# FERGIE OLIVEIRA NJEUMENI TCHONKOUANG

# EVALUATION OF THE IMPACT OF THE COVID-19 PANDEMIC ON TOURISM IN THE ALGARVE REGION –

# PORTUGAL



UNIVERSITY OF ALGARVE

FACULTY OF ECONOMICS

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Dissertation made under the supervision of:

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# UNIVERSITY OF ALGARVE FACULTY OF ECONOMICS

2021

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# **Work Authorship Declaration**

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are included in the listing of references.

**-** ·

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#### ABSTRACT

The tourism industry has often been subject to several crises of various dimensions, caused by wars, economic destabilization, drastic occurrences from climate change, natural disasters, epidemics, and pandemics. The Algarve region's economy is highly dependent on tourism and tourists, as it accounts for over 50% of its Gross Value Added (GVA) and 40% of employment. The Covid-19 pandemic hitting the world now can be considered an extraordinary issue for the global tourism industry, causing an abrupt and sudden drop in tourist flows and leading to a dramatic impact on the economy of the Algarve and Portugal. This dissertation aims to understand the impact the COVID-19 pandemic has had on the Algarve region's tourism sector and how it has been affected. The specific objectives are to compare and review tourism results of the first six months of the year 2019 to results of the same period in 2020 using key tourism performance indicators.

Using an exploratory descriptive method of secondary data collection and comparing the key tourism indicators numbers of the first half of 2020 to that of the previous year 2019, the results showed a strong negative impact on Algarve's tourism industry. Huge financial and job losses were registered in the tourism sector during this period because of the measures taken to mitigate the spread of the virus. The Algarve's economy suffered a lot, as the region highly depends on the foreign market, whose spending power is higher than the residents. The consequences of the crisis will be heavier than the return to normalcy of the region's economy, which will be slow and gradual. However, some positive points were identified from this crisis, for instance, the reduction in mass tourism that is harmful to the sustainability of the environment and climate change. Also, there was an emergence of innovation in the sector, with the digitalization of operations in the travel and tourism industry.

Keywords: Covid-19 pandemic, Tourism, Algarve, Socio-economic impact.

#### RESUMO

A indústria do turismo tem sido frequentemente sujeita a várias crises de várias dimensões, causadas por guerras, desestabilização económica, ocorrências drásticas de mudanças climáticas, desastres naturais, epidemias e pandemias.

O clima moderado e ameno e a bela e diversificada paisagem de Portugal fazem do turismo uma das suas maiores indústrias e um setor vital da economia portuguesa (Almeida & Correia, 2010). Tal pode reflectir-se no Produto Interno Bruto (PIB) do país, que em 2019 aumentou 2,2% em volume (+ 2,6% em 2018) e 3,9% em termos nominais (+ 4,3% em 2018), atingindo 212,3 mil milhões de euros (INE, 2020d). Os resultados divulgados pelo "Banco de Portugal" relativos à Balança de Pagamentos de 2019, indicam um aumento de 5,3% no saldo das Viagens e Turismo, menos expressivo do que o registado em anos anteriores (+ 8,4% em 2018, + 24,2% em 2017). As receitas / créditos continuaram a aumentar, totalizando 18,4 bilhões de euros. Este aumento foi, no entanto, inferior ao de 2018 (+ 8,1% após + 9,7% em 2018). Os gastos / dívidas com viagens e turismo atingiram 5,3 mil milhões de euros em 2019, com um aumento de 15,6% (+ 13,2% em 2018), refletindo uma aceleração em relação à evolução das receitas (INE, 2020d). No mesmo ano, o mercado interno cresceu 5,9%, totalizando 26,1 milhões de dormidas, correspondendo a 33,6% do total. As dormidas do mercado externo registaram um menor crescimento de 3,5% face ao ano anterior e atingiram 51,7 milhões de dormidas, representando 66,4% do total. Nos estabelecimentos de alojamento nacionais (hotéis, pensões, pousadas, bed & breakfast, etc.), as receitas totais ascenderam a 4,3 mil milhões de euros (+ 7,8%) (INE, 2020d). Todos estes números evidenciam o impacto do turismo no crescimento económico a nível nacional. Outro facto é que Portugal foi nomeado e ganhador do prémio "Europe's Leading Destination 2020" pelos WTA - World Travel Awards.

O Algarve é uma das regiões de Portugal com uma economia altamente dependente do turismo e turistas, sendo responsável por mais de 50% do seu Valor Acrescentado Bruto (VAB) e 40% do emprego. A economia do Algarve é dominada por três setores-chave, que são as atividades económicas centrais da região, levando em consideração o número de pessoas empregadas e o rendimento gerado. Incluem Turismo (restauração e alojamento), retalho e venda grossista e construção (Comissão Europeia, 2020a). O setor

de atividade mais importante é o setor terciário (comércio e serviços), sendo a sua principal atividade económica - o Turismo. Este subsetor assume tal importância no Algarve que representa, direta e indiretamente, cerca de 60% do emprego total e 66% do PIB regional. No entanto, a atividade económica da região também inclui os setores da agricultura e pesca, embora a sua importância relativa na economia da região esteja lentamente perder relevância (Comissão Europeia, 2020a). Por outro lado, atividades económicas como o setor imobiliário, agroalimentar e biotecnológico têm aumentado progressivamente a sua importância (Comissão Europeia, 2020a).

O impacto económico do turismo vai além do volume de negócios e da empregabilidade que representa: o turismo como atividade consome recursos acima do normal, pois implica investimentos em infra-estruturas, por exemplo, saneamento, limpeza, transportes, energia, etc.; o que significa que o turismo também tem impacto social, cultural e ambiental (Crouch & Ritchie, 1999).

O turismo no Algarve é uma atividade que contribui para o seu desenvolvimento económico e social. O seu peso económico segundo fontes como as estatísticas de Portugal, confere a este setor uma importância capital, em comparação com outros setores de atividade económica da região (Comissão Europeia, 2020c).

A pandemia Covid-19 que atinge o mundo agora pode ser considerada um grande problema para a indústria do turismo global, causando uma queda abrupta e repentina dos fluxos turísticos e, portanto, tendo um impacto dramático na económia do Algarve e de Portugal. Esta dissertação tem como principal objetivo compreender o impacto que a pandemia do Covid-19 tem tido no setor do turismo da região do Algarve e como este tem sido afetado. Os objetivos específicos deste trabalho são a comparação e analise dos resultados do turismo dos primeiros seis meses do ano de 2019 com os resultados do mesmo período em 2020, usando indicadores-chave de desempenho do turismo.

Utilizando um método exploratório descritivo de recolha de dados secundários e comparando os números dos indicadores chave do turismo do primeiro semestre de 2020 com os do ano anterior de 2019, os resultados demonstraram um impacto negativo muito significativo no setor do turismo do Algarve. Nesse período, foram registradas enormes perdas financeiras e de empregos no setor do turismo devido às medidas tomadas para mitigar a propagação do vírus. Os dados demonstram que o turismo algarvio esteve

praticamente sem atividade desde meados de março de 2020 e passou todo o primeiro semestre do ano de 2020 sem alcançar a continuação significativa do aumento das suas vendas, embora a economia tenha dado os primeiros sinais de abertura de negócios em Junho do mesmo ano. Os dados também indicam que o impacto no setor de turismo, restauração e hotelaria, em particular, é avassalador, incluindo o da aviação e companhias aéreas (com expectativa de recuperação mais rápida para o turismo doméstico e muito mais lenta para os mais distantes e / ou viagens internacionais). O crescimento económico do Algarve foi extremamente enfraquecido, prevalecendo o risco de uma desaceleração económica. A economia do Algarve sofreu muito, visto que a região depende fortemente do mercado externo, cujo poder de compra, em termos médios é superior ao dos residentes. A analise dos indicadores sugere que as consequências da crise serão mais pesadas do que o retorno à normalidade da economia da região, que será lento e gradual. No entanto, foram identificados alguns pontos positivos desta crise, por exemplo, a redução do turismo de massa que é prejudicial para a sustentabilidade do meio ambiente e as alterações climáticas. Além disso, houve um surgimento de inovação no setor, nomeadamente com a maior setor com a digitalização das operações no setor das viagens e turismo.

Abaixo estão algumas linhas de pensamento de importância variada que poderiam ser exploradas a fim de reduzir o impacto desta crise e das futuras no turismo.

- Uma estratégia de crise deve ser definida e planeada, tanto a nível regional como nacional.
- Uma oferta para staycation poderia ser criada.
- Planear campanhas de conscientização para o turismo local e comunicar sobre turismo responsável.
- Uma estratégia de atratividade turística baseada na qualidade deve ser favorecida e não no aumento do número de visitantes.
- Os governos de diferentes países devem ter uma abordagem uniforme sobre as medidas a serem tomadas.

• É necessário que a sociedade adote medidas de preparação e resposta a futuras pandemias para que as pessoas em geral e os governos, em particular, possam melhorar a sua capacidade de enfrentar crises como esta.

Esta dissertação ilustra que a pandemia de coronavírus teve um impacto negativo no setor turístico da região do Algarve. Registaram-se reduções e perdas importantes nos números dos indicadores chave do turismo no primeiro semestre de 2020 em comparação com o mesmo período do ano anterior, 2019. Os efeitos da pandemia Covid-19 na economia do Algarve são ainda muito difíceis de determinar com precisão hoje, pois estarão vinculados à duração da crise, à eficácia dos mecanismos de apoio implantados de âmbito nacional, mas também a ações coordenadas de incentivo de âmbito global (isto é, FMI, G20, etc.) e Nível europeu.

Palavras-chave: Pandemia de Covid-19, Turismo, Algarve, Impacto socioeconômico.

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## List of Abbreviations

- ANA: Aeroportos e Navegação Aérea Aeroportos de Portugal
- CCDR: Comissões de Coordenação e Desenvolvimento Regional

DGS: Direção-Geral da Saúde

- EC: European Commission
- EU: European Union
- **EURES: European Employment Services**
- **GDP:** Gross Domestic Product
- GVA: Gross Value Added
- ICT: Information and Communications Technology
- IEFP: Instituto de Emprego e Formação Profissional
- IMF: International Monetary Fund
- INE: Instituto Nacional de Estatística
- MERS: Middle East Respiratory Syndrome
- OECD: Organization for Economic Co-operation and Development
- PIB: Produto Interno Bruto
- RevPAR: Revenue Per Available Room
- RTA: Região de Turismo do Algarve

SARS: Severe Acute Respiratory Syndrome

SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus type II

UK: United Kingdom

UNWTO: United Nations World Tourism Organizations

USA: United States of America

VAB: Valor Acrescentado Bruto

WHO: World Health Organization

WTA: World Travel Awards

WTTC: World Travel & Tourism Council

#### **CHAPTER ONE**

#### **1** Introduction

The World Travel & Tourism Council (WTTC) highlights that Portugal is the European country with the highest growth in the tourism and travel sector, anticipating that this trend will continue in the coming years (Turismo de Portugal, 2019).

