2013). Complex rendelettár. 9/2013. (II.22.) önkormányzati rendelet az üzletek éjszakai nyitvatartásáról. Retrieved from https://erzsebetvaros.hu/onkormanyzati-jogszabalyok-rendeletek/oldal/3/9-2013.-(ii.22.)-onkormanyzati-rendelet-az-uzletek-ejszakai-nyitva-tartasarol-691

UNESCO. (2018). The list. World heritage list. Budapest, including the banks of the Danube, the Buda castle quarter and Andrássy Avenue. Retrieved from https://whc.unesco.org/en/list/400

IV.7   Byron Bay, Australia

Type of destination: Coastal & Islands

Region: Rest of the world - Oceania

Reported by: Jasper Heslinga

Byron Bay is a coastal town in the south-eastern Australian state of New South Wales (NSW). It is a popular holiday destination, known for its beaches, surfing and scuba diving sites.

Statistics

- Byron Shire had 1,979,000 visitors in the year 2016. This consists of 195,000 international tourists, 776,510 domestic tourists and 1,007,000 day-trippers. Compared to the year 2008 these numbers have been increasing with respectively 7% (international tourists), 83% (domestic tourists) and 15% (day-trippers).
- In this same period, the average amount of nights spent has increased for international tourists (from 6.4 to 7.3 nights) but decreased for domestic tourists (from 4.2 to 3.3 nights).
- With a surface area of 566.7 km² the TDR of Byron Shire is 24.2 and with a population of 31,556 (2016 census) the TPR is 43.5 tourists per 100 inhabitants.
- In 2015, the total tourism and hospitality sales in Byron Shire were Australian $516.6 million, the total value added was Australian $328.0 million, which imply increases of 18% and 29% in comparison to 2008.

Main impacts

- High number of tourists per residents
- Spread of visitors into residential neighbourhoods
- Exodus of local residents
- Lack of capacity
- Traffic and public transport congestion
- Uncivilised behaviour
- Gentrification

The increasing number of tourists visiting Byron Bay has the following impacts: First, the main concern is the pressure on infrastructure such as the town's roads, sewerage and waste networks, and other amenities (ABC, 2018). "Infrastructure choke points" in popular tourist areas need to be taken into account (Northern Star, 2017). Second, property prices are a huge issue; the median house price is almost Australian $1.5 million. Also Airbnb is gutting out the community since houses are taken out of both the property market and the rental market. Consequently, rising property values are pricing out traditional inhabitants (Sydney Morning Herald, 2018). When property prices skyrocket, but local wages remain low, workers in the town are often bussed to work, spending up to four hours a day travelling (ABC, 2017). Third, this has social impacts. There is some dissatisfaction with tourists, but the major issue for residents is the feeling their community erodes, since every second house is empty, which means no-one's volunteering at the surf club and no-one has got their kids at school (Sydney Morning Herald, 2018).

Measures taken

First, there is a local call to stop creating destination marketing campaigns aimed at attracting more tourists, but this is not shared among all stakeholders. Some national stakeholders are still talking about increasing the tourist numbers exponentially (ABC, 2017). Second, as a measure to limit growth, a bed-tax was proposed, but was rejected (ABC, 2017). Third, some measures aimed at taxation and fees were proposed, with varying success. The local council introduced a radical rating structure for water and sewerage charges to help pay for the infrastructure costs associated with high visitor numbers (ABC, 2017).

Mayor Simon Richardson suggested a levy where it would be up to business owners to decide whether to charge an extra fee that would then be used to fund community projects and infrastructure (ABC, 2018). The money would then be collected and audited and a panel would decide what projects to fund, which could include much-needed toilet and shower blocks, playgrounds, and cycle ways. (ABC, 2018). There is some doubt about this proposal, specifically related to the administrative issues and the need for monitoring and enforcement (ABC, 2018). Fourth, the NSW government has created a new Australian $1.3 billion regional growth fund to deliver infrastructure projects to help regional economies expand and to improve the amenity of people living in

regional NSW (ABC, 2017). Byron Shire Council is eligible to apply for funding, to support local projects and initiatives to address infrastructure pressures and other impacts (ABC, 2017), but the council has struggled to raise funds for projects and maintain infrastructure due to the overwhelming number of tourists each year (ABC, 2018). Finally, spreading the tourists throughout the Northern Rivers could "buy some breathing space" (Northern Star, 2017). To sum up, the local community and also the local authorities are very much aware of overtourism in Byron Bay and suggestions for improvement have been made, but this remains challenging so far.

The future of overtourism

Overtourism will remain a problem if the stakeholders on the local and higher levels do not align. On the local level, there is a growing awareness that chasing the extra growth is undesirable (ABC, 2017) but this is at odds with the NSW government's goal of doubling overnight visitor expenditure by 2020 (ABC, 2017) and stating that local infrastructure and amenity issues relating to the impacts of tourism remained chiefly the responsibility of local government (ABC, 2017)

Sources and links

ABC North Coast (2018). Byron Bay visitors could pay more in Australian-first voluntary tourist levy. Retrieved 02 August 2018, from http://www.abc.net.au/news/2018-06-06/byron-bay-considering-tourism-levy/9835876

ABC North Coast (2017). Byron Bay tourism crunch: Mayor warns of a backlash if growth isn't curbed. Retrieved 02 August 2018, from http://www.abc.net.au/news/2017-08-18/byron-wants-brakes-on-tourism/8820984

Byron Shire Council (2018). Byron Shire Tourism industry statistics. Retrieved 02 August 2018, from https://economy.id.com.au/byron/tourism-visitor-summary

Northern Star (2017). Byron mayor: Do we have to build a fence around ourselves? Retrieved 02 August 2018, from https://www.northernstar.com.au/news/crisis-tourist-town-at-breaking-point/3231318/

Sydney Moring Herald (2018). Airbnb is 'gutting our community', says mayor of holiday hotspot Byron Bay. Retrieved 02 August 2018, from https://www.smh.com.au/national/nsw/airbnb-is-gutting-our-community-says-mayor-of-holiday-hotspot-byron-bay-20180409-p4z8j5.html

IV.8   Cinque Terre, Italy

Type of destination: Rural

Region: EU

Reported by: Simone Moretti

Cinque Terre, an 18-km stretch of rugged and rocky coastline, is famous for the five small picturesque villages that cling on the steep hillside and overlooking the sea. The area was declared UNESCO World Heritage Site in 1997, for its human-made landscape and it is protected by a national park (Korey, 2017). Tourists are mainly attracted by the picturesque atmosphere of the villages, the extensive hiking trails connecting them, and the stunning landscape with the terrace vineyards. Around 75% of the overnight stays are related to international tourists (Ministero dell'Ambiente, 2017). The presence of the cruise ship port of La Spezia nearby, facilitates the increase in numbers of one-day visitors (Parco Nazionale delle Cinque Terre, 2014).

Statistics

- From an administrative point of view, Le Cinque Terre are included in 3 municipalities where 345,000 overnight stays have been registered in 2010, increased to 368,000 in 2013 (6.5% vs 2010) and soared to around 500,000 in 2015 , with an increase of 35% vs 2013 (Parco Nazionale delle Cinque Terre, 2016).
- Due to the limited number of accommodation, one-day trips are a frequent solution for visiting Cinque Terre, also because of the closeness of La Spezia, a city where around 200 cruise ship docks every year (Cotroneo, 2017). The number of one-day visitors has been estimated to be around 2 million per year (Pinelli, 2017), which means an average of more than 5,000 one-day visitors per day.
- With a resident population of only 4,119 inhabitants and an area of 33.5 km^2 (Parco Nazionale delle Cinque Terre, 2016) it is possible to calculate, for 2015, a TPR of 33.5 visitors per 100 inhabitants per day, and a TDR of 204.5 visitors per km^2 per day.
- The sum of one-day visitors and the number of arrivals for the entire area of the protected natural park (Cinque Terre plus the municipalities of Levanto and La Spezia), which were around 450,000 in 2014 (ASK Università Bocconi, 2016), provides an estimation of about 2.5 million annual visitors at Le Cinque Terre, reported by many sources (Dioko, 2017; Faccini, Raso, Malgarotto, & Antonielli, 2015; Millington, 2017).

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Environmental issues
- Traffic and public transport congestion

Overtourism issues in Cinque Terre are more visible during the summer months, also because of the increase in the one-day trips from nearby coastal tourism destinations and due to the large numbers of cruise tourists (Cotroneo, 2017). All the five villages are affected. Also, the narrow hiking paths between the rocks, that are connecting the villages, are under a heavy pressure (Faccini et al., 2015). The major issue in term of overtourism is the pressure exercised by an overcrowding number of visitors on a delicate and small portion of territory, also affected by geomorphological risk (due to its hillside waterfront position and the multiple human interventions) and with a small local population that feels themselves lost (Calandri, 2016). Services for residents have been disappearing and replaced with services for tourists (Parco Nazionale delle Cinque Terre, 2014). Over the years, the hiking paths have fallen into disrepair from erosion and overuse (Baker, 2018). Issues related to water supply during summer and waste disposal were reported since a long time (Bartolini, Peppalepore, Panerai, & Panico, 2004). Facilities and infrastructure are under pressure and the physical collocation of the villages doesn't leave any room for interventions aimed to increase their carrying capacity (Calandri, 2016; Coggio, 2018). That generated a widespread concern among locals and authorities about how to cope with overcrowding tourism flows and a rapid degradation of the landscape and living conditions (Mose, 2016).

Measures taken

Since decades the concerns about the impacts of (over)tourism have been on the agenda of the local authorities, and their actions have always been sustainability-oriented, with appreciable results in terms of environmental conservation (Bartolini et al., 2004). Nevertheless, those good practises and intentions, which are still shaping the management plan of the national park area (Parco Nazionale delle Cinque Terre, 2016) collide with the relentless increase of visitors that undermine the effectiveness of the adopted policies. For this reason, in the last years the

focus has been switched more on how to slow down, if possible, the number of visitors, with the intention of putting a cap to 1.5 millions of visitors per year (compared to the current 2.5 million). The idea has been recently defined "unfeasible" and "just a provocation" by the President of the National Park (Korey, 2017), saying that instead, a more intelligent management of tourism is needed. For example, local authorities installed "counting systems", which allows to determine the number of people on specific routes in real time. A mobile application (app)was developed, which tourists can download to see the number of people on the routes in real time, see when a path is overcrowded and freely decide if they want to join (Baker, 2018). The aim is to increase the awareness about the overcrowding issue, but so far there's no proof of the effectiveness in better managing the tourism flows through these measures.

The future of overtourism

At the moment, it is not realistically possible to forecast a decreasing number of visitors at Cinque Terre. Therefore, the discussion on overtourism will probably stay focused on how to manage in a more effective way increasing tourism flows, and how to better communicate with visitors (Korey, 2017). In an extreme case, the "people-counting" system and the app developed, may be used to implement a trial waiting lists (Baker, 2018). A "no-action" scenario, in a territory with the described constrains, might lead in the long term to an irreversible deterioration with a social and environmental collapse (Tozzi, 2017).

Sources and links

ASK Università Bocconi. (2016). *Accompagnare il territorio in un posizionamento culturale sostenibile - Parte I*. Retrieved from http://www.fondazionecarispezia.it/wp-content/uploads/2016/11/REPORT-ASK.pdf

Baker, V. (2018). Tourism pressures: Five places tackling too many visitors. Retrieved July 22, 2018, from https://www.bbc.com/news/world-43700833

Bartolini, F., Peppalepore, I., Panerai, S., & Panico, C. (2004). Sviluppo turistico ed economia della cultura: verso un turismo sostenibile. Il caso delle Cinque Terre. *Risposte Turismo*, *1*. Retrieved from http://www.risposteturismo.it/Public/lePaginediRT/uno2004_lePaginediRT.pdf#page=68

Calandri, M. (2016). Cinque Terre a numero chiuso: per salvare i borghi. E non solo. Retrieved July 22, 2018, from http://www.repubblica.it/venerdi/reportage/2016/06/15/news/cinque_terre_a_numero_chiuso-142059965/

Coggio, S. (2018). La gente protesta - Assalto al mare: dai borghi del golfo alle 5 Terre troppi turisti, la città scoppia. Retrieved July 22, 2018, from http://www.ilsecoloxix.it/p/la_spezia/2018/04/30/ACut9eOD-assalto_turisti_scoppia.shtml

Cotroneo, R. (2017). Cosa ci fa un milione di cinesi alle Cinque Terre? Retrieved July 21, 2018, from https://www.corriere.it/sette/17_giugno_29/cosa-ci-fa-milione-cinesi-cinque-terre-20d722a8-5d83-11e7-a3ba-28ae329eb765.shtml?refresh_ce-cp

Dioko, L. (2017). The problem of rapid tourism growth – an overview of the strategic question. *Worldwide Hospitality and Tourism Themes*, *9*(3), 252–259. https://doi.org/10.1108/WHATT-02-2017-0013

Faccini, F., Raso, E., Malgarotto, C., & Antonielli, G. (2015). Rockfall Risk Assessment and Management Along the "Via dell'Amore" (Lovers' Lane) in the Cinque Terre National Park (Italy). In *Engineering Geology for Society and Territory - Volume 2* (pp. 1979–1983). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-09057-3_351

Korey, A. (2017). How Cinque Terre Plans to Handle Mass Tourism. Retrieved July 21, 2018, from https://www.travelandleisure.com/trip-ideas/cinque-terre-tourist-overflow

Millington, K. (2017). Travel and Tourism - Italy - August 2016: What Next? Retrieved July 21, 2018, from http://academic.mintel.com

Ministero dell'Ambiente. (2017). *Natura e cultura. Le aree protette, luoghi di turismo sostenibile*. Retrieved from http://www.minambiente.it/sites/default/files/archivio/allegati/biodiversita/Rapporto_Natura_Cultura.pdf

Mose, I. (2016). *Protected Areas and Regional Development in Europe: Towards a New Model for the 21st Century*. Taylor & Francis. Retrieved from https://books.google.it/books?id=SnoHDAAAQBAJ

Parco Nazionale delle Cinque Terre. (2014). *Strategia e Piano di azione del Parco Nazionale delle Cinque Terre per l'adesione alla CETS*. Retrieved from http://www.parconazionale5terre.it/pdf/Piano_azione_5_terre_29-12.pdf

Parco Nazionale delle Cinque Terre. (2016). *Piano delle Performance 2017-2019*. Retrieved from https://performance.gov.it/performance/piani-performance/documento/690

Pinelli, D. (2017). Turismo di consumo alle Cinque Terre. Retrieved July 21, 2018, from http://laspezia.cronaca4.it/2017/05/13/turismo-consumo-alle-cinque-terre/51929/

Tozzi, M. (2017). In nome del turismo le Cinque Terre hanno tradito la natura. Retrieved July 22, 2018, from http://www.lastampa.it/2017/06/21/italia/cinque-terre-il-patto-rotto-con-la-natura-in-favore-del-turismo-GW6F4QpPKSUgw6SiQIOsYK/pagina.html

IV.9   Copenhagen, Denmark

Type of destination: Urban

Region: EU

Reported by: Simone Moretti

Copenhagen, the capital of Denmark, attracts international and domestic tourists for its typical Nordic urban landscape and architecture, a very rich cultural and design scene and a vibrant nightlife. Iconic hotspots of the city include the Nyhavn Canal, Tivoli Garden, the statue of The Little Mermaid, and the free-town of Christiania (Wonderful Copenhagen, 2018a; Lonely Planet, 2018). Copenhagen attracts a wide range of tourists, including an increasing number of cruise visitors and a dynamic conference tourism market (Wondeful Copenhagen, 2017).

Statistics

- Copenhagen (city area only): 8.1 million total overnight stays in paid accommodation in 2017 (58% vs 2010). 5.4 million from abroad (63% vs 2010), 2.7 million domestic (50% vs 2010) (Wonderful Copenhagen, 2018b). Arrivals data not available.
- Cruise visitors: 740,000 in 2016 (Wondeful Copenhagen, 2017), meaning 8.5% vs 2015 and 30% vs 2010.
- Copenhagen (city area only): 602,481 inhabitants, area 76.7 km^2 (Statistic Denmark, 2017) meaning, in 2017, a TPR of 4.0 tourists (incl. cruise visitors) per 100 inhabitants per day and a TDR of 315.8 tourists (incl. cruise visitors) per km^2 per day, on average. Considering July (peak of overnights): TPR increase to 5 tourists per 100 inhabitants and TDR to 385 tourists km^2/day.
- Arrivals at Copenhagen Airport: 29,180,000 in 2017 (Wonderful Copenhagen, 2018b), meaning an increase of 9.6% vs 2015 and 36% vs 2010. 95% of arrivals in 2017 were international (Statista, 2018).
- Seasonality: 35% of the overnights in 2016 is concentrated in June-July-August (Wonderful Copenhagen, 2018b).
- 2016 Tourism Revenue Capital Region: DKK 41 billion (€ 5.5 million; Wondeful Copenhagen, 2017).

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Traffic and public transport congestion

Crowding caused by tourism receives attention from the local authorities, especially since it relates to a more general concern for congestion of the city, as an increase of 130,000 inhabitants, only in the city centre, is expected in the near future (University of Copenhagen, 2013). As far as overcrowding from tourism is concerned, the local authorities seem to have the situation under control. Media have reported on specific cases of overcrowding from tourism and congestion in the high season, caused by cruise tourism, in the streets of the city centre and at specific tourism hotspots, such as The Little Mermaid (Elsom, 2017; King, 2018). Nevertheless, this is not impacting the overall tourists' experience nor the overall quality of life of inhabitants. According to the "Stakeholder Survey and Citizen Assessment Survey 2016", the overwhelming majority (96%) of residents of Greater Copenhagen "would be happy to see the number of visitors increase" (UNWTO-WTCF, 2017; p.1). That being said, some concerns have been raised about unregulated Airbnb subletting, which is taking apartments off Copenhagen's housing residential market (Carlström, 2017). Some resident complain and feel uneasy at the increasing number of tourists staying in Airbnb rentals (The Copenhagen Post, 2018).

Measures taken

In the last decades Copenhagen tourism authorities have taken into consideration the importance of developing tourism in a sustainable manner and have involved, whenever possible, the local community and other stakeholders of the destination (Bernhard Jørgensen & María Munar, 2009). Therefore, authorities have been quite effective in tackling overtourism, preventing negative impacts related to tourism. Examples of concrete measure taken include: a) An aggressive redistribution strategy aimed to spread tourism across the city; b) Prohibiting the establishment of new bars and restaurants; c) The creation of "Silent areas" in residential neighbourhoods; d) The famous bicycle-friendly transportation system, whereby tourists are encouraged to use it (Becker, 2015; Goodwin, 2017; Law, 2017). More recently, Wonderful Copenhagen (the city's DMO) developed "The new strategy for the city and its tourism development" which received notable international attention for claiming "the end of tourism as we know it" and focusing on the concept of "temporary localhood" (Wonderful Copenhagen, 2017). The

strategy focuses on tourism growth, while finding the right balance between challenges, such as visitor pressure, and care for the local community and the destination's stakeholders. It aims to ensure a sustainable and people-based tourism growth (Copenhagen Convention Bureau, 2018). Copenhagen's meeting industry also consider sustainability in a serious way, as almost 70 % of the city's hotel rooms are eco-certified and many suppliers in the meeting industry adopted green and sustainable initiatives (Kongres, 2018). Coping with the tensions related to Airbnb, the national government has just reached an agreement with the company, introducing a cap on the number of nights a homeowner is able to rent out (70 nights per year, leaving to the municipalities the power to increase the limit to 100 nights per year). Moreover, Airbnb will automatically report the generated hosts' income (which will be partially tax-free) to the Danish Tax Authorities (Airbnb, 2018). In conclusion, local authorities and tourism stakeholders in Copenhagen show a high level of awareness about the threats of overtourism. Measures have been taken by governments and local stakeholders. However, until now they have resulted in low impacts on overtourism.

The future of overtourism

The tourism strategy adopted by the Copenhagen municipality aims at growth but, at the same time, it acknowledges that tourism development can have a negative impact on the resident's quality of life. That's why Wonderful Copenhagen, with the aim of shaping the sustainable direction of the destination, has just appointed Mikkel Sander in the new role of Project Manager for sustainable tourism development. He will be in charge of implementing the new sustainability strategy with the involvement of residents and other destination's stakeholders, pursuing a people-based growth that can help avoid problems with overtourism (Kongres, 2018).

Sources and links

Airbnb. (2018). Denmark embraces home sharing. Retrieved July 26, 2018, from https://www.airbnbcitizen.com/denmark-embraces-home-sharing/

Becker, E. (2015). The Revolt Against Tourism. Retrieved July 26, 2018, from https://www.nytimes.com/2015/07/19/opinion/sunday/the-revolt-against-tourism.html

Bernhard Jørgensen, L., & María Munar, A. (2009). The Copenhagen Way: Stakeholder-driven Destination Branding. In A. L. Cai, W. C. Gartner, & A. M. Munar (Eds.), *Tourism Branding: Communities in Action (Bridging Tourism Theory and Practice, Volume 1)* (pp. 177–189). Emerald Group Publishing Limited,. https://doi.org/10.1108/S2042-1443(2009)0000001015

Carlström, V. (2017). Copenhagen politicians want to limit the number of days apartments can be sublet on Airbnb. Retrieved July 26, 2018, from https://nordic.businessinsider.com/copenhagen-politicians-want-to-limit-the-number-of-days-apartments-can-be-sublet-on-airbnb-2017-7/

Copenhagen Convention Bureau. (2018). Wonderful Copenhagen appoints sustainability profile to develop new sustainability strategy. Retrieved July 26, 2018, from https://www.copenhagencvb.com/copenhagen/wonderful-copenhagen-appoints-sustainability-profile-develop-new-sustainability-strategy

Elsom, D. (2017). Holidaymakers shame the iconic tourist destinations that fail to live up to the picture postcards. Retrieved July 26, 2018, from https://www.thesun.co.uk/travel/3399571/travellers-shame-the-iconic-holiday-destinations-that-fail-to-live-up-to-their-reputation/

Goodwin, H. (2017). *The Challenge of Overtourism*. Retrieved from http://haroldgoodwin.info/pubs/RTP'WP4Overtourism01'2017.pdf

King, S. (2018). An expert guide to Copenhagen. Retrieved July 26, 2018, from https://www.telegraph.co.uk/travel/destinations/europe/denmark/copenhagen/

Kongres. (2018). Wonderful Copenhagen appoints sustainability profile. Retrieved July 26, 2018, from https://kongres-magazine.eu/2018/07/wonderful-copenhagen-appoints-sustainability-profile/

Law, W. (2017). Overtourism in Europe is a critical problem. Retrieved July 26, 2018, from https://www.tourism-review.com/overtourism-in-europe-endangeres-communities-news5418

Lonely Planet. (2018). Copenhagen is colourful creativity. Retrieved July 25, 2018, from https://www.lonelyplanet.com/denmark/copenhagen

Statista. (2018). Distribution of international and domestic passengers at Copenhagen Airport 2017. Retrieved July 26, 2018, from https://www-statista-com.proxy1.dom1.nhtv.nl/statistics/802835/distribution-of-international-and-domestic-passengers-at-copenhagen-airport-in-denmark/

Statistic Denmark. (2017). Statistic Denmark - Population. Retrieved July 25, 2018, from http://www.statbank.dk/BY3

The Copenhagen Post. (2018). Jutland seaside town residents protest at summer tourist influx. Retrieved July 26, 2018, from http://cphpost.dk/news/jutland-seaside-town-residents-protest-at-summer-tourist-influx.html

University of Copenhagen. (2013). Projections: Danish cities face overcrowding. Retrieved July 26, 2018, from

https://uniavisen.dk/en/projections-danish-cities-face-overcrowding/

UNWTO-WTCF. (2017). *UNWTO/WTCF City Tourism Performance Research. Report for Case Study "Copenhagen."* Retrieved from http://cf.cdn.unwto.org/sites/all/files/docpdf/copenhagencasestudy.pdf

Wondeful Copenhagen. (2017). *2016 Annual Report for Wonderful Copenhagen*. Retrieved from https://www.visitcopenhagen.dk/sites/default/files/asp/visitcopenhagen/Corporate/PDF-filer/Arsberetning2016UK/aarsberetning2016_english.pdf

Wonderful Copenhagen. (2017). *Towards a new beginning of Localhood - Strategy 2020*. Retrieved from http://localhood.wonderfulcopenhagen.dk/wonderful-copenhagen-strategy-2020.pdf

Wonderful Copenhagen. (2018a). Top attractions in Copenhagen. Retrieved July 25, 2018, from https://www.visitcopenhagen.com/copenhagen/sightseeing/top-30-attractions

Wonderful Copenhagen. (2018b). Turismebarometer København. Retrieved July 25, 2018, from https://copenhagen.tourismbarometer.com/Current

IV.10   Dublin, Ireland

Type of destination: Urban

Region: EU

Reported by: Simone Moretti

Dublin, the capital and largest city of Ireland, is internationally renowned for its culture, attractions, castles and cathedrals, historical and literary heritage, museums, the famous zoo, festivals, and the dynamic nightlife, ruled by the typical Irish pubs, which are the real core of social interactions in Dublin (Lonely Planet, 2018; Mintel Academics, 2015). The city has become a multi-cultural, creative hub and in 2010 Dublin was designated as UNESCO City of Literature, in recognition of its cultural profile and international standing as a city of literary excellence (Failte Ireland, 2018). The majority of visitors travel for leisure or visiting friends/relatives, while the business market counts for about 20% (Mintel Academics, 2015).

Statistics

- Tourists' arrivals in Dublin 2015: 6.68 million, meaning 25% vs 2013 and 47% vs 2010 (Fitzpatrick Associates, 2016; ITIC, 2016).
- Overnight stays in Dublin 2015: 9.58 million, meaning 18% vs 2013 (ITIC, 2016).
- TPR/TDR: population Dublin City: 554,500 inhabitants (Central Statistics Office, 2017), area 115 km^2 (MWE, 2014) leading to, in 2015, a TPR of 4.7 tourists per 100 inhabitants per day and a TDR of 228 tourists per km^2 per day.
- Dublin accounts for 59% of all tourism-related GDP in Ireland (WTTC, 2017).
- Most visited attractions in Dublin in 2015: Guinness Storehouse (1.3 million visitors), Dublin Zoo (1.1 million visitors), and Book of Kells (0.7 million visitors) (ITIC, 2016).
- Route of entry for international visitors in 2016: by air from Britain: 36%; by air from other countries: 49%; by sea: 5% (Fáilte Ireland, 2017a).
- Revenue from tourism in 2016 (only Dublin): €2.36 billion (Fáilte Ireland, 2017a) vs €1.95 billion in 2015 (ITIC, 2016), meaning an increase of 21%.

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Lack of capacity
- Tourists complain about tourists
- Uncivilised behaviour
- Gentrification

Many of the typical overtourism issues are visible in Dublin. They affect particularly the city centre and some specific hotspots, such as the area around Temple Bar, especially during the summer season. The main reported issues are:

- Physical overcrowding, which generates dissatisfaction in the tourists' experience and hostile feelings among the residents (Fáilte Ireland, 2017b; Webster, 2017).
- Gentrification process and locals' perception of living in a theme park, where the residential functions of the city disappeared (Spain, 2016; Tranum, 2017).
- Uncivilised behaviours and noise as a consequence of alcohol abuse by tourists (Spain, 2016).

One of the major problems related to overtourism is the increasing cost of living for residents and the lack of affordable accommodation, due to the boom of short-term tourism rentals through platforms such as Airbnb. As of January 2016, of the 3,117 properties listed on Airbnb in Dublin city, 47.1% were entire homes or apartments and over a third of the city's hosts have multiple listings. That entails a professional use of the platform, aimed to run small rental businesses (McGrath, 2016). The popularity of Airbnb in Dublin might also be boosted by the shortage of hotel developments in the last years (McGrath, 2016; Webster, 2017).

Measures taken

The minister of tourism for Ireland, recently admitted that "In Dublin, we're victims of our own success" and his department intends to introduce campaigns aimed to spread tourism flows, in time (extending the high season) and space (emphasizing regional options, away from hotspots in Dublin). The aim is to tackle overtourism and ensure that tourism benefits everyone and doesn't damage its destinations (Baginski, 2018). Although the Dublin City Development Plan 2016 – 2022 has ambitious goal in terms of growth of tourism flows it recognises the need of "a city of sustainable communities and neighbourhoods" (Dublin City Council, 2016). The same principles are contained in the "Local Economic and Community Plan (LECP) 2016 - 2022 GOALS". The marketing strategy for the next years has shifted towards attracting high-spending US and Australian tourists, who tend to stay longer and spend more (Hospitality Ireland, 2017). Therefore, a choice of quality over quantity. Moreover, the hotel accommodation capacity will increase with 5,500 rooms by 2020 (Travel Extra, 2016). This might partially ease the pressure on the private rental market, depending also on further regulation of tourism short-term rental services. In general, local authorities seem to be aware, on paper, of overcrowding tourism issues. Nevertheless, the effectiveness of concrete and implemented actions still needs to be proved.

The future of overtourism

The implementation of policies for Dublin's tourism development, through an effective action-plan, has always been problematic, due to "lack of sufficient detail such as budget and staff allocations, along with practical timeframes for implementation" (Hanrahan & McLoughlin, 2015). As there is no evidence that tourist arrivals will decrease in the near future, it will be of primary importance for the city to overcome issues related to tourism governance effectiveness, to avoid a deterioration of the situation in terms of negative consequences of overtourism.

Sources and links

Baginski, M. (2018). Could and should travel advise curb over-tourism? Retrieved August 1, 2018, from https://www.canadiantraveller.net/Could-should-travel-advisors-help-curb-over-tourism

Central Statistics Office. (2017). Population 2011 to 2016 by Age Group - Census 2016 data. Retrieved July 31, 2018, from https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/saveselections.asp

Dublin City Council. (2016). *Dublin City Council - Tourism statement of strategy and work programme 2017-2022*. Retrieved from https://www.dublincity.ie/councilmeetings/documents/s10038/Agenda Item 2 - Compressed - Dublin City Council Tourism Statement of Strategy and Work Programme 20.pdf

Failte Ireland. (2018). Visit Dublin - A breath of fresh air. Retrieved July 31, 2018, from https://www.discoverireland.ie/visit-dublin

Fáilte Ireland. (2017a). *Regional tourism performance 2016*. Retrieved from www.failteireland.ie

Fáilte Ireland. (2017b). *Tourism Barometer - April 2017*. Retrieved from http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3_Research_Insights/3_General_SurveysReports/Failte-Ireland-Tourism-Barometer-April-2017.pdf?ext=.pdf

Fitzpatrick Associates. (2016). *Analysis of Visitor Accommodation in Dublin 2015-20*. Retrieved from http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3_Research_Insights/2_Regional_SurveysReports/Analysis-of-Visitor-Accommodation-in-Dublin-2015-20.pdf?ext=.pdf

Hanrahan, J., & McLoughlin, E. (2015). A framework for analysing the local authorities' tourism planning in Ireland: A socio-cultural perspective. *European Journal of Tourism Research*, *11*, 73–86.

Hospitality Ireland. (2017). Ireland's Tourism Industry To Face "Sustainability Issues" In 2017, Says CEO. Retrieved August 1, 2018, from https://www.hospitalityireland.com/irelands-tourism-industry-face-sustainability-issues-2017-says-ceo/36395

ITIC. (2016). *Economic impact to Dublin of tourism*. Retrieved from https://www.dublincity.ie/councilmeetings/documents/s3542/Economic Impact Tourism 22 March2016.pdf

Lonely Planet. (2018). Dublin travel. Retrieved July 31, 2018, from https://www.lonelyplanet.com/ireland/dublin

McGrath, L. (2016). Does Airbnb Mean There Are Fewer Homes to Rent in Dublin? Retrieved July 31, 2018, from https://www.dublininquirer.com/2016/05/17/does-airbnb-mean-there-are-fewer-homes-to-rent-in-dublin/

Mintel Academics. (2015). Emerging City Destinations in Europe - June 2015: Dublin. Retrieved July 31, 2018, from http://academic.mintel.com.proxy1.dom1.nhtv.nl/display/741775/?highlight#hit1

MWE. (2014). *Dublin - Capital factsheet on separate collection*. Retrieved from https://www.municipalwasteeurope.eu/sites/default/files/IE Dublin Capital factsheet.pdf

Spain, J. (2016). Ireland is not a theme park - tourists need to get real. Retrieved July 31, 2018, from

https://www.irishcentral.com/news/irishvoice/ireland-not-a-theme-park

Tranum, S. (2017). Protest and Resistance in the Tourist City, Reviewed. Retrieved July 31, 2018, from https://www.dublininquirer.com/2017/08/15/protest-and-resistance-in-the-tourist-city-reviewed/

Travel Extra. (2016). Shane Ross hits back at critics over tourism performance. Retrieved August 1, 2018, from http://www.travelextra.ie/shane-ross-hits-back-critics-tourism-performance/

Webster, K. (2017). *Be Careful What You Wish For When Tourism Growth Exceeds Capacity*. Retrieved from https://tourismpolicyworkshop.files.wordpress.com/2017/11/katherine-webster.pdf

WTTC. (2017). *City travel & tourism impact 2017 - Europe*. Retrieved from https://www.wttc.org/research/economic-research/economic-impact-analysis/

IV.11   Echternach, Luxembourg

Type of destination: Heritage & Attractions

Region: EU

Reported by: Claudio Milano & Wilson Hoyos

Tourism is one of the major industries in Luxembourg. "The combination of its pleasant landscape and diverse cultural attributes, along with its proximity to major West European population centres, underpin the industry" (Smith, 1992: 427). Echternach is the oldest town of the country and the capital of the Mullerthalregion, also known as the little Switzerland. Located in the south-east of the country, on the German border, it receives regular visits. In 2008, it has been awarded with the EDEN (European destination of excellence) distinction from the European Commission. On 16th November 2010, the UNESCO's intergovernmental Committee for the safeguarding of the intangible cultural heritage voted unanimously to place the Hopping Procession of Echternach on the list representing the intangible cultural heritage of humanity. The procession takes place every year on Tuesday of Pentecost (a Christian religious festival). It is documented since year 1100 and is founded on the cult of Saint Willibrord, a monk and founder of the Abbey of Echternach. The procession begins early in the morning with 8,000 dancers divided into 45 groups according to a ritual. Nowadays, the procession registers an average of 13,000 participants each year (UNESCO, 2018a; 2018b).

Statistics

According to the Statistic Portal of the Grand Duchy of Luxembourg (GDL) (STATEC, 2018):

- In April 2018, GDL had 602,000 inhabitants.
- In April 2018, the Canton Echternach had 18,900 inhabitants and the municipality of Echternach 5,614 inhabitants.
- In 2017, the tourist arrivals in GDL were 1,156,000 and 102,500 in the Mullerthal region.
- In 2017, there were 2,891,600 overnight stays in all type of accommodation in the GDL.
- In 2017, the Mullerthal region registered 446,900 overnight stays in all type of accommodation.
- In the GDL, there are 225 hotels and similar establishments and 87 campsites. In Echternach, ten hotels and similar establishments and three campsites were registered in January 2018.
- The TPR for GDL was 1.3 tourists per 100 inhabitants per day in 2017, while the TDR, based on a size of 2,586 km^2 was 3.1 tourists per km^2 per day.

Main impacts

- High number of tourists per residents

In recent years, the Hopping procession has attracted more than 12,000 pilgrims from all over Luxembourg and from neighbouring countries, as well as many tourists and curious onlookers (Luxembourg.lu, 2018). Moreover, Luxembourg registers a constant high flow of visitors due to its geographical location close to Germany and because of transit due to the lower fuel taxes.

Measures taken

The local authorities are seeking to preserve the importance of intangible heritage. Some measures have been taken in order to preserve the Hopping Procession of Echternach tradition. They attempt to improve visitor's behaviour with a small notice brochure, asking them to avoid clapping, show restraint and letting them know that the Hopping Procession is a procession and not a folklore performance (Lamparski, 2013). To prevent congestion and traffic jams during the procession, it is forbidden to park in Echternach on Tuesday and many streets are closed. The authorities provide a shuttle bus that circulates between the Parking du Lac in Route de Luxembourg and the Echternach train station (Walder, 2018).

The future of overtourism

With respect to overtourism related issues in Luxembourg and Echternach, there are not so many conflicts or disputes. Furthermore, even though the whole of Luxembourg receives a number of visitors greater than the resident population, there are no noteworthy experiences of negative impacts of tourism. This is because arrivals are not concentrated in peak season and the length stay of business and conference tourists are normally quite short (Boniface, Cooper & Cooper, 2016). In January 2018, the Secretary of State for the Economy presented

"Tourism 2022" - a strategic plan containing a joint reflection of the Ministry of the Economy and its partners in the field of tourism. The Strategic Plan classified eight pillars to improve the tourism sector, the travel revenues and tourists' experience in the country (Luxemburg, 2018). Finally, in 2022 the city of Esch-sur-Alzette will be European Capital of Culture. This event will open future scenarios for the travel and tourism sector in Luxembourg (E22).

Sources and links

Boniface, B., Cooper, R., & Cooper, C. (2016). Worldwide destinations: The geography of travel and tourism. Routledge.

E22 (2018). Esch-Sur-Alzette, Pro Sud, Ccphva European Capital Of Culture 2022. Retrived from: https://www.esch2022.lu/en

Lamparski, N. (2013, 09 03). BBC Magazine. Retrieved from https://www.bbc.co.uk/news/magazine-23927021

Luxembourg.lu. (2018). The official portal of the Grand Duchy of Luxembourg. Retrieved from http://luxembourg.public.lu/en/actualites/2018/05/22-procession/index.html

Luxemburg (2018) Tourism 2022. Retrieved from: https://gouvernement.lu/dam-assets/fr/actualites/communiques/2018/01-janvier/10-closener-touristique-2022/Document-TOURISME-2022.pdf

Smith, R. V. (1992). Tourism's role in the economy and landscape of Luxembourg. Tourism Management, 13(4), 423-428.

STATEC. (2018). Le Portail des Statistiques Grand Duche de Luxumbourg. Retrieved from http://www.statistiques.public.lu/fr/index.html

UNESCO (2018a). The Hopping Procession of Echternach. Retrieved from: https://unesco.public.lu/en/patrimoines/immateriel.html#

UNESCO (2018b). Hopping Procession of Echternach. Retrieved from: https://ich.unesco.org/en/RL/hopping-procession-of-echternach-00392

Walder, A. (2018, 05 18). Luxembourg Times. Retrieved from: https://luxtimes.lu/culture-life/33865-echternach-tradition-just-a-hop-skip-and-jump-away

IV.12   Geirangerfjord Area, Norway

Type of destination: Coastal & Islands

Region: Other European

Reported by: Jasper Heslinga

The Geirangerfjord is a fjord area that is on the UNESCO World Heritage list since 2015. Because of its landscape with majestic, snow-covered mountain tops, wild and beautiful waterfalls, lush green vegetation, and the deep, blue fjord, it is one of the most visited areas in Norway (Fjord Norway, 2018). Apart from the opportunities the areas offers for tourist such as hiking, biking, canoeing, sailing, and fishing, the fjord is frequently visited by cruise ships (Visit Norway, 2018).

Statistics

- Geiranger has 215 permanent inhabitants, but is visited by about 800,000 to 1 million visitors a year, who come to the village mainly during the period May – September (Fjord Norway, 2018). This implies a TPR of 1274.2 (same day) visitors per day per 100 inhabitants.
- The concentration of visitors especially occurs at specific sites. For example, the number of people hiking up to the a spectacular Trolltunga (Troll tongue) has increased from 1,000 to a 100,000 over just five years, while the amount of people visiting Preikestolen (Pulpit Rock), another vertigo-inducing attraction, has increased from 60,000 in 2009 to 300,000 in 2016 (Telegraph, 2016; Business Insider Nordic, 2016).
- Visitors entering the Geirangerfjord is largely facilitated by cruise tourism, which has been growing in the whole country. The number of cruise visitors in Norway have increased from about 200,000 to almost 700,000 between 2000 and 2015, according to Norway's Institute of Transport Economics (Dybedal et al., 2015). The number of cruise ship port calls in Norway has gone up from approximately 1,200 to 2,000, and the number of passengers per ship has nearly doubled over the same time.

Main impacts

- High number of tourists per residents
- Traffic and public transport congestion
- Environmental issues

The Geirangerfjord area has experienced an increasing number of visitors and the impacts become problematic on those days when large numbers of cruise ships arrive at times when the villages are already full with other tourists (Telegraph, 2016). The increase of cruise tourism arrivals has been growing the past 15 years (Dybedal et al., 2015), but recently part of the growth could be put down to Frozen, a Disney cartoon whose fictional setting, Arendelle, is closely modelled on Norway. This has resulted in more attention to the areas by families, especially from the US market (Telegraph, 2016). Also social media platforms such as Instagram and Facebook have magnified the attraction of sites with spectacular photo-opportunities, such as Trolltunga and Preikestolen, which are almost marketing tools themselves (Telegraph, 2016). These factors led to fully-booked hotels, traffic problems and queues at popular destinations. In addition, growing cruise ship traffic is causing local towns to be blanketed in polluted air, bringing health hazards to the population (Business Insider Nordic, 2018).

Measures taken

There is an increasing awareness of overcrowding in the Geirangerfjord area, especially in the views of those stakeholders that are responsible for promoting the area. As a measure to better guide this growth, Fjord Norway, for example, now plans to promote visiting in the spring, autumn and winter months, as well as tries to raise the profile of destinations which has been overlooked so far. This same agency is encouraging hotels and the harbours where cruise ships berth to increase their prices steeply in July and August, to push more visitors into the less busy months (Telegraph, 2018). The tourist board for Western Norway, the site of the country's most magnificent fjords, has slashed its promotion budget for next summer, after surging visitor numbers in the wake of the success of Disney's Frozen. With regard to the environmental impacts related to cruise ships, the country's government opposition is now calling on the government to require ferries to run on fossil-free fuels (Business Insider Nordic, 2018).

The future of overtourism

Important steps have been made in stopping the promotion of the area to slow down the growth of visitors. Nevertheless, further steps can be made to help the destination adapt to the large amount of visitors.

Sources and links

Business Insider Nordic (2016). Frozen is flooding Norway with more tourists than the nation can handle. Retrieved 27 July 2018, from https://nordic.businessinsider.com/frozen-is-flooding-norway-with-more-tourists-than-the-nation-can-handle-2016-9/

Business Insider Nordic (2018). Norwegian fjords could be as polluted as London and now there calls to electrify cruise ship travel. Retrieved 27 July 2018, from: https://nordic.businessinsider.com/norwegian-fjords-could-be-as-polluted-as-london---and-now-there-are-calls-to-electrify-cruise-ship-travel--/

Dybedal, P. et al. (2015). Cruise passenger traffic to Norway – history and forecasts until 2060. Retrieved 27 July 2018, from https://www.toi.no/getfile.php/1339880/Publikasjoner/T%C3%98I%20rapporter/2015/1388-2015/1388-summary.pdf

Fjord Norway (2018). Welcome to Geiranger. Retrieved 27 July 2018, from: https://www.fjordnorway.com/geiranger/

Telegraph (2016). Norway stops promoting tourism as it is overwhelmed thanks to 'Frozen effect'. Retrieved 27 July 2018, from https://www.telegraph.co.uk/news/2016/09/16/norway-stops-promoting-tourism-as-it-is-overwhelmed-thanks-to-fr/

Visit Norway (2018). The Geirangerfjord. Retrieved 27 July 2018, from   https://www.visitnorway.com/places-to-go/fjord-norway/the-geirangerfjord/

IV.13 Giethoorn, the Netherlands

Type of destination: Heritage & Attractions

Region: EU

Reported by: Jeroen Nawijn

Giethoorn is a small village and is part of the municipality of Steenwijkerland. The key features of Giethoorn are its small canals and 180 bridges, for which it is nicknamed the 'Dutch Venice' (Giethoorn Tourism, 2018). Visitors to Giethoorn mainly spend their time around the canals, biking, walking and taking boat rides. Giethoorn is mainly a destination for daytrips (Steenwijkerland, 2017), attracting both Dutch and foreign visitors.

Statistics

- Exact figures of the total number of tourists annually are not recorded, but estimates vary between a few hundred thousand up to two million (Valkeman, 2017). Based on a study by Marketing Oost, using Vodafone data, the city council reports 590,000 visitors in 2015, of which 205,000 came from abroad (Steenwijkerland, 2017).
- Most international visitors stem from Belgium and Germany, with increasing numbers from Asian and Arab countries. The growth in these latter markets was a deliberate choice and the consequence of marketing investments.
- Number of inhabitants in 2018 is 2,750 (CBS StatLine, 2018)
- Based on 2,750 inhabitants, the TPR for Giethoorn is 58.8 tourists per day per 100 inhabitants (CBS Statline, 2018).

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Environmental issues (waste)
- Lack of capacity of the narrow roads/cycle lanes/footpaths (actually turn away guests)
- Tourists complain about tourists
- Traffic and public transport congestion
- Uncivilised behaviour

The main issues related to overtourism are of social and environmental nature: A lack of parking spaces for inhabitants, congestion on the canals and walking/cycling infrastructure including the many footbridges, disturbance from overnights visitors, waste in public spaces and uncivilized behaviour of tourists (Boonstra, 2018; Valkeman, 2017). These issues are most prominent during the summer, which is the high season (Keukenkamp & Lohuis, 2018).

Measures taken

Four working groups were formed in 2017 to tackle the issues of lack of parking spaces for inhabitants, congestion on the canals, disturbance from overnights visitors, and waste in public spaces. The working groups advised the city council of Steenwijkerland (Valkeman, 2017). Early 2018, €196,500 was made available to tackle the most prominent issues raised by the working groups. The money will be spent on more frequent emptying of garbage bins, replacing damaged beacons, and better signage for parking spaces (Fix, 2018). This shows that the city council is aware of the problems of overtourism and is actively involved in taking measures to prevent or mitigate negative effects of overcrowding on the inhabitants. Future measures addressed by the City Council are to actively enforce the law on bed and breakfasts and to adjust the regulations for water traffic in accordance with EU regulations (Fix, 2018). The latter is not taken up before late 2018 (Keukenkamp & Lohuis, 2018). The tourism policy plan 2018-2022 of the City Council of Steenwijkerland shows that they aim for more tourists and more economic benefits from tourism. The City Council strives for more overnight visitors and better quality accommodations (Steenwijkerland, 2017). To minimise overtourism, the City Council intends to spread tourists more over Steenwijkerland and to have a better spread of tourism throughout the year.

The future of overtourism

The city council is keen on increasing revenues of tourism, while reducing the effects of overtourism (Steenwijkerland, 2017). It is unclear how these measures will work out for overtourism in Giethoorn.

Sources and links

Boonstra, J. (2018, 08 May 2018). Hoeveel Chinezen kan Giethoorn eigenlijk aan? [How Many Chinese can Giethoorn handle?]. *AD*. Retrieved from https://www.ad.nl/binnenland/hoeveel-chinezen-kan-giethoorn-eigenlijk-aan~a983b0f2/

CBS StatLine. (2018). *Kerncijfers wijken en buurten 2018 [Core numbers boroughs and neighbourhoods 2018]*. Retrieved from: https://opendata.cbs.nl/#/CBS/nl/dataset/84286NED/table?ts=1535097037070

Fix, M. (2018, 11 April 2018). Kleine 2 ton om irritaties in Giethoorn het hoofd te bieden [Almost 2 hundred thousand to tackle irritations in Giethoorn]. *De Stentor,*. Retrieved from https://www.destentor.nl/steenwijkerland/kleine-2-ton-om-irritaties-in-giethoorn-het-hoofd-te-bieden~af767350/

Giethoorn Tourism. (2018). Giethoorn. Retrieved from https://giethoorntourism.com/

Keukenkamp, S., & Lohuis, S. (2018, 03 February 2018). Grachten Giethoorn blijven voorlopig overvol [Canals Giethoorn remain overcrowded for the time being]. *De Stentor,*. Retrieved from https://www.destentor.nl/steenwijkerland/grachten-giethoorn-blijven-voorlopig-overvol~ab5f4e4b/

Steenwijkerland. (2017). *TOERISME & RECREATIE STEENWIJKERLAND BELEIDSPLAN 2018-2022 [Tourism & Recreation Steenwijkerland Policy Plan 2018-2022]*. Retrieved from Steenwijkerland, The Netherlands:

Valkeman, A. (2017, 09 October 2017). 'Giethoorn is geen theater en wij geen acteurs' ['Giethoorn is not a theatre and we are not actors']. *De Stentor,*. Retrieved from https://www.destentor.nl/kop-van-overijssel/enlsquo-giethoorn-is-geen-theater-en-wij-geen-acteursenrsquo~adb3aff8/

IV.14   Grand Canyon, the United States

Type of destination: Rural

Region: Rest of the world – North America

Reported by: Rami K. Isaac

The Grand Canyon has an enormously diverse wildlife, including about 89 species of mammal, 355 species of bird, 17 species of fish, 50 species of reptile, 9 species of amphibian and over 1,500 species of plant. The sharp change in elevation along its walls allows different climates and ecosystems to exist in close proximity, and the canyon and its surroundings contain three of the four types of desert that exist in North America, and five of the continent's seven ecological zones (National Park Service, 2010).

Statistics

- The number of visitors to the Grand Canyon National Park amounted to approximately 6.25 million in 2017 (Statistica, 2018).
- In 2004, a survey found that park visitors included citizens from all 50 states. Additionally, 17% of park visitors had come from at least 41 different foreign countries (Arizona Hospitality Research & Resource Center, 2005).
- In 2004, tourism at Grand Canyon National Park created an estimated $686 million of economic activity in the northern Arizona region, supporting nearly 12,000 jobs (Arizona Hospitality Research & Resource Center, 2005). Recent statistics reveals that the canyon itself accounts for between 0.5 to 1.0 billion dollars a year in revenues that spread throughout the regional economy (Wernick, 2016). Tourism is Arizona's single largest source of out of-state revenue, with the Grand Canyon accounting for more than 10% of total visits to the state.
- The Grand Canyon National Park & Northern Arizona Tourism Study, a year-long survey of visitors to Grand Canyon National Park (2005), revealed that respondents' length of stay at Grand Canyon National Park averaged 7.3 hours (median 6 hours) for day visits, and 5.3 days (median 2.5 days) for overnight visits.
- Based on a size of 4,926 km^2, the TDR of the Grand Canyon is 3.5 (same-day) visitors per km^2.

Main impacts

Overcrowding, traffic jams and an outdated transportation system are all issues that the park is trying to address. The natural quiet of Grand Canyon has been disturbed by rumbling aircraft noise, and forest landscapes have been altered by decades of wildland fire suppression (National Park Service, 2015). The growing crowds at U.S. National Parks in general and the Grand Canyon in particular have become unmanageable, jeopardizing the natural experience the parks were created to provide. This crowding comes at an uncertain time for the parks. President Trump has proposed cutting the Park Service budget by 13% (which would be the largest cut to the agency since World War II), and there is already a backlog of staffing and maintenance issues. Moreover, there is concern that the Trump Administration might move to make the parks even friendlier to commercial interests that would bring in more visitors and more development. The visitor crush is creating two main problems, first a steep decline in the quality of visitor experience that a national park is supposed to provide, and secondly damaging impacts on the ecology of these intact natural places (Yale Environment, 2018).

In recent years, the prospect of further tourist and residential development near the canyon's rim threatens the delicate equilibrium of nature. In 2010, a recent report called for the need to recognise and avert a variety of challenges posed to the park, including the management of the Colorado River system that fails to adequately adopt strategies for the protection and restoration of native animals, as well as cultural resources and wildlife habitat; threats from future mining development adjacent to the park; and remediation of historic mining activities that occurred within its boundaries (O'Donoghue, 2010). Currently, there are three main threats to the Grand Canyon. First, the escalade is a proposal to build a 2 million square foot, industrial-scale construction project on the east rim of the canyon that includes a tram to the bottom of the Grand Canyon at the confluence of the Colorado and Little Colorado Rivers. The Escalade project would forever damage the canyon's remote, wild character. Secondly, active and inactive uranium mines on the north and south rims of the canyon threaten clean water. Current proposals exist to revive some of the inactive mines, and expand the exploration of currently active mines. Finally, a foreign investment group has been trying to expand the town of Tusayan, which lies just outside the south entrance to Grand Canyon National Park. This expansion would require substantial withdrawals of groundwater from the aquifer. Ongoing drought has dramatically affected this area of the country. Increased groundwater withdrawal could negatively impact ecologically important seeps and springs within the Grand Canyon itself (American Rivers, 2018).

Measures taken

Special no flight zones have been created to preserve natural quiet in remote areas of the park and prescribed burning and forest thinning are natural resource management tools used to restore forest landscapes and reduce wildfire hazards (National Park Service, 2015). Grand Canyon National Park has implemented projects to reduce the crowd and the harm they do to the environment. There are several planning processes that have either been completed or are in progress, including the park's 1995 General Management Plan and a recently completed South Rim Visitor Transportation Plan. There are also plans for commercial overflights, river and backcountry use (Levine, 2009). "Many popular parks such as Grand Canyon still have capacity but it's clustered," said the National Park Service officer. "Most people could be entering through one gate but other entrances of a park may have much more capacity. This isn't about limiting access. If there's a daily limit on entries, those limits are still collectively above what the numbers are now. And then, there are situations like in the Grand Canyon where we only allow so many daily permits for rafting trips on the river" (Peltier, 2018).

The Tusayan Route shuttle bus route began on March 1, 2018. It helps visitors who want to avoid congestion and parking distresses by allowing them to park in the gateway community of Tusayan and ride the shuttle to the Grand Canyon National Park (Az Family News, 2018). The South Rim Visitor Plan provides a transportation system that addresses issues like long waits, parking lots with a surplus of cars and buses, traffic congestion, and poor signage. This implemented plan accommodates the visitors by enhancing their experiences and the environment by protecting the park's resources. There have been proposals to restrict cars from entering the park. Another proposal was to install all around the park a traffic-jam monitoring system. However, the problem is not just with the overcrowding of vehicles. There are 2 million acres of wilderness that less than 5% of its visitors ever see. The crowds can be reduced by simply spreading people out within the park (Levine, 2009). The Grand Canyon has to constantly update their trails and renovate their facilities to prevent overcrowding.

The future of overtourism

Looking at the possible solutions and measures taken by the national park and those that are underway, Grand Canyon is considering that overtourism and crowding is indeed a problem. The Grand Canyon management is looking at several suggestions and ideas tackling over tourism and it seems that they will succeed in putting these measures to tackle this problem.

Sources and links

American Rivers (2018). American Rivers. Available at https://www.americanrivers.org/river/colorado-river-in-the-grand-canyon/ (Accessed 2 August, 2018).

Arizona Hospitality Research and Resource Center (2005). *Northern Arizona University, Grand Canyon National Park & Northern Arizona Tourism Study.* Flagstaff: Arizona: USA

AZ Family News (2018). Holiday's weekend bring huge crowds to the Grand Canyon. Available at http://www.azfamily.com/story/37639663/tips-for-visiting-the-grand-canyon-during-spring-break (Accesses 2 August, 2018).

Grand Canyon National Park (2005). Executive Summary study. Available on https://tourism.az.gov/sites/default/files/documents/files/Grand_Canyon_Visitor_Study_Executive_Summary.pdf (Accessed 2 August, 2018).

Levine, J. (2009). Parks seeks way to manage crowds, cars. Available at http://www.ournationalparks.us/park_issues/busy_parks_seek_approaches_to_manage_crowds_cars/ (Accessed 2 August, 2018).

National Park Service, Grand Canyon National Park (2010). Nature and Science. Flagstaff: Arizona: USA.

National Park Service (2015). Environmental factors. Available at https://www.nps.gov/grca/learn/nature/environmentalfactors.htm (Accessed 1 August, 2018).

O'Donoghue, A. (2010). Grand Canyon facing environmental challenges. Available at https://www.deseretnews.com/article/700059752/Grand-Canyon-facing-environmental-challenges.html (Accessed 2 August, 2018).

Peltier, D. (2018). The US national parks aren't sure how to deal with overtourism. Available at https://skift.com/2018/03/02/u-s-national-parks-arent-sure-how-to-deal-with-overtourism/ (Accessed 2 August, 2018).

Statistica (2018). Sport and recreation. Available on https://www.statista.com/statistics/253878/number-of-visitors-to-grand-canyon-national-park/#0 (Accessed 2 August, 2018).

Wernick, A. (2016). Some US national parks are feeling pressure from developers. Available at https://www.pri.org/stories/2016-09-05/some-us-national-parks-are-feeling-pressure-developers (Accessed 1 August 2018).

Yale Environment (2018) How A Surge in Visitors Is Overwhelming America's National Parks. Available at https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks (Accessed 2 August 2018).

IV.15   Isle Of Skye, United Kingdom

Type of destination: Coastal & Islands

Region: EU

Reported by: Jasper Heslinga

The Island of Skye is situated off the West Coast of mainland Scotland. It is the largest and best known of the Inner Hebrides. Skye is renowned for its natural beauty, history, and wildlife. Tourists often come to the island for visiting old castles, wildlife watching, walking, and climbing. Also, Skye features in a number of blockbuster films, which have used its unique beauty as a backdrop.

Statistics

- Precise visitor statistics for Skye are difficult to obtain but VisitScotland (2017a) says more than 150,000 people visited its centre in Portree (Skye's largest town) in 2017 – up 5% compared to 2015. More than 24,000 people visited the centre in June 2017, again 5% up compared to June 2016 (VisitScotland (2017b).
- The number of Airbnb listings on Skye has jumped from 54 in 2015 to 360 in 2017 (The Guardian, 2017).
- More than 30 cruise ships were scheduled to moor in Portree Bay in summer 2017, each for less than a day and some with 2,200 passengers on board (The Guardian, 2017).

Main impacts

- Sudden high number of tourists per residents
- Environmental issues
- Tourists complain about tourists
- Traffic congestion

Skye has been highlighted in the wake of its busiest ever summer, which has seen growing demands for improved infrastructure on Skye. A problem is that there has been decades of underinvestment in basic infrastructure without adapting to today's tourists' needs. Family cars are now much larger and tour buses proliferate (The Guardian, 2017). As a consequence car parks are full, locals find their normal routes to work blocked, there is a drastic shortage of toilet facilities, and there are warnings from the police about turning up without booking accommodation (Scotsman, 2017). There are also fears that the traffic jams could prevent mountain rescue teams from reaching Skye's mountain rescue headquarters in Glen Brittle (The Guardian, 2017). Islanders therefore complain that their narrow, single-track roads are being choked with camper vans, tour buses and cars, that litter is strewn around stopping places, and visitors are going to the toilet in the open (Scotsman, 2017). Another impact that coincides with these problems is the boom in coastal cruises around Scotland, which has threatened to overwhelm parts of the Orkney Islands, has also arrived on Skye (The Guardian, 2017). A final impact is the increasing pressure on affordable housing for locals (The Guardian, 2017). Skye's popularity has been driven by Hollywood, pop stars, commercials, and social media, which in turn have been promoted heavily by the tourism agency VisitScotland and Scottish ministers, who are anxious to attract high-spending foreign visitors (The Guardian, 2017).

Measures taken

Many stakeholder are aware of the problems overtourism cause and some measures have been taken. First, a new task force has been set up after the local Member of the Scottish Parliament (MSP), Kate Forbes, warned that the island's infrastructure was "creaking at the seams" to the number of visitors flocking there (Scotsman, 2017). Second, there is a close collaboration between the local community and a newly-established destination management organisation, "Skyeconnect", to consider ways to mitigate the issues, by encouraging visitors to come at different times throughout the year and by promoting other-lesser known, but equally beautiful, attractions in the Highlands (Scotsman, 2017). Third, there is an initiative to coordinate a long term strategic plan with the council, Scottish ministers, and local groups, with extra money offered to Highland council to help it cope. That included building a much larger 150-space car park in Glen Brittle, and strengthening roadsides at the worst-affected areas (The Guardian, 2017). Finally, there is a discussion going on about fees and tourists taxes. For example a small fee could be charged at the Skye Bridge for a special fund to help bring the infrastructure in line with expectation of visitors, such as more public toilets and better car parking (BBC, 2017).

The future of overtourism

Despite the diversity of measures, the problems on Skye need to be taken more seriously by some national stakeholders. With the general vision of Visit Scotland to attract more tourists remaining and some people in the Scottish government continuing to see the tourist boom in Scotland as great news, managing overtourism will remain a challenge (Scotsman, 2017).

Sources and links

BBC (2017). Is Skye reaching the limit for tourists? Retrieved 26 July 2018, from https://www.bbc.co.uk/news/uk-scotland-40874488

Isle of Skye (2018). The Isle of Skye. Retrieved 26 July 2018, from https://www.isleofskye.com/

Scotsman (2017). Skye alongside Barcelona and Prague as victim of 'mass tourism'. Retrieved 26 July 2018, from https://www.scotsman.com/lifestyle/skye-alongside-barcelona-and-prague-as-victim-of-mass-tourism-1-4650039

The Guardian (2017). Skye islanders call for help with overcrowding after tourism surge. Retrieved 26 July 2018, from https://www.theguardian.com/uk-news/2017/aug/09/skye-islanders-call-for-help-with-overcrowding-after-tourism-surge

Visit Scotland (2017a). Research and insights: Facts, figures, the future. Retrieved 26 July 2018, from https://www.visitscotland.org/research-insights

Visit Scotland (2017b). Insight Department: Tourism in Scotland's Regions 2016. Retrieved 26 July 2018, from https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/insights---tourism-in-scotlands-regions-2016_update-may-18.pdf

IV.16   Juist Island, Germany

Type of destination: Coastal & Islands

Region: EU

Reported by: Simone Moretti

Juist is a small snake-shaped island (17 km long, less than 1 km wide), belonging to the group of seven East Frisian Islands, on the western German coast of the North Sea. It is also included in the Wadden Sea UNESCO World Heritage Site. The island hosts two villages, and, along the norther costal side, the landscape is characterised by endless dunes and long white sandy beaches. With many guestrooms and hotels, tourism is the main economic activity of the island, attracting especially families and couples. The island provides health and wellness facilities but also sport, nature and beach activities. Cars are prohibited on the island and people move around by bicycle, horse-drawn carriages or on foot (Inselgemeinde Juist, 2018; Lonely Planet, 2018; Tourismus Marketing Niedersachsen, 2018a, 2018b; Weber et al., 2017).

Statistics

- Tourism arrivals: 110,545 in 2010 (9.5% vs 2004), 124,176 in 2013 (12.3% vs 2010), 129,184 in 2015 (4% vs 2013) (Weber et al., 2017).
- One-day visitors: 25,000 in 2015 (Weber et al., 2017).
- Overnight stays: 983,971 in 2015. 7.6 days average length of stay (Weber et al., 2017).
- TPR/TDR: The population is 1,710 and its area is 16.4 km^2 (Weber et al., 2017), leading to, in 2017, a TPR of 161.7 visitors per 100 inhabitants per day and a TDR of 168.6 visitors per km^2 per day.
- Number of accommodations in 2015: 209 (6,003 beds) (Weber et al., 2017).
- Tourism turnover: €4.1 million in 2014 (8% vs 2013) (Weber et al., 2017).
- Employment: 92 % of the employees in Juist Island works (directly or indirectly) in the tourism sector. Seasonal workers represent 26% of the total jobs (Weber et al., 2017).

Main impacts

- High number of tourists per residents
- Exodus of local residents
- Environmental issues

Although the growth rate of tourist arrivals has slowed down in recent years, the volume of tourism calls for special attention, due to the delicate and fragile socio-environmental ecosystem of the island. During the high season (June-September), the island's landscape is strongly influenced by the presence of tourists (LancewadPlan, 2008; Weber et al., 2017; Wöste, Scheffler, & Rathke, 2015). Weber et al. (2017), provided a summary of the main impacts related to increasing tourism flows in Juist Island. From an environmental point of view the tourists' ecological footprint is the main concern, due to a delicate ecosystem, sand dune preservation needs, water and energy consumption, waste disposal, and pollution. The arrival and departure of the guests is Juist's biggest source of CO_2 emissions. Social impact concerns are related to the total dependence of the island on tourism and the seasonality of this industry, which leaves many residents unemployed during the winter. Also because of that, many young residents decide to leave, searching for better and more stable opportunities. This is impacting the society of the island which is already in precarious situation (residents complain about too many secondary residences, which are used only for holiday and not as permanent homes). Moreover, the reconstruction and renovation of old buildings seems to be mainly tourism-business driven and locals perceived it as not respectful of the original island's character and charm.

Measures taken

As a reaction to the negative tourism impacts experienced by the local community, a new long-term vision for the island was developed, based on principles of sustainable development. Juist Island is aiming to become the first climate-neutral island of Germany by 2030 and the implementation of this vision is realised with the engagement of all the island's stakeholders, including the municipality, residents and guests (Weber et al., 2017).

Concreate actions and activated projects include:

- Participation of the local population in the destination management and planning (Lein, 2018; Weber et al., 2017).

- Participation of tourists, with the organisation of an annual "Guest-Parliament" with a consultancy function, in order to include tourists' point of views in tourism decision-making processes (Seiz, 2017; Weber et al., 2017).
- The "Climate Island Juist" project, aimed at containing the current CO_2 footprint by involving the local tourism companies. This initiative received various awards and certifications as a sustainable project (Futouris, 2015; Weber et al., 2017).
- Talks, with the local hospitality and retail sector, on sustainability issues, and a "Children University for sustainability" organised in summer for kids (Green Pearls, 2018; Wanderlust, 2017; Weber et al., 2017).
- Plans to attract more tourists in the off-season and improve the working conditions for residents (Weber et al., 2017).
- Interventions aimed at reducing energy/water consumption and improving the waste disposal system (Weber et al., 2017).

The overall strategy and the enthusiastic participation of all the stakeholders, included the industry, demonstrate the high level of awareness of the entire island of the need to manage the impacts of increasing tourism flows. Appreciable results are already visible (Weber et al., 2017) although a full evaluation of their effectiveness require a longer-term perspective.

The future of overtourism

Due to initial satisfactory results, certifications and sustainability awards, Juist Island acquired international popularity in the area of sustainable tourism and overtourism prevention. By pursuing the goal to become the first German climate-neutral island by 2030, the local municipality has developed measures and recommendations, to be implemented in the next years, involving environmental, ecological and social sustainability (Weber et al., 2017). If implemented effectively, that strategy might safeguard Juist Island from the negative consequences of overtourism.

Sources and links

Futouris. (2015). Climate-neutral island Juist, Germany. Retrieved July 27, 2018, from http://www.futouris.org/en/projects/klimainsel-juist/

Green Pearls. (2018). The university for children on Juist: perceptible sustainability. Retrieved July 27, 2018, from https://www.greenpearls.com/blog/the-university-for-children-on-juist-perceptible-sustainability/

Inselgemeinde Juist. (2018). Juist Toewerland. Retrieved July 27, 2018, from https://www.juist.de/vor-ort/

LancewadPlan. (2008). Cultural Entity - Juist. Retrieved July 27, 2018, from http://www.lancewadplan.org/Cultural atlas/LS/Juist/juist.htm

Lein, S. (2018). Energy efficiency and sustainable tourism. Potential and best practices. Retrieved from http://www.ccila-portugal.com/fileadmin/ahk_portugal/site_upload/RF/IV_Missao_Empresarial_Cabo_Verde/02_Susanne_Lein_adelphi.pdf

Lonely Planet. (2018). Welcome to Juist. Retrieved July 27, 2018, from https://www.lonelyplanet.com/germany/juist

Seiz, A. (2017). Bringing Life to the Brand Profile - Example North Sea Island Juist" Retrieved July 27, 2018, from https://www.kohl.at/de/magazin/dem-markenprofil-leben-geben-beispiel-nordseeinsel-juist/95-214178.html

Tourismus Marketing Niedersachsen. (2018a). Juist - Highlights. Retrieved July 27, 2018, from https://www.niedersachsen-tourism.com/destinations/east-frisian-islands/juist-1

Tourismus Marketing Niedersachsen. (2018b). Wadden Sea: UNESCO World Heritage Site. Retrieved July 27, 2018, from https://www.niedersachsen-tourism.com/experiences/nature/natural-landscapes/wadden-sea-unesco-world-heritage-side

Wanderlust. (2017). Top 5 sustainable tourism projects and why you'll want to support them. Retrieved July 27, 2018, from https://www.wanderlust.co.uk/content/sustainable-tourist-projects-maldives-morocco-thailand/

Weber, F., Stettler, J., Priskin, J., Rosenberg-Taufer, B., Ponnapureddy, S., Fux, S., Barth, M. (2017). Tourism destinations under pressure - Challenges and innovative solutions. Lucerne. Retrieved from https://static1.squarespace.com/static/56dacbc6d210b821510cf939/t/5906f320f7e0ab75891c6e65/1493627704590/WTFL_study+2017_full+version.pdf

Wöste, H.-C., Scheffler, M., & Rathke, M. (2015). Droht Deutschen Inseln bald der Touristenstopp? Retrieved July 27, 2018, from https://www.welt.de/regionales/hamburg/article144283049/Droht-deutschen-Inseln-bald-der-Touristenstopp.html

IV.17   Plitvice Lakes, Croatia

Type of destination: Rural

Region: EU

Reported by: Claudio Milano & Belen Serrano Muñoz

Since 1949, Plitvice Lakes constitute a National Park. They were added to the UNESCO World Heritage List in 1979. The area extends over 300 km^2 and has a unique biodiversity, including brown bears, wolves, deers, and more than 340 butterfly and 40 dragonfly species (Vale, 2018). The park is surrounded by aquatic ecosystems, which have an enormously natural value to the region (Biondić, Biondić & Meaški 2010). Construction inside the National Park is forbidden. The three hotels, with 698 beds, were built before the 1980s and are currently owned and managed by the Public Institution NPPL (Vukadin, 2017). Only a small part of territory of the Plitvice National Park is visited by tourists (Vurnek et al., 2018).