According to the WTTC, the Portuguese tourism industry's success has made it one of the giant contributors to the national economy and the biggest employer, with approximately one million direct and indirect jobs. In previous years, the tourism industry has broken records after the government and businesses considered the sector a weapon for growth after the debt crisis experienced in 2011 – 2014. The "Instituto Nacional de Estatistica" (INE – National Statistics Institute Portugal) says in 2019, the tourism sector was accountable for 52.3% of exports of services and 19.7% of total exports, with tourist revenues registering a contribution of 8.7% in Portuguese Gross Domestic Product (GDP). These figures highlight the importance of this sector to the country's economy, contributing around 41.5 billion euros to the Portuguese economy, and also to job creation in Portugal. In 2018, the sector had in the country 1.05 million people employed, representing 21.8% of total jobs (Cardoso, 2018).

The Algarve (Portugal's southernmost region) has been reputed for being a famous tourist destination in recent years. Each year, visitors from all over the world flock to the southernmost part of Portugal to have a taste of its pleasant climate, beautiful landscape, modern amusement parks, golf courses, rich culture, historic sites, amazing gastronomy, and a remarkable cluster of activities to choose from.

The Algarve region's economy is based on tourism and tourists, responsible for over 50% of its Gross Value Added (GVA) and 40% of employment (Coelho, 2020). The "Região de Turismo do Algarve – RTA" (Algarve Tourism Region), announced on 16th January 2020 that in 2019, the Algarve reached new annual maximums for overnight stays, guests, and hotel income, as well as passengers and golf rounds. According to the data reported by the National Statistics Institute Portugal (INE), between January and November 2019 the Algarve had over 20 million overnight stays, meaning, for the third consecutive year, it will be the only region in the country to reach this level. And in this same period, the

Algarve accumulated 4.9 million guests (a 7.3% increase than in 2018) and 20.4 million overnight stays (a 2.4% increase) (INE, 2020e). The total income amounted to 1.2 billion euros (a 7.2% increase), golf courses that are members of the Algarve Golf Association recorded 1.29 million rounds (a 1.4% increase) and the Faro Airport handled 8.7 million passengers (3.7% increase) in 2019. This increase in the domestic market until November had already exceeded the annual record for overnight stays in the region, reached in 2018. Also, the "Região de Turismo do Algarve – RTA" (Algarve Tourism Region) added that, overnight stays by residents in 2019 grew by 17.8% and non-residents by 5.9%, with emphasis on the United Kingdom (5.7% increase), Germany (10.5% increase), Spain (5.7% increase), United States of America (22.1% increase) and Italy (40.4% increase) (Calderwood & Soshkin, 2019). The average stay was 3.89 nights, and the net occupancy rate reached 27.4%. It is worth noting that, at that time, we were in the penultimate month of 2019, and the total income from accommodation in the Algarve increased by 10.6%, reaching 32.3 million euros. In a nutshell, when we talk about tourism in the Algarve, we talk about the region's economy.

Unfortunately, the existing scenario in these pandemic times is not very encouraging with the fact that the Algarve tourism sector is highly seasonal (with a 36.3% seasonality rate in 2019 according to the Instituto Nacional de Estatística - INE) and greatly relies on the overseas market (according to the "Região de Turismo do Algarve – RTA", 75% of the total overnight stays registered in tourist accommodation establishments were from non-residents in 2019) (TravelBi, 2020b). The Algarve's most crucial industry got shut down since March 2020 to fight this disease – COVID 19 that struck the whole world.

This global pandemic of the new coronavirus the world is currently faced with has brought the entire socio-economic structure into an impasse and challenges globalization and the global enterprises' operations. The coronavirus disease 2019 (COVID-19) is a very infectious illness that is caused by the Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2) (Direção-Geral da Saúde, 2020). The first cases of the COVID-19 in Portugal were confirmed on the 2nd of March 2020. On the 18th of March 2020, the President of the Republic of Portugal and his council of ministers declared that the whole country would be in a state of emergency due for 15 days which was further extended (Governo de Portugal, 2020). The country was confined for more than two months, with the economy at a standstill. The World Health Organization's

recommendations to reduce the spread of the virus were to avoid social contact, avoid a large crowd, strict hygiene measures (regular washing of hands), and usage of face masks. These recommendations clearly change our way of life.

This pandemic knocked on our door at the worst time of the year when enterprises and people were preparing for the high summer season, as it does every year, which is essential to ensure enough revenue to withstand the rest of the year. When the country had to prepare itself for the summer season, the country was on lockdown, with airports and borders closed. Consequently, even when summer arrives, we suspect that it will be very weak since we doubt that the visitors will have the financial and fearless mental conditions that is required to do differently. According to Statistics Portugal (INE), for each quarter that the country spends without tourism, we risk losing about 2.9% of our GDP (INE, 2020e). Therefore, this situation is very critical. All international studies released so far share the same opinion on one point, which is tourism and travel has the most to lose due to the current pandemic.

#### **1.1 Problem Statement**

The tourism industry has not been spared from the economic, emotional, and health impact caused by the COVID-19 pandemic. Everything shows that we are moving towards a different paradigm, a new way of living that we discover and must learn from, welcome it, and accommodate ourselves to this new situation and reality. Our range of values and viewpoints of reality has changed, be it from our social, family, and personal arena. The two months (and more in some other countries) confinement in our houses, of the major part of the world's population, has certainly promoted in each one of us the desire for freedom, to experience and benefit from spare moments that on some occasions has not been sufficiently enjoyed. This is where travel & tourism comes in to create values and a range of opportunities as broad as every citizen opts for.

This health crisis demonstrates the frailty of human beings, how our plans and activities are not guaranteed and can be altered in just a twinkle of an eye, and we cannot react to it. Being in a society where everything seems to be controlled by the economy, where predictions are made months in advance on the number of guests that would arrive at a hotel, we are all scandalized by the tsunami a virus can cause. Many countries all over the world have acted using measures such as Non-Pharmaceutical Interventions (Gössling et al., 2020) in order to reduce and contain the spread of the virus. Exceptional travel restrictions and "stay-at-home" recommendations result in the most severe interruption of the global economy since the Second World War. These travel bans all over the world heavily affect the world's population and further restrictions on people gathering and public mobility. Tourism was at a complete stop in the past months. The World Tourism Organization (UNWTO) already predicted a drastic fall in international arrivals by at least 20% to 30% compared to arrivals in 2019. This represents more or less a loss of about 30 to 50 billion dollars in international tourism receipts (UNWTO, 2020a).

It is clear that tourism triggers social, economic, and cultural values and it is obvious that tourism and its related activities will recover from this crisis, but this relies on the specialists and authorities in the sector acquiring the ability to align themselves with this recent conception of the world and then convey values of safety, originality, liberty, and respect of life and our planet. Tourism is very vulnerable to the measures taken to restrain this pandemic especially due to mobility restrictions and social distancing.

#### 1.2 Aim

The tourism industry has often been subject to several crises of various dimensions, caused by wars, economic destabilization, drastic occurrences from climate change, natural disasters, epidemics, and pandemics. But the COVID-19 pandemic hitting the world now can be considered an extraordinary issue for the tourism sector, causing an abrupt and sudden drop in tourist flows and therefore leading to a decrease in income and the supply of tourism-related jobs (either direct or indirect jobs) across the Algarve region, Portugal, and the world at large. This crisis has caused significant damage to the Portuguese's domestic as well as international tourism. The main aim of this dissertation is to understand the impact the COVID-19 pandemic has had on the Algarve region's tourism sector and how it has been affected.

The specific objective of this dissertation is to compare and review tourism results of the first six months of the year 2019 to results of the same period in 2020 using key tourism performance indicators.

The thesis focused on the Algarve because it is one of the regions in Portugal that is highly dependent on tourism, also because it is the author's home away from home. Therefore, she intends to increase knowledge on the repercussions any crisis may have on Algarve's tourism industry.

### **1.3** Organization of the work

The present dissertation is divided into six chapters. The first chapter presents a brief introduction on which this study is based and describes the main aim of the study.

In chapter two, the literature review is presented to show the study's relevance and ease the interpretation of the results obtained.

In the third chapter, the methodology used in the study is described with the objective to analyze the impact of the coronavirus pandemic on the Algarvian tourism sector.

Chapter four presents the results of the investigation, which are analyzed and interpreted.

The discussion of the results is presented in the next chapter, five.

And finally in chapter six, the study's conclusion, together with the limitations and suggestions for future studies, are presented.

#### **CHAPTER TWO**

#### 2 Literature Review

#### 2.1 International Tourism

Although tourism has become a global recreational activity, it has no precise, general, or accepted definition (Heeley, 1980). Various researchers have proposed definitions of tourism, but these definitions are always criticized, declaring that tourism is a complex phenomenon (Netto, 2009). The simple definition of tourism as an industry is the combination of all retail businesses that produce goods and services for the traveler, disregarding his motivations or personal characteristics (Smith, 1988). Tourism has a wide range of products and services that interact to provide an opportunity to fulfill a tourist experience that comprises both tangible parts (such as hotel, restaurant, resorts, or air carriers) and intangible parts (such as sunset, scenery, mood) (Judd, 2006). Tourism products include seaside tourism, urban tourism, rural tourism, ecotourism, religious tourism, wine tourism, culinary tourism, business tourism, cultural tourism, sports tourism, educational tourism and many more (Camilleri, 2018). Sceneries in tourist destinations promote the sustainability of the industry. These broad types and products reflect the complexity of the global tourism sector and the wide range of experiences in countless destinations (Tureac & Turtureanu, 2010). Every country's government authorities have not always recognized the economic importance of tourism. From the 50s of the 20th centuries, tourism started being recognized for its important contribution to the global search for economic prosperity, consequent territorial development, quality of life, and social well-being. Until that date, the economy of western societies depended on the primary and secondary sectors. Still, during the 1960s, 70s, and 80s, the thriving of western economies would enable economic growth through the tertiary sector (services). Since the 1990s, the travel and tourism sector (recreational and business, domestic and international markets, as defined by the WTTC - World Travel & Tourism Council), has become one of the largest industries in the world economy, with a serious territorial economic impact (Crouch & Ritchie, 1999). Currently, tourism is the largest service industry, representing one of the most important economic sectors in terms of turnover and employability, and responsible, directly and indirectly, for more than 10% of global GDP (Caldwell & João, 2004).

The tourism industry has grown significantly over the past decades. By 2013, international tourism generated \$1,075 billion in export earnings and employed 235 million workers around the world, making it one of the world's fastest-growing economic activities (UNWTO, 2013). Tourism is currently an essential and fast-growing economic activity in low and middle-income countries, accounting for about 6.5% of global export and generating 10% of the world's jobs. Transnational travel accounts for about 30% of world trade services. In 2019, tourism contributed 9,170 billion USD in global GDP (which represents 10.4% of global GDP). In the same year, international tourist arrivals increased by 5% to reach 1.4 billion, generating export earnings of USD 1.7 trillion (World Tourism Organization, 2019). International tourist arrivals maintained a growing trend, however in 2019, international tourist arrivals slowed down in most advanced countries and Europe in particular. But they maintained the upward trend (+3.8%), representing a -1.9% compared to the previous year), standing at 1.5 billion (+54 million compared to the previous year) according to provisional data from the World Tourism Organization (INE, 2020d). This slower growth rate could be due to the uncertainty surrounded by the Brexit, geopolitical and trade pressures, and the slowdown in global economic growth.