Statistics

- In 2016, Croatia registered 15,460,000 tourist arrival and in 2017, the number increased to 17,430,000 (Ministry of Tourism, 2018).
- The park has 600 permanent workers. During the high summer season, there are 300 - 400 more employees (Vurnek et al., 2018).
- The number of visits to the Park has increased in recent years and it is expected that the trend will continue. The Park received 1.43 million visitors in 2016 and 1.72 million in 2017 (Ministry of Tourism, 2018).
- The ticket price for an adult is HRK 55 (or € 7) from January to March and November to December. From April to June and September to October the price is HRK 150 (or € 20). In July and August, until 4pm, the price is HRK 250 (or € 34) and after 4pm is HRK 150 (or € 20).
- Based on a size of the park of 297 km^2 the TDR is 15.9 tourists per km^2 (thereby ignoring the small amount of people staying overnight in the three hotels in the park).

Main impacts

- High number of visitors
- Lack of sewage system and waste-water treatment
- Lack of capacity (which actually turns away guests)
- Environmental issues
- Economic interest prevails over the protection of the Park.

In 2007 the first Management Plan, developed by the Karst Ecosystem Conservation Project, came into effect. It was valid until 2017. A new one is under preparation by the Ministry of Environmental Protection and Energy and the Plitvice Lakes National Park. According to the Conservation Outlook Assessment of 2017, there are several threats to the National Park, related directly and indirectly to human disturbances. These include "high visitor pressure on the lakes area, damages to travertine dams, natural system modifications (excessive water drawn from lakes, natural eutrophication intensified by anthropogenic influence, encroachment of forests into meadows), and pollution (inadequate treatment system of sewage water, organic pollution of water from tourism infrastructure and nearby villages, organic pollution of water from agricultural activities)" (IUCN, 2017: 2). Finally, some other threats for the Park are related to "the inadequate management of drinking water supplies, lack of wastewater treatment plant and excessive construction in village" (Vurnek et al., 2018: 55), the deforestation, and the organic pollution of water produced by tourism infrastructure (Prtorić & Vale, 2018). For the Plitvice Lakes National Park indicators or a carrying capacity study that might measure the daily limit of the number of visitors do not exist (Sremac, Božičević & Marković, 2012). According to Marković Vukadin, "the growth in visitor number, exacerbated by the seasonal concentration in a small area of the Park, affects not only the sensitive natural system but also the quality of visitor experience (2017: 211). The number of tourists has now reached a level which may require crisis management (Ružić & Šutić, 2014). As mentioned, the Plitvice Lakes National Park is inscribed in the World Heritage List and the common feature of all properties inscribed on the List is to meet the requirements for Outstanding Universal Value (OUV). According the "Reactive Monitoring mission to Plitvice Lakes National Park" by the World Heritage Convention & International Union for Conservation of Nature (WHC & IUCN, 2017: 1) the key factors impacting the Park and the OUV are the following:

- new and existing housing, major visitor accommodation and associated infrastructure inside the property;
- impacts of tourism and visitors;

- water extraction;
- surface and ground water pollution from waste water and traffic;
- transportation infrastructure and effects arising from its use;
- management and institutional factors; and
- changes in traditional ways of life and knowledge system (abandoning of small scale agriculture).

Measures taken

Based on the above diagnosis, some recommendations have been suggested regarding the visitor's management (WHC & IUCN, 2017: 2). For some of them, such as housing, visitor accommodation and associated infrastructure, tourism pressure, changes in traditional ways of life and environmental negative impacts, the following recommendations have been given:

- Strengthen cooperation, coordination and exchange of information among national, regional and local authorities on activities having an actual or potential impact on the property and its OUV and ensure participation of the Plitvice Lakes National Park.
- Develop, in line with IUCN's Advice Note on Environmental Assessment, a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park based on the requirements under the World Heritage Convention.
- Add a Visitor management plan to the Management Plan, to mitigate the impacts of tourism particularly within the most sensitive areas of the lake system.
- Finalise the new Management Plan through an inclusive and participatory approach, incorporating the results of a Strategic Environmental Assessment, a traffic study and relevant scientific studies.
- Maintain rigorous and permanent water monitoring within the property's watershed, strengthen the overall ecological monitoring programme of the National Park.
- Take measures to encourage local and environmentally sensitive agriculture, and consider establishing a local brand name for certified products and services provided by local people.

The future of overtourism

The Plitvice Lakes National Park is an emblematic example of a great attractive natural heritage dealing with overtourism. It is currently facing challenges that need to be overcome in order to preserve the Park to future generations: protecting the sensitive environmental system, ensuring economic sustainability and dealing with visitor pressure (Vukadin, 2017). The Plitvice Lakes National Park brings a paradox. On the one hand, more tourists mean more income (entrance fees). On the other hand, the increasing number of visitors is triggering negative impacts on nature that may lead to a decreasing interest of visitors (Ružić & Šutić, 2014).

Sources and links

Biondić, R., Biondić, B. & Meaški, H. (2010). The conceptual hydrogeological model of the Plitvice Lakes. *Geologia Croatica*, *63*(2), 195-206.

International Union for Conservation of Nature (IUCN) (2017) 2017 Conservation Outlook Assessment. Retrieved from: https://www.worldheritageoutlook.iucn.org/explore-sites/wdpaid/2016

Ministry of Tourism (2018) Tourism in Figures 2017. Retrieved from: https://mint.gov.hr/UserDocsImages//AA_2018_c-dokumenti//180608_HTZTUBENG_2017.PDF

Prtorić, J. & Vale, G. (2018). Is this Croatian paradise in danger? Equal Time (24th of April of 2018). Retrieved from: https://www.equaltimes.org/is-this-croatian-paradise-in#.W2M-Stj7TOS

Ružić, V., & Šutić, B. (2014). Ecological Risks of Expansive Tourist Development in Protected Areas–Case Study: Plitvice Lakes National Park. *Collegium Antropologicum*, *38*(1), 241-248.

Sremac, J., Božičević, S., & Marković, I. (2012). Plitvice Lakes National Park (Central Croatia)—more than 50 years of continuous monitoring of natural and human influence. *European Geologyst*, 34, 12–16

Vale. G. (2018) Plitvice lakes in danger. *Osservatorio Balcani e Caucaso.* (9th of February of 2018). Retrieved from: https://www.balcanicaucaso.org/eng/Areas/Croatia/Plitvice-lakes-in-danger-185734

Vukadin, I. M. (2017). Sustainability Issues in Management of Tourism in Protected Areas: Case Study of Plitvice Lakes National Park. In: Dwyer, L., Tomljenovic , R., & C orak, S. *Evolution of Destination Planning and Strategy. The Rise of Tourism in Croatia.* (pp. 201-219). Palgrave Macmillan, Cham.

Vurnek, M., Brozinčević, A., Čulinović, K., & Novosel, A. (2018). Challenges in the Management of Plitvice Lakes National Park, Republic of Croatia. In: Suratman, M. N. National Parks. Management and Conservation. (pp. 55- 72).

World Heritage Convention & International Union for Conservation of Nature - WHC/IUCN (2017) Reactive Monitoring mission to Plitvice Lakes National.

IV.18   Lisbon, Portugal

Type of destination: Urban

Region: EU

Reported by: Claudio Milano & Manuela Kaspary

Lisbon has many tourist attractions such as various viewpoints (miradouros), the ceramic architectural facades, the vast gastronomy, the spectacles of Fado shows, the architecture and the historical heritage. These attractions, the strategic location and the mild climate throughout the year has stimulated a growing number of tourists to visit Lisbon, as a city break destination. Lisbon is the second oldest city in Europe and is situated between the mouth of the river Tagus and the Atlantic Ocean. It has 504,964 inhabitants (Statistics Portugal, 2017). In 2016, Portugal was the country of continental Mediterranean Europe which have had the highest increase in international tourist arrivals (13%). In 2016 Lisbon held the third place in international arrivals in Portugal (UNTWO, 2017; WTTC, 2017a). In the same year, the tourism sector in Lisbon generated € 3.8 billion, 5.3% of the total local GDP. With regard to employment, the Lisbon tourism sector generated 101,000 jobs, representing 7% of total employment (WTTC, 2017a).

Statistics

- In 2017, international tourism was responsible for 72.5% of the occupancy rate in Portugal's accommodations. 83.5% of international tourists come from European countries. The main markets were the United Kingdom (22.3%), Germany (13.6%) and Spain (9.8%) (Turismo de Portugal, 2018).
- In 2017, there were 12.7 million international tourist arrivals in Portugal (Turismo de Portugal, 2018).
- In 2017, Portugal experienced a growth of 8.9% in the number of overnights stays (20.6 million) in comparison to 2016. The growth of international guests was of 11.7% (1.3 million) (Turismo de Portugal, 2018).
- In 2017, the metropolitan region of Lisbon registered 11.2 million international overnight stays. The main markets were France (11.3%), Spain (10.7%) and Brazil (10.2%) (Turismo de Portugal, 2018).
- In 2017, the metropolitan region of Lisbon registered 29.9% of the total overnight stays in Portugal (Turismo de Portugal, 2018).
- In 2017, the Lisbon airport received 13.4 million international tourist arrivals; 52.4% of the total for Portugal (Turismo de Portugal, 2018).
- Based on a population of 506,892 and a size of 100 km^2 the TPR for Lisbon is 6.1 tourist per inhabitant per day and the TDR is 306.8 tourists per km^2.

Main impacts

- Spread of visitors into residential neighbourhoods
- Exodus of local residents
- Gentrification

The amount of tourists and the tourists' demand to go to unexplored areas has increased, leading to growth of visits to historical and peripheral residential neighbourhoods such as Alfama, Chiado, Moreria, and Bairro Alto. These neighbourhoods are experiencing an accelerated process of gentrification (Ascensão, 2015), caused by the deregulation of the housing market and real estate speculation. In order to cater for tourists' demands, historical buildings have been rehabilitated and there has been a significant displacement of previous residents and small traders. In the last three decades, Lisbon lost more than 240,000 inhabitants and was confronted with an aging population (Mendes, 2013). Causes for that are tourism, urban changes, gentrification processes fostered by special taxation on real estate investments funds, and the presence of many temporary residents. These phenomena together have been called 'tourism gentrification'. It led to foreign investments in the tourism sector and real estate market, focussing on the demands of a new middle and creative class for upscale neighbourhoods (Mendes, 2016). The results include a loss of resident purchasing power due to the arrival of new residents with different lifestyles such as students, artists and temporary residents (Barata Salgueiro, Mendes & Guimarães, 2017).

Measures taken

The local authorities have not taken specific measures to counter the consequences of 'tourism gentrification'. At the beginning of 2017, the Lisbon City Council implemented some plans and programmes to ensure there is a

residential and commercial fabric in the historical neighbourhood: the Affordable Income Plan (Plano de Renda Acessível), the National Rehabilitation Fund Urban (Fundo Nacional de Reabilitação do Edificado), and the programme "Shops with History" (Lojas com História). Furthermore, in 2014 the Municipal Tourist Tax was approved. It was applied from 2016 onwards. Different social movements such as "Live in Lisbon" (Morar em Lisboa) or community groups like "People live here" (Aqui mora gent) are protesting against the urban tourism trend in the city and the growing 'party tourism' phenomenon (Novy & Colomb, 2016) and are advocating a new type of urban governance. On a national level, there is the Strategy for Tourism 2027 (Turismo de Portugal 2017), which aims to integrate tourism public policies up to 2027. The plan has five strategic axes: preserve territory, boost economy, enhance knowledge, generate networking, and promote the Portugal brand. At a regional and local level, there is the Strategic Tourism Plan for the Lisbon Region (2015-2019). This policy focuses more on developing key products and on improving attractions, rather than solving urban and tourism related issues.

The future of overtourism

To prevent that the negative impacts of 'tourism gentrification' take the overhand, overtourism related issues in Lisbon require more effective public housing and tourism policies and a better dialogue with urban social movements (Mendes, 2016). What is required is critical innovation in the design and implementation of local processes of urban regeneration, principles, policies and practices to prevent eviction and expulsion and taking concrete measures and initiatives to ensure the "right to housing" instead of "tourism-led gentrification" (Ibid, 2016: 38-39).

Sources and links

Ascensão, E. (2015). Slum gentrification in Lisbon, Portugal: displacement and the imagined futures of an informal settlement. In Lees, L., Shin, H. B., & Morales, E. L *Global gentrifications: uneven development and displacement*, (37-58) Policy Press.

Barata Salgueiro, T., Mendes, L., & Guimarães, P. (2017). Tourism and urban changes: lessons from Lisbon. In Gravari-Barbas, M., & Guinand, S. (Eds.) *Tourism and Gentrification in Contemporary Metropolises. International Perspectives*, (255-275). Routledge.

Mendes, L. (2013). Public policies on urban rehabilitation and their effects on gentrification in Lisbon. *AGIR– Revista Interdisciplinar de Ciências Sociais e Humanas*, 1(5), 200-218.

Mendes, L. (2016). "What can be done to resist or mitigate tourism gentrification in Lisbon? Some Policy Findings & Recommendations". In: Glaudemans, M. & Marko, I. (Eds.). City making & tourism gentrification. Tilburg, Stadslab.

Novy & Colomb (Eds.) (2016). Urban tourism and its discontents: an introduction. In Colomb, C., & Novy, J. Protest and resistance in the tourist city (pp. 15-44). Routledge.

Statistics Portugal (2017) Statistical Yearbook of Área Metropolitana de Lisboa Region 2016. Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=277105510&PUBLICACOEStema=00&PUBLICACOESmodo=2

Statistics Portugal (2018) Estatísticas do Turismo - 2017. Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpubboui=320462327&PUBLICACOESmodo=2

Strategic Tourism Plan for the Lisbon Region (2015-2019). Plano Estratégico para o Turismo da Região de Lisboa 2015-2019. Retrieved from: https://www.visitlisboa.com/sites/default/files/2016-10/2015_19_Plano%20Estrat%C3%A9gico_0.pdf

Turismo de Portugal (2017). Estratégia Turismo 2027 - Liderar o Turismo do Futuro, Setembro 2017. Retrived from: http://estrategia.turismodeportugal.pt/sites/default/files/Estrategia_Turismo_Portugal_ET27.pdf

Turismo de Portugal (2018). Publicações 2017. Retrieved from: http://travelbi.turismodeportugal.pt/pt-pt/Documents/An%C3%A1lises/Economia/turismo-em-portugal-2017.pdf

UNWTO (2018) Tourism Highlights, 2017 Edition. Retrieved from: http://mkt.unwto.org/publication/panorama-omt-del-turismo-internacional-edicion-2017

WTTC (2017a). City travel & tourism impact 2017 Lisbon. Retrieved from: https://www.wttc.org/-/media/files/reports/economic-impact-research/cities-2017/lisbon2017.pdf

WTTC (2017b). Country Reports 2018 Portugal. Retrieved from: https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/portugal2018.pdf

IV.19   Lucerne, Switzerland

Type of destination: Urban

Region: Other European

Reported by: Claudio Milano & Lisa-Maria Gradinger

Lucerne is known for its panoramic location, set between the foothills of the Alps and on the north end of Lake Lucerne. The lake, also known as Vierwaldstättersee, attracts many visitors throughout the year. One of the main attractions of the city is one of Europe's oldest bridge (Kapellbrücke), stemming from the Middle Ages, as well as two others that connect the old town with the expanded town (Luzern Tourismus AG, 2007). One of the most visited squares is the Schwanenplatz, a meeting point for (group) travellers, a transport node and a place to buy luxury goods (Hanser Consulting AG, René, Bösch, & Isenring, 2018).

Statistics

- In 2017, a total number of 1,343,229 overnight stays were registered. 22% of them were domestic. International visitors came from:
  - Asia (33%): China is the most important country with 28% of the Asian market,
  - Europe (21%): with Germany accounting for 32% of the European market and
  - America (20%): with the United States representing 83%, thereby being the most important source market for Lucerne (Luzern Tourismus AG, 2018).
- Overnight stays have increased by 10.4% from 2013 until 2017 (Luzern Tourismus AG, 2018).
- The number of day-visitors increased from 6.6 million in 2009 to 8.2 million in 2014 (Stettler, 2017).
- On the Schwanenplatz 42,500 tourist buses were counted in 2017, which leads to an estimated total number of group travellers of 1.4 million. These visitors, mainly from the United States and Asia, bring in 90% of revenues for businesses selling watches, jewellery and souvenirs (Hanser Consulting AG et al., 2018).
- In 2014, Lucerne registered around 15,000 to 20,000 daily visitors, which accounts for around 20% of the 80,500 inhabitants (Bundesamt für Statistik, 2017) during the high season from June to August (Zentralplus, 2014).
- The TPR in Lucerne is 32.5 tourists per 100 inhabitants per day and, based on a size of 29.11 km^2 the TDR is 898.2 visitors per km^2.

Main impacts

- Perception of more Asian groups visiting the destination
- Traffic and public transport congestion
- High number of tourists per residents
- Displacement of traditional businesses
- Increased prices

80% of Chinese visitors travel in big groups, as it is easier to obtain a visa through the tour operator. Furthermore, the tourism agency of Lucerne has been taking and continues to take marketing measures in China, which led to Lucerne being a "must-see". The main reasons being the mountainous landscape and the sale of prestigious watches (PwC - Lodging & Tourism Clients Group, 2014). This translates to an increasing number of watch and jewellery businesses with rising prices and a decreasing number of traditional, small ones. Around 70% to 80% of tourist bus offers include Lucerne in their tours combined with stops in Austria, France, Germany or Italy for travellers from the Asian market (Hanser Consulting AG et al., 2018; Wirtschaftsforum Graubründen, 2015). Locals are avoiding the old town more and more, due to the high number of group travellers. (Blumer, 2017). The most conflictive issues, traffic jams and congestions are in the city centre (PwC - Lodging & Tourism Clients Group, 2014).

Measures taken

In 2017 free use of public transport for hotel guests was introduced (Luzern Tourismus AG, 2018). It is being paid for by the visitor's tax and was done to be more attractive to visitors, thereby following the example of other Swiss cities (e.g. Basel, Lausanne) (Zentralplus, 2016). The town councillor is supporting the strategy of quality tourism followed by the local tourism agency, Luzern Tourismus AG (LTAG). Measures are taken to enhance the old town. Local businesses in the watch and jewellery industry increased the security personnel, which led to less robberies in the old town (Zimmermann, 2015).

The future of overtourism

In 2014 a study was undertaken by a consulting company regarding tourist bus movement within the city centre, to investigate future developments connected to the growth of tourism and receive recommendations on measures such as a traffic management system, limitations on tourist buses, or the building of car parks (PwC - Lodging & Tourism Clients Group, 2014). A year later the town councillor agreed to convert one parking area of tourist buses into a station to board and drop off tourists as a two-year pilot project (Luzern Tourismus AG, 2015). Luzern Tourism AG mentioned in its annual report of 2017 that one of their main aims is to further penetrate the Asian market (Luzern Tourismus AG, 2018). The number of visitors is currently not seen as the main problem; the focus is on mitigating the negative impacts (Blumer, 2017) and on gaining the acceptance of the general public for the tourists by engaging with them (Küttel, 2017).

Other point of interest

Visitors from the United States tend to stay longer and choose qualitatively higher accommodation than Chinese visitors. They book their flights individually, travel in small groups and are interested in the local sights and specialties (PwC - Lodging & Tourism Clients Group, 2014). Finally, based on Weber et al., study (2017) the close attraction of Mount Rigi (Queen of the Mountains) shows how fast tourism development can lead to temporary overcrowding issues, traffic congestion, and local residents' complaints regarding noise and undesired visitor behaviours.

Sources and links

Blumer, F. (2017). Einheimische leiden unter dem Touristenstrom: Luzerner meiden ihre Altstadt - Blick. Retrieved August 1, 2018, from https://www.blick.ch/news/schweiz/einheimische-leiden-unter-dem-touristenstrom-luzerner-meiden-ihre-altstadt-id7068977.html

Bundesamt für Statistik. (2017). City Statistics Portäts 2017: Kernstädte, Luzern. Retrieved August 1, 2018, from https://www.bfs.admin.ch/bfs/de/home/statistiken/querschnittsthemen/city-statistics/staedteportraets/luzern.html

Hanser Consulting AG, René, G., Bösch, D. I., & Isenring, M. (2018). Gruppentourismus in Luzern, Analyse der volkswirtschaftlichen Bedeutung.

Küttel, K. (2017). GASTGEWERBE: Einheimische dürfen billiger ins Hotel. Luzerner Zeitung. (1st of August 2018). Retrieved from: https://www.luzernerzeitung.ch/zentralschweiz/luzern/gastgewerbe-einheimische-duerfen-billiger-ins-hotel-ld.95300

Luzern Tourismus AG. (2007). City of Lucerne - History, tourism, worth to know. Retrieved from: http://www.luzern.com/en/facts-figures-lucerne

Luzern Tourismus AG. (2015). Carverkehr in der Luzerner Innenstadt - Luzern. Retrieved August 3, 2018, from http://www.luzern.com/de/medienmitteilungen-2015/carverkehr-luzern

Luzern Tourismus AG. (2018). Geschäftsbericht 2017. Retrieved from: http://www.luzern.com/de/geschaeftsbericht

PwC - Lodging & Tourism Clients Group. (2014). Studie zum Carverkehr in der Luzerner Innenstadt Luzern Tourismus.

Stettler, J. (2017). Der Tourismus in Luzern – Zur Bedeutung des Tourismus heute und mögliche Entwicklungen. «Tourismus in Luzern – Entwicklung, Bedeutung, Zukunft» Mittwoch, 20. September 2017, Hotel Palace Luzern (20th September of 2017).

Weber, F., Stettler, J., Priskin, J., Rosenberg-Taufer, B., Ponnapureddy, S., Fux, S., Camp, M. A., Camp., & Barth, M. (2017). Tourism destinations under pressure. Lucerne, Switzerland: Lucerne University of Applied Sciences and Arts.

Wirtschaftsforum Graubründen. (2015). Sommergeschäft durch Touringgäste aus Asien beleben.

Zentralplus. (2014). Wie viele Touristen erträgt Luzern? (16th September of 2014) Retrieved from: http://gaestival.ch/ressources/editorfiles/Wie%20viele%20Touristen%20ertr%C3%A4gt%20Luzern_zentral+_20140916.pdf

Zentralplus. (2016). Luzerner Hotelgäste bekommen Gratis-Tickets | zentralplus. Retrieved August 3, 2018, from https://www.zentralplus.ch/de/news/aktuell/5510896/Luzerner-Hotelgäste-bekommen-Gratis-Tickets.htm

Zimmermann, A. (2015). Luzerner Juweliere verstärken Sicherheitsmassnahmen (1st August of 2018) Retrieved from: https://www.zentralplus.ch/de/news/gesellschaft/4660697/Luzerner-Juweliere-verstärken-Sicherheitsmassnahmen.htm

IV.20   Machu Picchu, Peru

Type of destination: Heritage & Attractions

Region: Rest of the world – South America

Reported by: Claudio Milano & Wilson Hoyos

Machu Pichu is an old Inca Town from the 15th century also called "Lost City of Incas". Machu Pichu was discovered in 1911 and it was included in the UNESCO World Heritage List in 1983. The Inca citadel is surrounded by temples and is part of the Inca rail properly called Qhapac Ñan. The citadel of Machu Pichu is located 110 km away from Cusco at 2,450 meters over sea level. The citadel of Machu Picchu is 530 meters long by 200 wide and includes at least 172 compounds (MINCETUR, 2018b). It is the most important touristic destination in Peru and in 2007 it was included in the list of the new Seven Wonders of the World. Visitors have to get by train from Cusco or Ollantaytambo to Aguas Calientes (closest town to Machu Picchu) and then walk or get a 20 minute bus ride. The site ticket costs $70. Due to the high demand, the tickets to Machu Picchu have to be purchased in advance by the official web page or through a travel agency. An extra ticket is required to visit Waynapicchu Mountain. Another option for arrival to the site is to hike through the Inca Rail tour that takes around three days.

Statistics

According to the System of Tourism Statistics of the Ministry of Foreign Trade and Tourism (MINCETUR, 2018a):

- In 2016, Machu Pichu registered 1,420,000 visitors, slightly more than in 2017, which saw 1,411,000 visitors. The busiest month, May, registered in 2018 an increase of 11.6% (580,200 arrivals) compared to May 2017.
- In 2016, the number of international visitors was 996,800 and in 2017, this was 1,071,000. This reflects a growth of 9%. In 2017, international visitors made up 75.9% of the total number of visitors.

Main impacts

- Lack of capacity and congestion
- Tourists complain about tourists
- Uncivilised behaviour

The increase in the number of visitors to Machu Picchu has produced a massive pressure to the site. The land on which the citadel was built is sliding down about 0.4 inches every year (BBC, 2001). The former farming village of Aguas Calientes that is used as a jumping-off point for tourists has grown into a town of 4,000 inhabitants with five-star hotels and restaurants (Salazar, 2011). Despite the Decentralized Culture Directorate of Cusco recommending that there should not be more than 2,500 visitors per day, during the popular summer months daily visitation is regularly twice this number. The Carrying Capacity and Limit of Acceptable Change Study of the Historic Sanctuary of Machu Picchu highlights that the carrying capacity of the site is exceeded on a daily basis (UNESCO, 2017). The report stresses the lack of effective management of the property and the lack of risk management plans related to natural disasters. Finally, early in 1992, geomorphology, geology and conservation of architecture research showed the threats on the historical architecture. The large number of visitors caused water pollution and shortage issues, as well as damage to the local endemic vegetation (Bouchard, Carlotto & Usselman, 1992). In addition, with so many visitors, the site is rapidly losing its integrity and the quality of visitor's experience to the site is reduced (Carroll, 2017). According to the Master Plan of the Historic Sanctuary of Machu Picchu (2015 – 2019), there are four main problems to be resolved concerning overtourism and visitor's management: the accessibility, the capacity constraints, the public management, and the tourist experience. Furthermore, the social inclusion of surrounding local communities, research on the environmental impact and the security on the site are included on the action agenda.

Measures taken

The Master Plan of the Historic Sanctuary of Machu Picchu (2015 – 2019) stated the maximum capacity is 2.500 visitors per day. The Decentralized Culture Directorate of Cusco Director, Vidal Pino Zambrano, established new rules, which went into effect from the 1st of July 2017. Some of them concern time and the group limitation access. For instance, visitors are allowed to get into the site during two periods, either in the morning (6am-noon) or afternoon (noon-5.30pm) and tourist group size is limited to 16 people. Furthermore, the Regulation forbid visitors to enter with backpack or bags of more than 40x35x20 cm, umbrellas, music instruments, shoes with heels, foods, and alcoholic drink. They are not allowed to smoke inside the citadel. As well as for the Machu Picchu,

the new Regulation established rules for the Waynapicchu and Machupicchu mountains, indicating periods when and how long tourists are allowed to enter and the maximum number of visitors.

The future of overtourism

The international tourist arrival has grown from 699,831 in 2010 to 1,411,279 in 2017 that means a 102% more than seven years before. The threats of overtourism to Machu Picchu are recognised by local and national authorities. Since 2007, UNESCO's World Heritage Committee has recommended Machu Picchu to be considered for the List of World Heritage in Danger — a designation that has so far been rejected. As discussed above, some important policies and restrictions have been formulated, but this still has not resulted in respecting the carrying capacity of 2,500 visitors each day. The challenge for the executive board of the Master Plan is to address the issues identified in the Master Plan, to foster more inclusiveness and respect carrying capacity.

Sources and links

BBC (2001). Machu Picchu 'in danger of collapse'. BBC News. Retrieved from: http://news.bbc.co.uk/2/hi/americas/1208026.stm

Bouchard, J. F., Carlotto, V., & Usselman, P. (1992). Machu Picchu: Problemas de conservación de un sitio inca de ceja de selva. *Bull. Inst. Fr. études andines*, 21(3), 905-927.

Carroll, L. (2017). Overtourism at UNESCO World Heritage Sites. Ethical Traveler. Retrieved from: https://ethicaltraveler.org/2017/11/overtourism-at-unesco-world-heritage-sites/

Coldwell, W. (2017). Machu Picchu to trial timed entry tickets in bid to control tourist numbers. The Guardian. Retrieved from: https://www.theguardian.com/travel/2017/jun/20/machu-picchu-tickets-peru-timed-entry-control-flow-of-tourists

MINCETUR - Ministry of Foreign Trade and Tourism (2018a). System of Tourism Statistics Retrieved from: http://datosturismo.mincetur.gob.pe/appdatosTurismo/Content2.html

MINCETUR - Ministry of Foreign Trade and Tourism (2018b). Tourist Attractions. Retrieved from: Machu Picchu Archaeological Park: http://ficha.sigmincetur.mincetur.gob.pe/index.aspx?cod_Ficha=917

Master Plan of The Historic Sanctuary of Machu Picchu 2015 – 2019. Ministry of Culture. Retrieved from: http://www.culturacusco.gob.pe/dmdocuments/machupicchu/DIAGNOSTICO_FINAL.pdf

Salazar, C. (2011). Peru celebrates Machu Picchu amid tourism worries NBCNEWS. Retrieved from: http://www.nbcnews.com/id/43658495/ns/travel-news/t/peru-celebrates-machu-picchu-amid-tourism-worries/#.W1umjlBKhPY

UNESCO (2017). State of Conservation – Historic Sanctuary of Machu Picchu (Peru) Retrieved from: https://whc.unesco.org/en/soc/3570

IV.21   Mallorca, Spain

Type of destination: Coastal & Islands

Region: EU

Reported by: Claudio Milano

 "Mallorca is by far the largest of the Balearic Islands, with a coastline of 550 kilometres in length and mountains rising to over 1,000 metres in the northwest" (Boniface, Cooper & Cooper, 2016: 310). In 2017, Mallorca registered more than 10 million tourists, received approximately 70% of the whole of tourist arrivals on the Balearic Islands (16,340,000) (IBESTAT, 2018). Mallorca offers beautiful and accessible beaches, great weather, vibrant nightlife and cultural heritage like "*La Serra de Tramuntana*". The latter was declared a UNESCO World Heritage Site in 2011. Moreover, Mallorca has recently been voted "The Best Place to Live in the World" by the Sunday Times. The Balearic Islands are also known for their All Inclusive (AI) model, which appeared for the first time in 1950 and was offered by the French company "Club Mediterranee" or "Club Med" (Anderson, 2012).

Statistics

- In 2017, Mallorca had 868,700 inhabitants. The municipality of Palma de Mallorca had 406.492 inhabitants (IBESTAT, 2018).
- In 2017, there were 45,710,000 overnight stays in Mallorca. In 2008, there were 39,020,000 overnight stays, which implies an increase of 17.16 % from 2008 to 2017 (IBESTAT, 2018).
- In 2017, Mallorca registered 11,640,000 tourist arrivals (AETIB, 2018).
- In 2017, the total expenditure by tourists on the whole island was €11.59 million (AETIB, 2018).
- In 2017, the average occupancy rates of hotel beds in Mallorca was 79.4% (AETIB, 2018).
- According to the Port Authority of the Balearic Islands, Mallorca Port received 1,528,000 cruise passengers in 2017 (Ports de Balears, 2018a).
- The TPR, based on tourists and cruise visitors, is 14.9 visitors per 100 inhabitants per day while the TDR, based on a size of Mallorca of 3,640 km^2 is 35.6 visitors per km^2.

Main impacts

- Anti-tourism protests
- Environmental issues
- Real estate speculation

Already in the early 1990s, Mallorca was considered to be in a mature phase of tourism development (Nawijn & Mitas, 2012). Currently, overtourism issues are visible during peak times and mostly during the summer season. Inhabitants' complaints and protests against the negative environmental impacts of tourism are not new. At the end of the 1970s, there were protests against tourism development and the construction of a sports harbour on the small island of Dragonera, due to the potential environmental impacts (Kousis, 2000). Partly caused by tourism, Mallorca suffered from water shortage (Kent, Newnham, & Essex, 2002; Wheeler, 1995). Since the last decades, other consequences of overtourism are landscape and beach degradation, which has been described as a result of "the insufficient control of urban planning, overcrowded, and massive construction on the coastal zone that has led to degradation processes over the beach–dune system" (García & Servera, 2003: 298). An increase in housing prices has been provoked by the real-estate bubble and speculation (Bonet, & Salom, 2012; Rullan, 2005) and the use of housing for tourist use (HUT) (Vives Miró, 2011). The functioning of the housing market has played a big role in the gentrification, rent gap and home dispossession processes in the Palma de Mallorca city centre (Vives-Miró & Rullan, 2017). Touristification, urban regeneration and displacement are together described as the 'tourist gentrification' of the city centre (Vives Miró, 2011). Lastly, there have been strong protests against the increasing number of cruise ships. This led to the campaign 'Stop Cruises Palma'. The local social movement "City for the person who lives in it" (catalan for *Ciutat per a qui l'habita, no per a qui la visita*) organised a big demonstration during the arrival of the world's largest cruise ship "Symphony of The Seas" in Palma de Mallorca Port in 2018 (Sobot & Couzens, 2018).

Measures taken

The Mallorca government Institutions have used different strategies to face overtourism related issue. One of the strategies has been the campaign "Better in Winter", with the aim of deseasonalising and balancing the tourism flux. A strategy against the traffic congestion in tourist hot spots has been applied by the Palma de Mallorca City

Council and three town halls (Escorca, Pollensa and Valldemossa). They restrict access and parking in over-congested areas such as Sa Calobra/Cala Tuent, Formentor and Port de Valldemossa. Regarding real estate speculation and HUT, the latest legislation (6/2017 of the 31th of July) addresses two main issues: rules for commercialisation and the establishment of a maximum number of licences for accommodation. Furthermore, the current law allows the government to penalise both the property and platforms such as Airbnb. For instance, the commercialisation of HUT without the legal license could be penalised with a fine from 20,001 to 40,000 euros for the owner or broker and up to €400,000 for the platform (CAIB, 2017). In January 2018, the decree-law (13/2017 of the 29th of December), established a rise of the Balearic government eco tax to a maximum of €4 per day (Boletín Oficial de las Islas Baleares, 2017).

Lastly, the Plan of Tourist and Environmental Balance 2017-2020 (Catalan for *Pla d'Equilibri Ambiental i Turístic 2017-2020*) contains the ambitions to:

- Promote sustainable tourism, featuring winter tourism and spring to summer tourism.
- Take measures that impinge directly or indirectly on tourism flows, in order to moderate the summer peaks.
- Mitigate the effects of human pressure arising from mass tourism.
- Improve the management of natural resources, energy, human, etc. involved in economic activity, especially tourism.
- Improve the redistribution of resources generated by tourism and working conditions of workers in the sector.

The future of overtourism

Overtourism, and the resulting protests, are a serious problem for local authorities. Local social movements are protesting and pointing out that the tourism is destroying the social and economic fabric of Palma de Mallorca. These protests are likely to continue and grow in strength in the future. At the moment the movement "City for the person who lives in it" is strongly promoting a campaign of tourism de-marketing. They also started a protest on the 14th of July 2018 at Palma de Mallorca airport bringing forward the negative effects of overtourism for the island (Sobot, 2018). Working in the opposite direction, Palma de Mallorca airport authority will enlarge and improve the airport with an investment of more than €296,840 million till 2021 (Magro, 2017). Likewise, the Port Authority of the Balearic Islands invested €12,400 million to enlarge the Maritime Station Nº6 with a total surface of 9,280 m^2 and an external covered surface of 3,575 m^2 (Ports de Balears, 2018b). The current Tourism Strategic Plan 2015-2025 (PITIB, 2015) has as its main aim tourism constant growth and has the following goals: to improve the tourism sector and the tourist's experience, generate more employments, facilitate new technology to the consumers, and strengthen relations among public and private sector.

Sources and links

AETIB - Agencia de Estrategia Turística de las Islas Baleares (2018) Anuario de Turismo: Datos informativos. Retrieved from: http://www.caib.es/sites/estadistiquesdelturisme/es/anuarios_de_turismo-22816/

Anderson, W. (2012). Analysis of 'all-inclusive' tourism mode in the Balearic Islands, *Tourismos*, 7(1), 309-323.

Boletín Oficial de las Islas Baleares (2017). Decree-law 13/2017 of the 29th of December. Retrieved from: http://www.ecotasa.es/wp-content/uploads/2018/02/14728.pdf

Bonet, A. A. A., & Salom, M. B. (2012). ¿ Reconversión o desregulación? análisis de planes de reconversión turístico-inmo-biliaria de la playa de Palma (Mallorca). Cuadernos de turismo, (29), 11-34.

Boniface, B., Cooper, R., & Cooper, C. (2016). *Worldwide destinations: The geography of travel and tourism*. Routledge.

CAIB - Govern de les Illes Balears (2017). Entra en vigor la modificación de la ley de Turismo de las Islas Baleares que regula el alquiler turístico y establece un techo de plazas Retrieved from: http://www.caib.es/govern/sac/fitxa.do?codi=3016603&coduo=2390298&lang=es

Garcia, C., & Servera, J. (2003). Impacts of tourism development on water demand and beach degradation on the island of Mallorca (Spain). *Geografiska Annaler*, 85(3-4), 287-300.

IBESTAT Institut d'Estadística de les Illes Balears (2018). Retrieved from: https://www.caib.es/ibestat/estadistiques/economia/turisme/0b70b294-81e0-413a-b7b2-3cc3a33593a8

Kent, M., Newnham, R. & Essex, S., (2002). Tourism and sustainable water supply in Mallorca: A geographical analysis. *Applied Geography*, 22(4), 351-374.

Kousis, M. (2000). Tourism and the environment: A social movement's perspective. Annals of Tourism Research, 27(2), 468-489.

Magro, A. (2017). Aena invertirá 297 millones en ampliar el aeropuerto y agilizar su actividad. Diario de Mallorca. Retrieved from: https://www.diariodemallorca.es/mallorca/2017/03/06/aena-invertira-297-millones-

ampliar/1195007.html

Nawijn, J., & Mitas, O. (2012). Resident attitudes to tourism and their effect on subjective well-being: the case of Palma de Mallorca. *Journal of Travel Research*, 51(5), 531-541.

Ports de Balears (2018a). Tráfico - Crucero Estadí sticas. Retrieved from: http://www.portsdebalears.com/es/estadisticas

PITIB (2015) Plan Integral de Turismo de las Islas Baleares.Retrieved from: http://www.caib.es/govern/sac/fitxa.do?codi=2225484&coduo=475&lang=es

Ports de Balears (2018b). La APB pone en servicio la nueva Estación Marítima Nº6 Del Puerto de Palma. Retrieved from: http://www.portsdebalears.com/es/noticia/la-apb-pone-en-servicio-la-nueva-estaci%C3%B3n-mar%C3%ADtima-n%C2%BA6-del-puerto-de-palma

Rullan, O. (2005). Una técnica urbanística para contener el crecimiento residencial en espacios con fuerte presión inmobiliaria. *Scripta Nova. Revista electrónica de geografía y ciencias sociales*, 194(32).

Sobot, R. (2018). Majorca holidaymakers confronted by protesters at airport blasting 'tourism kills us!'. Express - Home of the Daily and Sunday Express. Retrieved from: https://www.express.co.uk/news/world/988806/majorca-holiday-palma-airport-flights-tourist-protest-Ciutat?dclid=CIrhsrGb0NwCFSqmUQodPhMH9w

Sobot, R. & Couzens, G. (2018). 'Terror of the Seas tourists leave!' Hundreds Protest in Majorca at world's largest cruise. Express - Home of the Daily and Sunday Express. Retrieved from: https://www.express.co.uk/news/world/943330/Spain-anti-tourist-protest-Majorca-latest-cruise-ship-Symphony-of-Seas

Vives-Miró,S (2011). Producing a "Successful City": Neoliberal Urbanism and Gentrification in the Tourist City—The Case of Palma (Majorca). *Urban Studies Research*, 13.

Vives-Miró, S., & Rullan, O. (2017). Desposesión de vivienda por turistización?: Revalorización y desplazamientos en el Centro Histórico de Palma (Mallorca). Revista de Geografía Norte Grande, (67), 53-71.

Wheeler, D. (1995). Majorca's water shortages arouse Spanish passions. *Geography*, 80(3), 283–286.

IV.22   Maya Bay - Phi Phi Leh, Thailand

Type of destination: Coastal & Islands

Region: Rest of the world – Southeast Asia

Reported by: Jasper Heslinga

The island Phi Phi Leh is part of the Krabi Province in Thailand and consists of a ring of steep limestone hills surrounding two shallow bays, Maya Bay and Loh Samah. Maya Bay is a popular tourist destination that can be accessed by boat and largely owes its fame due to the movie 'the Beach' (Cohen, 2005).

Statistics

- Although the beach is just 250 metres long and 15 metres wide, Maya Beach received an average of 5,000 visitors a day in 2016 even during the low season. This means that 200 boats set anchor in the bay on a daily basis (Bangkok Post, 2016) and it implies a TDR of 1,333 visitors per km^2 per day.
- Chinese tourists are the largest single national group (Telegraph, 2018). Thailand's overtourism problem has been widely reported with low-cost holidays pedalled in Chinese markets attributed much of the blame. Visits from China alone increased by almost 32% in April 2018 compared to the same month in 2017. Chinese visitors accounted for just under 46% of all inbound tourists to the country during this time –987,000 out of over 2.1 million (Telegraph, 2018).
- Tourism is important in Thailand with some reports estimating it accounts for 18% of the country's GDP. Visitor numbers have tripled since 2004 and in 2017, they exceeded 35 million arrivals (Guardian, 2018)
- The park (Nat Noppharat Thara-Mu Ko Phi Phi National Park) collects entry fees of 1.6 million baht (or € 43,000 a day from tourists (Bangkok Post, 2016).

Main impacts

- High number of tourists
- Environmental issues
- Tourists complain about tourists
- Traffic and public transport congestion

Partly due to the movie 'the Beach', Maya Beach has received an increasing number of visitor in a limited space, which has led to the following issues and impacts: First, the beach is overcrowded with tourists (Cohen, 2005). Those responsible for promoting tourism have done a very good job (Bangkok Post, 2016), but now the beach is full with hordes of tourists, which causes distraction from the bay's magic (Guardian, 2018). Second, due to overcrowding the islands infrastructure is under pressure. The entire bay was jammed with both long-tailed and speed boat ferries (Bangkok Post, 2016). Also, basic facilities such as toilets were not enough for the 5,000 or more tourists a day. There were only 14 toilets on Maya Beach in 2016, with more being built. However, with limited space available, the number is unlikely to exceed 20 (Bangkok Post, 2016). Third, waste is an immense problem; around Maya Beach a lot of litter is floating around at many spots in the sea (Guardian, 2018). This is problematic for the entire country of Thailand, being among the world's biggest contributors of ocean waste, and consequently posing a serious threat to wildlife (Reuters, 2018). The final and most important impact is environmental degradation and exceeding the environment's carrying capacity. The Marine National Park is overcrowded with tourists and boats, posing a serious threat to the environment, particularly coral reefs (Bangkok Post, 2016). Marine biologists have found that 80% of the coral reefs surrounding the bay have been destroyed by boat traffic and pollution; marine life is virtually non-existent as a result (Guardian, 2018).

Measures taken

To counter the impact caused by the vast amount of tourists and boats visiting the island, four measures have been taken. First, the local authorities announced that Maya Beach would be closed to tourists for four months (1 June to 30 September 2018) to allow it to recover from environmental damage due to excessive visitor numbers (Reuters, 2018; Guardian 2018, Telegraph, 2018). The poor condition of Maya Bay and images of large crowds of people have finally spurred them into action and allow the coral reefs to recover from rising temperatures and the environmental impact of thousands of visitors each day (Reuters, 2018). Second, after reopening, limitations are announced to control visitor numbers. Access will be limited to 2,000 people per day and boats will have to dock outside the bay. The government will spend 100 million baht (or € 2.67 million) to construct a boat parking zone and floating pier to receive tourists. It will use an online ticketing system to manage sales and income from

entry fees. Third, the country banned smoking and littering at 24 beachside locations (Reuters, 2018). Fourth, sprawling could be a strategy to visit other places, which are equally interesting (Reuters, 2018). Only recently, the awareness of local authorities regarding overtourism has become so apparent that important and firm measures have been taken.

The future of overtourism

The measure taken at Maya Beach are a step in the right direction, but it could be argued that it is nothing more than a sticking plaster in a region being crushed under the weight of tourism (Telegraph, 2018). An example of this structural problem is that in the same week Maya Bay closed for four months, as a result of overtourism, the Airports of Thailand (AOT) board of directors approved the construction of two new airports – one in Chiang Mai and one in Phuket (Telegraph, 2018). The growth strategies remain the dominant paradigm in a country that is highly reliable on the revenues from tourism (Dodd et al., 2010).

Sources and links

Bangkok Post (2016). Phi Phi's Maya Bay: Overcrowding an environmental disaster. Retrieved 03 August, from https://www.bangkokpost.com/learning/advanced/1029745/phi-phis-maya-bay-overcrowding-an-environmental-disaster

Cohen, E. (2005). The beach of 'The Beach'—The politics of environmental damage in Thailand. *Tourism Recreation Research, 30*(1), 1–17.

Dodds, R. (2010). Koh Phi Phi: Moving towards or away from sustainability? *Asia Pacific Journal of Tourism Research, 15*(3), 251–265.

Reuters (2018). Thai bay made famous by film 'The Beach' to close for four months. Retrieved 03 August 2018, from https://www.reuters.com/article/us-thailand-tourism/thai-bay-made-famous-by-film-the-beach-to-close-for-four-months-idUSKCN1IO0KF

Telegraph (2018). Thailand approves new airports to serve even more travellers – while Maya Bay closes due to overtourism. Retrieved 03 August 2018, from https://www.telegraph.co.uk/travel/news/new-thai-airports-announced-in-wake-of-maya-bay-closure/

The Guardian (2018). Thailand's Maya Bay, location for The Beach, to close to tourists. Retrieved 03 August 2018, from https://www.theguardian.com/travel/2018/feb/14/thailand-maya-bay-the-beach-movie-close-to-tourists-leonardo-dicaprio

IV.23 Parc Naturel Régional des Monts d'Ardèche, France

Type of destination: Rural

Region: EU

Reported by: Simone Moretti

The "Parc Naturel Régional des Monts d'Ardèche" is a regional natural park, formally established in 2001 and characterised by a strong rural identity. It covers more than 2,200 km² of medium-high mountainous area of volcanic origin. The park territory includes almost 150 municipalities, is populated by about 76,000 inhabitants and it is well known for its nature, hiking trails, breath-taking rural landscapes, streams and torrents and the renowned blueberry and chestnut production. It attracts visitors for its cultural heritage, museums and various events and outdoor activities. The park, included in the UNESCO Global Geoparks list, is involved in several education and public awareness activities in the field of geology, also hosting various conferences, courses and exhibitions all over the Park (Parc Naturel Régional des Monts d'Ardèche, 2018; UNESCO, 2018).

Statistics

- In 2007, the number of overnight stays in the territory of the Park was estimated to be between 7.5 and 8 million (Cartier-Moulin et al., 2013). That would mean a TPR of 32.8 tourists per 100 inhabitants per day. The size of the Park is 1,800 km², leading to a TDR of 13.9 tourist per km².
- Same day visitors in 2013: estimated to be 1.1 million (Parc Naturel Régional des Monts d'Ardèche, 2014).
- The Park area covers around 40% of the administrative department "Ardèche". According to the French Ministry of Environment, the département de l'Ardèche has an accommodation capacity of 261,000 beds (SOeS, 2017).
- The agency for tourism development of Ardèche's department estimated for 2016 (and for the first time) a total of 25.8 million overnight stays in the entire department's territory (Agence de developpement touristique de l'Ardèche, 2017).
- Despite the tourism season running from Easter to early November, the majority of visits is concentrated in July and August.
- Source markets: 85% domestic visitors, 15% internationals, half of them from Belgium (Agence de developpement touristique de l'Ardeche, 2017; Cartier-Moulin et al., 2013)).
- Expenditure by tourists has been estimated at €175 million for the Park's territory and €408 million considering the entire Ardèche department (Cartier-Moulin et al., 2013).
- Mont Gerbier de Jonc, one of the most popular hotspots in the park, in 2013 attracted 450,000 visitors (Cartier-Moulin et al., 2013).

Main impacts

- High number of tourists per resident
- Environmental issues
- Uncivilised behaviour

The main identified issues relate to overcrowding of some of the sites during the high season, such as the Ray Pic Waterfall and Mont Méznec. Damages to those sites is caused by the excessive pressure on a delicate and fragile environment or due to inappropriate tourist behaviour. The south-east part of the Park shows significant tourism development, therefore there is a higher risk of landscape environmental degradation (Maison du Park des Monts d'Ardèche, 2013). Due to the growing importance of tourism for the local economy, there are social concerns in relation with the high seasonal character of employment in tourism.

Measures taken

Confronted with increasing tourism pressure, the Park governmental Authority positioned itself as a coordinator of sustainable local development. The tourism policy of the Park is based on sustainable tourism (awarded since 2011 as a Charter Area for Sustainable Tourism in Protected Areas), and its development is based on the promotion of cultural and natural heritage (Nklee, 2013). Practical interventions included a visitor management plan implemented at the Ray Pic Waterfall, with the aim to absorb better the increasing flows of visitors. Mont Méznec and its surroundings have been declared special area "Espace Naturel Sensible" (ENS), in order to provide more resources and ensure an integrated management of this territory of high ecological value (Cartier-Moulin et al., 2013). An EU-founded LIFE programme has also been implemented and helped to ease the impacts due to

overcrowding. Other areas were deforested, to restore the landscape value to certain summits, as for example at Lauzière (Cartier-Moulin et al., 2013). Through an inclusive approach, Parc naturel Régional des Monts d'Ardèche "tries to mainstream conservation activities and touristic development in an overall local development strategy" (Lutz, Klee, Cocatre, & Dupieux, 2014, p. 1), showing the necessary level of awareness about overcrowding tourism issues and impacts on such a fragile destination.

Sources and links

Agence de developpement touristique de l'Ardèche. (2017). Etude de la frequentation et des clienteles touristiques de l'Ardeche s'ouvre au monde!

Cartier-Moulin, O., Peisser, C., Renau, P., Martin, S., Perret, A., & Regolini-Bissig, G. (2013). Aspiring Geopark des Monts d'Ardèche. Retrieved from http://www.geopark-monts-ardeche.fr/images/phocadownload/Geopark/geopark_of_monts-d-ardeche_application_web.pdf

Lutz, M., Klee, N., Cocatre, D., & Dupieux, N. (2014). Abstract: Mainstreaming Geoheritage Into Conservation Policies: First Steps and Achievements in the Aspiring Geopark Des Monts d'Ardèche, France. Atlantic Geology, 50(1). Retrieved from http://archives.datapages.com/data/atlantic-geology-journal/data/050/050001/pdfs/339b.htm

Nklee, N. (2013). Monts d'Ardèche Geopark Project: reconnecting people with the geoheritage. Società Geologica Italiana, 20. Retrieved from http://www.geopark-monts-ardeche.fr/images/phocadownload/Geopark/monts_ardeche_geopark_project_reconnecting_people_with_the_geoheritage.pdf

Parc naturel régional des Monts d'Ardèche. (2014). Parc naturel régional des Monts d'Ardèche-juillet 2014 Géoparc des Monts d'Ardèche, 4 ans d'actions autour du géotourisme. Retrieved from https://www.parcduluberon.fr/wp-content/uploads/2018/04/07RTD_geoparc_monts_ardeche.pdf

Parc Naturel Régional des Monts d'Ardèche. (2018). Le territoire -The area. Retrieved August 1, 2018, from http://www.parc-monts-ardeche.fr/en/discover-the-ardeche-mountains/the-area.html

SOeS. (2017). Tourism intensity at a local level: environmental pressure or preservation factor? Retrieved from http://www.statistiques.developpement-durable.gouv.fr/fileadmin/documents/Produits_editoriaux/Publications/Datalab/2017/datalab-17-la-fonction-touristique-des-territoires...mars2017-anglais.pdf

UNESCO. (2018). Monts d'Ardèche UNESCO Global Geopark. Retrieved August 1, 2018, from http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/unesco-global-geoparks/list-of-unesco-global-geoparks/france/monts-dardeche/

IV.24   Prague Old Town, the Czech Republic

Type of destination: Heritage & Attractions

Region: EU

Reported by: Simone Moretti

Prague is renowned for its medieval architecture and the historical old town, inscribed in the UNESCO World Heritage list, which is the main reason and stimulus for visiting. Although Prague attracts a variety of markets, there is a prevalence of tourists, who organise the trip by themselves (Prague City Tourism, 2018). The city's beer culture attracts many visitors for bachelor parties and pub crawls as well (Kottasová, 2017).

Statistics

- TDR/TPR 2003-2011: The TDR in the municipality of Prague increased from an average of about 47 tourists per day per km^2 in 2003, up to an average of 72 in 2011. TPR showed an increase from a value of 2 tourists per 100 inhabitants up to 3. Tourism pressure considering only the old town is much higher, with a TPR of 41 tourists per day per 100 inhabitants in 2011 (Dumbrovská & Fialová, 2014)
- TDR/TPR 2017: Considering an urban area of 496 km^2 (Czech Statistical Office, 2017) a population of 1.29 million inhabitants (Czech Statistical Office, 2018) and 18 million overnight stays (TourMIS, 2018), in 2017 the TDR reached a value of 100 tourists per day per km^2 (vs 72 tourists per day in 2011) and the TPR increased to 3.8 tourists per day per 100 inhabitants (vs 3 tourists in 2011).
- The total number of visitors grew up from 2.5 million in 2002 to 4.74 million in 2010 (90% growth compared to 2002) and 7.65 million in 2017 (61% growth compared to 2010) (TourMIS, 2018).

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Exodus of local residents
- Uncivilised behaviour
- Gentrification

Prague sees an overwhelming concentration of tourists in the old town (Dumbrovská, 2017), with peaks of tourist arrivals in the months of July and August. Overtourism becomes particularly visible for the frequently reported congestion, overcrowding, tourism usage of the old town (Kádár, 2013), and a general increase in prices, especially for accommodation, which pushed out many local residents (Pixová & Sládek, 2016). Issues linked to noise, inappropriate behaviour related to alcohol consumption, Segway and e-bike tours pushing people off the sidewalks were also frequently reported (Dumbrovská, 2017; Baker, 2017). Prague, due to specific socio-historical reasons, has not been the stage for large public anti-tourism manifestations and the majority of residents still have a positive attitude towards tourism (Dumbrovská, 2017). The few activists are more inclined to focus on poor governance and lack of management issues, not on tourism itself (Pixová & Sládek, 2016).

Measures taken

The reluctance of the state to interfere with the market after a long period of central-planned economy, and the economic benefits related to tourism flows, led to an uncontrolled development of tourism in Prague's historic centre (Pixová & Sládek, 2016; Dumbrovská, 2017). Despite the recent acknowledgment of overtourism concerns and issues, only a few measures have been taken by the local government: inviting tourists to visit less beaten track outside of the old town to ease the congestion of the city centre (Baker, 2017), a ban for Segway tours in the old town (Pixová & Sládek, 2016), and "anti-conflict" patrols which control the busiest nightlife areas and reduce the concerns related to alcohol-tourism (Kottasová, 2017). The effectiveness of those measures is still not clear. As reported by Baker (2017), Prague City Tourism acknowledge the concerns related to the old town, but "rejects the assertion that Prague as a whole is suffering from overtourism just yet," stating that "the solution doesn't lie in restricting the number of visitors, but rather in trying to change the geographic distribution of tourists".

The future of overtourism

Despite the intention of redistributing visitors outside the old town, it is still not clear how realistic this plan can be. Anyway, it seems clear that the local government will not implement drastic measures to restrict tourism any time soon (Baker, 2017). As reported by Dumbrovská (2017), in order to avoid the old town degradation by

tourists overuse and self-destructiveness of unregulated tourism development, a strategic tourism and land-use plan is needed.

Sources and links

Baker, M. (2017). Too Many Tourists In Prague? Retrieved July 21, 2018, from https://markbakerprague.com/too-many-tourists-in-prague/

Czech Statistical Office. (2017). Czech Demographic Handbook - 2016. Retrieved July 20, 2018, from https://www.czso.cz/csu/czso/czech-demographic-handbook-2016

Czech Statistical Office. (2018). Population of Municipalities - 1 January 2018. Retrieved July 20, 2018, from https://www.czso.cz/csu/czso/population-of-municipalities-mg2kmr7h39

Dumbrovská, V. (2017). Urban Tourism Development in Prague: From Tourist Mecca to Tourist Ghetto. In N. Bellini & C. Pasquinelli (Eds.), Tourism in the city (pp. 275–283). Springer, Cham. https://doi.org/10.1007/978-3-319-26877-4_19

Dumbrovská, V., & Fialová, D. (2014). Tourist intensity in capital cities in central Europe: Comparative Analysis of tourism in Prague, Vienna and Budapest. Czech Journal of Tourism, 3(1), 5–26. https://doi.org/10.2478/cjot-2014-0001

Kádár, B. (2013). A morphological approach in defining the causes of tourist-local conflicts in tourist-historic cities. In Resourceful Cities conference Berlin 29-31 August 2013. Berlin. https://doi.org/10.13140/2.1.4063.0400

Kottasová, I. (2017). These European cities are fed up with tourists. Retrieved July 21, 2018, from https://money.cnn.com/2017/08/25/news/economy/tourism-backlash-europe/index.html

Pixová, M., & Sládek, J. (2016). Touristification and awakening civil society in post-socialist Prague. In C. Colomb & N. Johannes (Eds.), Protest and Resistance in the Tourist City. Contemporary geographies of leisure, Tourism and mobility (Routledge, pp. 73–89). London. https://doi.org/10.1017/CCOL9780521855600.004

Prague City Tourism. (2018). 2017 Annual Report - Prague City Tourism. Prague. Retrieved from https://www.praguecitytourism.cz/file/edee/en/annual-reports/a4-vyrocni-zprava-2018_2-verze_en_web.pdf

TourMIS. (2018). Cities - Nights and arrivals - Annual data. Retrieved July 20, 2018, from http://www.tourmis.info

IV.25   Reykjavik, Iceland

Type of destination: Urban

Region: Other European

Reported by: Claudio Milano

Reykjavik is mainly an urban destination, but surrounded by nature and adventure tourist attraction. Tourists visit Reykjavik and Iceland in search of natural landscape, caves, birdwatching, Northern Lights, volcanoes, geothermal geysers, staggering scenery and waterfalls (Morris, 2018). In fact, the Reykjavík Official Tourist Information Centre states that "Reykjavík is so much more than just a destination; it's a place of exciting possibilities surrounded by incredible landscapes, where countless adventures beckon and a host of natural wonders await". According the Statistics Iceland (2018a), there are 348,500 inhabitants in the whole island. The capital region has 222,500 and Reykjavik has 124,850. Since almost a decade, Iceland experienced a tourist boom. The related increase in income from tourism was most welcome, after the financial crises and the bankruptcy in 2008 (Moore, 2017). Together with the number of tourists, employment in the tourism sector increased as well. In February 2018, there were 1,727 employers and about 24,700 employees in activities related to tourism (Statistics Iceland, 2018b). The tourism sector in Iceland is characterised by a few large and dominant firms and numerous small, often family-run businesses (Jóhannesson & Huijbens, 2010). Its output has grown from 23.7% of exported goods and services in 2012 to 39.2% in 2016 (Iceland Tourist Board, 2017).

Statistics

According to the Iceland Tourist Board (2017):

- In 2017, the number of international arrivals in Iceland reached 2,224,000, representing an increase of 24.2 % on 2016.
- In 2017, 98.7% of the total number of visitors came on flights through Keflavík International Airport (50 km southwest of Reykjavik).
- Cruise ship passengers to Iceland have increased significantly from 72,000 in 2010 to 101,000 in 2016. The mean annual increase has been 7.3% per year. Approximately 97% of cruise ships make a stopover in Reykjavik, but many ships stay in more than one port.
- In July 2016, there were 14,790 rooms available in 470 hotels, hotel apartments and guesthouses in Iceland, 39.8% thereof in the Capital Region.
- In 2016, the Capital Region had 5,881 rooms available.
- The Capital Region registered a total of 3,728,000 overnight stays in all types of registered accommodation in 2017 (Statistics Iceland, 2018c).
- Based on a size of the capital region of 1,062 km^2 and 216,900 inhabitants in 2017, the TPR is 4.7 tourists per 100 inhabitants per day and the TDR is 9.6 tourists per km^2 per day.

Main impacts

- High number of tourists per residents
- Spread of visitors into residential neighbourhoods
- Gentrification
- Environmental issues
- Real estate speculation

One of the main issues related to overtourism in Reykjavik is the high number of tourists per residents. The total number of registered overnight stays in Iceland was around 7.8 million in 2016. The overnight stays of foreign visitors were around 6.8 million in 2016 and have increased by 21.2% annually since 2010. In greater Reykjavik area and Reykjanes peninsula, 3.9 million overnight stays were registered in 2016, whereby 37.0% were during winter, 32.5% in the summer and 30.5% in the spring or autumn (Icelandic Tourist Board, 2017). Important impacts of overtourism are gentrification, the spreading of visitors into residential neighbourhoods, and the increase in housing market and rental prices. In the last two decades, the city centre has been redesigned by tourism-oriented urban projects and more accommodations have become available for tourism purpose, mainly via Airbnb. This has led to an increase of real estate values in Reykjavik, also called the "Airbnb Syndrome" (Mermet, 2017). Finally, the environmental impacts and its relation with tourism pressure has started to worry the governmental institutions. The Iceland Tourist Board is aware of the sensitive nature of Iceland's environment and the fact that visitors mainly come to experience the unique nature of the island. For that reason, "since 1995, the Icelandic tourism industry has spent about ISK 700 million (or € 5.1 million) on grants and projects in over 300

locations around Iceland. The creation of the Tourist Site Protection Fund in 2011 has led to substantial funding increases for improvements in popular tourist attractions and national parks" (Iceland Tourist Board, 2018b).

Measures taken

Not so much focusing on the Reykjavik area, but on the whole of the island, Iceland is shifting the focus of promotion away from their most-visited attractions. For example, the local government has been working to shift visitors away from overburdened areas by promoting the town of Akureyri, which attractions include waterfalls and hot springs (McKinsey & Company, & World Travel & Tourism Council, 2017). Furthermore, since 2011 the Tourist Site Protection Fund has two main goals: (1) to develop, maintain and protect nature and man-made structures at tourist attractions which are under public ownership or in protected areas and (2) to carry out construction related to traveller safety and nature conservation at tourist destinations, whether these are owned by public or private entities (Iceland Tourist Board, 2018a).

The future of overtourism

In the last century tourism has had a peripheral position compared to agriculture, fisheries and aluminium production. More recently, tourism has a central role in the public domain (Jóhannesson & Huijbens, 2010). Iceland experienced a big financial bubble and during the mid-2000s, it shifted from being a thriving economy specialised in fishing and aluminium smelting to experience financial crises and finally to the miraculous renascence (O`Brien, 2015). The economy has partly recovered due to the increase of incomes from tourism. The rapid boost in tourism does however raise questions regarding planning, the environment and sustainability, the image and promotion, and research and education (Jóhannesson, Huijbens, & Sharpley, 2010). It is not surprising that the "13th International Conference on Responsible Tourism in Destinations on the topic "Tackling Overtourism - local response" took place in the city of Reykjavik. Finally, the creation of the Tourist Site Protection Fund in 2011 shows the growing interest in dealing with the environmental issue provoked by the tourism pressure" (Icelandic tourism Board, 2018b).

Sources and links

Iceland Tourist Board (2017). Tourism in Iceland in figures (June 2017). Retrieved from: https://www.ferdamalastofa.is/static/files/ferdamalastofa/Frettamyndir/2017/juli/tourism-in-iceland-2017-9.pdf

Iceland Tourist Board (2018a). The Tourist Site Protection Fund. Retrieved from: https://www.ferdamalastofa.is/en/quality-and-environment/the-tourist-site-protection-fund

Iceland Tourist Board (2018b). Environmental Issues. Retrieved from: https://www.ferdamalastofa.is/en/quality-and-environment/environmental-issues.

Jóhannesson, G. T., & Huijbens, E. H. (2010). Tourism in times of crisis: exploring the discourse of tourism development in Iceland. *Current Issues in Tourism*, 13(5), 419-434.

Jóhannesson, G. T., Huijbens, E. H., & Sharpley, R. (2010). Icelandic tourism: Past directions—future challenges. *Tourism Geographie*s, 12(2), 278-301.

Mermet, A. C. (2017). Airbnb and tourism gentrification: critical insights from the exploratory analysis of the 'Airbnb syndrome' in Reykjavik. In Gravari-Barbas, M. y Guinand, S. *Tourism and Gentrification in Contemporary Metropolises: International Perspectives* (pp. 52-74). London; New York: Routledge/Taylor & Francis.

Moore, T. (2017). Iceland's tourism boom — and backlash. The Financial Times. Retrieved from: https://www.ft.com/content/44ebbfee-025e-11e7-aa5b-6bb07f5c8e12

Morris, H. (2018). Has Iceland been over-estimating its growth in tourism?. The Telegraph. Retrieved from: https://www.telegraph.co.uk/travel/destinations/europe/iceland/articles/iceland-tourism-statistics-accuracy/

O`Brien M. (2015) The miraculous story of Iceland. The Washington Post. Retrieved from: https://www.washingtonpost.com/news/wonk/wp/2015/06/17/the-miraculous-story-of-iceland/?noredirect=on&utm_term=.704d37108664

Statistics Iceland (2018a). Iceland in figures 2018. Retrieved from: https://hagstofa.is/media/51192/iceland_in_figures_2018.pdf

Statistics Iceland (2018b). Slower growth in tourism. Retrieved from: https://www.statice.is/publications/news-archive/enterprises/number-of-employers-and-employees-in-february-2018/

Statistics Iceland (2018c). Overnight stays and arrivals in all types of registered accommodation 1998-2018. Retrieved from: http://px.hagstofa.is/pxen/pxweb/en/Atvinnuvegir/Atvinnuvegir__ferdathjonusta__gisting__3_allartegundirgististada/SAM01601.px/table/tableViewLayout1/?rxid=6a410c72-73f1-4c30-8ece-2421dd66195d

Welling, J. T. (2013). *Tourism, Landscapes and Climate Change in Iceland.* Icelandic Tourism Research Centre.

McKinsey & Company, & World Travel & Tourism Council. (2017). Coping with success: Managing overcrowding in tourism destination. Retrieved from https://www.wttc.org/-/media/files/reports/policy-research/coping-with-success---managing-overcrowding-in-tourism-destinations-2017.pdf

IV.26 Riga – Historic Centre, Latvia

Type of destination: Heritage & Attractions

Region: EU

Reported by: Simone Moretti

Riga is the capital of Latvia and the largest city of the Baltic States (including Latvia, Lithuania and Estonia). Despite being more than 800 years old, Riga is a modern European capital with open-air cafes, operas, concerts, cosy restaurants and a vibrant nightlife. The most admired part of the city is the Historical Centre, in which over 800 buildings are of the Art Nouveau (Jugendstil) style of architecture, leading Riga's Historical Centre to be included in the UNESCO World Heritage list, as a pearl of art nouveau and "living illustration of European history" (Riga Tourism, 2018; UNESCO-WHC, 2018). The main reason for visiting Riga is leisure, while the business market accounts for approximately one third of visitors (Riga City Council, 2013).

Statistics

- Tourist arrivals 2016 (entire city): 1.42 million, meaning 26% vs 2014 and 82% vs 2010. 87% of them were internationals (Riga Municipality, 2017). In 2014 (entire city) there were 880,000 one-day visitors (Investment and Development Agency of Latvia, 2015).
- Overnight stays 2016 (entire city) increased by 8.1% vs 2015 (Riga City Council, 2013; Riga Municipality, 2017). Overnight stays in 2014 (entire city) were 1.95 million, meaning an increase of 18% vs 2010 (Investment and Development Agency of Latvia, 2015).
- Based on a size of the city of 304 km^2 and 640,319 inhabitants in 2016, the TPR is 1.2 visitor per 100 inhabitants per day and the TDR is 25.5 visitors per km^2 per day.

Main impacts

- High number of tourists per residents
- Lack of capacity (actually turns away guests)
- Uncivilised behaviour
- Gentrification

Although in Riga overtourism has not resulted in public protests against tourism, the Historical Centre suffered from some typical issues associated with overtourism. Main reported problems are:

- Uncivilised behaviour and increased criminality linked to the popularity of Riga for alcohol and sex tourism (Reckon Talk, 2010; Smith & Peach, 2007; Telegraph, 2009).
- Overcrowding of the Old Town, due to the high number of visitors on such a small area (EatRiga, 2012).
- The tourism boom, facilitated by cheap flights and prices, caught Riga unprepared, in terms of social readiness to increasing visitor numbers and also in terms of accommodation capacity (Charles, 2005; The Baltic Times, 2004).
- Gentrification processes and increased cost of living for residents in the Historical Centre (EatRiga, 2012).