Given the arrival of tourists by destination, it appears that all regions of the world varied positively in 2019. The Middle East region (+ 6.8%) was the only one whose growth was higher than the previous year (+2.5 p.p.) (INE, 2020d). Europe continued to have the preference of the majority of international tourists (weight of 50.9% in total), welcoming a total of 744.3 million, followed by the Asia and Pacific region with 24.7% (360.6 million). The American continent remained in the third position, representing 15.1% (220.2 million tourists). Africa concentrated only 5.0% of arrivals and, finally, the Middle East emerges with a weight of 4.4% of total tourist arrivals (INE, 2020d).

Global tourism demand has increased, and new developing countries are entering the industry. There has been a 4% increase in international tourist arrivals in Africa and an advancement in a broad range of tourist attractions from cultural and historical sites, beaches, hills, wildlife, and flora (UNWTO, 2019). The World Travel & Tourism Council (WTTC) forecasts Angola, Uganda, and Mozambique to be among the ten fastest-growing destinations for leisure travel between 2016 and 2026. In Asia, Africa, and the

Middle East, even the least developed countries are making great advancements in tourism, reflecting the importance of tourism across the globe (UNWTO, 2019).

#### 2.2 Tourism in Portugal

Tourism is today, a relevant economic activity throughout the world, which involves powerful interests in every continent such as accommodation, real estate, air transport, operators, leisure industries, financial investments, ICT-Digital platforms, etc. Each country needs to understand what involving tourism and its activities represent for their economy; for instance, is it a speculative and opportunistic activity, tending to get immediate results, even at the detriment of ruining resources, or if, on the contrary, it is an activity that aims to be sustainable, capable of generating wealth, boost development and employment, but at the same time by preserving and enhancing, vital non-renewable resources, regardless of their nature (Neto, 2015). The latter must be Portugal and obviously the Algarve's first option. That is first to know what tourism and its activities represent and then determine where we want to be at the tourism level. Portugal must be wise when choosing its options because the tourism industry cannot be considered a complement to other industries, as it is regarded in powerful economies such as the United States of America, Germany, or France as it constitutes, today, an irreplaceable strategic parameter to Portugal's economic growth. In Portugal or any other country, and any region – like the Algarve – when thinking about tourism, it is important to be fully aware of its dimension, from the territory in question, and its resources and supply potential. Because the competition is tough, and it is not enough to be "very good" in one or another aspect to win. For instance, the traditional travel agents and some new ones think that what matters is having a menu of "products" capable of filling a package to satisfy "tourists", whether for a few days or even just for a few hours (heritage, churches, museums, places, events). This strategy carries many risks and influences the offer itself because they tend to be equal to that of competitors and do not show the differences.

Portugal occupies a total area of 92,985 km2, of which 88,944 km2 is mainland Portugal and the remainder is the Madeira and Azores Islands (Provenzano, 2012). The moderate and mild weather and the beautiful and diversified landscape in Portugal make tourism one of its largest industries and a vital sector of the Portuguese economy (Almeida & Correia, 2010). This can be reflected by the country's Gross Domestic Product (GDP),

which in 2019 increased by 2.2% in volume (+ 2.6% in 2018) and 3.9% in nominal terms (+ 4.3% in 2018), reaching 212.3 billion euros (INE, 2020d). The results released by "Banco de Portugal" regarding the 2019 Balance of Payments indicate an increase of 5.3% in the balance of Travel and Tourism, less expressive than that recorded in previous years (+ 8.4% in 2018, + 24.2% in 2017). Revenues/credits continued to increase, totaling 18.4 billion euros. However, this increase was less than in 2018 (+ 8.1% after + 9.7% in 2018). Expenses/debts on travel and tourism reached 5.3 billion euros in 2019, with an increase of 15.6% (+13.2% in 2018), reflecting an acceleration in relation to the evolution of revenues (INE, 2020d). In the same year, there was a 5.9% growth in the domestic market, totaling 26.1 million overnight stays, corresponding to 33.6% of the total. Overnight stays by the foreign market registered a lower growth of 3.5% compared to that of the previous year and attained 51.7 million overnight stays, representing 66.4% of the total. In national accommodation establishments (hotels, guest houses, inns, bed & breakfast, etc.), the total income amounted to 4.3 billion euros (+7.8%) (INE, 2020d). All these figures justify an empirical analysis that measures the impact of tourism on economic growth, at the national and also regional level. Another fact is Portugal was nominated and won for "Europe's Leading Destination 2020" by the World Travel awards.

#### 2.3 The Algarve region and Tourism

#### 2.3.1 Geographical and Climatic characteristics of the Algarve territory

The Algarve is Portugal's southernmost province, with a total area of 4997 Km2. representing 5.4% of Portugal's total territory (INE, 2020f). The Algarve shares boundaries on political and natural areas with Lower Alentejo to the North; to the East, the Guadiana River constitutes a political and natural border with the Spanish lands; to the South and West, the Atlantic ocean bathes the Algarve territory (Fabião & Calado, 2011). It has approximately 440000 inhabitants representing 4.3% of Portugal's total population (INE, 2020c). The Algarve is represented by 16 municipalities namely: Albufeira, Alcoutim, Aljezur, Castro Marim, Faro, Lagoa, Lagos, Loulé, Monchique, Olhão, Portimão, S. Brás de Alportel, Silves, Tavira, Vila do Bispo and Vila Real de St. António. However, Faro is the capital of the region and the most populated city with about sixty-five thousand inhabitants (INE, 2020f).

The region is subdivided into three major strips, which are all of great scenic beauty. These include "Littoral, Barrocal and the Serra" (Visit Algarve, 2018). The "Littoral" is the part where most of the regional economic activity is concentrated. This part in terms of landscape is very diversified, ranging from steep coasts, extensive sands, indented lagoons, marshes and other dune formations (Fabião & Calado, 2011). The predominant rocks are essentially of the sedimentary type (as is the case with sandstones and conglomerates) (Visit Algarve, 2018). Morphologically, the "Littoral" has a low altitude and is mostly made up of flattened reliefs, arranged by meadows and floodplains (Fabião & Calado, 2011).

The barrocal is a transition zone between the coast and the mountains, consisting of limestone and schist rocks. Also known as Beira-Serra, this area is traditionally the main supplier of agricultural products in the Algarve, where its famous "medronho", honey and cork stand out (Visit Algarve, 2018).

The "Serra" (meaning mountains in English) occupy half of the Algarve territory. In this area we can find the main mountain ranges of the Algarve – namely, "Serra de Espinhaço de Cão", "Serra de Monchique" with the highest altitude in the region (902 meters) and "Serra do Caldeirão or Mú", with an altitude of 508 meters (Fabião & Calado, 2011).

Because it is protected by the mountains of the "Sierras" to the north, the climate of the Algarve territory is Mediterranean, characterized by hot summers with high sunshine, and mild winters with short-term precipitation (seventy days a year), occurring throughout the good visibility. The East, like the city of Vila Real de Santo António, has temperatures twice as hot as the West, like Cabo de São Vicente, where the wind is also higher than in the rest of the Algarve (Oliveira, 2018). Algarve's climatic characteristics, particularly its mild temperatures and the scarce periods of rainfall (usually concentrated between the months of November till March), have boosted the all-year-round tourist activities mostly based on the binomial products "Sun – beach", which has led to the abandonment of the interior areas of the region with the mostly rural environment and landscape (Fabião & Calado, 2011).

Also, the Algarve's relief and geographical location receive various climatic influences: from the European continent to North Africa, from the Atlantic Ocean to the Mediterranean (Oliveira, 2018). There is a fluctuation of temperatures throughout the year, between 15°C and 31°C, with low temperatures during winter, a season with sunny day which induces visits from the northern European countries.

The Algarve has experienced decades of a poorly developed region, with basically an agricultural economy and some industry resulting from land and sea resources to a region that is predominantly a combination of services around activities associated with tourism (Neto, 2015). But today, the structural imbalance and the weight of the agricultural sector and industry in the region are scarce. Tourism is now the dominant activity and the engine of the economy. It makes the Algarve have a per capita income even higher than the national average, of 85%, corresponding to the European average rate (Neto, 2015). One of the public works promoted by the state and which had the greatest impact on the development of Faro and the entire Algarve region was, without a doubt, the Faro International Airport. Nowadays, the Faro International Airport plays a very important role in the national and regional tourism industry, receiving around 9 million passengers per year (as of 2019), and is one of the largest employers in the region (ANA, 2019). The Algarve is one of the country's main tourist destinations, both for the foreigners and Portuguese nationals, and makes a relevant contribution to the national economy through revenues generated by Tourism, which is the main export sector.

#### 2.3.2 Importance & role of tourism to the Algarve region

The Algarve has recently been reputed for been a famous tourist destination. Each year, visitors from all over the world flock to the southernmost part of Portugal in order to have a taste of its pleasant climate, beautiful landscape, modern amusement parks, golf courses, rich culture, historic sites, fantastic gastronomy, and a remarkable cluster of activities to choose from. The Algarve is blessed with a mild and sunny climate in almost all seasons. The region has an exuberant natural beauty and awesome beaches with warm waters and golden cliffs, and almost deserted islands or small bays. The calm and warm ocean in all shades of blue attracts tourists for long baths and to practice water sports. The region's local cuisine stands out with its fresh fish and other kinds of seafood, making it an ideal holiday destination.

Algarve's economy is dominated by three key sectors, which are the region's central economic activities, taking into consideration the number of people employed and the generated income. They include Tourism (catering and accommodation), retail and

wholesale and construction (European Commission, 2020a). But the most important sector of activity is the tertiary sector (commerce and services), resulting in its main economic activity - Tourism. This subsector assumes such importance in the Algarve that it represents, directly and indirectly, about 60% of the total employment and 66% of the regional GDP. Nevertheless, the region's economic activity also includes agriculture and fishing sectors, even though its relative importance in the region's economy is slowly depreciating (European Commission, 2020a). On the other hand, economic activities such as the real estate sector, agro-food and biotechnology sector have progressively increased in importance (European Commission, 2020a).

The economic impact of tourism goes beyond the turnover and the employability that it represents: tourism as an activity consumes resources above the normal, as it implies investments in infrastructures, for instance, sanitation, cleaning, transport, energy, etc.; which means that tourism also has a social, cultural and environmental impact (Crouch & Ritchie, 1999).

Tourism in Algarve is an activity that contributes to its economic and social development. Its economic weight, according to sources like statistics Portugal, gives this sector capital importance, compared to other sectors of economic activity in the region (European Commission, 2020c). As already mentioned in the previous chapter, when we talk about tourism in the Algarve, we refer to the region's economy, as tourism is responsible for over 50% of the Algarve's Gross Value Added (GVA) and 40% of employment (Coelho, 2020).

#### 2.4 Impact of pandemics on tourism

According to Gössling et al. (2020: 578) "Pandemics and new diseases have long had a transformational effect on environments and societies". Though the term pandemic does not yet have a generally accepted definition (Morens et al., 2009), however they have various elements in common such as (Morens et al., 2009):

- Wide geographic extension diseases that are widely distributed globally.
- Disease movement they spread through a transmission that can be tracked and followed from one place to another.
- High attack rates & explosiveness rapid surge of numerous cases in a short time.

- Minimal Population immunity.
- Novelty most of the time, they are new, and /or associated with new variants of existent organisms.
- Contagious highly infectious from one person to another.
- Severity diseases are severe and fatal.

Over the past 15 years, the world has come face to face with a number of pandemics, ranging from SARS to the Swine Flu and most recently COVID-19, which significantly affected the economy of many countries, with the travel and tourism industry being one of the most crippled sectors. Coronaviruses have significantly affected the tourism sector, putting tourists in a dilemma, as tourist sites are unsafe during pandemics. Coronaviruses are a big family of viruses that can cause ailments to animals and humans. In humans, there exist different types of coronaviruses that are known to provoke respiratory infections varying from the popular simple cold to more serious illnesses like the Middle East Respiratory Syndrome (MERS – that emerged in 2012), the severe acute respiratory syndrome (SARS – discovered in 2002, also known as the SARS-CoV) (Bahadur et al., 2020) and the current COVID-19.

#### 2.4.1 The Severe Acute Respiratory Syndrome (SARS-2003) and Tourism

In early 2003, the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-1) was identified as the cause of the Severe Acute Respiratory Syndrome (Chen et al., 2005), which originated in Guangdong, China (Zhong et al., 2003). The disease usually began with high fever and mild respiratory symptoms but rapidly progressed to pneumonia within a few days (atypical pneumonia) (Zhong & Wong, 2004). SARS-CoV-1 outbreaks occurred in various parts of the world, including South-East Asia, North America, and Europe, declared as the first pandemic of the 21st century.

The SARS-CoV-1 epidemic in early 2003 directly and substantially affected global tourism (Mason et al., 2005). The infection persisted for eighteen months in 29 countries with 8422 cases and 916 deaths (Chan-Yeung & Xu, 2003). During the early part of 2003, the outbreak of severe acute respiratory syndrome (Chen et al., 2005) had major impacts on the movement of tourists. A key reason was that the spread of SARS-CoV-1 was associated with international tourists visiting affected areas and transmitting the virus in their home countries upon returning home. Most countries, including China, Vietnam, the

USA, Canada, and the UK, had outbreaks of SARS and the World Health Organization issued health warnings to prevent tourist visits (Mason et al., 2005).

Although the SARS-CoV-1 pandemic did not affect the Portuguese population but had a significant effect on the Portuguese economy and tourism (Costa, 2004). The outbreak of SARS-CoV-1 leads to an economic slowdown and huge revenue losses from the tourism sector in Portugal. This created a challenge for tourism professionals in managing their facilities in an innovative, responsible, and profitable way (Corfu et al., 2006). The SARS-CoV-1 epidemic in 2003 led to a widespread economic recession with direct implications, which also affected the tourism industry in the Algarve region. This led to the weakening of both the air transport and airport sector, significantly delaying the Faro airport planned investments (Graham, 2018).

#### 2.4.2 MERS (2012), Impact on Tourism

Middle East Respiratory Syndrome (MERS) was caused by the called Middle East Respiratory Syndrome Coronavirus (MERS-CoV), another member of the Coronaviruses (Yin & Wunderink, 2018). MERS patients presented serious respiratory disorders with fever, cough, and dyspnea. About 30% to 40% of patients reported with MERS died (de Groot et al., 2013). The majority of the cases were reported from Saudi Arabia, and all cases confirmed so far were directly or indirectly contracted through travel and from residents in or around the Arabian Peninsula countries (they include Saudi Arabia, United Arab Emirates, Qatar, Oman, Jordan, Kuwait, Iran, Lebanon, and Yemen). The country with the second-highest number of cases was the Republic of Korea, with an outbreak of more than 180 cases in 2015 following introduction into the country by a single patient who had travelled from the Middle East. As of 5 February 2016, 26 countries had reported cases of MERS to the World Health Organization, with two cases of MERS reported in the United States, one in Indiana and the other in Florida, both in May of 2014 (Rasmussen et al., 2016). Despite thorough evaluation and testing of contacts of these two patients in their households, communities, and health care settings, no additional people infected with MERS were identified (Joo et al., 2019).

Due to frequent travels, some other countries outside of the Arabian Peninsula who also reported MERS cases were Algeria, Austria, China, Egypt, France, Germany, Greece, Italy, Malaysia, Netherlands, Philippines, Republic of Korea, Thailand, Tunisia, Turkey, United Kingdom (UK), and United States of America (Joo et al., 2019). Portugal, however, was not significantly affected by the outbreak but lost an appreciable amount of funds from tourists who live in these pandemic-stricken countries.

#### 2.4.3 Influenza and Tourism

The spread of the H1N1 type of influenza A virus, commonly referred to as the "swine flu," was first discovered in April 2009. By June of that year, the World Health Organization had officially declared it a global pandemic (Correia et al., 2010). The following months witnessed a global response of alarm as governments and health organizations prepared for an apparent looming catastrophe. For example, in China, passengers on incoming international flights were screened, and those displaying flu-like symptoms (as well as those seated around them) were quarantined to prevent the possible spread of the virus (Lacey & Jacobs, 2009). The subsequent fall and winter months in the United States saw a flood of media coverage about the swine flu as it spread all over the country. Many reports compared the outbreak to the 1918 "Spanish flu," the deadliest influenza pandemic in history, which killed up to 50 million people (Johnson & Mueller, 2002). Such coverage from the media seemed to be a mixed blessing. However, quick communication of the risks of infection, however, would seem to facilitate safe behavior and reduce the spread of the virus (Sandman, 2009). On the other hand, mass media coverage leads to mass hysteria and fear, as was found during the 2005 epidemic of avian flu, during which greater television exposure was correlated with greater fear of this disease (Van Den Bulck & Custers, 2009).

In effect, tourism was hugely affected as people felt it was unsafe for them to travel. For some individuals, however, worries about contracting H1N1 influenza may become excessive, leading to inordinate distress and anxiety, as well as avoidance behaviors that significantly impair functioning.

#### 2.4.4 COVID-19, Origin and Epidemiology

The coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the current public health concern across the globe. The first case of COVID-19 was reported and confirmed in Wuhan, China, in December 2019 (Zhu et al., 2020). Despite the astonishing morbidity and mortality of

COVID-19, the numbers of confirmed and death cases will continue to increase in the coming months because no specific drug or vaccines have been identified to treat the disease (Sohrabi et al., 2020). Most patients infected with SARS-CoV-2 have mild illness and present with common symptoms such as fever, cough, and muscle pain while others present with uncommon symptoms such as hemoptysis, headache, sputum production and diarrhea, dry cough, and respiratory distress (Huang et al., 2020).

The COVID-19 Pandemic officially spread to Portugal on the 2nd of March 2020 when it was reported that two men, a 60-year-old doctor who was on vacation in northern Italy and a 33-year-old man who was in Spain for work, tested positive for COVID-19 (Direção-Geral da Saúde, 2020). It was on 9th March 2020 that the Algarve confirmed its first case of COVID-19. It was a 16-year-old girl who was in Italy during the carnival period with her mother who was later on confirmed positive (Vilhena & Freire, 2020).

As of 13<sup>th</sup> September 2020, Portugal had confirmed 67,592 cases and 1,867 deaths, with the Algarve region contributing 1,192 cases and 17 deaths (Worldometer, 2021). Also, 18,047 patients are being hospitalized, and 57 are in intensive care units (Direção-Geral da Saúde, 2020). However, experts from the WHO (looking at the way the virus is transmitted and its reaction) warn that the number of infected people is probably much higher than the number of confirmed cases since tests are limited to a specific number of people with symptoms and because many people with mild or even asymptomatic symptoms do not seek medical attention, while they are actively transmitting the virus (WHO, 2020).

The COVID-19 is a health crisis of unprecedented proportions and will be predictably responsible for the most severe global economic crisis in the last 100 years (IMF, 2020). Projections anticipate that economies more dependent on tourism will experience more severe recessions (IMF, 2020), and will be more susceptible to an escalation of unemployment (OECD, 2020a). Tourism has to do with mobility and social interaction. In the absence of specific pharmaceutical means to prevent and fight the new disease, immobility and physical distance are the remedies. Therefore, the entire tourism value chain - from operators and travel agencies to airlines, accommodation, entertainment, etc. - is being subjected to a "demand shock" that practically stopped the "industry". In Portugal, for instance, the months of April and May 2020 recorded a minimum historic

activity in tourist accommodations, with 85% and 70.4% of establishments closed or not active, respectively (INE, 2020g) and thousands of workers laid-off.

#### 2.4.5 Crises, COVID-19 Pandemic and Tourism

It is obvious that the tourism industry is among the most easily affected by crises (Santana, 2008). The world has experienced devastating repercussions and consequences on this industry in the past years, ranging from natural disasters to epidemics/pandemics and mismanagement to terrorism (Santana, 2008). The tourism industry has been paralyzed since March 2020 by the COVID-19 pandemic, as most countries in the world close their borders, restrict domestic travel, airflights are being canceled and suspended Physical distancing measures are implemented in order to reduce and control the spread of the virus. The UNWTO reported a 70% decrease in international arrivals in the first eight months of 2020 compared to the same period in 2019, with the largest decrease experienced in the Asia-Pacific continent (UNWTO, 2020b). According to recent data from the World Tourism Organization, the year 2020 was the worst year for global tourism, with a 74% drop in international arrivals, representing one billion fewer international arrivals in 2020 compared to the previous year. This has put in peril between 100 and 120 million jobs all over the world, with the majority being in small and mediumsized companies and export revenues losses estimated at \$1,3 trillion (World Tourism Organization, 2021).

The whole world is still in the middle of the COVID-19 Pandemic (WHO, 2020). This virus has a detrimental effect on the tourism industry, compelling travel & tourism-related businesses worldwide to sack employees and temporarily shut down their businesses, if not for good (Benjamin et al., 2020). If the current containment steps (quarantines and social/physical distancing) are effective in controlling the outbreak in Portugal, the economic effects of the crisis would impact the country in the post-COVID-19 era. Some immediate outcomes of the economic slowdown caused by the COVID-19 consisted of a fall in the real estate market in areas with strong reputations in the housing market and tourism, namely the Lisbon Metropolitan Area and the Algarve region (Ruiz Estrada, 2020). Moreover, the unemployment rate registered in 74 municipalities during April 2020 was more than twice the registered unemployment rate in the same month of the previous year (Ruiz Estrada, 2020). However, and in comparison, to the 2011 financial

crisis, all cost reduction interventions or initiatives in the health sector should be taken with extreme caution. On the one hand, all cutbacks on budgets that could affect the health sector in the future will restrict the capability of the already weak sector in working against any recurring outbreak (Leung et al., 2020). On the other hand, the country's economic status, in view of its lower economic growth rates, could further restrict spending on the health sector. Tourism in the Algarve region could face similar challenges and hence the need to assess the economic impact of COVID-19 in the region.

#### 2.4.6 Coronavirus Pandemic, an Extraordinary Crisis for the Tourism Economy

The coronavirus (COVID-19) pandemic is a humanitarian crisis affecting people's lives and has generated a global economic crisis. This crisis has had a significant effect on the tourism industry, which is vital for foreign exchange and regional development, especially in countries and regions where tourism is an integral part of the economy. The Organization for Economic Co-operation and Development (OECD) is an international organization that works towards building exceptional policies for better lives, of which Portugal is a member. The tourism sector directly contributes, on average, 4.4% of GDP and 21.5% of service exports in OECD countries (OECD, 2020b). For other OECD countries, these shares are much higher. For example, tourism in Portugal contributes 8.0% of GDP while travel represents 51.1% of total service exports. These figures are 7.4% and 22.2% in France (OECD, 2020c).