Measures taken

Riga shows a significant awareness of overtourism, has promptly reacted to the issues discussed above, and has included principles of sustainability in the general strategy "Sustainable Development Riga 2030" (Riga City Council, 2014). Many overtourism impacts and related issues have been reduced through specific interventions (Ratfelders, 2017), e.g. stricter regulations to fight alcohol and sex tourism (Latvian Police, 2014). The particular attention to the environment led Riga to be widely considered the cleanest city centre in Europe (Lane, 2017). UNWTO-WTTC (2014) gave an overall positive feedback on the management of the Historical Centre and graded with "fair" the relationship with the local community. The overall strategies and the implemented actions seem to achieve satisfactory results in preventing major overtourism issues.

The future of overtourism

Considering the increasing trend of tourist arrivals, local authorities need to continue in their prompt reaction to overtourism issues. Nevertheless, the satisfactory results shown so far, lead to a positive outlook in terms of future tourism development and ability to manage increasing tourist flows.

Sources and links

Apkaimes. (2018). Centrs- Pamatinformacija. Retrieved August 1, 2018, from https://apkaimes.lv/centrs/

Charles, J. (2005). Latvia prepares for a tourist invasion. Retrieved August 1, 2018, from http://news.bbc.co.uk/2/hi/programmes/crossing_continents/4633647.stm

EatRiga. (2012). Tourist Numbers in Riga Could be up to 1.5 million in 2012. Retrieved August 1, 2018, from https://eatriga.lv/2012/01/09/tourist-numbers-increase-riga-2012/

Investment and Development Agency of Latvia. (2015). 2 million tourists visited Riga in 2014. Retrieved August 1, 2018, from http://www.latvia.travel/en/news/2-million-tourists-visited-riga-2014

Lane, I. (2017). Ecotourism in Northern Europe: Riga Latvia eco-itinerary. Retrieved August 1, 2018, from https://greenloons.com/2010/09/15/ecotourism-in-northern-europe-riga-latvia-eco-itinerary/

Latvian Police. (2014). Advice for tourists from the Latvian Police. Retrieved August 2, 2018, from http://www.mfa.gov.lv/en/belgium/touristic-information/advice-for-tourists-from-the-latvian-police

Ratfelders, R. (2017). #rigabay. Retrieved August 2, 2018, from http://www.escaperies.com/tag/rigabay/

Reckon Talk. (2010). Riga: The European City of Sex Tourism ? Retrieved August 1, 2018, from https://www.reckontalk.com/riga-the-european-city-of-sex-tourism-latvia-documentary/

Riga City Council. (2013). Riga. Retrieved August 1, 2018, from https://slideplayer.com/slide/6809113/

Riga City Council. (2014). *Riga 2030 - Sustainable Development Strategy of Riga until 2030 and Development Programme of Riga for Sustainable Development Strategy of Riga until 2030 and Development Programme of Riga for 2014-2020*. Retrieved from http://www.rdpad.lv/wp-content/uploads/2014/11/ENG_STRATEGIJA.pdf

Riga Municipality. (2017). *Annual Report 2016*. Retrieved from https://pasvaldiba.riga.lv/NR/rdonlyres/86E4CE14-17F5-41C9-A2EA-8C61857B64AF/66747/RD_Report_2016.pdf

Riga Tourism. (2018). Riga, Latvia. Retrieved August 1, 2018, from http://www.riga.com/

Robinson, M., & Smith, M. (2005). *Cultural Tourism in a changing world. Politics, Participation and (Re)presentation*. (M. Robinson & M. Smith, Eds.). Channel View Publications. Retrieved from http://www.channelviewpublications.com

Smith, N., & Peach, G. (2007). Sex tourism revolt in the 'Bangkok of the Baltic' | The Sunday Times. Retrieved August 2, 2018, from https://www.thetimes.co.uk/article/sex-tourism-revolt-in-the-bangkok-of-the-baltic-7cx9dfhp0hz

Telegraph. (2009). Drunk, naked and urinating on a monument: portrait of the British tourist. Retrieved August 1, 2018, from https://www.telegraph.co.uk/expat/6062069/Drunk-naked-and-urinating-on-a-monument-portrait-of-the-British-tourist.html

The Baltic Times. (2004). Riga struggles to accommodate tourism boom. Retrieved August 2, 2018, from https://www.baltictimes.com/news/articles/11117/

UNESCO-WHC. (2018). Historic Centre of Riga. Retrieved August 1, 2018, from https://whc.unesco.org/en/list/852

UNWTO-WTTC. (2014). *World Heritage Periodic Report - Riga Historic Centre*.

IV.27   Rio de Janeiro, Brazil

Type of destination: Urban

Region: Rest of the world - South America

Reported by: Claudio Milano & Manuela Kaspary

The beautiful topography, represented by beaches, hills, the iconic Christ the Redeemer on Corcovado mountain, the sugarloaf cable car, the Tijuca Forest (the world's largest urban forest), the Copacabana beach, the landscape and architecture inspired by the French Belle Époque, and the lifestyle marked by Samba and Bossa Nova have made Rio de Janeiro one of the most desired cities to be visited in the world. In the last two decades, Rio de Janeiro has invested in strong urban renewal programmes and socio-spatial developments, partly in the context of sport's mega-events such as the Pan American Games in 2007, the Football World Cup in 2014 and the Olympic Games in 2016. The current City Strategic Plan (Plano Estratégico da Cidade do Rio de Janeiro) (2017) states that Rio de Janeiro is a city traditionally devoted to tourism and that the media attention due to the mega sports events will lead to a doubling of hotel capacity. Via continuous promotion, the city wants to maintain and increase the flow of tourists.

Statistics

According to the Ministry of Tourism and WTTC (2017b):

- In 1970s, Brazil recorded 249,900 of tourist arrivals. Four decades later, in 2010, the number has grown to 5,161,000 (MTUR, 2016).
- In 2015, Brazil was visited by 6,306,000 visitors which represents 0.53% of the tourist flow worldwide and 20.47% of the tourist flow in South America. The same year Brazil generated a revenue from tourism of $5.8 billion (MTUR, 2016; 2018).
- In 2017, there were 1,356,000 tourist arrivals (MTUR, 2018), making Rio de Janeiro the second most visited city in Brazil (20.6%) after São Paulo (2,145,000). The visitors to Rio de Janeiro were mainly from South America (684,900) and Europe (418,600). 97.75% of visitors came by air (1,325,000) and 2.25% by sea (30,430) (MTUR, 2018).
- In 2000, Rio de Janeiro registered 1.811.891 tourist arrivals (SETUR – EBAPE, 2005), meaning that in 2017 there were 25.14% less visitors (MTUR, 2016; 2018).
- In 2016, the direct GDP contribution from travel and tourism was 4.9% of the local GDP and the tourism sector generated 4.3% of total employment of the city (WTTC, 2017a).
- The organisation of the Olympic Games in 2016 cost R$ 43 billion (€9.66 billion; Monteiro & Cosentino, 2017).
- Based on the 2017 size of the city of 1,255 km^2 and 6,320,000 inhabitants (IBGE, 2018), the TPR is 0.1 tourist per 100 inhabitants per day and the TDR is 6.8 tourists per km^2 per day.

Main impacts

- Spread of visitors into residential neighbourhoods
- Gentrification

The main impacts of tourism in Rio de Janeiro are related to the urban changes (large-scale interventions, construction of sporting infrastructure, and socio-spatial restructuring) and real estate speculation fostered by the organization of sports mega-events such as Pan American Games, Football World Cup and Olympic Games. These events imposed a neo-liberal "shock doctrine" that triggered processes of displacement and gentrification in several areas of the city and lead to a rise in housing price (Gaffney, 2010). As a result, Rio de Janeiro is one of the most expensive cities in the world. Urban processes have also helped to spread visitors to peripheral neighbourhoods (Cummings, 2015; Freire-Medeiros & Cohen, 2015). The increase in the price of housing, contributing to a loss of purchasing power, widened socio- economic inequalities. Currently, there is an open debate on the main impacts of the favela tourism, a phenomenon that has increased in recent decades (partly due to sport's mega events). The Federal government's aesthetic interventions and urban transformations, has helped to introduce the private sector into the pacified favelas (Steinbrink, 2014). It is not easy to measure the impacts of tourism in the favelas. There are extreme positions such as "favela tourism might help disadvantaged communities", as well as "favela tourism is an immoral touristic practice" (Freire-Medeiros, 2009). Lastly, the existence of sexual exploitation and child prostitution has been also described as taking place in Rio de Janeiro during the high tourist season (Amar, 2009).

Measures taken

The main national and local public policies (Plano Nacional de Turismo; Plano Director do Turismo do Estado do Rio de Janeiro, Plano de Turismo Cidade Maravilhosa Rio Mais; Unidades de Polícia Pacificadora) are mostly based on tourism growth, urban regeneration and tourism development. These policies aim to create and develop new destinations and attractions in order to encourage domestic and international tourism. Local, regional and federal government institutions have not taken measures to counteract e.g. inflationary pressure, displacement, and socio-economic inequality within the different neighbourhoods and favelas of the city.

The future of overtourism

Since 1990s, public tourism policies have aimed at generating income and create new products for the international market – targeting at tourism growth. Today, growth of tourism is expected as a result of the devaluation of the Brazilian currency, caused by the recession that began in 2014. The hosting of sports mega event and favela tourism intensify "the pressure exerted on local real estate" and promote "gentrification, splitting up communities and exacerbating socio-spatial segregation" (Broudehoux, 2016: 206).

Sources and links

Amar, P. (2009). Operation Princess in Rio de Janeiro: policing 'sex trafficking', strengthening worker citizenship, and the urban geopolitics of security in Brazil. *Security Dialogue*, 40(4-5), 513-541.

City Strategic Plan - Plano Estratégico da Cidade do Rio de Janeiro (2017). Rio 2020: mais solidário e mais humano. Retrieved from: http://prefeitura.rio/c/document_library/get_file?uuid=028b1762-7931-47dc-b191-ef2f5825537f&groupId=7108891

Cummings, J. (2015). Confronting favela chic: The gentrification of informal settlements in Rio de Janeiro, Brazil. *Global gentrifications: Uneven development and displacement*, 81-99.

Freire-Medeiros, B. (2009). Gringo na laje: produção, circulação e consumo da favela turística. Editora FGV.

Freire-Medeiros, B., & Cohen, G. (2015). The Travelling Favela: Cosmopolitanisms from Above and from Below. In Reisinger, Y. *Transformational tourism: Host perspectives.* (93-101) CABI: London.

Gaffney, C. (2010). Mega-events and socio-spatial dynamics in Rio de Janeiro, 1919-2016. *Journal of Latin American Geography*, 7-29.

Gaffney, C. (2016). Gentrifications in pre-Olympic Rio de Janeiro. *Urban Geography*, 37(8), 1132-1153.

IBGE - Instituto Brasileño de Geografía y Estadística (2018) População Rio de Janeiro. Retrieved from: https://cidades.ibge.gov.br/brasil/rj/rio-de-janeiro/panorama

Monteiro, P & Cosentino, R. (2017). Projeto, orçamento e (des)legados olímpicos. Rio de Janeiro: Fundação Heinrich Böll.

MTUR - Ministério do Turismo do Brasil (2016). Estatísticas básicas de turismo Brasil - Ano base 2015. Retrieved from: http://www.dadosefatos.turismo.gov.br/images/pdf/EstatisticasBasicasdoTurismo-Brasil2016-Anobase2015.pdf

MTUR - Ministério do Turismo do Brasil (2018). Anuário estatístico de Turismo - Ano base 2017. Retrieved from: http://www.dadosefatos.turismo.gov.br/dadosefatos/anuario/.

SETUR/Prefeitura da Cidade do Rio de Janeiro & EBAPE/Fundação Getúlio Vargas (2005). Economia do turismo da cidade do Rio de Janeiro – 2003. Retrieved from: http://portalgeo.rio.rj.gov.br/estudoscariocas/download/2368_Economia%20do%20turismo%20da%20cidade%20do%20Rio%20de%20Janeiro-2003.pdf

Steinbrink, M. (2014). Festifavelisation: mega-events, slums and strategic city-staging–the example of Rio de Janeiro. *DIE ERDE–Journal of the Geographical Society of Berlin*, 144(2), 129-145.

WTTC. (2017a). City travel & tourism impact 2017 - Rio de Janeiro. Retrieved from: https://www.wttc.org/-/media/files/reports/economic-impact-research/cities-2017/riodejaneiro2017.pdf

WTTC. (2017b). Travel & Tourism Economic Impact 2018 Brazil. Retrieved from https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/brazil2018.pdf

IV.28   Rovaniemi (Lapland), Finland

Type of destination: Heritage & Attractions

Region: EU

Reported by: Simone Moretti

Rovaniemi is the capital of Lapland, the northern region of Finland. After Helsinki and Vantaa, it's the third most visited Finnish destination by international visitors, attracted by a unique combination of peaceful nature, Nordic culture and urban activity (Rovaniemi Marketing & Tourism, 2016). Rovaniemi is internationally known for being the "official" home town of Santa Claus (Santa Claus Village) and for the stunning Northern Lights and midnight sun. Other important attractions are the Arktikum museum, the amusement park Santapark and various events and festivals (Lonely Planet, 2018). About 70% of visitors travel for leisure, while 30% for business (Rovaniemi Marketing & Tourism, 2016). This division makes sense as Rovaniemi is also an important business and conference centre.

Statistics

- Overnight stays 2017: 631,000, meaning an increase of 31% vs 2013. 415,000 of them were from abroad (52% increase vs 2013), while 216,000 were domestic (3.7% increase vs 2013).
- International arrivals increased from 153,000 in 2016 to 200,000 in 2017 (30%), while domestic arrivals remained stable at 131,000 (Rovaniemi Marketing & Tourism, 2014; TAK Research and Analysis Centre, 2018).
- 75% of international arrivals in 2017 were from Europe. This percentage has been shrinking in the last years, due to the increase of Asian visitors, especially from China (TAK Research and Analysis Centre, 2018).
- In 2015, there were more than 350,000 people who visited Santa Claus Village. Top five countries of origin were Finland, Japan, China, Russia and Italy (Rovaniemi Marketing & Tourism, 2016). It generated revenues of about €2 million in 2015 (Reuters, 2015).
- The winter season (November-March) counts for approximately 60% of the total number of visitors (Rovaniemi Marketing & Tourism, 2016). In 2017, 30% of the overnight stays were concentrated in January and December (TAK Research and Analysis Centre, 2018). Almost 90% of visitors reach Rovaniemi by airplane, mainly through domestic flights from Helsinki (TAK Research and Analysis Centre, 2018).
- Accommodations turnover soared from €22.4 million in 2013 to €40.6 million in 2017, with an 81% increase in 4 years (TAK Research and Analysis Centre, 2018).
- Based on a size of 7,582 km^2 and 62,000 inhabitants (IBGE, 2018), the TPR is 2.8 tourists per 100 inhabitants per day and the TDR is 0.2 tourists per km^2 per day.

Main impacts

- Spread of visitors into residential neighbourhoods
- Lack of capacity (actually turn away guests)
- Tourists complain about tourists

Signs of overtourism are visible in Rovaniemi during the winter season (November-March) especially during Christmas time, mainly in the city centre and at some specific tourists-spots such as Santa Claus Village (Gaston, 2016; Life in Lapland, 2017). Although some overtourism perceptions and concern have been reported by locals, professional operators and tourists (Nylund, 2018), overall the situation is not perceived as problematic. However, issues do manifest themselves in relation to the local housing market. A shortage of hotel beds during peak season and combined with tourism growth increased the usage of Airbnb (Nielsen, 2017). Airbnb also pushes the prices of the private long-term rental market (Koskela, 2018). Nearly half of all new flats recently built were bought by investors, including some middle-income locals (YLE News, 2017), which used the properties to offer short-term rentals to tourists. 20% of the renters convey 50% of the available Airbnb accommodations, showing the phenomenon has become a business-driven tool to invest in tourism (Koskela, 2018). Rovaniemi is also an important research and academic centre, and concerns were raised by the student population. Students are clearly impacted by the increase of the rental prices (Koskela, 2018).

Measures taken

Overall, there is no great evidence of attention for overtourism issues in the current and past tourism destination management of Rovaniemi. The Rovaniemi Tourism Strategy 2006-2016 (City of Rovaniemi, 2006) was mainly focused on numerical objectives and tourism development opportunities, investments, and revenue targets.

There was no mention of sustainability principles or strategies aimed to mitigate social or environmental impacts of increasing (over)tourism flows. According to Invest in Finland (2017), "several new development projects are already under way to increase the accommodation capacity of the town by hundreds of beds". That might contribute to ease the "Airbnb-effect" and the consequences on the private rental market, although it is set out to be a development-driven measure, rather than a reaction aimed to ease a social impact of increasing tourism flows. The "Lapland Tourism Strategy 2011-2014" (Regional Council of Lapland, 2010) and "Finland Tourism Strategy to 2020" (Ministry of Employment and the Economy, 2010) do give a special attention to sustainable development in tourism, although there is no evidence of specific and concrete actions focused on Rovaniemi.

The future of overtourism

Considering the tenacious tourism development strategy pursued by Rovaniemi, flows of tourists are set to increase, in the near future. Particularly relevant are the efforts in attracting more Chinese tourists, through cooperation with large Chinese travel providers such as Alitrip. Alitrip aims to send 50,000 Chinese tourists annually to Rovaniemi by 2020. Also because of that, the target of 730,000 overnight stays set for 2020 (Regional Council of Lapland, 2013) appears feasible and realistic. That means overtourism impacts will most likely become more visible and perceived by both tourists and locals. Concrete actions will be required, in order to tackle negative consequences of increasing tourism flows.

Sources and links

City of Rovaniemi. (2006). *Rovaniemi Tourism Strategy 2006-2016*. Retrieved from https://www.rovaniemi.fi/loader.aspx?id=3b56c475-2990-4989-80fd-01d82a09d50c

Gaston, P. (2016). This is Where Santa Claus Lives - Santa's Village in Finland. Retrieved July 25, 2018, from http://www.paulagaston.com/gone-with-the-wine/santa-claus-village-finland

Invest in Finland. (2017). Rovaniemi wows visitors with new hotels. Retrieved July 25, 2018, from https://www.investinfinland.fi/-/rovaniemi-wows-visitors-with-new-hotels

Koskela, T. T. (2018). Airbnb haastaa opiskelijakaupungin asuntomarkkinat. Retrieved July 25, 2018, from http://lapinylioppilaslehti.fi/2018/02/19/airbnb-haastaa-opiskelijakaupungin-asuntomarkkinat/

Life in Lapland. (2017). Santa Claus Village and the Arctic Circle. Retrieved July 25, 2018, from http://www.lifeinlapland.com/articles/rovaniemi-travel-tips/santa-claus-village-arctic-circle.html

Lonely Planet. (2018). Welcome to Rovaniemi. Retrieved July 25, 2018, from https://www.lonelyplanet.com/finland/lapland/rovaniemi

Ministry of Employment and the Economy. (2010). *Finland's Tourism Strategy to 2020*. Retrieved from http://www.mek.fi/w5/meken/index.nsf/(images)/Finlands_Tourism_Strategy_to_2020/$File/Finlands_Tourism_Strategy_to_2020.pdf

Nielsen, T. (2017). Record-breaking winter season for Lapland tourism. Retrieved July 25, 2018, from https://thebarentsobserver.com/en/travel/2017/11/record-breaking-winter-season-lapland-tourism

Nylund, A. (2018). Is it ok for you to be a Tourist? Retrieved July 25, 2018, from https://forestexperience.wordpress.com/tag/visitor/

Regional Council of Lapland. (2010). *Lapland Tourism Strategy 2011-2014*. Retrieved from http://www.lappi.fi/lapinliitto/c/document_library/get_file?folderId=53864&name=DLFE-21987.pdf

Regional Council of Lapland. (2013). *Lapland tourism development and strategy - May 2013*. Retrieved from https://matkailu.luc.fi/loader.aspx?id=1aacbbe8-cb33-46e0-a892-cece0b24a9b6

Reuters. (2015). Santa Claus, out of the red, set to get more visitors. Retrieved July 25, 2018, from https://www.reuters.com/article/us-finland-santaclaus/santa-claus-out-of-the-red-set-to-get-more-visitors-idUSKBN0U41Q420151221

Rovaniemi Marketing & Tourism. (2014). *Rovaniemi - International Media Kit 2014*. Retrieved from https://web.archive.org/web/20150528074751/http://www.visitrovaniemi.fi/sites/visitrovaniemi.fi/files/roi_press_eng_2014.pdf

Rovaniemi Marketing & Tourism. (2016). *Rovaniemi - International Media Kit 2016-2017*. Retrieved from http://www.visitrovaniemi.fi/wp-content/uploads/VisitRovaniemi-_Media-Kit_2016-2017.pdf

TAK Research and Analysis Centre. (2018). *Rovaniemi Travel Key Figures, December 2017*. Retrieved from http://www.visitrovaniemi.fi/wp-content/uploads/Rovaniemi-tourism-statistics_December2017.pdf

YLE News. (2017). Airbnb shakes up tourism industry in northern Finland. Retrieved July 25, 2018, from http://www.rcinet.ca/eye-on-the-arctic/2017/11/01/airbnb-shakes-up-tourism-industry-in-northern-finland/

IV.29 Salzburg Historical Centre, Austria

Type of destination: Heritage & Attractions

Region: EU

Reported by: Bernadett Papp

Salzburg is the capital city of the province of Salzburg (Bundesland) and is one of the most visited tourist destinations in Austria. Salzburg, often referred to as the city of culture, is the hometown of Mozart and hosts over 4,500 cultural events yearly .The historic centre of Salzburg is a UNESCO World Heritage Site and attracts millions of leisure tourists every year (Tourismus Salzburg GmbH, 2017). Besides leisure, the MICE segment is also highly profitable and is strongly promoted (Horwath HTL, 2016).

Statistics

- The top tourist destinations of Austria, such as Salzburg, are in popular demand. Salzburg receives approximately 6.5 million day visitors annually (Tourismus Salzburg GmbH, 2017).
- In 2017, overnight tourism showed record numbers. The number of tourist arrivals reached 1.7 million (7.9% compared to 2016) with a total of 3 million overnights (7.6% compared to 2016). Consequently, room occupancy rates increased, to approximately 80% (12,200 beds available) (Tourismus Salzburg GmbH, 2017).
- Around 12% of all visitors arrive by airplane, 10% by train, 6% by bus and the majority, 62% by own vehicle (Tourismus Salzburg GmbH, 2013). Salzburg W.A. Mozart Airport received a total of 1.8 million passengers in 2017, representing an increase of 8.6% compared to the previous year (Salzburg Airport, 2017).
- Concerning seasonality, the most overnight stays were recorded in the summer season (61%) with peaks in July and August (Tourismus Salzburg GmbH, 2017).
- In 2017, Salzburg had 154,800 permanent residents (Stadt Salzburg, 2018). When looking at the TPR, there are 16.8 visitors per 100 inhabitants per day while the TDR is 396.3 visitors per day per km^2 (total 65.68 km^2).
- The most visited sites in the city are the Hohensalzburg Fortress (1.2 million visitors), the Fortress Museum (695,800 visitors), Mozart's birthplace and the Mozart Residence (519,000 visitors) and the Salzburg Zoo (345,300 visitors) (Tourismus Salzburg GmbH, 2017).
- Tourism represents a key sector in Salzburg with roughly 15 to 20% contribution to the GDP. Approximately 10,000 jobs are related to tourism in the city (Tourismus Salzburg GmbH, 2017).

Main impacts

- Traffic and mobility issues
- Touristification & gentrification
- Rising cost of living

Visitor pressure is mostly visible in the historic city centre. The large volume of day and overnight visitors, combined with commuters, leads to significant traffic and infrastructure problems. The biggest challenge are day visitors, including cruise tourists arriving from the nearby river cruise ports. While causing lot of congestion issues, the contribution of day tourists to the local economy is rather low (Hofer, Haberl, & Fellendorf, 2016). Besides visible infrastructure problems, touristification of the historic centre is noticeable. The city landscape is changing at a fast pace and is now catering more for tourists than locals. Global brands and souvenir shops are slowly taking over the authentic shops (Papp, Postma & Koens, 2018). Besides Airbnb driving up real estate prices, owners of apartments often neglect to follow the rather strict rules and avoid paying the city tax (ECC Austria, 2017).

Measures taken

- Spatial distribution of visitors: Long-term sustainability plays a key role in the development of Salzburg's tourism industry. With regards to the spatial distribution of visitors, offers have been developed to combine experiences with the surrounding areas (e.g. The Sound of Music Tour) and to direct visitors towards the less visited areas. Combined tickets and discounted offers are in use, such as the Salzburg Card (Papp, Postma & Koens, 2018).
- Pricing strategy: Price differentiation is used as a technique to better distribute visitors throughout the course of a day, as well as a throughout the year (Papp, Postma & Koens, 2018).
- Traffic regulations: Concerning traffic regulations, most parts of the historic centre belong to a protection zone. Parts of the zone were declared car free. A bollard system is in use to regulate traffic (Tourismus

Salzburg GmbH, 2017). Smart applications and real time data for public transport is also available (Papp, Postma & Koens, 2018).

- Airbnb: In Salzburg, regulations concerning private apartment rentals are rather strict. Currently it is prohibited to rent a flat in a building with more than five apartments. The rule is planned to be extended to apartment buildings with three apartments. Furthermore, all owners/residents of a building need to approve the use of the apartment for touristic purposes (ECC Austria, 2017).

The future of overtourism

In the province of Salzburg, tourism is a key sector for the regional economy (EC, 2018). As visitor numbers are expected to grow further in the near future, finding solutions to the traffic and infrastructure problems is one of the main points on the agenda. Managing visitor flows and creating a balanced distribution of visitors has key importance. As mentioned above, the biggest challenge is posed by day visitors, including river cruise tourists (Papp, Postma & Koens, 2018).

Sources and links

EC. (2018). Databases. Regional innovation monitor. Base profile. Salzburg. Retrieved from https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/salzburg

ECC Austria. (2017). *Strict rules for Airbnb. New legislation for several cities*. Retrieved from http://europakonsument.at/en/page/strict-rules-airbnb

Hofer, K., Haberl, M., & Fellendorf, M. (2016). Travel demand modelling of touristic trips in the province of Salzburg. *European Transport Conference*. Barcelona.

Horwath HTL. (2016). *Publications. Special market report Issue 72 - Austria*. Retrieved from http://country-clone.htl-web.com/files/2016/08/MR72_Austria.pdf

Papp, B., Postma, A. & Koens, K. (2018). *Visitor pressure and events in an urban setting. Understanding and managing visitor pressure in seven European urban tourism destinations (unpublished)*. Breda/Leeuwarden: CELTH.

Salzburg Airport. (2017). *The company. Statistics*. Retrieved from https://www.salzburg-airport.com/en/thecompany/about-us/statistics/

Stadt Salzburg. (2018). *Salzburg in numbers. Population statistics*. Retrieved from https://www.stadt-salzburg.at/internet/bildung_kultur/salzburg_in_zahlen/einwohner_bevoelkeru_321402/bevoelkerungsz ahlen_1_1_2018_465586.htm

Tourismus Salzburg GmbH. (2013). *Salzburg 2017 tourismuskonzept (internal document)*.

Tourismus Salzburg GmbH. (2017). *Salzburg information. Tourism in Salzburg*. Retrieved from https://www.salzburg.info/en/press/presstexts

Tourismus Salzburg GmbH. (2017). *Travel information. Arrival and mobility. Automobile. Bollard*. Retrieved from https://www.salzburg.info/de/reiseinfos/anreise-verkehr/auto/poller

IV.30   Santorini, Greece

Type of destination: Coastal & Islands

Region: EU

Reported by: Simone Moretti

Santorini is a famous Greek volcanic island, belonging to the Cyclades archipelago, located in the southern Aegean Sea. It is well known for the breath-taking views, stunning sunsets, volcanic beaches, the iconic white houses with blue-domed roofs lying on the cliff tops, archaeological sites, churches, and traditional culinary products. Santorini is often considered the perfect destination for a romantic getaway and the island has a growing reputation as a "wedding destination" for couples from all over the world. It was estimated that more than 500 ceremonies take place every year (Greek National Tourism Organisation, 2018; Lonely Planet, 2018; Municipality of Thira, 2018).

Statistics

- Overnight stays 2017: 5.5 million, compared to 3.3 million in 2012 (66% growth) (O. Smith, 2018).
- Total arrivals, plus day trips, in 2017: 2 million (H. Smith, 2018).
- Cruise tourism: 636 ships docked in 2015, carrying 790,000 passengers, with an increase of 7% vs 2014 (Greece Is, 2015; GTP, 2016), meaning more than 2,000 cruise visitors per day with peaks of 18,000 per day during the high season (Prakash, 2018). Due to the introduction of capacity limits, cruise arrivals remained almost stable in 2016 (GTP, 2017) and dropped to 620,000 in 2017 (The Greek Observer, 2018).
- TPR/TFR: Santorini has 15,550 inhabitants and spans an area of 76 km^2 (Greece Is, 2015), leading to, in 2017, a TPR of 97 tourists per 100 inhabitants per day and a TDR of 198 tourists per km^2 per day. When including the 620,000 cruise visitors the TPR of Santorini is 107.8 tourists per 100 inhabitants per day and the TDR is 220.6 tourists km^2/day.
- Arrivals by transport in 2011: 58% by air, 42% by sea (Baldacchino, 2016).
- Land use: According to a study of the University of Aegean, 15% of the total surface of Santorini comprises built-up areas, while this is 1% on average on other Greek islands (The National Herald, 2017).
- Tourism turnover: €1 billion per year (CityContact, 2018).

Main impacts

- Spread of visitors into residential neighbourhoods
- Too many cruise ships
- High number of tourists per residents
- Environmental issues
- Tourists complain about tourists
- Traffic and public transport congestion

Uncivilised behaviour in Santorini has been reported as a critical problem. The negative impacts of overcrowding are concentrated in the summer season, from May to October (GTP, 2016), although some of them have permanent consequences on the island and its community. The overall congestion of the island represents a problem also for the tourists themselves. They experience problems related to traffic, congestion, waste disposal, and environmental degradation. This can negatively impact the future attractiveness of the destination (Bellos, 2018; The National Herald, 2017; Vassilopoulou, 2017). Locals' most frequent worries and angers are related to traffic jams, overcrowding, and congestion of facilities and infrastructures, water and energy shortages, cultural displacement, and proliferation of Airbnb short-term rentals (CityContact, 2018; Lichrou, O'Malley, & Patterson, 2010; O. Smith, 2018). The latter is having serious economic consequences on the residents and seasonal workers, as Airbnb is making it more lucrative to rent out properties nightly to tourists instead of monthly to workers, who struggle to find affordable places to live (CityContact, 2018; Dilouambaka, 2017; GTP, 2016). Experts agree in saying that Santorini is the most overwhelming Greek destinations (CityContact, 2018; O. Smith, 2018) and, among the main impacts of overtourism in Santorini, they mention overexploitation, environmental impoverishment, volume of trash, pressure on the insufficient infrastructures, water and energy supply, social impacts (O. Smith, 2018; Vassilopoulou, 2017), and environmental impacts of cruise tourism (Maragkogianni & Papaefthimiou, 2015).

Measures taken

In the last decades, tourism development in Santorini lacked a strategic framework and effective planning. The destination suffered from inadequate support by the public sector in developing and implementing effective policies, aimed at managing and regulating increasing tourism flows (Lichrou et al., 2010). Recently, local authorities have been sounding the alarm (H. Smith, 2018), but they mostly rely on the central government, while they have limited powers and resources (CityContact, 2018; Lichrou et al., 2010; Vassilopoulou, 2017). One of the few concrete measures taken was a daily cap on cruise passengers, set at an 8,000 person per day maximum. The goals are to ensure a quality service, preserve the environment, and spread out the number of cruise arrivals throughout the week (GTP, 2016; H. Smith, 2018). It seems the measure has been effective in terms of limiting the number of one-day cruise visitors, as cruise arrivals have decreased in the last 2 years (The Greek Observer, 2018). The local community of Santorini is fully aware of the social, cultural, economic, and environmental impacts created by overtourism (Lalani, 2017), but experience a lack of adequate and appropriate governance by the Greek government (Lichrou et al., 2010).

The future of overtourism

The lack of tourism governance and strategical cooperation between local and national authorities might put the future of the destination at risk. Implementation of effective policies aimed at managing and regulating increasing tourism flows is needed, in order to ease the negative consequences of overtourism on the local community. That is necessary to preserve the image of the destination, prevent deterioration, and safeguard the future tourism attractiveness of the island.