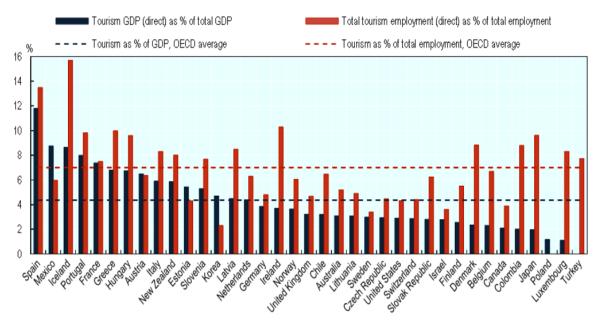


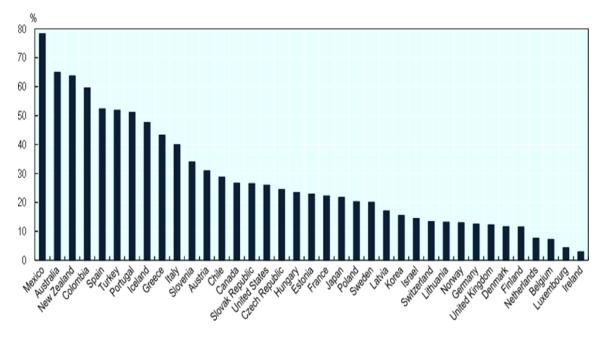
Figure 2.1 Direct contribution of tourism in OECD economies

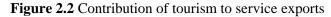
Source: OECD Tourism Statistics (Database) (OECD, 2020c)

According to the OECD, "Tourism is a labor-intensive area, directly contributing 6.9% of employment on average in OECD countries". Tourism is one of those leading employment sources, generating permanent and temporary jobs for both skilled and unskilled workers. With the mid-year effects of the crisis continuing, many of these jobs will be directly affected. If not affected by this pandemic, tourism contributes to the employment of migrants, students, and older workers with different types of opportunities, not only in the big cities but also in the rural, remote, and coastal areas, including any other economically disadvantaged places where alternative employment opportunities may be minimal.

In this current crisis, tourism is one of the industry's most directly affected, which calls for immediate and lasting responses. The effect of COVID-19 on global tourism has been devastating and immediate, with international aviation at a virtual standstill since March, the closing of touristic sites and attractions, the suspension or postponement of major festivals and activities, and limits on either indoor or outdoor public gatherings in many countries. In addition, despite the demonstrated resilience of the sector in response to past crises, the complexity of COVID-19-related effects on tourism and the broader economy means that a rapid recovery is unlikely to occur. Looking at the urgency of the situation, an extraordinary meeting of the G20 Tourism Ministers was held on 23 April

2020, with Ministers releasing a statement welcoming national efforts to alleviate the economic and social impact of the pandemic, also promoting committed work together in order to give aid to support a sustainable an all-inclusive recovery of the tourism industry (G20 Summit, 2020).





Source: OECD Tourism Statistics (Database) (OECD, 2020c)

# 2.5 Conclusion

The COVID-19 pandemic represents a shock to the world's public health with an unprecedented economic impact in recent history, reflecting adverse effects on the demand and supply side in Portugal, the Algarve, and the world. This shock to the economy has already shown negative effects on the tourism industry, production, employment, productivity, the financial system, and the confidence of economic agents, which should be mitigated by the measures implemented in the meantime, both nationally and internationally. As a result of the pandemic, the necessary physical/social distancing resulting from it, and its effects on the rest of the world, resulted in high economic losses in the Portuguese economy and consequently the Algarve's economy (St. Aubyn, 2020).

The economic recovery cannot yet be discerned at the time of elaboration of this work. Yes, there has been a common financial aid agreed by the European Union Commission (European Commission, 2020b), which appears to be a positive aspect, but the basic phenomenon, the pandemic, which is not yet over, does not yet allow any certainty at the moment concerning the recovery. Also, the uncertainty about the duration, magnitude, and geographical dispersion makes it particularly difficult to quantify these impacts on the economy.

### **CHAPTER THREE**

## **3 METHODOLOGY**

A secondary research methodology was adopted to develop this study. Secondary data refers to the use of information and dataset that was previously collected and gathered by someone else (Martins et al., 2018). Although primary data is a good method to use, as it is most likely to be trusted, reliable, and clear about the subject the researcher is focused on, it can also be tough and expensive to gather/obtain be limited. The issue is most entities do not usually easily disclose data due to confidentiality reasons. Fortunately, international, public, and private organizations can collect a reasonable amount of data from these companies and entities, which saves a lot of time, money, and other resources to the researcher. Therefore, using secondary research can be of great advantage to researchers.

The main sources of secondary data used were Informations, records, and documents taken from the portals/websites of Portugal's National Statistics Institute (INE), the European Commission, the press, World Tourism Organization, OECD, United Nations Organization, "Turismo de Portugal", "Banco de Portugal", "Região de Turismo do Algarve" (RTA – Algarve Tourism Board) and the "Comissão de Coordenação de Desenvolvimento Regional do Algarve" (Algarve Regional Development Coordination Commission). Besides this, numerous academic published articles, News articles, webpages were considered to gather the required secondary data for this study.

Considering the limited availability of secondary data, results on key tourism indicators such as the total number of guests, overnight stays, airport movements, revenue generated from tourist accommodations and other, the Revenue Per Available Room (RevPAR) and employment numbers are used to analyze the impact of this pandemic has on Algarve's tourism industry. The period under study was the first six months of the year 2019 and the first six months of the year 2020, that is, before the pandemic and during the pandemic were compared to understand the impact better. The research did not alter or intervene in the data before the analysis. The data obtained were analyzed using GraphPad Prism version 8.0 and Microsoft Excel. Thus, this study is quantitative with a descriptive preference.

Online and academic databases found on the B-on website (Online library), Sapientia, and others were used to conduct searches using combinations of the following keywords both in English and Portuguese: (COVID-19), (Algarve tourism in numbers), (COVID-19 and tourism), (COVID-19 and tourism in Algarve) (COVID-19 and tourism in Portugal), (Impact of COVID-19) and (COVID-19 and tourism in Europe).

In this study, the researcher was trying to review, re-analyze, and interpret past data that has been professionally collected to determine how this data will add knowledge and answer the questions to her current research. The fact that this study was conducted during a pandemic also incited secondary data, as the country was in a lockdown and due to secondary data being inexpensive, time saving, easily accessible, and allows you to generate new insights from the previous analysis. Moreover, it provides longitudinal analysis with a huge amount of data from a wide variety of sources.

However, secondary data could be more or less unsuitable for the study's specific purpose as it is expected by the researcher and may have a different format than what the researcher is looking for. This is because the data was collected by someone else. Another weakness of secondary data is that the researcher does not have control over the data quality. Since the surveys were developed and distributed to a certain population size by other people, the researcher cannot determine whether the collected data guarantees validity or quality. The source of information may be questionable, especially when the data is gathered via the internet. In addition, secondary data is collected by someone else who maybe bias in favor of the person who gathered it. These notwithstanding, the secondary data obtained for this study are real time unbiased data that helped to identify the socio-economic impact of the coronavirus pandemic on tourism in the Algarve region. Another disadvantage is that the original researchers/authors who collected this secondary data may not provide enough information on how they conducted their research.

## **CHAPTER FOUR**

### **4 RESULTS**

This chapter presents the results obtained from the literature and data search with the review of published results.

### 4.1 Total guests in tourist accommodations

In the first half of 2019, Portugal registered a total of 12.23 million guests in tourist accommodations. The total number of guests in tourist accommodations declined to 4.38 million in 2020 (Figure 4.1). There was a steady increase in the number of guests in Algarve's tourist accommodations from January to June 2019. The same trend was observed from January to February 2020. However, in March 2020, there was a sharp decline in the number of guests in Algarve's tourist accommodations (-60%), with April 2020 recording the highest decline in the number of guests in tourist accommodations in the Algarve (-99% relative to April 2019) (Table 4.1). Similar year-on-year negative change rates were recorded in May and June 2020 (98% and 84%, respectively, in relation to May and June 2019).

Month	Number of guests in tourist accommodation		Year-on-year
	2019	2020	change rates (%)
January	139,694	151,200	8%
February	182,270	217,152	19%
March	271,715	107,599	-60%
April	457,321	4,001	-99%
May	522,740	11,723	-98%
June	599,968	95,347	-84%
Total	2,173,708	587,022	-73%

Table 4.1 Total number of guests in Algarve's tourist accommodations in the first half of 2020 vs 2019

Source: Own elaboration, data retrieved from (INE, 2020b)

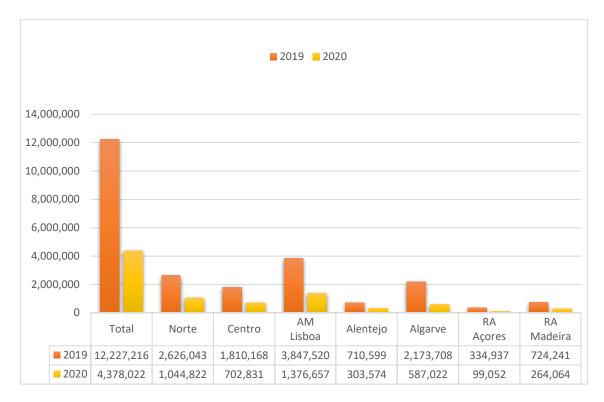


Figure 4.1 Total number of guests in tourist accommodations - First half of 2020 vs 2019

### Source: Own elaboration, data retrieved from (INE, 2020b)

All seven regions of Portugal registered a significantly higher number of guests in tourist facilities in the first half of 2019 than the corresponding half year in 2020 (Figure 4.1). In the first half of 2020, the total number of guests in Algarvian hotels and accommodation was 587.022, and the recorded decrease was 1.586.686 guests (-73.1%).

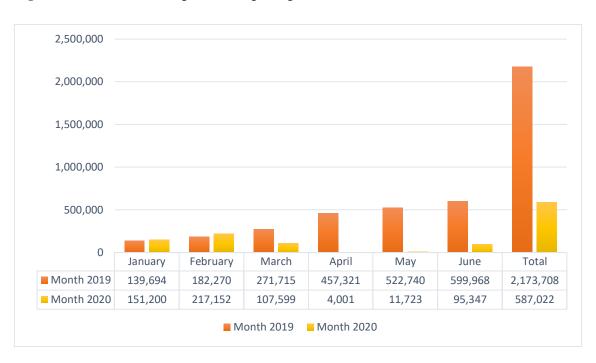
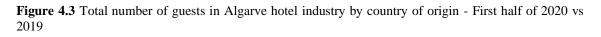
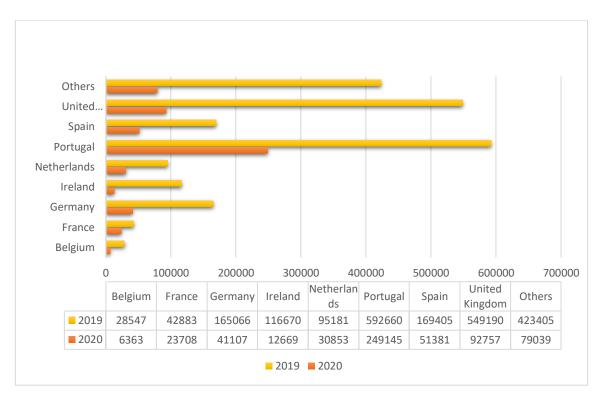


Figure 4.2 Total number of guests in Algarve global hotel business in first half 2020 vs 2019

Source: Own elaboration, data retrieved from (INE, 2020b)





Source: Own elaboration, data retrieved from (Turismo do Algarve, 2020)

The Algarve's global hotel business in the first semester of 2020 registered a drastic fall in its total guest numbers compared to the same period in 2019 where there was a constant increase in the total guests. As we can see in figure 4.2, the lowest numbers in total guests were registered in April (a 99% decrease), due to the total lockdown that was imposed.

From January to June 2020 and compared to the same period of 2019, the decrease in guests varied between -89.1% in Ireland and 58% in Portugal. We can see in figure 4.3 that in the first half of 2020, Portugal represented 42.4% of total guests in the Algarve's global hotel industry, followed by the United Kingdom with 15.8% and Spain with 8.7%.

## 4.2 Overnight stays in tourist accommodations

Portugal registered a significantly higher number of overnight stays in tourist accommodation in the first half-year of 2019 (30,723,140 stays) than in the corresponding half-year of 2020 (10,464,536 stays), losing approximately 20,258,604 overnight stays in the first half of 2020 in contrast to the corresponding half-year 2019 (Figure 4.4). The Algarve region recorded a significantly lower number of overnight stays in tourist accommodations in the half-year of 2020 (2,333,891 stays) than the corresponding half-year in 2019 (8,579,442 stays). However, compared to the first half-year of 2019, the Algarve region lost the highest number of overnight stays of tourist accommodations in 2020 compared to other regions, with up to 6,245,551 stays lost.

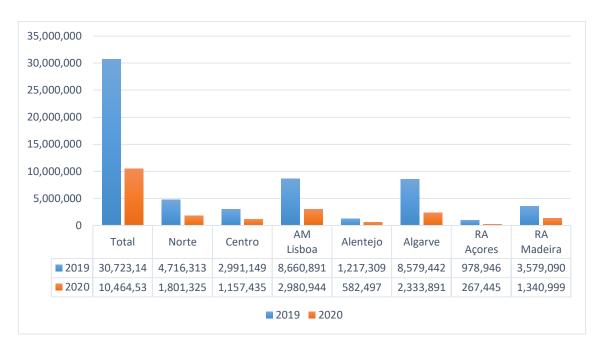
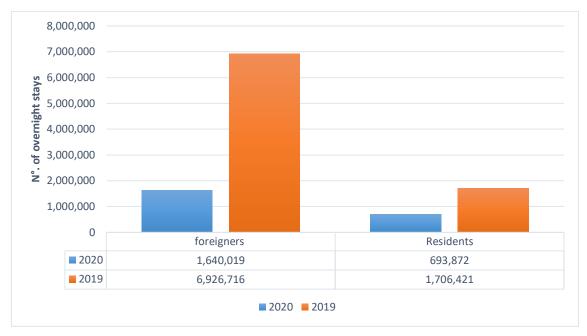


Figure 4.4 Total number of overnight stays in tourist accommodation - First half 2020 vs 2019

*Source:* Own elaboration, data retrieved from Statistics Portugal (INE) – survey on guest stays in tourism accommodations, (TravelBi, 2020c) (INE, 2020b)

Overnight stays registered in the first half of 2020 totaled 2,333,891 overnight stays, 73% less than in the same period of the previous year, 2019. Overnight stays from foreigners had a decrease of 76.3% (-5,286,697 of overnight stays) and overnight stays from Portuguese fell by 59 .3% (-1,012,549 of overnight stays). Figure 4.5 below shows this.

Figure 4.5 Total number of overnight stays in tourist accommodations by resident - First semester 2020 vs 2019



Source: Own elaboration, data retrieved from (TravelBi, 2020a)

From January to June 2020, and compared to the same period of 2019, the downward trend continued in all countries, fluctuating between 81.6% in the UK and 59.4% in the Netherlands, as shown in figure 4.6. The countries with the largest market share in the first half of 2020 for the overnight stays in the Algarve hotel sector were Portugal, which registered a share of 29.7% of overnight stays, followed by the United Kingdom with 20.8% and the Netherlands with 10.5%.

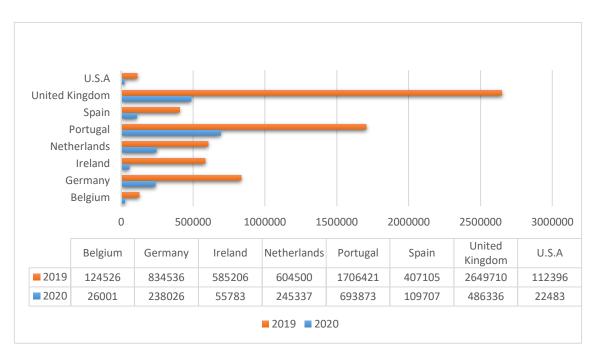


Figure 4.6 Overnight stays in Algarve hotels by country of origin - First half of 2020 and 2019

Source: Own elaboration, data retrieved from (Turismo do Algarve, 2020)

# 4.3 Revenue generated from tourist accommodations in Portugal-First semester of 2019 versus 2020.

Figure 4.7 below demonstrates that Portugal generated significantly lower revenues from tourist accommodation in the first half-year of 2020 ( $\in$ 538,594) than the corresponding half-year in 2019 ( $\notin$ 1,794,931). In the first half of 2020 and compared to the homologous period, the Algarve recorded a decrease of 334.773 million euros. In the total calculated from January to June 2020, the Algarve region registered a percentage decrease of 77.7% (Turismo do Algarve, 2020).



Figure 4.7 Revenue generated in tourist accommodations in the first half of 2020 versus 2019

*Source:* Own elaboration, data retrieved from Statistics Portugal (INE) – survey on guest stays in hotels and other accommodations, (INE, 2020b)

In the period from January to June 2020, the recorded Revenue Per Available Room (RevPAR) in Algarve's global hotel industry was lower, except January  $(+0.69 \in)$  and February  $(+2.31 \in)$ , than those achieved in the same period of 2019 as shown by figure 4.8 below. It started dropping from March when the Covid-19 virus hit Portugal.

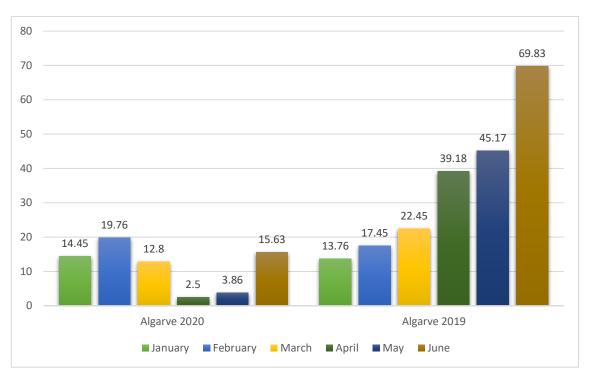


Figure 4.8 RevPAR in Algarve hotel industry - First half of 2020 vs 2019

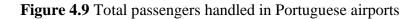
*Source:* Own elaboration, data retrieved from Statistics Portugal (INE) – survey on guest stays in hotels and other accommodations, (INE, 2020b)

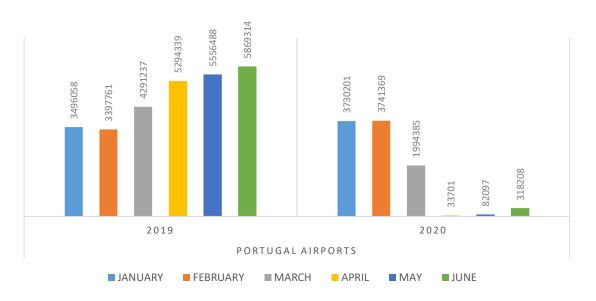
# 4.4 Air transport - Passengers handled on national airport infrastructures, on commercial flights.

Due to the pandemic, air transport was severely penalized in 2020, with 17.9 million passengers passed through Portuguese airports, which corresponds to a drop of 69.6% compared to the previous year, registering Portugal as the fourth biggest drop among the 12 countries where the airport concessionaire operates, according to data released by Vinci, owner of the ANA (All Nippon Airways – Airports of Portugal), manager of the Portuguese airports (Laranjeiro, 2021).

In the first semester of 2020, a total number of 798.908 passengers passed through the Faro airport, a drop of 3.17 million passengers compared to the same period of 2019, representing a percentage change of 79.9% (INE, 2020h). All these figures reflect the pandemic crisis that still plagues the world, with particular acuity, the main markets of the Algarve region (Turismo do Algarve, 2020). This situation results from the imposition of strong travel restrictions put in place around the world to combat the spread of the coronavirus.

Figures 4.9 and 4.10 below, reflect this situation in all Portugal's airports and Faro airport in the Algarve region.





*Source*: Own elaboration, data retrieved from INE and Turismo do Algarve, survey on transportation activities (INE, 2020h)

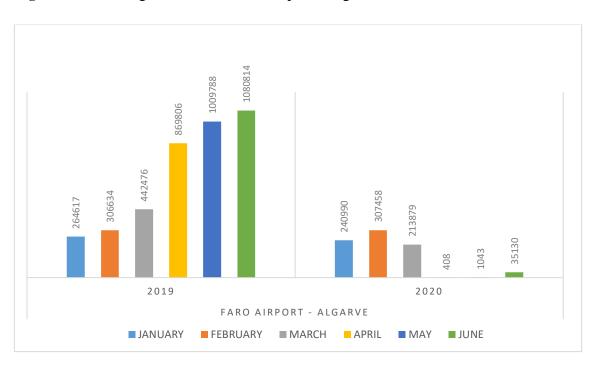
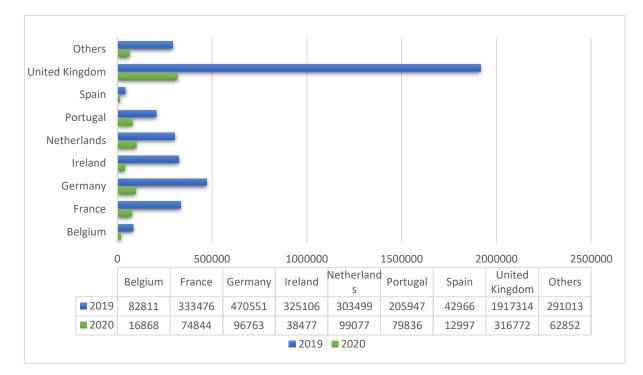
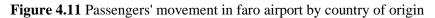


Figure 4.10 Passengers handled in faro airport - Algarve

# *Source*: Own elaboration, data retrieved from INE and Turismo do Algarve, survey on transportation activities (INE, 2020h)

Concerning the movement of passengers at Faro airport by the main countries of origin in the 1st half of the year 2020 compared to the same period of 2019, the observed drops oscillate between 61.2% of national passengers and 88.2% of the Irish, while the UK had a decrease of 83.5%. This can be observed in Figure 4.11 below. Until June 2020, the United Kingdom had a share of 39.7% of the total passengers disembarked at Faro airport, followed by the Netherlands, with 12.4%, and Germany, with 12.1%. Portugal recorded a market share of 10%.