Sources and links

Baldacchino, G. (2016). *Archipelago Tourism: Policies and Practices*. Routledge. Retrieved from https://books.google.it/books?hl=en&lr=&id=tMO1CwAAQBAJ&oi=fnd&pg=PA35&dq=santorini+tourism +governance&ots=eVnnmVZd3p&sig=QpnR9o7y-SICO_igqjC8VGApqO4&redir_esc=y#v=onepage&q=santori&f=false

Bellos, I. (2018). Santorini authorities rationing cruise passenger visits to island | Business | ekathimerini.com. Retrieved July 27, 2018, from http://www.ekathimerini.com/224901/article/ekathimerini/business/santorini-authorities-rationing-cruise-passenger-visits-to-island

CityContact. (2018). Media: Iconic Greek holiday island of Santorini reaching its limits. Retrieved July 26, 2018, from http://www.tornosnews.gr/en/tornos/trends/32057-media-iconic-greek-holiday-island-of-santorini-reaching-its-limits.html

Dilouambaka, E. (2017). Locals in Santorini Are Fed up with Tourists. Retrieved July 26, 2018, from https://theculturetrip.com/europe/greece/articles/locals-in-santorini-are-fed-up-with-tourists/

Greece Is. (2015). Santorini in Numbers. Retrieved July 26, 2018, from http://www.greece-is.com/santorini-in-numbers/

Greek National Tourism Organisation. (2018). Visit Greece - Santorini. Retrieved July 26, 2018, from http://www.visitgreece.gr/en/greek_islands/santorini

GTP. (2016). Santorini to Limit Cruise Traffic, Visitor Numbers. Retrieved July 26, 2018, from https://news.gtp.gr/2016/02/29/santorini-limit-cruise-traffic-visitor-numbers/

GTP. (2017). Santorini System to Regulate Cruise Ship Arrivals. Retrieved July 26, 2018, from https://news.gtp.gr/2017/05/03/santorini-system-regulate-cruise-ship-arrivals/

Lalani, S. (2017). Greek Traditions in Santorini: Hidden Behind Tourism. Retrieved July 27, 2018, from http://www.schoolvoorjournalistiek.com/europeanculture/greek-tradition-santorini-hidden-behind-tourism/

Lichrou, M., O'Malley, L., & Patterson, M. (2010). Narratives of a tourism destination: Local particularities and their implications for place marketing and branding. *Place Branding and Public Diplomacy*, *6*(2), 134–144. https://doi.org/10.1057/pb.2010.10

Lonely Planet. (2018). Santorini is romantic island sunsets. Retrieved July 26, 2018, from https://www.lonelyplanet.com/greece/cyclades/santorini-thira

Maragkogianni, A., & Papaefthimiou, S. (2015). Evaluating the social cost of cruise ships air emissions in major ports of Greece. *Transportation Research Part D: Transport and Environment*, *36*, 10–17. https://doi.org/10.1016/J.TRD.2015.02.014

Municipality of Thira. (2018). Santorini - At a glance. Retrieved July 26, 2018, from http://www.santorini.gr/index.php?option=com_content&view=article&id=113&Itemid=65&lang=en

Prakash, A. (2018). Santorini: Why Greek island is limiting number of tourists. Retrieved July 26, 2018, from

https://www.news.com.au/travel/world-travel/europe/santorinis-tourism-numbers-are-growing-but-is-that-actually-a-good-thing/news-story/058a52d0a38409f370af652ed37150b9

Smith, H. (2018). Greece tourism at record high amid alarm over environmental cost. Retrieved July 27, 2018, from https://www.theguardian.com/world/2018/jun/03/greece-tourism-at-record-high-amid-alarm-over-environmental-cost

Smith, O. (2018). Greece tourism numbers: Europe's latest victim of 'overtourism. Retrieved July 26, 2018, from http://www.traveller.com.au/greece-tourism-numbers-europes-latest-victim-of-overtourism-h110v6

The Greek Observer. (2018). Cruise ship arrivals and passenger visits drop in 2017. Retrieved July 26, 2018, from http://thegreekobserver.com/greece/article/32380/cruise-ship-arrivals-passenger-visits-drop-2017/

The National Herald. (2017). Hordes of Tourists Overrunning Santorini, Ruining Environment. Retrieved July 26, 2018, from https://www.thenationalherald.com/173361/hordes-tourists-overrunning-santorini-ruining-environment/

Vassilopoulou, T. (2017). Tourism boom putting strain on holiday island of Santorini. Retrieved July 26, 2018, from http://www.ekathimerini.com/221229/article/ekathimerini/news/tourism-boom-putting-strain-on-holiday-island-of-santorini

IV.31 Stockholm, Sweden

Type of destination: Urban

Region: EU

Reported by: Simone Moretti

Stockholm, capital of Sweden, is well known for the very open and welcoming atmosphere and diversity of the city, where change and innovation are always encouraged. Tourists are attracted by this character and the combination of modernity and history, urban and nature, culture and leisure. From its celebrated medieval Old Town, to its Art Nouveau and modern quarters, Stockholm is a city rich in museums, theatres, landmarks, and various national and international events.

Statistics
- In 2017, domestic overnights were the majority of the total stays (56%), while the main international market sources were Germany, United Kingdom and United States (Visit Stockholm AB, 2017).
- Overnight stays 2017 (city only): 9.56 million, meaning 2.5% growth vs 2016, 28% growth vs 2013, and 42% growth vs 2010 (TourMIS, 2018). Average length of stay in 2016: 2.4 nights (Visit Stockholm AB, 2017).
- TPR/TDR: Stockholm city has 952,100 inhabitants (TourMIS, 2018) and spans an area of 188 km^2 (SCB, 2018), leading to, in 2017, a TPR of 2.8 visitors per 100 inhabitants per day and a TDR of 139.3 visitors per km^2 per day (both excluding day visitors)
- Arriving and departing from Stockholm's airports (Arlanda, Skavsta, Bromma,Västerås and Örebro) in 2016 were 29,470 passengers, meaning 10% vs 2014 and 40% vs 2006 (Visit Stockholm AB, 2017).
- Arriving and departing by ferry in 2016 were 10,039 passengers, meaning 0.8% reduction vs 2014 and 0.4% reduction vs 2010 (Visit Stockholm AB, 2017).
- In 2016, 48% of rooms were sold for business purposes, 35% for leisure, 9% for conferences, and 8% for groups (PwC, 2017).
- Most visited attraction: Kulturhuset Stadsteatern, 2.9 million visitors in 2016 (9% reduction vs 2015) (Visit Stockholm AB, 2017).
- Cruise traffic in Stockholm port: 530,200 passengers in 2015 (13.5% vs 2014) (Green Pearls, 2018).

Main impacts
- High number of tourists per residents
- Gentrification

Although the city is already operating at high capacity levels (The Local, 2017; VIA, 2011), tourism pressure in Stockholm seems to be under control by the local authorities. A review of the recent media and the academic literature did not reveal the existence of major issues in terms of overtourism. There are specific locations around the city, which are reported to be more crowded in the summer season (due the high concentration of attractions in the city centre) such as the old town (European Union, 2010; Potooo, 2018) and some specific attractions representing bottlenecks, such as the Vasa Museum (Lansky, 2014). Moreover, some gentrification processes are visible. Nevertheless, the environment and the social fabric is not suffering yet by excessive tourism pressure, and Stockholm has been declared one of the most welcoming cities for tourists (Business Insider Nordic, 2017; Coffey, 2017). Moreover, Stockholm is frequently reported as a travel option for tourists in search of less crowded destinations, where overtourism issues have been tackled or where it is not visible yet (Ekstein, 2017; Rossi, 2017). McKinsey & Company, & World Travel & Tourism Council (2017) in its report about overcrowding tourism, identify Stockholm as at risk of overcrowding tourism only for one indicator (attractions concentration) out of nine.

Measures taken

The tourism development strategy followed by Stockholm's local authorities in the last decades produced good results in preventing overtourism issues. It was strongly influenced by the general city management plan, developed along the line of rigorous sustainability principles. According to City of Stockholm (2017) "just about everything that happens in Stockholm does so with sustainability in mind"- therefore, tourism as well.

European Union (2010) and Tillväxtverket (2016) mentioned many factors that contributed to maintaining tourism impacts under control:

- Attention to developing sustainable tourism products.
- Involvement of a wide range of local stakeholders.
- The aim to attract a higher number of international visitors while remaining sensitive to overall sustainability issues (e.g. social and environmental factors).

- Enhancing the overall accessibility.
- Traffic limitation in the city centre and the development of an efficient public transport system.
- Regulations in terms of private accommodation rentals for tourism purposes.
- Sustainable urban planning in terms of green areas, water treatment, waste disposal, etc.

The high consideration of sustainability principles in strategic planning, the concrete measures taken, and the satisfactory results, show a high level of awareness of overcrowding tourism issues in the current management of the destination.

The future of overtourism

The growth rate of arrivals and overnight stays slowed down in the last years. Therefore, in the near future this trend might be confirmed. Nevertheless, local authorities will probably maintain their focus on sustainability, also in tourism development. Considering the satisfactory results reached so far, this leads to a positive outlook in terms of future tourism development and ability to prevent or tackle overtourism issues.

Sources and links

Business Insider Nordic. (2017). Stockholm, Copenhagen, Helsinki the world's most welcoming cities. Retrieved July 30, 2018, from https://nordic.businessinsider.com/stockholm-and-helsinki-are-the-worlds-most-welcoming-cities-according-to-study-2017-11/

City of Stockholm. (2017). The City of Stockholm's Environmental Work.

Coffey, H. (2017). The most welcoming cities in the world, from Singapore to Stockholm. Retrieved July 30, 2018, from https://www.independent.co.uk/travel/news-and-advice/most-welcoming-cities-in-world-friendly-singapore-stockholm-helsinki-san-francisco-a8040016.html

Ekstein, N. (2017). Want to Avoid Other Tourists When You Travel? Here's Where to Go. Retrieved July 30, 2018, from https://www.bloomberg.com/news/articles/2017-08-24/want-to-avoid-other-tourists-when-you-travel-here-s-where-to-go

European Union. (2010). *Stockholm European Green Capital 2010*. https://doi.org/10.2779/17961

Green Pearls. (2018). The university for children on Juist: perceptible sustainability. Retrieved July 27, 2018, from https://www.greenpearls.com/blog/the-university-for-children-on-juist-perceptible-sustainability/

Hoikkala, H., & Magnusson, N. (2018). Sweden Is Expecting a Tourism Boom. Retrieved July 30, 2018, from https://www.bloomberg.com/news/articles/2018-06-18/scandic-bets-weak-krona-and-sunshine-will-fill-empty-hotel-rooms

Lansky, D. (2014). Searching for the Solution to Tourism Overcrowding in Top Destinations. Retrieved July 30, 2018, from https://skift.com/2014/11/04/searching-for-the-solution-to-tourism-overcrowding-in-top-destinations/

Potooo. (2018). Do you suffer from "overtourism" like Amsterdam? [Blog comment]. Retrieved July 30, 2018, from https://www.reddit.com/r/AskEurope/comments/7jpjz8/do_you_suffer_from_overtourism_like_amsterdam/

PWC. (2017). The hospitality market in Scandinavia, (October).

Rossi, A. (2017). Over-Tourism Is on the Rise: Here's Where You Should Go Instead. Retrieved July 30, 2018, from https://www.smartertravel.com/2017/09/08/over-tourism-alternative-destinations/

SCB. (2018). Folkmängd i riket, län och kommuner 31 mars 2018 och befolkningsförändringar 1 januari–31 mars 2018. Retrieved July 29, 2018, from http://www.scb.se/hitta-statistik/statistik-efter-amne/befolkning/befolkningens-sammansattning/befolkningsstatistik/pong/tabell-och-diagram/kvartals--och-halvarsstatistik--kommun-lan-och-riket/kvartal-1-2018/

The Local. (2017). Stockholm is a magnet for foreign tourists, new statistics show. Retrieved July 30, 2018, from https://www.thelocal.se/20170808/stockholm-is-a-magnet-for-foreign-tourists-statistics

Tillväxtverket. (2016). *Sustainable destination development*. Retrieved from https://tillvaxtverket.se/download/18.3446e9bb1589a4fbd992c7f8/1480346042627/Sustainable Destination Development.pdf

TourMIS. (2018). Cities - Nights and arrivals - Annual data. Retrieved July 20, 2018, from http://www.tourmis.info

VIA. (2011). National Strategy for tourism and travel 2020. Retrieved July 30, 2018, from http://viavasterbotten.se/sectors/tourism/overview/sweden/tourism-2020/

Visit Stockholm AB. (2017). *Facts about Stockholm's tourism industry Statistics for 2016 Content*. Retrieved from https://www.stockholmbusinessregion.com/globalassets/about-us/publications/2016_facts_about_stockholms_tourism_industry.pdf

McKinsey & Company, & World Travel & Tourism Council. (2017). *Coping with success: Managing overcrowding in tourism destination*. Retrieved from https://www.wttc.org/-/media/files/reports/policy-research/coping-with-success---managing-overcrowding-in-tourism-destinations-2017.pdf

IV.32   Sunny Beach, Bulgaria

Type of destination: Coastal & Islands

Region: EU

Reported by: Simone Moretti

Sunny Beach is the largest and most popular beach resort of the Bulgarian Black Sea coast. Famous for the warm weather, the long sandy beach and the vibrant nightlife, it attracts especially young tourists mainly from Russia and the North of Europe. According to Tutenges (2015), Sunny Beach resembles the numerous resorts around the world that aim to promote and capitalise on nightlife activities, "designed for hedonistic consumption, collective excitement and mass transgression".

Statistics

- Many indicators show the increase in tourism flows in the period 2010-2017: The number of available beds increased by 28%. The arrivals almost doubled, increasing from 453,000 to 810,000 (79% growth). The overnight stays passed from 3.2 million to 5.3 million (growth of 65%), therefore, the average length of stay contracted from 7.07 days in 2010 to 6.52 days in 2017. Revenues from overnight stays in hotels and other accommodation establishment increased by 133% (NSI, 2018).
- Tourism in Sunny Beach has a strong seasonality: in 2017 58% of arrivals were concentrated in July-August, while 93% of the total arrivals occurred between June and September (NSI, 2018)
- According to Kamburov (2015), during the peak season people on the beach can only have the availability of $0.4m^2$ per person, while the Bulgarian Territories Management regulation would require at least 8 m^2 per person.

Main impacts

- Environmental issues (waste, water, air pollution, energy, CO_2 emissions, land use, landscape, ecosystems)
- Tourists complain about tourists
- Uncivilised behaviour

Being a sort of "tourism enclave", overtourism manifests itself within the entire resort, during the summer season. As the resort was built in a non-residential area and there are no permanent residents (Frick, 2010), Sunny Beach does not entail local community displacement issues as frequently happen with overtourism.

More problematic impacts of overcrowding tourism in Sunny Beach are mentioned by Ivanov (2017) and are mainly related to safety and nuisance issues linked to alcohol abuse and consequent uncivilised behaviours (Tutenges, 2015), tourism creating a demand for prostitution (Hesse & Tutenges, 2011), overcrowded infrastructure and facilities (Nurdem, 2008), social implication related to the high seasonality of tourism jobs (Matev & Assenova, 2012), sand dunes destruction (Stancheva et al., 2011) and other environmental impacts on the coastal area (Stanchev, Stancheva, & Young, 2015). Nevertheless, in the last years, media frequently reported safety, social and environmental issues, which are negatively influencing the reputation and the perceived image of the destination, possibly discouraging different or alternative segments of possible visitors (Cheresheva, 2016).

Measures taken

After the collapse of the communist regime, extensive unregulated coastal construction on the Bulgarian Black sea coast, such as Sunny Beach resort, resulted from deregulation in urban and territorial planning, from property restitution after the soviet-era and less constrained travel (Holleran, 2015b). There were no concerns about overtourism, and a largely unregulated tourism development was particularly welcome, given the post-socialist exhaustion with central planning industrial development (Andrusz, Harloe, & Szelenyi, 1996) and because of the chance to use tourism development to rebrand the nation (Aronczyk, 2013). In this context a variety of entrepreneurs, small-scale tourism operators and property speculators took the lead in developing resorts such as Sunny Beach, within a framework often criticised for environmental concerns and corruption (Holleran, 2015a). Within this framework, an effective response to mass-tourism and overtourism issues in Sunny Beach has been neglected for a long time. Recently, the government launched an inspection-campaign to fight noise and public drunkenness, which led to fines and even the closure of some venues and festivals (Birchall, 2017). Lately, those interventions were extended to tax evasion and other irregularities, such as health and labour laws (The Sofia Globe, 2017). Although those measures were criticised by nightclubs owners, they received the support of hotel owners (Radio Bulgaria, 2017). That happened while tour operators and local business were already asking for a

strict enforcement of laws and new legislation aimed at imposing fines to drunken holidaymakers (Cheresheva, 2016). According to the Minister of Interior, Mr Simeonov, the intention of the government is to clean up the deteriorated image of the destination, "attract more solvent tourists" and "have a better quality of tourism" (Birchall, 2017). At the moment, it's still too early to make even an early evaluation of the effectiveness of the adopted policies in relation to the stated objectives. Anyway, they might address only part of the visible issues. The awareness of overtourism and related issues at Sunny Beach is increasing between (potential) tourists, and also among the authorities and local tourism operators (Cheresheva, 2016). Nevertheless, a more strategic, comprehensive and coordinated destination management plan would probably be required, also considering internal disagreements and different points of view within the government (The Sofia Globe, 2018).

The future of overtourism

Currently, the destination management approach to overtourism appears still weak, fragmented and there is no specific evidence of a strategic approach aimed to tackle the issues. Within this framework, overtourism issues will probably continue to manifest themselves, impacting on the general environment degradation and progressively deteriorating the destination image of Sunny Beach.

Sources and links

Andrusz, G., Harloe, M., & Szelenyi, I. (1996). *Cities After Socialism: Urban and Regional Change and Conflict in Post-Socialist Societies*. (G. Andrusz, M. Harloe, & I. Szelenyi, Eds.). Oxford, UK: Blackwell Publishers Ltd. https://doi.org/10.1002/9780470712733

Aronczyk, M. (2013). *Branding the Nation*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199752164.001.0001

Birchall, G. (2017). Bulgaria is cracking down on boozy Brit tourists as politicians declare 'war on noise' and 24-hour partying. Retrieved July 23, 2018, from https://www.thesun.co.uk/news/4261534/bulgaria-cracking-down-on-boozy-brit-tourists-as-politicians-declare-war-on-noise-and-24-hour-partying/

Cheresheva, M. (2016). Rowdy Bulgarian Resort Considers Crackdown on Drunks. Retrieved July 20, 2018, from http://www.balkaninsight.com/en/article/rowdy-bulgarian-resort-considers-crackdown-on-drunks-02-29-2016

Frick, M. (2010). Impacts of Tourism Development in Saint Vlas, Bulgaria. Retrieved July 19, 2018, from https://ecoclub.com/education/articles/522-saint-vlas

Hesse, M., & Tutenges, S. (2011). Young tourists visiting strip clubs and paying for sex. *Tourism Management*, *32*(4), 869–874. https://doi.org/10.1016/J.TOURMAN.2010.08.002

Holleran, M. (2015a). On the Beach: The Changing Meaning of the Bulgarian Coast after 1989. *City & Society*, *27*(3), 232–249. https://doi.org/10.1111/ciso.12066

Holleran, M. (2015b). Socio-Spatial Polarization and Peripheralization in a Rapidly Changing Region — Building Europe's Balkan Edge: Tourism Development in Coastal Bulgaria. In *Understanding Geographies of Polarization and Peripheralization* (pp. 156–170). London: Palgrave Macmillan UK. https://doi.org/10.1057/9781137415080_9

Ivanov, S. (2017). Mass tourism in Bulgaria: The force awakens. *Mass Tourism in a Small World*, (January). https://doi.org/10.1079/9781780648545.0168

Kamburov, I. (2015). Bulgarian Coastal Black Sea Strandja Region - an eco(nomic) approach toward sustainability of one protected area. Luxembourg. Retrieved from http://ec.europa.eu/environment/nature/natura2000/platform/documents/continental_seminar/2_coastal-case_study_presentation_strandzha_ivan_kamburov_bg_en.pdf

Matev, D., & Assenova, M. (2012). Application of corporate social responsibility approach in Bulgaria to support sustainable tourism development. *Clean Technologies and Environmental Policy*, *14*(6), 1065–1073. https://doi.org/10.1007/s10098-012-0519-9

NSI. (2018). Annual data - Activity of the resorts. Retrieved July 23, 2018, from http://www.nsi.bg/en/content/7074/annual-data

Nurdem, R. (2008). Bulgaria's Black Sea resorts face long summer. Retrieved July 20, 2018, from https://www.telegraph.co.uk/travel/travelnews/1939697/Bulgarias-Black-Sea-resorts-face-long-summer.html

Radio Bulgaria. (2017). Sunny Beach set to protest massive inspections, hotel owners support government measures. Retrieved July 23, 2018, from http://bnr.bg/en/post/100864713/sunny-beach-set-to-protest-massive-inspections-hotel-owners-support-government-measures

Stanchev, H., Stancheva, M., & Young, R. (2015). Implications of population and tourism development growth for Bulgarian coastal zone. *Journal of Coastal Conservation*, *19*(1), 59–72. https://doi.org/10.1007/s11852-014-0360-x

Stancheva, M., Ratas, U., Orviku, K., Palazov, A., Rivis, R., Kont, A., Stanchev, H. (2011). Sand Dune Destruction Due to Increased Human Impacts along the Bulgarian Black Sea and Estonian Baltic Sea Coasts. *Journal of Coastal Research*, (64), 324–328.

The Sofia Globe. (2017). Bulgarian authorities carry out check-ups in Sunny Beach, other Black Sea summer resorts. Retrieved July 23, 2018, from https://sofiaglobe.com/2017/08/13/bulgarian-authorities-carry-out-check-ups-in-sunny-beach-other-black-sea-summer-resorts/

The Sofia Globe. (2018). Bulgarian Cabinet ministers disagree over fate of 'illegal' restaurants and clubs at Sunny Beach. Retrieved July 23, 2018, from https://sofiaglobe.com/2018/06/05/bulgarian-cabinet-ministers-disagree-over-fate-of-illegal-restaurants-and-clubs-at-sunny-beach/

Tutenges, S. (2015). Pub crawls at a Bulgarian nightlife resort: A case study using crowd theory. *Tourist Studies*, *15*(3), 283–299. https://doi.org/10.1177/1468797615597856

IV.33 Tallinn Old Town, Estonia

Type of destination: Heritage & Attractions

Region: EU

Reported by: Bernadett Papp

Tallinn, the capital of Estonia, is seen as a city-break destination that offers quality services. Besides leisure tourism, Tallinn is becoming a popular convention destination (Tallinn City Tourist Office & Convention Bureau, 2017). The historic city centre (old town) has been on the UNESCO World Heritage List since 1997 (UNESCO, 2018).

Statistics

- 74% of the total number of visits by foreigners to Estonia were made to Tallinn (Tallinn City Tourist Office & Convention Bureau, 2017).
- The city received 4.5 million foreign visitors in 2017 (7% growth compared to 2016), out of which, 2.7 million were one-day visitors (10% growth compared to 2016) and 1.8 million visitors stayed overnight in an official accommodation establishment (3% growth compared to 2016). Besides inbound tourism, domestic tourism has increased in the past 5 years. The number of domestic tourists has grown by 36% since 2013 (Tallinn City Tourist Office & Convention Bureau, 2017).
- Tourism in Tallinn has a strong seasonal character and is mostly based on short trips. While domestic tourism is more evenly distributed throughout the year, peaks in inbound tourism can be seen in June, July, and August. Seasonality affects the number of accommodation facilities as well, as a large proportion of these facilities are privately owned small scale guest houses, tourist apartments, and B&Bs that close down in the shoulder months due to lack of revenue.
- The number of hotel beds available in the city is 16,234, while the average occupancy rate in 2017 was 66% (no change compared to 2016) (Tallinn City Tourist Office & Convention Bureau, 2017).
- In 2017, Tallinn's airport received 2.64 million passengers (19% compared to 2016). The increase is partly due to the opening of new air routes in 2017 (Tallinn Airport, 2017). Tallinn's seaport catered to 10.5 million passengers in 2017, a 3% increase compared to the previous year. The Tallinn-Helsinki route accounts for 83% of all passengers (8.83 million). Tallinn is the third most popular destination for cruise ships in the Baltic Sea (311 stops made in the port of Tallinn, 2017) (Port of Tallinn, 2018).
- Tallinn has a population of 450,531. When looking at the TPR, the number of international tourists 100 inhabitants is 4.2 (assuming each tourist stays 2,3 days), while the TDR for international tourists is 117.7 per day per km² (total area 159.2 km²).

Main impacts

- Congestion & traffic problems
- Rising cost of living
- Touristification
- Social impacts

The impacts of overtourism are mainly visible in the Old Town. Due to the specific layout of the historic centre, congestion and traffic issues often arise (Tallinn City Council, 2014). A main challenge appears in the winter season, around Christmas. During advent, the number of visitors have increased significantly in the past few years. Negative impacts generated by the sharing economy, most notably Airbnb, are present in Tallinn. Noise pollution, unpaid bills, and seasonal occupancy of apartments is becoming a significant issue (Tallinn City Council, 2014). In the Old Town rental prices are rising (Tallinn City Council, 2014). The number of souvenir stores and highly priced restaurants have increased in the past years, forcing local residents out of the touristic hotspots. Due to high seasonality, there are differences in quality standards between the low and main season (Tallinn City Council, 2014). With regards to social impacts, the main concerns are linked to the noise level of bars and other entertainment facilities, drug and alcohol consumption, street crime, prostitution, and begging. Such activities reduce the attractiveness of the city and increase safety concerns (Tallinn City Council, 2014).

Measures taken

- Cooperation between stakeholders: Tallinn's tourism strategy is based on the National Tourism Development Plan and the Tallinn Development Plan, indicating a close cooperation between the various stakeholder groups (Papp, Postma & Koens, 2018).

- Zoning system: Due to the UNESCO World Heritage Listing, most of the Old Town is a pedestrian zone (Tallinn City Council, 2014).
- Time-based rerouting: One of the biggest challenges of the city is seasonality and the high concentration of visitors in the historic city centre. The MICE segment is considered as an efficient tool to reduce seasonality, together with the organisation of cultural events outside the main season. The May season has been successfully extended (Papp, Postma & Koens, 2018).
- Spatial distribution of visitors: The city is working constantly to redirect visitors towards the less popular areas. The Tallinn City Card, one of the main initiatives, combines attractions and public transport. Furthermore, new attractions are being developed and new neighbourhoods are being included in the tourism offer (Papp, Postma & Koens, 2018).

The future of overtourism

Arrival numbers in Tallinn are constantly growing. The city keeps renewing and refreshing itself. However, the high concentration of visitors in the Old Town and the problem of seasonality require strategic actions to ensure quality experiences for visitors and long-term sustainability for the locals. There is a risk of Disneyfication of the Old Town, further strengthening the touristification of the historic centre (Tallinn City Council, 2014).

Sources and links

Papp, B., Postma, A. & Koens, K. (2018). Visitor pressure and events in an urban setting. Understanding and managing visitor pressure in seven European urban tourism destinations (unpublished). Breda/Leeuwarden: CELTH.

Port of Tallinn. (2018). Key figures. Passenger traffic. Retrieved from http://www.portoftallinn.com/key-figures

Tallinn Airport. (2017). Partners. Statistics. Traffic Report 2017. Retrieved from https://www.tallinn-airport.ee/wordpress/wp-content/uploads/2018/01/TLL-traffic-2017-short.pdf

Tallinn City Council . (2014). Comprehensive management plan of Tallinn Old Town 2014-2021. Tallinn.

Tallinn City Tourist Office & Convention Bureau. (2017). Statistics & surveys. Tourism reports. Overview of tourism trends in Tallinn in 2017. Retrieved from https://www.visittallinn.ee/static/files/002/ulevaade_tallinna_turismitrendidest_2017__eng__toim.pdf

Tallinn City Tourist Office & Convention Bureau. (2018). Plan. Good to know. Population. Retrieved from https://www.visittallinn.ee/eng/visitor/plan/good-to-know/tallinn-and-estonia

UNESCO. (2018). The list. World heritage list. Historic centre (old town) of Tallinn. Retrieved from https://whc.unesco.org/en/list/82

IV.34   Tatranská Lomnica, Slovakia

Type of destination: Rural

Region: EU

Reported by: Simone Moretti

Tatranská Lomnica is a Slovak skiing and hiking resort, belonging to the High Tatras Mountains. It is often recognized for having one of the steepest aerial cableways in Europe, remarkable for its lack of supporting pylons between the two stations. Tatranská resort offers almost 12 km of slopes for skiing and snowboarding and 8 modern ski-lifts. Its geographical location makes it a perfect starting point in summer for hikes around the area as well as for trips to other parts of the High Tatras. Tourists mainly go to Tatranská for the winter season, with a snow cover that in good years can last up to 5 months, while summer tourists go there to enjoy the several hiking trails and breathtaking nature and mountain views (Lonely Planet, 2018; Ski Resort Service, 2018; Vysoke Tatry Travel, 2018).

Statistics

- Overnight stays 2015 (High Tatras Region): 1.36 million (11.6% vs 2014) (Podtatranské noviny, 2016).
- Tourists and one-day trips totalled 3 million in 2017 in the High Tatras Region (Ľubomír Motyčka, 2018).
- For the High Tatras Region, the TDR is 10.9 tourists per km^2 (based on a size of 159 km^2).

Main impacts

- Environmental issues
- Lack of capacity (actually turn away guests)
- Traffic and public transport congestion

According to various sources, the amount of visitors during the winter season exceeds the capacity limits, provoking major consequences, especially in terms of environmental degradation (Getzner & Švajda, 2015; Gúčik & Marciš, 2017; Kluczowe, 2010; Ližbetinová, 2014; Więckowski et al., 2012). In terms of overcrowding and congestion, the main reported issues are related to an excessive number of visitors, queues, lack of parking, and especially critical traffic congestion, which cause pollution and dissatisfaction among the guests (Ľubomír Motyčka, 2018; Tatry Mountain Resorts, 2017; Więckowski et al., 2012).

In terms of environmental impacts, the major reported issues are:

- An overall high level of pollution, also with garbage and waste dumping along hiking trails and close to the accommodations (Gúčik & Marciš, 2017; Izakovičová & Oszlány, 2009; Ližbetinová, 2014).
- Interference with the natural ecosystem along the slopes and damages due to the construction of ski trails (Ližbetinová, 2014; Więckowski et al., 2012).
- Noise pollution (Izakovičová & Oszlány, 2009).
- Losses in biological diversity and disruption of natural processes (Getzner & Švajda, 2015).
- Threats posed to water sources by development of intensive forms of tourism (Izakovičová & Oszlány, 2009).
- Negative impacts of constructions (chalets, houses) on ecologically significant ecosystems (Kluczowe, 2010; Ližbetinová, 2014).

Both residents and guests reported negative perceptions in terms of environmental impact of tourism, although the local community seems quite divided on the topic, as many of them keep a strong positive attitude towards tourism, being their main source of income (Gúčik & Marciš, 2017; Ližbetinová, 2014).

Measures taken

The tourism destination governance of Tatranská Lomnica appears to be private-business driven. No major action plan was put in place by the local authority to ease the situation. The implementation of new parking capacities paradoxically led to an even worse situation, because without a proper communication plan and additional interventions, more parking facilities motivate visitors to reach the destination by car (Ľubomír Motyčka, 2018). In terms of land-use measures and regulations, the existence of two authorities with sometimes overlapping functions, TANAP Administration and TANAP State Forests, created a rather chaotic situation in competences for nature protection and regulation of tourism development. Moreover, there has been a long-lasting dispute over the Tatranská zoning, with the result that private-owned tourism facilities continue their uncontrolled expansion

(Więckowski et al., 2012). According to Getzner & Švajda (2015), despite sustainability principles being included in national laws and regional regulations, local and national authorities have failed in preventing nature disruption and environmental degradation in the entire area of Tatra National Park, in which Tatranská Lomnica is included. The author believes that, behind this lack of law enforcement, there is the increased attractiveness of the area as a tourist resort and, therefore, the chance to use it as a means to support local and regional economic development. This approach reveals a low level of awareness about the impact of (over)tourism in the management of the destination, especially in terms of congestion and environmental degradation.

The future of overtourism

As there is no evidence of tourism flows slowing down in the near future, overtourism issues will most likely get worse, especially in terms of environmental degradation and congestion. That might lead to a situation in which the local community might withdraw its support to tourism and develop hostile feelings towards tourism. Consequences of overtourism might impact the image of the destination and its tourism attractiveness as well. A proper tourism governance framework, more strategical approach to tourism development and more effective law enforcement might help in effectively dealing with overtourism issues.

Sources and links

Aktuálne. (2014). Počet obyvateľov mesta Vysoké Tatry naďalej klesá. Retrieved July 28, 2018, from https://aktualne.centrum.sk/pocet-obyvatelov-mesta-vysoke-tatry-nadalej-klesa/dnes/regiony/

Andrej, S., Krogmann, A., & Marek, C. (2012). *Intensity of tourism in the municipalities of Tatry tourism Region as a basic factor for recreational urbanisation*.

Getzner, M., & Švajda, J. (2015). Preferences of tourists with regard to changes of the landscape of the Tatra National Park in Slovakia. *Land Use Policy*, *48*, 107–119. https://doi.org/10.1016/J.LANDUSEPOL.2015.05.018

Gúčik, M., & Marciš, M. (2017). Sustainable tourism development in the Tatra National Park. *EKONOMIA I ŚRODOWISKO*, *2*(61), 76–86.

Izakovičová, Z., & Oszlány, J. (2009). Sustainable Landscape Management of the Tatry biosphere reserve of UNESCO. *Ekológia*, *28*(4), 333–345. https://doi.org/10.4149/ekol_2009_04_33

Kluczowe, S. (2010). *Strategy of sustainable development of the Tatry Biosphere Reserve*. Retrieved from http://www.tpn.pl/files/news/editor/files/T3_16.pdf

Ližbetinová, M. (2014). Sociological survey of the current status and nature conservation in relation to the development of tourism in the cadastral of Tatranská Lomnica. *Revija Za Geografijo*, *9*(1), str. 63-71. Retrieved from http://www.ff.um.si/zalozba-in-knjigarna/ponudba/zbirke-in-revije/revija-za-geografijo/clanki/stevilka-9-1-2014/RG_17_9-1_05_Lizbetinová-Sociological_survey_of_the_current_status_and_nature_conservation_….pdf

Lonely Planet. (2018). Tatranská Lomnica. Retrieved July 28, 2018, from https://www.lonelyplanet.com/slovakia/tatranska-lomnica

Ľubomír Motyčka. (2018). Prepájanie stredísk v Tatrách? Retrieved July 28, 2018, from https://www.cestovatel.eu/prepajanie-stredisk-v-tatrach/

Podtatranské noviny. (2016). Tatry zažili rekordný rok. Retrieved July 28, 2018, from http://www.podtatranske-noviny.sk/2016/03/tatry-zazili-rekordny-rok/

Ski Resort Service. (2018). Skiing Tatranská Lomnica. Retrieved July 28, 2018, from https://www.skiresort.info/ski-resort/tatranska-lomnica/

Streberová, E., & Jusková, L. (2015). Standards of quality for outdoor recreation in Tatra National Park: a contribution to integrated visitor monitoring and management. *Eco.Mont*, *7*(1). Retrieved from http://www.musiklexikon.ac.at:8000/buecher/files/eco.mont_(Journal_on_Protected_Mountain_Areas_Research)/eco.mont_Vol._7_No._1/ecomont-13-10-Streberová-Jusková.pdf

Tatry Mountain Resorts. (2017). Developing of skiing and tourism in the Tatras must go hand in hand with a complex solution of transport issues. Retrieved July 28, 2018, from http://www.tmr.sk/media/news/development-of-skiing-and-tourism-in-the-tatras-must-go-hand-in-hand-with-a-complex-solution-of-transport-issues/

Vysoke Tatry Travel. (2018). Center of High Tatras - Tatranska Lomnica. Retrieved July 28, 2018, from https://www.high-tatras.travel/region/center-of-high-tatras/tatranska-lomnica/

Więckowski, M., Michniak, D., Chrenka, B., Ira, V., Komornicki, T., Rosik, P., … others. (2012). *The potential for improved accessibility and tourism development in the Polish-Slovak borderland : conditions, recommendations and good practices*. Instytut Geografii i Przestrzennego Zagospodarowania PAN. Retrieved from https://books.google.it/books?id=oHYGAwAAQBAJ

IV.35   Turkish Riviera, Turkey

Type of destination: Coastal & Islands

Region: Other European

Reported by: Jasper Heslinga

The Turkish Riviera is an area located in the southwest of Turkey, encompassing the provinces of Antalya and Muğla. The combination of a favourable climate, warm sea, mountainous scenery, fine beaches along more than a thousand kilometres of shoreline, and abundant natural and archaeological points of interest make this stretch of Turkey's coastline a popular national and international tourist destination. As an example Antalya, Turkey's biggest international sea resort, is analysed.