*Source:* Own elaboration, data retrieved from "ANA- Aeroportos de Portugal" and Turismo do Algarve, INE - survey on transportation activities.

# 4.5 Registered unemployment in Portugal and the Algarve

In Portugal, the year 2020 kicked off positively with an 8.61% decrease in the number of registered unemployed in January compared to the same month in 2019. This positive percentage change was only experienced in the first two months of the year 2020. From March 2020, when the first coronavirus case was detected in the country, we can observe in figure 4.12 below a consecutive increase in registered unemployment until June

compared to the previous year (2019), where a consecutive decrease in registered unemployment is observed.

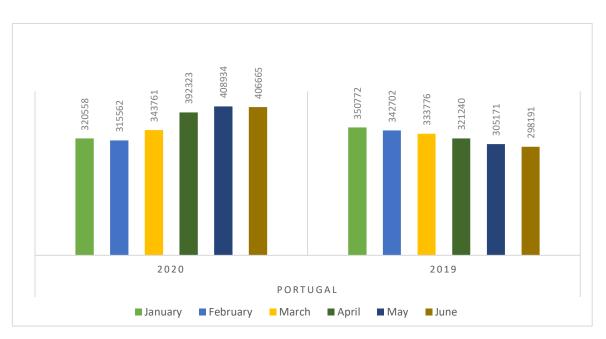


Figure 4.12 Total number of registered unemployment during the first semester of 2020 and 2019 in Portugal

*Source:* Own elaboration, data retrieved from Statistics Portugal Employment Survey; IEFP - Monthly Employment Market Statistics (IEFP, 2020a)

The Algarve, on the other hand, started feeling the impact of the pandemic from the beginning of the year, as we can see from figure 4.13 below. This evidence stems from the drop-in tourism activity. The region experienced from January a continuous increase in the number of registered unemployed. According to this data from the national employment and professional training institute (IEFP) portal, in May 2020, the Algarve was the region that registered the largest increase in the number of registered unemployed people in the country, with a growth of 202.36% compared to the same month of the previous year 2019. This situation confirms the alert/warning given by the Organization for Economic Cooperation and Development (OECD), which estimated that the regions where tourism has more weight shall face a greater risk of job destruction and may lose more than 40% of jobs.

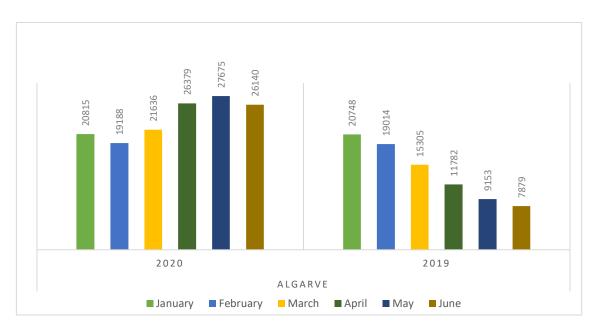


Figure 4.13 Registered Unemployment in Algarve - First six months of 2020 vs 2019

*Source:* Own elaboration, data retrieved from Statistics Portugal Employment Survey; IEFP - Monthly Employment Market Statistics (IEFP, 2020a)

# 4.6 Population employed in the accommodation and catering sector and the like in the Algarve region

According to a report by TravelBi from "Turismo de Portugal" (which is Portugal's tourism national board), in 2020, activities related to accommodation, catering, and similar activities employed 292 thousand individuals, which is 29 thousand less than in 2019 (figure 4.14 below illustrates this). The fall in the total economy was less pronounced, representing 2%. This decrease in employees in companies linked to tourism was motivated by restrictions and successive periods of confinement imposed by the government to contain the pandemic caused by the new coronavirus SARS CoV 2. These measures inevitably led to the partial or permanent closure of a large number of companies. In April 2020, for instance, more than 50% of the hotel units had been closed or did not register any movement. The employed population in the Accommodation and Catering and Similar sectors represented 6.1% of the total economy (-0.4% than in 2019) (TravelBi, 2021).

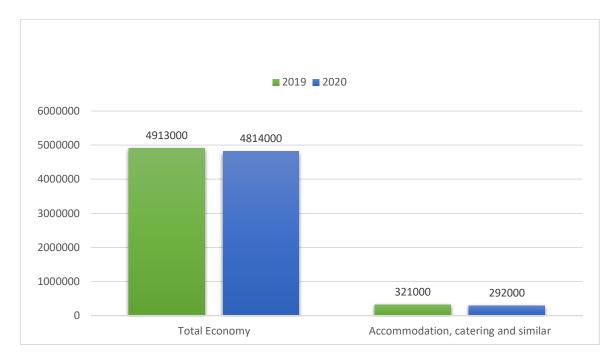


Figure 4.14 Total population employed in the accommodation, catering, and similar sector of activity in 2020 vs 2019

According to Statistics Portugal's employment survey for the second quarter of 2020, the total population in the Algarve region was 437.5 thousand people, and the employed population was around 195.9 thousand, which corresponded to a drop of 17.3 thousand jobs in relation to the same period of the previous year 2019 as shown in figure 4.15 below. The unemployment rate in the region was already 7.4%, the highest in the country, which was already reflecting the strong impact suffered by the region, particularly in the Tourism, Hotel and Restaurant sector, reflecting the pandemic crisis and the consequent confinement measures, restrictions on movement and travel and the preservation of public health applied across Europe and the world (EURES, 2020; IEFP, 2020b).

Source: (TravelBi, 2021)

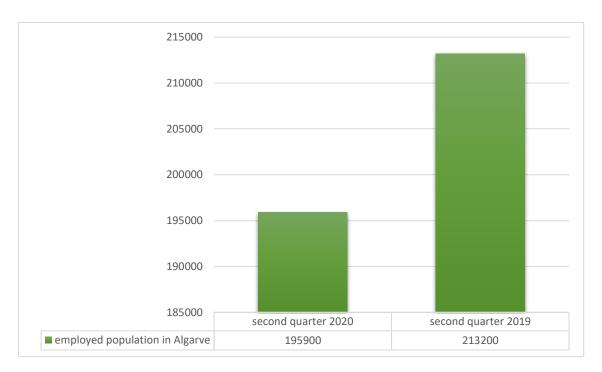


Figure 4.15 Total population employed in the Algarve - Second quarter 2020 vs 2019

Source: Own elaboration, data retrieved from Statistics Portugal Employment Survey; (IEFP, 2020b)

At the end of June 2020, 26140 (figure 4.13) unemployed were registered with the national employment and professional training institute (IEFP) in the region, representing about 6.4% of the national total - with long-term unemployment being the lowest in the country (only 13.9% of the total unemployed were registered for more than one year) (IEFP, 2020a; TravelBi, 2021).

Statistics published by the IEFP portal, on the registered unemployment according to regions by sectors of activity during the first semester of 2020 and in comparison, with the first half of the previous year 2019, there was a significant increase in the number of unemployed people in the accommodation, catering, and similar sector in the Algarve. The highest number of 2469 was registered in April (as shown in figure 4.16 below) sxwhen the country was in a total lockdown.

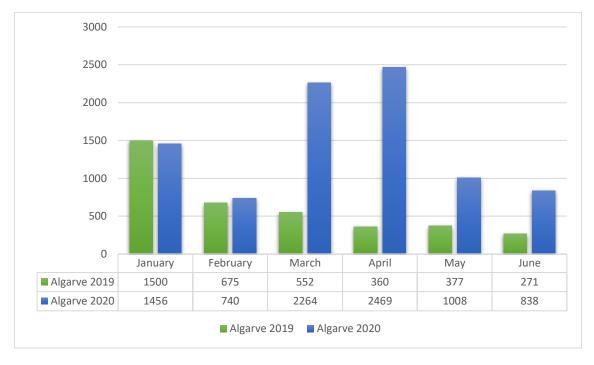


Figure 4.16 Registered unemployment in Accommodation, catering, and similar in Algarve - First half of 2020 vs 2019

*Source:* Own elaboration, data retrieved from Mercado do emprego, estatisticas mensais (IEFP, 2020b)

The Algarve's economic structure is based on six strategic sectors associated with the region's natural resources: hospitality, catering and tourism, health, ICT, creative activities, agri-food, and maritime activities. Most companies are engaged in commerce, rent-a-car activities, and accommodation and catering, reinforcing the significant weight of tourism as an element of the local development (EURES, 2020).

During the same period, cross-border movements in the border area with Spain (with the Andalusian region) are still insignificant, especially given the similarity of the economic structure of the two regions. Portuguese border workers who work in Andalusia do so in the Hotel and Restaurant, Canned Fish and Agriculture sectors (EURES, 2020).

### 4.7 Government measures in response to the Covid-19 crisis

The World Tourism Organization (UNWTO) has published a set of recommendations on measures for the global tourism sector to face the challenges brought by the Covid-19. The recommendations were grouped under three main themes:

- To manage the crisis and mitigate the impact: These proposed measures were intended to maintain jobs, support self-employed workers and support companies' cash flow, promote training, especially digital training.
- Consider recovery measures while considering environmental sustainability. These measures will be based on financial incentives for investment and tourism exploitation, the review of taxes and charges.
- Prepare for tomorrow: Preparing for crises to improve resilience and ensure that tourism is included in national emergency mechanisms and systems. Invest in human capital and the development of talents and finally, firmly include sustainable tourism among national priorities, move to the circular economy and take ownership of the sustainable development goals (SDGs).

The Portuguese government introduced over thirty initiatives to protect workers and families and reduce the economic impacts of Covid-19 through fiscal breaks and the injection of liquidity. The government paid special attention to the Travel & Tourism sector by establishing a dedicated amount of 60 million euros credit line for microbusinesses in the sector and by working closely with the national tourism board "Turismo de Portugal" to boost the national capacity to respond to the challenges resulting from Covid-19 (WTTC, 2020). The Government's created a stimulus package to stimulate the economy and employment by making available 9,2 billion euros during the second quarter of 2020. These measures include tax-related measures, financial support, support of social security contributions. Business credit lines amounting to 3 billion euros were made available for the travel and tourism sector, considered the most affected sector. The restaurants and food catering had 600 million euros available, of which 270 million for micro and small enterprises; Travel agencies, organization of events had 200 million euros at their disposal, of which 75 million for micro and small enterprises; Tourism related activities, such as hotels and local accommodation had 9 billion euros, of which 300 million for micro and small enterprises; and the textiles, clothing and footwear industries, wood related products, extractive industries with 1,3 billion euros at their disposal, of which 400 million for micro and small enterprises (ILO, 2020; WTTC, 2020).