Statistics

- A record 12.5 million tourists passed through Antalya in 2014, but after that, the visitor number dropped due to political instability and safety issues.
- With a surface area of 1,417 km² the TDR of Antalya is 55.6 tourists per 100 inhabitants per day (assuming each tourist stays for 2.3 days) and with a population of 1,203,994 inhabitants (in 2014) the TPR is 6.5 tourists per 100 inhabitants per day.
- Antalya, and Turkey in general, are recovering and visitors' numbers are increasing again. The Culture and Tourism Ministry announced that around 29 million people visited Turkey in the first 10 months of the year 2017, an increase of 28% compared to 22.7 million in the same period the year before. The holiday resort city of Antalya recorded the highest number of visitors; 9.25 million (Daily Sabah, 2017).
- Despite the visitor numbers dropping in 2016, Antalya is forecasted to be the fastest growing of the European cities over the next ten years, with an expected 9.8% growth in visitors numbers (WTTC, 2017).
- Russian tourists made their way to Turkey the most, constituting 4.5 million visitors and 15.7% of all tourists (Daily Sabah, 2017). Antalya is also among the favourite residential centres for foreigners. In the city, there are 60,534 foreign inhabitants, from more than 100 different countries. Russians lead the way at 9,035 inhabitants (Daily Sabah, 2017).

Main impacts

- High number of tourists per residents
- Environmental issues
- Gentrification

Tourism development in Antalya, and Turkey in general, is structured primarily as mass tourism, which is accompanied by many environmental, social, and economic problems (Çızel et al., 2013). The increasing number of tourists visiting the destination have led to the following impacts. First, mass tourism has influenced social inequalities by creating further disparity among the social classes in the tourism regions (Tosun et al., 2003). Second, the huge mass tourism establishments tend to be located in resort areas that are very much separated from the city centre. This distance between resort areas and the city centre resulted in tourists not needing to visit the city centre to fulfil their needs (Erkus-Ozturk, 2010). Third, mass tourism has caused a greater dependence on foreign tour operators (Erkus-Ozturk, 2010) who lack the environmental consciousness and neglect the needs of local people (Kuvan, 2010). Fourth, construction leads to damage to the destination's natural (and cultural) habitats (Çızel et al., 2013). In Turkey, the ever-increasing availability of premium land for touristic development has caused irreparable damage to the natural habitat, yet there has been little concern to harness this galloping trend through careful regulation. The huge numbers of large hotel firms operating in the region and the increasing flow of international tourists puts pressure on the region's environmental resources. For instance, deforestation resulting from the allocation of forestry areas for the construction of largescale tourism facilities is a major, but silent, problem in the region (Kuvan, 2010).

Measures taken

The measures that were taken are limited. In fact, most strategies and measures that are currently taken are still aimed at growth and to help the tourism industry recover from the crisis in 2016. As an example of this growth thinking, Culture and Tourism Minister Numan Kurtulmuş recently declared that Turkey will host 38 million tourists in 2018 and projected that by 2023 Turkey will welcome 50 million tourists, who would bring $50 billion to the country (Hurriyet, 2018). Also the construction sector is looking forward to more hotel complexes to be

lined across the Turkish shores and for this year the local hoteliers in Antalya are expecting 14 million tourists in their 2,300 hotels (Hurriyet, 2018).

The future of overtourism

Antalya is of the world's most popular tourist destinations. Despite the destination being near to the limits of growth, more and more attractions are being built. To make matters worse, tourism in Turkey is still heavily promoted (Soydanbay, 2017). With this prospect in mind, overtourism in Antalya, and the Turkish Riviera in general, will remain a major problem.

Sources and links

Çızel et al. (2013). Emergence and Spread of an All-Inclusive System in the Turkish Tourism Sector and Strategic Responses of Accommodation Firms, *International Journal of Hospitality & Tourism Administration*, 14(4), 305-340. doi: 10.1080/15256480.2013.838083

Daily Sabah (2017). Turkey sees 28% increase in number of tourists from Jan to Oct 2017. Retrieved 06 Augustus 2018, from https://www.dailysabah.com/tourism/2017/11/30/turkey-sees-28-pct-increase-in-number-of-tourists-from-jan-to-oct-2017

Erkus-Ozturk, H. (2010). Planning of Tourism Development: The Case of Antalya, *Anatolia: An International Journal of Tourism and Hospitality Research,* 21(1), 107-122. doi: 10.1080/13032917.2010.9687093

Hurriyet (2018). The perils of overtourism. Retrieved 06 Augustus 2018, from http://www.hurriyetdailynews.com/opinion/ariana-ferentinou/the-perils-of-overtourism-133089

Kuvan, Y. (2010). Mass tourism development and deforestation in Turkey. *Anatolia: An International Journal of Tourism and Hospitality Research*, 21(1), 155–168

Soydanbay, G. (2017). A Systemic Analysis of Overtourism and Tourismophobia: And What Destinations Can Do About It. Retrieved 06 Augustus 2018, from https://placebrandobserver.com/overtourism-tourismophobia-causes-solutions/

Tosun, C., Timothy, D. J., & Ozturk, Y. (2003). Tourism growth, national development and regional inequality in Turkey. *Journal of Sustainable Tourism,* 11(2/3), 133–161

WTTC (2017). Travel & Tourism City Travel & Tourism Impact 2017 Europe. Retrieved 06 Augustus 2018, from https://www.wttc.org/-/media/files/reports/economic-impact-research/cities-2017---regional/europe---city-travel-and-tourism-impact-2017.pdf?la=en

IV.36   Valletta, Malta

Type of destination: Heritage & Attractions

Region: EU

Reported by: Bernadett Papp

Valletta is the capital as well as the political and administrative centre of Malta. The city is one of the main tourist attractions of the Maltese Islands. Due to its unique tangible and intangible heritage, Valletta is on the UNESCO World Heritage List. The city is home to 320 monuments, making it one of the most highly concentrated heritage sites in the world (UNESCO, 2018). The port of Valletta, including the historical waterfront, is one of the main gateways of the island (Valletta Cruise Port plc., n.d.). Valletta currently holds the title of European Capital of Culture (Valletta 2018 Foundation, n.d.).

Statistics

- In 2017, Malta received a total of 2.3 million international arrivals, indicating a 16.4% growth compared to the previous year (MTA, 2017) The number or overnights spent in collective accommodation facilities reached 9.2 million (excl. Gozo) (MTA, 2017). Due to high prioritisation of the tourism industry, Malta has become the world's most tourism-dependent country (World Economic Forum, 2017).
- Most tourists arrive at Luqa International Airport (97.9%), as it is in close proximity to Valletta. 2.1% of all international arrivals travel by sea using the Port of Valletta as an entry point. In 2017, the port received 670,000 cruise tourists (7% growth compared to 2016) out of which 577,000 were transit passengers (MTA, 2017). The total annual revenue generated by the cruise industry is approximately €31 million (Ministry for Tourism, n.d.).
- Malta's tourism industry is highly seasonal. Most guest nights are recorded in July and August. Occupancy rates in the high season reach 86% (MTA, 2017).
- In 2016, Valletta was amongst the top five locations where inbound tourists visiting Malta region (excl. Gozo) as a single centre destination, stayed the longest in 2016 (NSO, 2017). In 2018, the visitor numbers are expected to grow by 12% as result of the event "*Valletta 2018 – European Capital of Culture*" (Markwick, 2017).
- Based on a size of 316 km^2 and 437,000 inhabitants, the TPR of Malta is 6.2 visitors (tourists plus cruise visitors) per 100 inhabitants per day and the TDR is 85.6 visitors per km^2 per day.

Main impacts

- Reduced affordability of real estate
- Reduced accessibility & mobility
- Worsening of cleanliness and general condition of public facilities
- Museumification & commoditisation
- Unlicensed holiday rentals

Due to changes in the urban landscape, mostly triggered by Valletta 2018, such as the restoration of buildings, opening of new catering and accommodation facilities, and the increase in the number of cultural events, residents are becoming concerned about the affordability of real estates (Valletta 2018 Foundation, 2016). As a result of increased popularity and larger masses of visitors, residents are also concerned about the accessibility of the city, inadequate infrastructure, lack of parking places and cleanliness of public facilities (Valletta 2018 Foundation, 2016). In some of Valletta's neighbourhoods, most of the premises are changing their functions from residential to commercial uses (mostly to retail or catering). (Valletta 2018 Foundation, 2016). Due to intense promotion and tourism related developments commoditization and museumification may become an issue (Markwick, 2017). Even though the accommodation sector is strictly regulated, Airbnb and other unlicensed accommodation facilities are causing problems, threating the image of Malta and representing unfair competition to licenced service providers (Malta Independent, 2017).

Measures taken

- Action plan: The Valletta action plan (integrated cultural heritage management plan) published in 2009, aimed to improve the physical and the social environment of the city and its surroundings while preserving the invaluable heritage (URBACT, 2009).
- Urban regeneration projects: The Valletta 2018 Foundation, in the framework of Valletta 2018, is working on a range of infrastructure projects aiming at the regeneration and rehabilitation of the city's hidden architectural gems (Valletta 2018 Foundation, n.d.).

- Off-peak tourism concept: As part of the 2015-2020 tourism policy of Malta, Valletta and its surroundings are developed and promoted as a cultural tourism destination in order to reduce the image of a sun, sea and sand destination. Increasing the reputation of Valletta as a city-tourism destination will help to reduce seasonality and will ensure that the benefits of Valletta 2018 are spread more evenly (Ministry for Tourism, n.d.).
- Zoning system: There are two larger tourism zones, the resort area and the historical area including Valletta. It is the responsibility of the assigned tourism zone officers to monitor the conditions of their respective zone, concerning e.g. traffic or waste management, and initiate interventions if needed. (MTA, n.d.)
- Environmental contribution: The environmental contribution was introduced in 2016, with the aim of improving and maintaining the local infrastructure. The contribution is calculated on stays in all types of accommodation, with a cap of €5 per stay (MTA, n.d.).
- Pedestrian zone: Most of the inner city in Valletta is a pedestrian zone, with the zone being extended continuously. A bollard system is in use to assist residents living in the area. (Ministry for Justice, Culture and Local Government, 2008).
- Regulations: Those who provide accommodation without an issued licence (e.g. Airbnb) are liable to a fine of up to €23,000 (Ministry for Justice, Culture and Local Government, 2003).

The future of overtourism

Arrival numbers in Malta are expected to exceed 2.5 million in 2018. With tourism contributing around 27% to the GDP, the industry will certainly remain one of the main sources of income for the country. As an effect of Valletta 2018 and intense cooperation between Air Malta and the Malta Tourism Authority, arrival numbers are expected to increase further placing even larger pressure on the capital city, Valletta (Malta Chamber of Commerce, Enterprise and Industry, 2018).

Sources and links

Malta Chamber of Commerce, Enterprise and Industry. (2018). More than 2.5 million tourists expected to visit Malta in 2018. Retrieved from https://www.maltachamber.org.mt/en/more-than-2-5-million-tourists-expected-to-visit-malta-in-2018

Malta Independent. (2017). MTA aims to raise standards, steps up enforcement on unlicensed accommodation. Retrieved from http://www.independent.com.mt/articles/2017-01-27/local-news/MTA-stepping-up-enforcement-on-unlicensed-accommodation-aims-to-raise-standards-6736169623

Markwick, M. (2017). Valletta ECoC 2018 and cultural tourism development. Journal of Tourism and Cultural Change, DOI: 10.1080/14766825.2017.1293674.

Ministry for Justice, Culture and Local Government. (2003). Malta travel and tourism services act. Retrieved from http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8875

Ministry for Justice, Culture and Local Government. (2008). Subsidiary legislation 499.54. Valletta pedestrian zones regulations. Retrieved from http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11376

Ministry for Tourism. (n.d.). Draft National Tourism Policy 2015-2020. Retrieved from http://mhra.org.mt/wp-content/uploads/2015/08/TOURISM-POLICY-2015-2020.pdf

MTA. (2017). Tourism in Malta, facts and figures 2017. Retrieved from file:///D:/Downloads/MTA_Statistical_Report_2018_(no_marks)pdf_FINAL.pdf

MTA. (n.d.). Environmental contribution. Retrieved from http://www.mta.com.mt/environmentalcontribution

MTA. (n.d.). Policy, planning & projects. Tourism zones management. Retrieved from http://www.mta.com.mt/tourismzones

NSO. (2017). Regional statistics Malta 2017 edition. Retrieved from https://nso.gov.mt/en/publicatons/Publications_by_Unit/Documents/02_Regional_Statistics_(Gozo_Office)/Regional%20Statistics%20MALTA%202017%20Edition.pdf

UNESCO. (2018). The list. World heritage list. City of Valletta. Retrieved from https://whc.unesco.org/en/list/131

URBACT. (2009). Valletta action plan, integrated cultural heritage management plan. Retrieved from https://www.academia.edu/14196305/HERO_Valletta_Action_Plan_Integrated_Cultural_Heritage_Management_Plan

Valletta 2018 Foundation . (2016). The impacts of Valletta 2018. Retrieved from https://valletta2018.org/wp-content/uploads/2017/03/Evaluation-Monitoring-A5_WEB_v2.pdf

Valletta 2018 Foundation. (n.d.). Infrastructure projects. Retrieved from https://valletta2018.org/infrastructure-projects/

Valletta 2018 Fundation. (n.d.). Mission statement. Retrieved from https://valletta2018.org/mission-statement/

Valletta Cruise Port plc. (n.d.). Main page. Retrieved from https://www.vallettawaterfront.com/

World Economic Forum. (2017). The travel and tourism competitiveness report 2017. Paving the way for a more sustainable and inclusive future. Geneva: World Economic Forum. Retrieved from http://www3.weforum.org/docs/WEF_TTCR_2017_web_0401.pdf

IV.37   Vatican City, Vatican

Type of destination: Heritage & Attractions

Region: Other European

Reported by: Simone Moretti

Vatican City is the smallest independent State in the world, both in population and territorial extension, having only 444 permanent inhabitants (Stato Città del Vaticano, 2011) and covering 0.44 km^2 (Stato Città del Vaticano, 2018). The Catholic Church, and specifically being the official seat of the bishop of Rome's Catholic Church (The Pope), is the whole reason for the existence of Vatican City. It contains some of the most popular attractions in the entire Italian peninsula, such as St. Peter's Square, St. Peter's Basilica, and the Vatican Museums, where the famous Sistine Chapel is located (Italy Travel Guide, 2018). The whole of Vatican City has been included in the UNESCO World Heritage List, stating that "a unique collection of artistic and architectural masterpieces lie within the boundaries of this small state" (UNESCO-WHC, 2018). Visitors are attracted both for religious and leisure motivations.

Statistics

- Travel and Leisure (2014) estimated the Vatican City to be the 25th most visited place in the world, with 11 million annual visitors, meaning an average of 30,000 visitors per day. Given the small size of the Vatican (0.44 km^2) this leads to an extremely high TDR of 68,490 visitors per km^2 per day.
- In 2016, the Vatican Museums were visited by 6 million people, meaning an increase of 20% compared to 5 million of 2011 and a 39% increase compared to the 4.3 million in 2010. In the same year, the Vatican museums complex was the seventh most visited museum in the world (Antoniutti, 2017; Castoldi & Castoldi, 2012; Marroni, 2012).
- Every Wednesday, an average of 40,000 people attend the weekly Pope's midweek audience at the Nervi Audience Hall (Formatlab, 2018).
- Normally, it's not possible for visitors at Vatican City to stay overnight. Moreover, most of the territory of the State has a restricted access and visitors can only enter specific areas (such as St. Peter's Square, St. Peter's Basilica, the Vatican Museums and the Vatican's gardens) away from the residents' normal life. Therefore, calculations on overnight stays, TPR, and TDR, have no meaning.

Main impacts

- Lack of capacity
- Tourists complain about tourists
- Uncivilised behaviour
- Site congestion

The main impacts are related to overcrowding generated by the huge number of visitors on a very small area. The most critical situations are visible at St. Peter's Basilica, where praying pilgrims are left with very little chance to meditate (Timothy, 2011) and at the Vatican Museums (Antoniutti, 2017; De Santis, 2015; Povoledo, 2007), where overcrowding, queues, noise, congestion, and confusion affect the benefits from visitors as well (Kington, 2012). Moreover, there are cases of tourists' misbehaviours concerning the local rules in terms of dress code while visiting religious sites (Corriere della Sera, 2010). The overcrowding issues are even more visible during Catholic religious holidays, such as Christmas and Easter, when pilgrim numbers increase..

Measures taken

The Vatican's attractiveness requires attention by the local authorities in terms of managing significant flows of visitors, considering the logistic complexity of the site as well, which does not help in dealing with overcrowding situations. The management of the Vatican Museums is working on a plan to improve the visitors' flow management along the 7 km of exposition, including the opening of a second entrance and a better accessibility of less visited spaces (Vatican News, 2018). Some called for limiting the number of visitors per day, at least to the Sistine Chapel, but the Museums management declined the idea, saying that the Chapel is a compendium of theology, a catechism in images, and from an ethical point of view they cannot limit the access to it (Kington, 2012).

The authorities are also constantly committed to enforcing the local rules in terms of dressing (no short pants, no short skirts, no bare shoulders), with communication campaigns aimed to inform visitors (Corriere della Sera,

2010). Moreover, tour guides in the Vatican City are obliged to use a radio-system, connected to visitors' earphones, which allow them to be heard without speaking loudly, reducing the nuisance (Sina, 2013). The industry took actions as well, to provide customers with less crowded experiences. The Tour Operator City Wonders recently launched a "VIP Vatican breakfast tour", providing an exclusive 6:50 a.m. entry in the Vatican City, when the museums are still closed, starting off with a buffet breakfast served in a picturesque courtyard, followed by a tour of the Vatican Museums, without entry-queues (Baran, 2018). Local authorities at Vatican City are certainly aware about overcrowding issues and they are committed to plan and implement strategies to control the tourism pressure.

The future of overtourism

The relentless increase in the number of visitors, will constantly put local authorities in front of new challenges, including the need of balancing the attractiveness of heritage, historical and artistic sites, overtourism implications and the religious significance of those sites.

Sources and links

Antoniutti, A. (2017). Musei Vaticani Troppo Affollati, Preoccupazioni Per La Sicurezza. Esposto Del Codacons. Retrieved August 3, 2018, from http://www.ilgiornaledellarte.com/articoli/2017/10/128338.html

Baran, M. (2018). Tour operators provide answers to challenges of overtourism: Travel Weekly. Retrieved August 7, 2018, from https://www.travelweekly.com/Travel-News/Tour-Operators/Tour-operators-provide-answers-to-overtourism

Castoldi, G., & Castoldi, M. (2012). Le statistiche turistiche: dai conti della spazzatura al conto satellite. Hoepli. Retrieved from https://books.google.nl/books?id=7WFIpHJXLx4C

Corriere della Sera. (2010). Vaticano, stretta su short e gonne corte «Visitatori coperti anche alle poste». Retrieved August 3, 2018, from https://roma.corriere.it/notizie/cronaca/10_luglio_28/vaticano-vestiti-copritevi-1703475158279.shtml

De Santis, R. (2015). Allarme overbooking: i musei si difendono dal turismo di massa. Retrieved August 7, 2018, from http://www.repubblica.it/cronaca/2015/06/02/news/allarme_overbooking_i_musei_si_difendono_dal_turismo_di_massa-115873975/

Formatlab. (2018). Quanti pellegrini hanno partecipato alle udienze di Papa Francesco. Retrieved August 3, 2018, from https://www.truenumbers.it/udienze-papali/

Italy Travel Guide. (2018). Vatican City. Retrieved August 3, 2018, from https://www.italylogue.com/planning-a-trip/vatican-city.html

Kington, T. (2012). Vatican in row over "drunken tourist herds" destroying majesty of the Sistine Chapel. Retrieved August 7, 2018, from https://www.theguardian.com/world/2012/sep/29/sistine-chapel-tourist-row

Marroni, C. (2012). In 5 milioni ai Musei vaticani. Retrieved August 3, 2018, from http://www.ilsole24ore.com/art/impresa-e-territori/2012-11-28/milioni-musei-vaticani-165003.shtml?uuid=AbgpIH7G

Povoledo, E. (2007). Vatican Takes Steps to Control Overcrowding. Retrieved August 7, 2018, from https://www.nytimes.com/2007/02/18/travel/18journeys.html

Sina, Y. (2013). A San Pietro solo con le radio-guide del Vaticano. Retrieved August 7, 2018, from http://www.romatoday.it/cronaca/radio-guide-vaticano-pagamento_1.html

Stato Città del Vaticano. (2011). Popolazione. Retrieved August 3, 2018, from http://www.vaticanstate.va/content/vaticanstate/it/stato-e-governo/note-generali/popolazione.html

Stato Città del Vaticano. (2018). Geografia. Retrieved August 3, 2018, from http://www.vaticanstate.va/content/vaticanstate/it/stato-e-governo/note-generali/geografia.html

Timothy, D. J. (2011). Cultural Heritage and Tourism: An Introduction. Channel View Publications. Retrieved from https://books.google.nl/books?id=oADPBQAAQBAJ

Travel and Leisure. (2014). The World's Most-visited Tourist Attractions. Retrieved August 3, 2018, from https://www.travelandleisure.com/slideshows/worlds-most-visited-tourist-attractions

UNESCO-WHC. (2018). Vatican City. Retrieved August 3, 2018, from https://whc.unesco.org/en/list/286

Vatican News. (2018). Musei Vaticani: si progetta un secondo ingresso per facilitare i visitatori. Retrieved August 3, 2018, from https://www.vaticannews.va/it/vaticano/news/2018-01/musei-vaticani-si-progetta-un-secondo-ingresso-per-migliorare-la.html

IV.38   Venice, Italy

Type of destination: Heritage & Attractions

Region: EU

Reported by: Jeroen Nawijn

Venice is one of the most popular cities in the world to visit and has one of the most active cruise ports in the south of Europe (Seraphin, Sheeran, and Pilato, 2018). Venice offers visitors a unique combination of nature and culture (UNESCO, 2018). The top attractions on Venice are the Canal Grande, Doge's Palace, Basilica di San Marco, St. Mark's Square, Ponte di Rialto and Gioielleria Eredi Jovon (TripAdvisor, 2018). Venice and its lagoon are UNESCO World Heritage since 1987 (UNESCO, 2018). The cultural heritage of Venice and assignment of the status of a World Heritage Site makes it a very attractive place to visit for tourists worldwide (Street, 2018; UNESCO, 2018).

Statistics

The number of inhabitants is 260,000 (Citta' Di Venezia, 2017) while the number of visitors is 24,000,000 (Citta' Di Venezia, 2017) leading to a TPR of 25.3 visitors per inhabitants per day and, based on a size of the city 415 km^2, a TDR of 158.4 visitors per km^2.

Municipality	Arrivals	Overnights	% arrivals change (2016 vs. 2015)	% overnights change (2016 vs. 2015)
Historic city	2,896,000	7,046,000	4.3%	3.4%
Lido	186,000	539,200	-1.6%	-5.0%
Mainland	1,564,000	2,927,000	2.2%	4.5%
Total	4,655,000	10,510,000	3.3%	3.2%

Source: Citta' Di Venezia (2017)

Main impacts

- Anti-tourism protests: Smith (2018) reports locals tearing down the 'segregation checkpoints' that were installed overnight to control the flow of tourists.
- High number of tourists per resident: On some days, the centre of Venice reportedly receives 60,000 visitors, while its population is only 55,000 (Smith, 2018).
- Traffic and public transport congestion: Large numbers of tourists put a strain on Venice's infrastructure (Street, 2018).
- Gentrification: Houses of inhabitants are sold and converted to hotels or restaurants (Secchi, 2017). Rich outsiders buy houses in Venice and Venice loses its intimate character, becoming a global, cosmopolitan city (Minoia, 2017).
- Crime and vandalism (Seraphin et al., 2018)

Overtourism in Venice is mostly social in nature. Overtourism is particularly present in weekends from July to September (Citta' Di Venezia, 2017; Secchi, 2017).

Measures taken

Italy is taking active measures to promote lesser known parts of Italy. 2017 was named 'year of the village' in order to reduce the pressure on popular Italian destinations, such as Venice (Mintel, 2018). The mayor of Venice is trying to spread tourism over the city (Secchi, 2017) and temporarily segregated locals and tourists in late April, early

May 2018 (Street, 2018). Academics advise to reconsider the role of Venice in Italy's Destination Management Plan and consequently halt all promotion for Venice (Seraphin et al., 2018). The city itself has outlined a large number of actions to be taken to tackle the issue of overtourism. These include: management of groups, creation of a new platform for acquiring the various services of the city, taking action on the landings diversifying them both for launches and in general, diversify the arrival points of private buses coming from the mainland, changes to the public transport navigation service routes, regulation of tourist facilities, introduction of new charges, introduction of landing charges, actions aimed at marketing, increase police control, creation of a new platform for acquiring the various services of the city, smartphone enabled devices for the personal use of visitors, agreements with mobile telephone providers, posters and information columns, a 'ten commandments' on behaviour for visitors, introduction of entry ticket, and agreements with rail network suppliers (see Citta' Di Venezia, 2017, pp. 29-40).

In recent years, calls have been made to ban cruise ships (Street, 2018). In 2015, cruise ships were banned from the Guidecca Canal. This lasted only 3 months as the measure was reversed by the Regional Administrative Court (Secchi, 2017).

The future of overtourism

Considering the most recent growth numbers are in the low 3% and a large number of measures will be taken (Citta' Di Venezia, 2017), it is likely that overtourism will have less negative effects in the near future, provided the proposed measures take effect.

Sources and links

Citta' Di Venezia. (2017). *Project of territorial governance of tourism in Venice*. Retrieved from Venice, Italy: h<u>ttps://www.venicegov.com/Home/ShowDocument?id=3161</u>

Minoia, P. (2017). Venice reshaped? Tourism gentrification and sense of place. In N. Bellini & C. Pasquinelli (Eds.), *Tourism in the City - Towards an integrative agenda on urban tourism* (pp. 261 - 274). Heidelberg, Germany: Springer.

Mintel. (2018). 2017 a boom year for tourism in Italy. *Travel and Tourism - Italy - February 2018*.

Secchi, M. (2017, 05 July 2017). Can Venice safe itself from its own popularity? *CNN*. Retrieved from h<u>ttps://edition.cnn.com/travel/article/venice-too-many-tourists/index.html</u>

Seraphin, H., Sheeran, P., & Pilato, M. (2018). Over-tourism and the fall of Venice as a destination. *Journal of Destination Marketing & Management, 9*, 374-376. doi:10.1016/j.jdmm.2018.01.011

Smith, O. (2018, 30 April 2018). Anti-tourist protests ERUPT: Chaos on streets of Venice as locals TEAR DOWN barriers. *Express.co.uk*. Retrieved from h<u>ttps://www.express.co.uk/news/world/952796/Tourism-tourists-Venice-travel-segegration-checkpoints-protest</u>

Street, F. (2018, 25 April 2018). Venice to separate tourists and locals over busy May Day weekend. *CNN*. Retrieved from h<u>ttps://edition.cnn.com/travel/article/venice-separates-tourists-and-locals/index.html</u>

TripAdvisor. (2018). The 15 Best Things To Do In Venice - 2018. Retrieved from h<u>ttps://www.tripadvisor.com/Attractions-g187870-Activities-Venice_Veneto.html#ATTRACTION_SORT_WRAPPER</u>

UNESCO. (2018). Venice and its lagoon. Retrieved from <u>https://whc.unesco.org/en/list/394</u>

IV.39   Vilnius Old Town, Lithuania

Type of destination: Heritage & Attractions

Region: EU

Reported by: Simone Moretti

The historical centre of Vilnius is one of the largest surviving medieval old town in the North of Europe and is inscribed in the UNESCO World Heritage List since 1994. "Despite invasions and partial destruction, it has preserved an impressive complex of Gothic, Renaissance, Baroque and classical buildings as well as its medieval layout and natural setting" (UNESCO-WHC, 2018). The Old Town is the real heart of the city and its old palaces, historical atmosphere, culture sites, narrow streets and countless churches of different faiths are among the main motivations for tourists to go to Vilnius (True Lithuania, 2018). In addition to its rich cultural heritage and architecture sights, Vilnius offers interesting contemporary entertainment experiences such as shopping, restaurants, and a vibrant nightlife (Mintel Academic, 2015). Germany, Russia, and Poland are the main market sources of international tourism in Vilnius (Vilnius Tourist Information Centre, 2018).

Statistics

- Tourist arrivals (Vilnius City): 0.52 million in 2010, 0.98 million in 2015 (89% growth vs 2010), 1.07 million in 2017 (9.4% growth vs 2015) (Vilnius Tourist Information Centre, 2018).
- Overnight stays (Vilnius City): 1.11 million in 2010, 1.83 million in 2015 (65% growth vs 2010), and 1.99 million in 2017 (8.54% growth vs 2015) (Vilnius Tourist Information Centre, 2018).
- Based on a size of 401 km^2 and 543,000 inhabitants, the TPR of Vilnius is 1.0 tourist per 100 inhabitants per day and the TDR is 13.6 tourists per km^2 per day.
- Market (Vilnius City): Considering the 2010-2017 arrivals, 82% were foreign and 18% domestic (Vilnius Tourist Information Centre, 2018).

Main impacts

- High number of tourists per residents
- Gentrification

Immediately after the inclusion of the Old Town in the UNESCO World Heritage List in 1994, the local government created and implemented a "Vilnius Old Town Revitalisation Strategy", which turned the historical centre into the most expensive part of the city, with consequences for the local community in terms of increased cost of living and gentrification (Kulikauskas, 2006). Despite of this and the increasing numbers of visitors, a review of recent academic and media material has not revealed major overtourism issues, protests by the local community, tourists' systematic complaints, or critical impacts associated with overcrowding tourism in Vilnius Old Town. On the contrary, from the visitor perspective, Vilnius (and its most visited part, the Old Town) is often reported as an alternative to overcrowded cities (AFP, 2018). On the residents' side, a recent survey shows Vilnius in the European top 5 for the residents' satisfaction with their urban environment (Travel on Spot, 2016), while recent initiatives in the Old Town saw the local community being quite supportive towards tourism (Municipality of Vilnius, 2018).

Measures taken

Although evident forms of overtourism (impacts) are not visible in Vilnius Old Town, the Municipality is completely aware of the potential issue and it has been active in preventing problems. A few examples of concrete actions:

- After a specific training, every summer (high season) a team of more than 250 volunteers is deployed around the most visited attractions in the Old Town, equipped with maps and multi-language info-packs, supporting visitors, providing recommendations, and informing on how to use the public transport and the cycling system (Municipality of Vilnius, 2018).
- Creation of a Vilnius Mobile Tourism App for supporting tourists with information about the places that can be visited in and surrounding the Old Town (Beliatskaya, 2013).
- A network of small tourism information centres spread around the city (Go Vilnius, 2017).
- Promotion of creativity and the emersion of new ideas, through continuous consultations with stakeholders (Go Vilnius, 2017).

- A one-euro tourist tax per night was introduced since the beginning of 2018, with an estimated tax revenue of €2.28 million in 2019. It will be used to increase the visibility of the city, improve its international accessibility, promote conference and business tourism, and increase the number of tourist attractions in Vilnius (Go Vilnius, 2017).

Therefore, Vilnius' tourism strategy appears focused on the attraction of more tourists and, meanwhile, ensure a proper management to avoid congestion and overcrowding tourism, also in the Old Town. Considering the above-mentioned absence of major overtourism issues, at the moment the results appear to be satisfactory.

The future of overtourism

There is no evidence that tourist flows will decrease in the near future, also in consequence of a tourism development strategy aimed at increasing the visibility of the city and develop new markets and products. Therefore, local authorities need to continue their activities aimed to prevent overtourism issues and manage increasing tourism flows. Nevertheless, the satisfactory results shown so far lead to a positive outlook in terms of future tourism development and ability to manage increasing tourist arrivals.

Sources and links

AFP. (2018). Lonely Planet's list of best European destinations 2018 tackles overtourism. Retrieved July 28, 2018, from http://lifestyle.inquirer.net/295117/p2fb-lonely-planets-list-best-european-destinations-2018-tackles-overtourism/

Beliatskaya, I. (2013). The evaluation of Vilnius tourismmobile application. *Papers de Turisme*, *54*, 109–121.

Go Vilnius. (2017). *Veiklos ataskaita už 2016 metus*. Retrieved from http://www.govilnius.lt/wp-content/uploads/2017/04/GoV-veiklos-ataskaita_2016-m.pdf

Kulikauskas, P. (2006). The story of revitalization of the Vilnius old town: 1995-2005. *City & Time*, *2*(2), 3. Retrieved from http://www.ceci-br.org/novo/revista/docs2006/CT-2006-65.pdf

Mintel Academic. (2015). Travel and Tourism - Lithuania - February 2015: Attractions. Retrieved July 27, 2018, from http://academic.mintel.com.proxy1.dom1.nhtv.nl/display/731423/?highlight#hit1

Municipality of Vilnius. (2018). Tourists met in Vilnius by hundreds of volunteers. Retrieved July 28, 2018, from https://vilnius.lt/en/2018/07/05/tourists-met-in-vilnius-by-hundreds-of-volunteers/

Statistic Lithuania. (2012). *Total Area and Population in Neighbourhoods of Vilnius Municipality*. Retrieved from https://web.archive.org/web/20120325132905/http://www.stat.gov.lt/vilniussampling/vsavsensk/surasy mas seniunijomis.pdf

Travel on Spot. (2016). Vilnius ranks among the top 5 cities whose inhabitants are most satisfied with their urban environment. Retrieved July 28, 2018, from https://www.travelonspot.com/en_LV/article/travel-journal/through-the-baltic/vilnius-ranks-among-the-top-5-cities-whose-inhabitants-are-most-satisfied-with-their-urban-environment

True Lithuania. (2018). Vilnius Old Town travel guide. Retrieved July 27, 2018, from http://www.truelithuania.com/old-town-of-vilnius-183

UNESCO-WHC. (2018). Vilnius Historic Centre. Retrieved July 27, 2018, from https://whc.unesco.org/en/list/541

Vilnius Tourist Information Centre. (2018). City Tourism Statistics. Retrieved July 27, 2018, from http://www.vilnius-tourism.lt/en/media/tourism-statistics/city-tourism-statistics/

IV.40   Warsaw Historic Centre, Poland

Type of destination: Heritage & Attractions

Region: EU

Reported by: Simone Moretti

After being heavily bombed and destroyed during the World War II, a meticulous restoration and reconstruction of Warsaw's old town led to the inclusion of Warsaw's historical centre in the World Heritage Sites as "an outstanding example of a near-total reconstruction of a span of history covering the 13th to the 20th century" (UNESCO World Heritage Centre, 2018). This historical atmosphere, with its traditional architecture, monuments, churches and the charming narrow streets with colourful townhouses, represent the main tourist offer and the most frequent reason for visiting (Warsaw Tourist Office, 2017). In the last decades, Warsaw attracted an increasing number of tourists, also due to a wallet-friendly price level (Coffey, 2017). Unlike other eastern EU destinations, Warsaw's domestic tourism outweigh the international visitors.

Statistics

- In 2016 Warsaw registered 9.6 million tourism arrivals: 2.73 million internationals (3.1% increase vs 2015) and 6.9 million domestics (73% increase vs 2015). Therefore, domestic arrivals counted for 71% of the total (Warsaw Tourist Office, 2017). Moreover, around 11 million one-day visitors arrived in 2016, leading to more than 20 million estimated annual visitors. Of these, 93% of the foreign visitors and 77% of the domestics visitors, visited the old town (Warsaw Tourist Office, 2017).
- McKinsey & Company, & World Travel & Tourism Council (2017), classified Warsaw at high risk of tourism overcrowding for the indicators of "density of tourism", "tourism intensity", "arrivals seasonality" and "threats to culture and heritage".
- Foreign visitors reached the destination mainly by plane (69%) or train (13%), while domestic visitors chose train (37%), car (31%) and bus (26%).
- According to City of Warsaw (2017), the tourist industry's contribution to the GDP of Warsaw in 2016 amounted to PLN 15.4 billion (around €3.5 billion). The average spending per visit amounted to PLN 739 (about €170), with a significant difference between the average of domestic visitors (PLN 402) and foreigners (PLN 1,482).
- Based on a size of 517 km^2 and 1,735,000 inhabitants, and assuming that each tourist spends 2.3 days in the city, the TPR of Warsaw is 5.2 tourists per 100 inhabitants per day and the TDR is 175.3 tourists per km^2 per day.

Main impacts

- Spread of visitors into residential neighbourhoods
- High number of tourists per residents
- Exodus of local residents
- Environmental issues (waste, water, air pollution, energy, CO_2 emissions, land use, landscape, ecosystems)
- Uncivilised behaviour
- Gentrification

Overtourism phenomena in Warsaw are mainly concentrated in the April-October period and limited to the Historical Centre, the main tourism precinct of the city. Despite the important residential function of the Old Town, it has become a great cluster of tourism-related services, where more than 80% of the service facilities are tourism-related (Derek, 2018). There is no hotel accommodation in the city historical centre, but more than 100 private apartments are available for tourism rental. These relatively high rentals increase accommodation prices for local residents living in the area. This pressure caused negative feelings of the residents towards tourism (Derek, 2018). These negative feelings are further enforced by the progressive displacements of local-oriented shops and facilities (Pawlikowska-Piechotka & Ostrowska-Tryzno, 2015). Overtourism manifests itself also through "visible signs of the physical damage at historic properties: wear and tear, litter and pollution, vandalism" and "throngs of people filling the narrow streets and their sometimes antisocial behaviour, or noise they make until the early hours" (Pawlikowska-Piechotka & Ostrowska-Tryzno, 2015).

Measures taken

Past initiatives from the local government led to the creation of documents aimed at defining a management strategy for the Historical Centre, such as the "Warsaw Strategy of Spatial Development" (2007) and the "Management of the Old Town Strategy" (2012), but they both relied on general ideas rather than on a concrete action plan, so they were far from being effective (Pawlikowska-Piechotka & Ostrowska-Tryzno, 2015). In 2010, The Warsaw City Council Office's (WCCO) held a series of consulting meetings with the local community, regarding the special management of the Old Town. The project, called "Old Town New Image" aimed at involving people in the decision-making process, but obtained a scarce participation (Pawlikowska-Piechotka & Ostrowska-Tryzno, 2015). Although there is no proper anti-growth movement in Warsaw, the local community is aware of overtourism concerns and would like to see tourism development managed within certain limits. Nevertheless, there is a low level of confidence of the residents in the real intention of the local government in involving residents as a respected partner in the policy making process (Pawlikowska-Piechotka & Ostrowska-Tryzno, 2015). This mistrust might be related to an ineffective tourism management system of the local authorities, with overlap of competences among different units and insufficient coordination (Best Place Institute, 2017).

The future of overtourism

Although overtourism concerns in Warsaw still did not result in street protests and strong hostile sentiments against tourism, if effective actions will not be taken, the anti-tourism feeling might become more visible in the historic centre of Warsaw. On the other side, recent new investments in leisure infrastructures might lead to the emergence of new trendy areas, contributing to spread of tourism flows onto other areas of the city (Derek, 2018).

Sources and links

Best Place Institute. (2017). *Diagnosis of the tourism status in the City of Warsaw in 2017*. Retrieved from http://warsawtour.pl/wp-content/uploads/2018/04/Diagnosis-of-the-tourism-status-in-the-City-of-Warsaw.-Summary.pdf

City of Warsaw. (2017). Warsaw earns billions on tourism. Retrieved July 23, 2018, from http://www.um.warszawa.pl/en/Highlights/warsaw-earns-billions-tourism

Coffey, H. (2017). The most overcrowded tourist destinations. Retrieved July 23, 2018, from https://www.independent.co.uk/travel/news-and-advice/most-overcrowded-tourist-destinations-amsterdam-rome-venice-warsaw-dubrovnik-a8108096.html

Derek, M. (2018). Spatial structure of tourism in a city after transition: The case of Warsaw, Poland. In *Tourism in Transition* (pp. 157–171). Springer, Cham. https://doi.org/10.1007/978-3-319-64325-0_9

Pawlikowska-Piechotka, A., & Ostrowska-Tryzno, A. (2015). Innovative Local Community Partnership and Sustainable Urban Development - The Old Town in Warsaw. *Economic Problems of Tourism*, *3*(31), 139–158. https://doi.org/10.18276/ept.2015.3.31-08

UNESCO World Heritage Centre. (2018). Historic Centre of Warsaw - UNESCO World Heritage Centre. Retrieved July 23, 2018, from http://whc.unesco.org/en/list/30/

Warsaw Tourist Office. (2017). *Tourism in Warsaw - Report 2016*. Retrieved from http://warsawtour.pl/wp-content/uploads/2018/03/Tourism_in_Warsaw_Report_2016.pdf

McKinsey & Company, & World Travel & Tourism Council. (2017). *Coping with success: Managing overcrowding in tourism destination*. Retrieved from https://www.wttc.org/-/media/files/reports/policy-research/coping-with-success---managing-overcrowding-in-tourism-destinations-2017.pdf

IV.41 Yellowstone, United States

Type of destination: Rural

Region: Rest of the world – North America

Reported by: Rami K. Isaac

Yellowstone National Park is located on the border between Idaho, Montana, and Wyoming. The natural landscape of the park includes limestone steps, waterfalls, and hot springs. There are more than 60 kinds of mammals living in Yellowstone National Park, and many of them are rare animals in the world (Zhao, 2017).

Statistics

- Statistics show a record 4.25 million Yellowstone visitors in 2007 (Explore big Sky, 2018).
- In 2007, visitors spent $524 million in communities near the park, supporting 8,156 jobs and resulting in a total economic impact of $680.4 million (Explore big Sky, 2018).
- According to a National Park Service report (Explore big Sky, 2018; Warthin, 2017), visitors to national parks across the country were responsible for $18.4 billion of direct spending in communities within 60 miles of a national park. Total park visitation topped 330 million this year, and the cumulative benefit to the U.S. economy is estimated at nearly $35 billion dollars.
- The largest portion of Yellowstone's visitor spending, 33%, went toward hotels. Restaurants were second with $85.6 million and recreation industries were third with $59.8 million (Explore big Sky, 2018)
- Yellowstone's economic impact has been rising significantly the past three years—the 2016 figure is 34% higher than 2013 (Explore big Sky, 2018).
- Based on a size of 8,991 km^2, the TDR of Yellowstone is 1.3 visitors per km^2 per day.

Main impacts

Yellowstone National Park social scientist, Nickerson (2017, p.1) states "Yellowstone National Park has been experiencing steady growth in visitation over the past decade, topped off with a dramatic increase of 17% from 2014 to 2015 and even higher levels of visitation in 2016, the centennial year of the National Park Service". In Yellowstone, four separate days showed that 226 visitors were seen off the boardwalk/trail system in Norris Geyser Basin between 9:30 a.m. and 3 p.m., equating to an average of one person every six minutes ignoring the regulations. This compares to 128 violations at Old Faithful and six violations at Midway Geyser Basin in four days (FitzGerald, 2016). Curiosity, vandalism, and overuse have damaged some features beyond repair (Jernigan, 2018). Moreover, with increasing numbers of visitors also the number of accidents with animals increased. Furthermore, direct damage to the park's flora and fauna increased as well. Park rangers issued more than 52,000 resource violations in 2015. Some incidents have made headline news – a man who strayed 225 yards off a designated path and fell to his death in Yellowstone's Norris geyser basin and five people were gored by bison (FitzGerald, 2016). The park also noted the damage done to the park's thermal features by tourists. Visitors carved their names in rock and knocked down natural stone walls. People threw rocks, trees and trash into the vent holes just to see them shoot into the sky when the geyser erupted. These practices caused irreparable harm to many of the park's thermal areas (Jernigan, 2018).

Measures taken

For the protection of animals, Yellowstone National Park does not allow the visitors to drive through animal habitats. Additionally, animal-channels that allow animals to go through freely were built to ensure the integrity and health of animal habitats. Because of the environmental protection concept of the Park, the management team has designed a series of environmental protection actions aimed at young people and tourists. Visitors have been taught the importance of the integrity of ecosystems. Because the size, visibility, and influence of Yellowstone National Park are huge, their educational activities can have a big impacts – and bring appreciated benefits to society (Zhao, 2017). The increase of international visitors, use of social media, and varied cultural expectations among visitors have all caused problems. To deal with this the park has e.g. hired Mandarin-speaking park rangers to communicate with the increasing number of Chinese visitors. Animal warnings have been translated into 10 languages (FitzGerald, 2016).

A suggestion was made that management of crowding should focus on "limiting rude, depreciative, and dangerous behaviour" (Nickerson, 2017). It appears that people who act in disorderly ways (e.g. littering, getting too close to wildlife, loud voices, or other detrimental environmental impacts) disturb other visitors more than the high numbers of ordinary visitors. This suggests some solutions: 1) More rangers for educational and control purposes; 2) a new way of educating visitors before entering the area, or 3) additional fines to visitors. Since

crowding is site- and visitor-specific, it seems logical that managers of parks and outdoor recreation areas should be allowed to endorse management techniques, most notably the creation of limits, as they experience visitor behaviour becoming intolerable and environmental conditions deteriorating. Surveying visitors about trade-offs is one method to get the discussion about limits started. Another way is to assess the capacity of the current infrastructure. Moreover, safety measures due to emergency situations could provide a limiting number. For example, how quickly a park can evacuate all visitors in Yellowstone when a wildfire explodes is influenced by the number of vehicles in the park. Knowing the acceptable evacuation time can help managers determine the maximum number of vehicles allowed for safety measures (Nickerson, 2017). Last year the park service said it's considering realizing a reservation system to control when, where, and how many people can enter on a daily basis (Peltier, 2018). The park service anticipates that a reservation system would help visitors consider visiting during off-peak times of the year when parks aren't as busy. But work and school schedules often dictate when people choose to visit.

Public/private partnerships are the next wave of the organization said the Yellowstone Park Service (Peltier, 2017). The partnership leadership is reaching out to the DMOs to ask them to help figure out how to deal with overtourism. Launched earlier this year, the "Parks 101" campaign is about showing visitors parks and places that they might not be as familiar with (Peltier, 2017). Another successful case is the 'Yellowstone Pledge'. To protect the park from the uncontrolled access to the masses, the Yellowstone Park created a pledge that invites visitors to behave in a certain way (Soydanbay, 2017).

The future of overtourism

National Parks in the US are not sure how to deal with crowding. Nowadays, overtourism is not clearly evident at Yellowstone national park, but the steady growth in the number of tourists will result in overtourism. The park service has dramatically changed its tune during the past year and acknowledged that over tourism is something it must address in the future (Peltire, 2018). Currently, the number of tourists is on the rise for visiting national parks and it seems that the management is unable and has no idea on how to deal with over tourism. New transportations systems and infrastructure can indeed, facilitate the increasing number of visitors and accommodate more tourists, however, these are temporary solutions.

Sources and links

Explore Big Sky (2018) Economic impact of Yellowstone national park: tourism tops $680 million. Available at http://www.explorebigsky.com/economic-impact-of-yellowstone-national-park-tourism-tops-680-million (Accessed 28 July, 2018).

Finnessey, L. (2002). The Negative Effects of Tourism on National Parks in the United States. Bsc Thesis. Johnson and Wales University: Providence.

FitzGerald, F. (2016) Increase in Yellowstone visitors raises park's concern over wildlife and safety. Available at https://www.theguardian.com/environment/2016/aug/24/yellowstone-national-park-visitors-wildlife-safety (Accessed 28 July, 2018).

Jernigan, M. (2018) How do people affect Yellowstone national park? Available at https://getawaytips.azcentral.com/people-affect-yellowstone-national-park-4061.html (Accessed 26 July, 2018)

Nickerson, N. (2017) Montan's crowded parks. Available on http://www.montanabusinessquarterly.com/montanas-crowded-parks/ (Accessed 2 Augustus, 2018).

Peltier, D. (2018). The US national parks aren't sure how to deal with overtourism. Available at https://skift.com/2018/03/02/u-s-national-parks-arent-sure-how-to-deal-with-overtourism/ (Accessed 2 August, 2018).

Peltier, D. (2017) U.S. National Park Service Still Figuring Out the Travel Industry and Overtourism. Available at https://skift.com/2017/09/12/u-s-national-park-service-is-still-figuring-out-the-travel-industry-as-overtourism-plagues-some-parks/ (Accessed 1 August, 2018).

Soydanbay, G. (2017). A systematic analysis of overtourism and tourismophopia: and what destinations can do about it. Available at https://placebrandobserver.com/overtourism-tourismophobia-causes-solutions/ (Accessed 1 August, 2018).

Wathrin, M. (2017). Tourism to Yellowstone National Park Creates $680.3 Million in Economic Benefits. Available at https://www.nps.gov/yell/learn/news/17020.htm (Accessed 28 July, 2018).

Wright, J. (2018). Stud yon visitations to aid management of Yellowstone's future. Available at http://www.explorebigsky.com/studies-on-visitation-to-aid-management-of-yellowstones-future (Accessed 1 August, 2018).

Visit Yellowstone National Park (2018) The Role of Humans in Yellowstone. Available at https://visityellowstonenationalparkyall.weebly.com/human-impact-and-the-future.html (Accessed 28 July, 2018).

Zhao, D. (2017) Best Practices in Ecotourism: Yellowstone National Park. Available at http://www.bluecommunity.info/view/article/59d445fe0cf21390392780fd/ (Accessed 25 July, 2018).

V   POLICY MEASURES OVERVIEW

This Annex provides a pragmatic overview of all 121 policy measures, distributed over 17 potential EU policy response categories that can be taken into consideration by destinations to prevent or address overtourism. The individual measures are written as much as possible in the original wording. Table 20 below shows which of the policies are taken from what sources. This is of interest because the first two columns (A and B) give existing policies in the EU, the columns C through H recently published policies, column I the results from the case studies and column J additional measures emerging from the foresight study (please see section 5.2 for a description of this part of the study). Many measures are proposed by more than one source.

Table 21:   Overview of policy responses (Roman-numbered categories) and policy measures (Latin-numbered items)[32].

Category	Current EU policies		Literature						Case studies	Foresight study
Source	(European Commission, 2010)	(European Commission, 2014)	(Koens & Postma, 2017)	McKinsey 2017 report[33]	(Weber et al., 2017)	(Postma et al., 2018)	(UNWTO, 2018b)	(Jordan et al., 2018)	41 cases (case number Chapter 4)	Foresight study
Policy response/measure	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
I. Stimulate and assist NTOs/DMOs in the spreading of visitors around the destination and beyond										
1. Move events to less visited parts of the destination and neighbouring areas			X		X	X	X			

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[32]   The numbers in the first column refer to the categories of destination policy measures found in 41 case studies (please see Chapter 4, Table 15).
[33]   McKinsey & Company and World Travel & Tourism Council (2017).

Policy response/measure	A	B	C	D	E	F	G	H	I	J
2. Develop and promote visitor attractions/facilities in less visited parts of the destination and neighbouring areas			X	X	X	X	X	X	2	
3. Improve capacity and time spent at visitor attractions			X		X	X	X			
4. Create joint identity of destination and neighbouring areas			X			X	X			
5. Implement travel card for unlimited local travel			X			X	X		2	
6. Market entire destination to stimulate visitation of less visited parts			X	X	X	X	X		2	
7. Limit access or close off certain parts of the destination for a period of time					X	X	X	X	1, 12	
II. Facilitate and assist NTOs/DMOs in the implementation of time-based rerouting within and across destinations										
8. Promote shoulder months and low season to visitors	X		X	X	X	X	X		5	
9. Dynamic price differentiation (such as variable or tiered pricing) and encourage pre-booking			X	X	X	X	X	X	4	
10. Stimulate events in the shoulder months and low season	X		X	X	X	X	X	X	5	
11. Use timeslots for popular visitor attractions and/or events, possibly aided by real-time monitoring			X			X	X	X	12	
12. Use apps to create dynamic time-based rerouting			X			X	X		9	
13. Deploy reservations and ticketing systems				X					9	

Policy response/measure	A	B	C	D	E	F	G	H	I	J
III. Stimulate and assist NTOs/DMOs in the development of dynamic visitor itineraries within and across destinations										
14. Provide multilingual information and itineraries by means of unmanned portals (digital – internet and apps - and analogue) at entrances of and within the destination, and use technology to nudge visitors in real time		X	X		X	X	X		9	
15. Provide tourist information centres (static and roaming)			X			X	X			
16. Offer combined discounts for specific low-impact itineraries			X			X	X			
17. Provide destination guides & books and (guided) tours highlighting hidden treasures			X	X		X	X	X	2	
18. Create dynamic experiences and thematic itineraries or routes for niche visitors		X	X	X		X	X			
19. Stimulate development of guided tours through less-visited parts of destination			X	X		X	X		2	
20. Use chat bots to provide advice on alternative attractions and use virtual reality and augmented reality for visits to famous sights			X		X	X	X	X		
IV. Facilitate NTOs/DMOs/national governments in developing financial regulations to manage, control and prevent overtourism at destination level										
21. Tax accommodation in sharing economy such as Airbnb			X	X		X	X	X	4	
22. Tax service providers that bring a large number of visitors to the area (cruises, coaches)			X	X		X	X	X	4	
23. Introduce eco taxes, such as CO_2 emission tax	X			X	X			X	6	X

Policy response/measure	A	B	C	D	E	F	G	H	I	J
24. Use tourism revenues to create a fund to compensate for environmental degradation, pollution, heritage maintenance etc.				X		X				X
V. Facilitate NTOs/DMOs/national governments in developing (uniform) operational regulations at destination level										
25. Adjust the opening times of visitor attractions			X	X	X	X	X	X	1	
26. Regulate visitor products and services that cause disturbance such as specific modes of transport or activities; increase fines and surveillance for non-compliance			X	X		X	X	X	7	
27. Limit accommodation in sharing economy through regulation			X	X	X	X	X	X	3	
28. Secure time for the rehabilitation of the destination e.g. restrict access for a short period of time									7, 12	X
29. Create scarcity by capping capacity, such as the number of visitors, cruise ships, flights per day/week/month etc.				X	X				7, 12	X
30. Apply regulations such as a moratorium on hotel construction to manage the growth of the accommodation sector				X	X	X			7	
31. Regulate the operations of accommodation providers, e.g. with regard to carrying capacity, operational standards, working conditions, permits, etc.				X	X	X		X	3, 6, 11	
32. Promote/oblige the use of sustainable resources (e.g. sun panels, no plastic policy, water usage, waste management etc.)		X			X	X			3, 6	

Policy response/measure	A	B	C	D	E	F	G	H	I	J
33. Establish certification measures for sustainable businesses practices					X				6	
34. Increase the number of on the ground staff, such as supervisors for crowd management, public advisors,								X		
VI. Facilitate NTOs/DMOs/national governments in developing (uniform) traffic regulations at destination level										
35. Regulate/limit access for large groups			X	X		X	X	X	12	
36. Regulate/limit traffic in busy parts of the destination			X	X		X	X	X	12	
37. Ensure car visitors use parking facilities at the edge of the destination			X			X	X		3	
38. Determine/communicate the physical carrying capacity of critical areas					X		X	X	X	3	
39. Create specific drop-off zones for coaches in suitable places			X			X	X		12	
40. Create pedestrian-only zones			X			X	X	X	3	
VII. Facilitate NTOs/DMOs/national governments in the stimulation of the business environment, specifically in the case of alternative businesses and businesses actively tackling the issue of overtourism within and across destinations										
41. Create creative incubators/labs for innovative businesses										X
42. Create an attractive business environment for innovative start-ups, such as funding and financial assistance programmes		x			X					X
43. Provide support and incentives for innovations in the business environment, such as funding, financial assistance programmes, ICT	X	X			X					X

Policy response/measure	A	B	C	D	E	F	G	H	I	J
development, crowd funding, matching grants, PPPs										
44. Provide support and incentives for domestic businesses					X					X
45. Provide an online guide with an overview of main funding opportunities available for the sector		X								
46. Provide incentives for domestically owned hotel developments						X	X		8	
VIII. Stimulate NTOs/DMOs/national governments to develop a diversified economy that is not too dependent on tourism										
47. Ensure that the economy is based on multiple pillars										X
48. Focus on resource-based development		X								X
49. Develop/promote the circular economy locally										X
IX. Stimulate NTOs/DMOs/national governments to make use of the "ladder of sustainable development" for the spatial planning of tourism development at destination level										
50. Focus on adaptive-reuse e.g. assign new functions to public spaces and un-used buildings/areas, removing street furniture that hamper the movement of crowd		X						X		X
51. Prioritize brown-field developments										X
X. Stimulate NTOs/DMOs to apply visitor segmentation and target marketing that emphasise local sustainable values at destination level and across Destination Europe										
52. Target visitors with limited impact for the specific destination context	X	X	X		X	X	X		10	
53. Diversify the tourism product with an emphasis on e.g. sustainable, alternative or ecotourism	X	X			X				10	X

Policy response/measure	A	B	C	D	E	F	G	H	I	J
products matching the DNA of the destination, and target visitors accordingly										
54. Target repeat-visitors			X			X	X			
55. Target local residents and the local business community								X		
56. Discourage visitation of the destination of certain groups of visitors			X			X	X		13	
57. Align with neighbouring destinations to each target a specific market			X			X	X			
58. Develop joint marketing projects with surrounding destinations/areas	X					X				
59. Actively monitor, manage and evaluate the content of social media platforms		X				X			15	
60. Launch online campaigns to enhance online presence		X				X				
61. Run targeted campaigns to provide fresh perspectives on the destination						X				
62. Adjust branding and marketing strategies to differentiate the destination	X					X			10	
63. De-market the destination for hot spots and high season					X				4, 13	X
64. Raise awareness of local culture by means of dedicated marketing techniques					X				14	
65. Employ sufficient security measures									3	

Policy response/measure	A	B	C	D	E	F	G	H	I	J
66. Favour responsible businesses in marketing					X					
XI. Stimulate NTOs/DMOs/national governments for cross-border cooperation and facilitate alliances between destinations within and outside Europe										
67. Conduct webinars, seminars, and workshops for knowledge sharing and co-creation between destinations (cities, regions, countries), for example to exchange best practices	X	X		X		X		X		
68. Develop trans-national and interregional (cross border) partnerships and develop joint promotion, incentives, discounts		X		X		X				
69. Participate in voluntary online information exchange mechanism to improve the coordination of school holidays in the EU member states	X	X								
70. Participate in a virtual tourism observatory to support and coordinate research activities by national research institutes and provide socioeconomic data on tourism at European level	X								16	
XII. Stimulate NTOs/DMOs/national governments to make residents benefit from the visitor economy at destination level										
71. Increase the level of employment in the visitor economy and strive to create permanent jobs			X			X	X			
72. Make positive impacts of tourism visible, create awareness and knowledge amongst residents			X			X	X	X		
73. Involve local residents in new tourism products			X		X	X	X			
74. Conduct an analysis of supply-demand potential of the local community			X			X	X		16	
75. Improve quality and frequency of public transport due to effective marketing to visitors			X			X	X			

Policy response/measure	A	B	C	D	E	F	G	H	I	J
76. Give residents free entry, reduced tariffs, special permits or access passes for example attractions, public transport or other facilities			X		X	X	X	X		X
77. Stimulate development of impoverished neighbourhoods through visitor economy facilities			X			X	X			
XIII. Facilitate NTOs/DMOs in the creation of destination experiences that benefit both visitors and local residents at destination level										
78. Develop the destination in line with the residents' needs and desires (e.g. housing, shops, leisure facilities) and treat tourists as temporary residents (once needs and desires are similar tourists disappear into the local)			X			X	X		11	
79. Give residents the opportunity to become tourists in their own destination, e.g. by creating space for residents at events, markets and/or visitor attractions and integrate locally oriented products into tourist markets			X			X	X			
80. Integrate visitor facilities within local festivities and activities			X			X	X		11	
81. Involve local volunteers, for example as destination ambassadors for the enjoyment of residents			X		X	X	X		8	
82. Make use of temporary 'guerrilla art' to provide fresh perspectives on the destination			X			X	X			
83. Prolong opening times of visitor attractions and cafes			X			X	X			
XIV. Facilitate NTOs/DMOs/national governments in the coordination and development of a consistent destination infrastructure and facilities within and across destinations										

Policy response/measure	A	B	C	D	E	F	G	H	I	J
84. Create a destination-wide plan for a well-balanced, sustainable/green infrastructure and traffic management			X			X	X		3	
85. Improve and expand infrastructure facilities to ensure that major routes are suitable for extensive tourism activity and that secondary routes are available at peak times					X	X	X		3	
86. Improve the destination's cultural and museum infrastructure						X	X			
87. Improve directional signage, interpretation materials and notices e.g. to a wide variety of attractions			X		X	X	X			
88. Make public transport better suited for visitors (e.g. better and faster connections)			X			X	X		2	X
89. Set up specific transport facilities for visitors during busy periods			X			X	X		2	
90. Foster the use of sustainable transportation for tourism purposes (e.g. tourist buses, sightseeing buses etc.)										X
91. Provide adequate infrastructure for alternative vehicles such as hybrids, all-electric vehicles etc.					X					X
92. Provide adequate public facilities, such as public toilets, Wi-Fi						X	X		3	
93. Create safe cycling routes and stimulate bicycle rent			X			X	X			
94. Set up specific safe and attractive walking routes			X			X	X			

Policy response/measure	A	B	C	D	E	F	G	H	I	J
95. Ensure that routes are suitable for the physically impaired or elderly visitors to avoid adverse impacts						X	X			
96. Guard the quality of cultural heritage and attractions			X			X	X		15	
97. Ensure cleaning services and regimes fit with visitor disturbance in public space and visitor facilities		X	X			X	X	X	3	
XV. Stimulate NTOs/DMOs and tourism businesses to communicate with and involve visitors at destination level										
98. Create awareness of issues of visitor pressure / overtourism amongst visitors, such as encouraging visitors to walk or to make use of public transport	X		X		X	X	X	X	9, 14	
99. Educate visitors on local etiquette and code of conduct, such as in public facilities, public transport	X		X		X	X	X	X	14	
100. Provide adequate information about traffic restrictions, parking facilities, fees, shuttle bus services								X	9	
101. Unite disjointed communities (e.g. by setting up a local DMO)			X			X	X		8	
102. Create participation and co-creation opportunities for loyal guests					X			X	8	
XVI. Stimulate NTOs/DMOs and tourism businesses to communicate with and involve local stakeholders at destination level										
103. Ensure that a tourism management group (that includes all stakeholders, including residents) is regularly convened	X	X		X		X	X	X	8	

Policy response/measure	A	B	C	D	E	F	G	H	I	J
104. Ensure that the DMO takes the role of a consultant for decisions needing political support						X				
105. Enhance local organizational structure: organize professional development programmes for private-public partnerships, networking events, ICT development, etc.	X	X		X	X	X	X	X		X
106. Organise local discussion platforms for residents			X	X	X	X	X	X	8	
107. Conduct research among residents and other local stakeholders, for example to investigate what they see as interesting attractions in potential new destinations or what they perceive as impacts of overtourism			X			X	X		16	
108. Encourage locals to share interesting content about their destination on social media		X				X	X			
109. Communicate with residents about their own behaviour			X		X	X	X			
XVII. Facilitate NTOs/DMOs in the coordination and development of responsive measures in organization and planning at destination level										
110. Provide an (adaptive) long-term future vision and tourism master plan, and make use of forecasting and alternative collaborative methods such as strategic foresight and scenario planning to prevent fragmentation of the sector and to be better prepared for the future		X		X	X			X		X
111. Apply zoning to create dedicated development areas					X	X			7	
112. Establish an early warning system and appropriate KPIs	X			X				X	15	

Policy response/measure	A	B	C	D	E	F	G	H	I	J
113. Monitor seasonal fluctuations in arrival numbers and produce relevant data					X	X		X	15	
114. Consider the use of big data to monitor and track visitor flows, to identify crowded areas, to evaluate industry performance and its volatility, and to refine tourism strategies or to create smart specialisation strategies		X		X	X	X		X	15	
115. Apply methods such as ''visitor journey mapping'' to fully understand the characteristics and behaviour of visitors								X	15	X
116. Integrate policy domains and make a shift from tourism as ''goal'' to tourism as ''means'', provide guidelines		X			X					X
117. Create contingency plans for peak periods						X	X			
118. Consider monitoring all operators (tour operators, guides, etc.) and focus on, for example, operational standards, permits, qualification requirements, awareness raising) in conjunction with an operator's licence system		X			X	X	X		15	
119. Prepare a comprehensive operational management plan (including operational practices) to coordinate awareness, conservation, management and tourism activities		X			X	X	X			
120. Coordinate the tour schedule of operators/excursion organizers who regularly bring groups to the destination						X	X			
121. Ensure that event management plans are in place to manage large crowds						X	X			

VI   VIEWS FROM THE WORLD TRAVEL AND TOURISM COUNCIL

The World Travel & Tourism Council (WTTC) is concerned that tourism is increasingly associated with negative headlines arising out of the 'overtourism' phenomena, despite the sector providing employment opportunities on a global scale, and is often of central economic relevance for destinations. Positive views of tourism thus need to be maintained by addressing the sector's value and contribution.

The WTTC acknowledges that overcrowding is a real and emerging problem in many established tourist destinations, which includes alienated residents as much as infrastructure used to capacity. Issues related to 'overtourism' are evident at all levels of a destination, from individual sites and attractions to beaches, cities and entire countries. Drivers include visitor pressure as a result of seasonality, or specific events attracting high tourist or day visitor numbers. Views on challenges vary between stakeholders, such as local residents, tourists, day visitors, destination marketing organisations, local businesses, or multinational corporations.

The WTTC underlines that tourism needs to be managed, and that tourism growth must be sustainable. This includes the realization that continued volume growth in some places may not be an option. Many of tourism's challenges are immediate; and they will become more urgent over time if they remain unaddressed. Tourism development must thus strive to ensure a balance between business, residents, and tourists. Overcrowding is a complex problem, with significant differences between destinations. WTTC distinguishes effects related to local residents, tourist experiences, overloaded infrastructure, damage to nature, and threats to culture and heritage. It recommends that destinations identify the most pressing problems, based on indicators such as tourist arrivals, social media reviews, seasonality or air pollution levels, to be better prepared to take action in the right manner, and with the right priorities being tackled first.

The implication is that destinations thus far defining success as arrival number growth need to rethink their position. Focus will in the future have to be on value and benefit, not just volume. Central to this is for destinations to begin gathering data on their tourism systems to develop analytical tools, which can inspire tourism strategies not necessarily built on volume growth. WTTC also recommends planning for and encouraging sustainable growth, based on longer-term strategies. For this purpose, it is important to involve stakeholders in development processes, including in particular communities where problems have accumulated.

Together with McKinsey & Company, WTTC (McKinsey & Company & World Travel & Tourism Council, 2017) published five principle strategies which can help address overcrowding:

1. *Smooth visitors over time*. Many destinations suffer from imbalances of visitors during certain seasons, days of the week, and times of day, as well as during headline events. Destinations must develop tactics to "smooth" these imbalances so communities and businesses can continue to reap the benefits of tourism.
2. *Spread visitors across sites*. Spreading visitors geographically can help distribute tourists more evenly across residential and under-visited areas and prevent bottlenecks in overcrowded locations.
3. *Adjust pricing to balance supply and demand*. Pricing can be an effective way to better align demand with supply. But while increasing the costs of visiting a destination or site is likely to limit the number of visitors, it also raises considerations of elitism and the ability of domestic tourists to access their own heritage and should therefore be carefully assessed before implementation.

4. *Regulate accommodation supply.* Some destinations place direct controls on the supply of tourism accommodation—including beds in both hotels and short- term rentals as a way to manage growth.
5. *Limit access and activities.* When overcrowding reaches a critical stage, the tactics above may not be enough to mitigate or recover from it. As such, some destinations are limiting or even banning certain tourist activities.

"There is a concern that in certain parts of the world tourism risks being seen as a risk and harm to local cultures and as a sector that does damage. Perhaps we have allowed ourselves to think too much about growth and not enough about the people. We need to change this, we need to be seen, and act, as beneficial. And then we need to prove it. The element of responsibility needs to be brought into this through collaboration with all stakeholders with an interest in ensuring a sustainable future."

Gloria Guevara Manzo, President & CEO, World Tourism and Travel Council cited from McKinsey & Company and World Travel & Tourism Council (2017).

This study addresses the complex phenomenon of overtourism in the EU. By focusing on a set of case studies, the study reports on overtourism indicators, discusses management approaches implemented within different destinations and assesses policy responses. It concludes that a common set of indicators cannot be defined because of the complex causes and effects of overtourism. Avoiding overtourism requires custom-made policies in cooperation between destinations' stakeholders and policymakers.