A temporal simplified lay-off scheme was put in place to maintain employees' contracts in companies facing crisis equivalent to 2/3 of the wage, whereby 70% is paid by the social security and 30% is paid by the employer. There was also an exemption of payment of employer's social security contributions for up to three months. This scheme was extended until the end of July, and a one-off compensation for laid-off workers ranging between 100 euros and 351 euros was paid in July for the loss of income. Self-employed workers were also given financial support to compensate for the reduction of economic activities and the possibility of suspending the payment of contributions (ILO, 2020). The "Turismo de Portugal" with other private associations such as ALEP (Associação do alojamento local em Portugal), AHRESP (Associação da Hotelaria, Restauração e Similares de Portugal) and AHP (Associação da Hotelaria de Portugal), provided a fund amounting to 250,000 euros to help hotel and accommodation owners with the payment of their bills. The government also made over 700 million euros available to encourage businesses to reopen (WTTC, 2020).

### **CHAPTER FIVE**

### **5 DISCUSSION OF RESULTS**

This chapter reviews, interprets, and elaborates on the results found to evaluate the impact the COVID-19 pandemic has on the economy of Portugal's southernmost region – the Algarve. This chapter will also highlight on the recommendations or suggestions to deal with the challenges faced by the tourism sector of the Algarve during and after this pandemic.

#### 5.1 Discussion & Interpretation of Results

The COVID-19 brought us the worst global crisis of our times. A crisis that no one anticipated and that will leave a deep imprint on humanity. Our way of living, working, traveling, socializing from the year 2020 has unavoidably been different. The World Tourism Organization already estimated a drop of 300 million international tourists worldwide from January to May 2020 (-56% compared to the first half of 2019). In addition, the Algarve's regional tourism board (Região de Turismo do Algarve - RTA) has also published a report on tourism activity in the region for the first half of 2020, as the previous chapter demonstrated. There was a unanimous view that the COVID-19 pandemic revealed itself to be a serious threat to the global economy with the closing of business establishments and the drastic fall in tourism as a result of strict measures adopted by governments, like confinement measures and the closing of borders to control and reduce the spread of the virus. The results obtained can confirm this unanimous point of view in relation to the Algarve and Portugal's economy as a whole.

There is an indication from the results that the year 2020 began with good prospects for tourism in the Algarve and the whole country, with expected growth in the demand for travel and a consequent increase in the revenue of companies in different tourism segments. Unfortunately, this perspective did not last long enough, as early in the first quarter, the sector suffered from practically a total interruption of its activities due to the pandemic of the new coronavirus type, Sars-Cov2, Covid-19. Interruptions in international travel, recommendations from local governments for social isolation, companies activating their survival mode, and other companies moving out of business made the travel and tourism market and its production practically inoperative, with the

escalation of cancellations and rebooking of packages and tickets already sold. Covid-19's actions to control the pandemic and reduce contaminations led to the need for sanitary interruptions in all countries of the world, restricting business possibilities at the local and international levels. Also, the fact that the severity and longevity of the virus cannot be predicted, the virus prompted governments worldwide to take strict measures to curb the spread of the virus. Measures include restricting the movement of people, goods and services, ban on travel, interruptions in educational proceedings, the closing of all nonessential businesses and confinement measures imposed on the population (Kuqi et al., 2021).

The data demonstrate that the Algarve's tourism has been practically without activities since mid-March 2020 and has spent the entire first half of the year without appreciating the significant continuation of its increasing sales, even though the economy showed the first signs of the opening of businesses in June of the same year. The data also indicates that the impact on tourism, catering, and hospitality sector, in particular, is overwhelming, including that of the aviation and airlines (with expected recovery to be faster for the domestic tourism and much slower for more distant and/or international travels). Algarve's economic growth has been extremely weakened, with the risk of an economic downturn remaining high. Looking at some key tourism indicators, we can see how the pandemic had a huge negative impact on Algarve's tourism sector.

- During the first semester of 2019, the Algarve welcomed a total of 2.2 million guests, of which 1.6 million (73%) were internationals and 587.1 thousand (27%) were Portuguese. While in the first semester of 2020, there were 587 thousand guests in Algarve, of which 337.9 thousand (57.6%) were internationals and 249.1 thousand (42.2%) were Portuguese. The Algarve thus lost 1.62 million guests in the first half of 2020, a decrease of more than 73.3% compared to the first half of 2019. Responsible for half of this fall is the foreign clientele which has collapsed (-1.26 million), and for the other half, the Portuguese clientele who favored destinations just around their municipalities (-338 thousand).
- During the first half of 2019, overnight stays in the Algarve stood at 8.6 million overnight stays. While in the first half of 2020, total overnight stays in the region were 2.3 million overnight stays. Therefore, overnight stays fell sharply over the first half of 2020, and the speed of the fall was due to confinement. Many hotels

in the Algarve remained closed even during the summer. Overnight stays in Algarve fell by 73.3% compared to the same period in 2019.

- Profits generated in the first semester of 2020 in Algarve tourism amounted to 96.2 million euros: of which 67.2 million euros was generated from room income (69.9%) and the rest 29 million euros (30.1%) was from other types of revenues. While in 2019, the first semester in Algarve tourism generated 431 million euros of revenues/profits: 302.2 million euros (70.1%) came from room income and the rest (29.9%) amounting to 128.8 million euros was from other income types.
- The pandemic caused a great loss in jobs, with more than 40% of employment at risk in the Algarve, according to the OECD (Público Comunicação Social, 2020). The highest number of 27675 unemployed people was in May (during the state of emergency), compared to 9153 of the same month in 2019. The great loss in commercial aviation, closing of hotels and businesses, led to significant losses and massive unemployment (Almeida & Silva, 2020). Companies in the hospitality and tourism sector experienced a reduction in turnover, and most companies are experiencing a significant drop in sales. The massive aid measures for companies and employees put in place by the Portuguese government and which continue till-date will protect a large part of them, but not all. So, we can expect, depending on the terms of the recovery, a sharp increase in bankruptcies in the near future.
- In 2020 there was a drastic fall in international arrivals, which corresponds to a loss of export earnings from international tourism greater than that recorded in the previous global financial crisis. In the second trimester of 2020, the movement of passengers at Faro airport, compared to the same period in 2019, presented a variation of -98.7%, representing a decrease of 2.92 million passengers (Turismo do Algarve, 2020). It is worth highlighting that last-minute flight cancellations and the trend towards flexible bookings to favor customers resulted in cash shortages.
- There was a very high negative impact on tourism's short-term liquidity, as lastminute cancellations required the reimbursement of payments and significant cash flow decreases due to the lack of new bookings.
- The impact on profitability was also greatly felt, as the main holiday period from June to September was strongly impacted by travel restrictions and consumer reluctance.

In social terms, the impact of this isolation is also very disturbing. According to several experts, "social distance" is critical to predicting future infections, but loneliness can also make us sick. As referred by Pfefferbaum & North (2020: 510):

"Uncertain prognoses, looming severe shortages of resources for testing and treatment and for protecting responders and healthcare providers from infection, imposition of unfamiliar public health measures that infringe on personal freedoms, large and growing financial losses, and conflicting messages from authorities are among the major stressors that undoubtedly will contribute to widespread emotional distress and increased risk for psychiatric illness associated with covid-19 (Pfefferbaum & North, 2020, p. 510)."

This situation, however, has also boosted creativity and reinvention, which could leave positive imprints for the future of the tourism industry. Companies are now testing telecommuting, which could result in their employees working more from home in the future, giving them greater flexibility, reducing congestion in cities, and reducing their carbon footprint. People with higher skills (education, financial services, corporate work, etc.) are better able to work remotely. However, it is certain and well known that not everyone can do it (manufacturing, retail, leisure, construction, and transport, etc.) (Remote Portugal & Digital, 2020). When it comes to education, this situation could be an opportunity for digital education. With the on and off closing of schools, solutions for "school from home" are being sought, with online tutorials, and with parents being more involved in the educational process. The problem is that it is probable that this leads to serious inequalities. Access to online resources is not available to everyone, and families in precarious situations will be more affected by the closure of schools. Several institutions started investing in digitizing their services (Laptops to improve the quality of remote working, videoconferencing solutions, among others), increasing their online services, enhancing meetings via conference calls, and reducing travel, which is important for sustainability.

### 5.2 **Recommendations - Medium and Long-term lines of thoughts**

The Covid-19 crisis is part of a fundamental movement to question mass tourism and its consequences (like pollution, biodiversity damage, climate change, among others) which have not reduced even with economic difficulties. This crisis accelerated another significant shift which is sustainable tourism. When activities resume and are well

established, we expect everything to happen in a different context in terms of expectations, choice of priorities, and the tourist's behavior. Tourists, especially the younger generation, will direct their choices towards more local and authentic travel. How can the Algarve region, which is one of Europe's leading destinations, take this turn? There are several lines of thoughts of varying importance that deserve to be explored:

- A crisis strategy should be defined and planned, both at the regional and national levels, for the conservation and protection of tourism jobs, including seasonal workers and businesses.
- An offer for staycation could be created. Staycation is a concept that inspires travelers to seek experiences within their cities and regions. People from all over the world come to spend their holidays in our city, why can't the residents themselves do the same. This offer should include catering, leisure, cultural outings, activities devoted to overall wellbeing (taking care of oneself, rediscovering one's territory).
- To invite Algarve residents to share their territory and become ambassadors and greeters. Greeters are volunteer citizens passionate about their region and are willing to freely show them around, tell their stories, show their favorite and most popular spots. Greeters support sustainable tourism. They respect natural and man-made environments, bringing both cultural and economical enrichment to local communities (International Greeter Association, 2021). A community of greeters can be called upon in the Algarve to help inhabitants discover their territory and make them aware of how to welcome international visitors. Make residents aware of how to welcome foreign visitors, cultivate them in the richness of their territory, encourage them to share their perception and history. Beyond the cultural, service and leisure offer, investing in people makes it possible to stand out from competing destinations. These trained residents can be mobilized for major events in the Algarve, for instance, the "Algarve Grand Prix in Portimão".
- To plan awareness campaigns for local tourism and communicate on responsible tourism (Zero-waste, reasonable consumption, etc.).

- A tourist attractiveness strategy based on quality should be favored rather than on the increase in the number of visitors, which is a source of increasing nuisances (like over-tourism, pollution, waste, damage to biodiversity, etc.).
- The difficulties encountered by the activity today should be considered and offer a new form of tourism, reasoned and reasonable at all stages of the visitor's trip. New distribution systems and channels could be put in place.
- Governments of different countries should have a uniform and identical approaches. Countries need to have common agreements on the measures to be able to recover the loss.
- It would be vital for companies to think about strategies for the post-COVID-19 period, in which they are increasingly present in digital platforms with quality and in a professional way. What we are experiencing today may be repeated tomorrow and what today tells us is that the digitization of the economy is a path with no return. People, more than ever before, are more attentive to digital media. There is a need for a bigger wager in digital tools. Destination management, for instance, should be more digitized. This is an opportunity to gain new customers eager to travel again as soon as all safety conditions are met.
- Companies should rely on insurance companies to manage uncertainty. For instance, businesses should consider credit insurance to protect them in case of insolvency or failure to repay their credit debts. They transfer the risk to the insurer and the insurance company can also offer credit management support to help reduce any chance of financial loss.
- Society must adopt measures to prepare for and respond to future pandemics so that people in general and governments, in particular, can improve their capacity to face crises like this one.

Stopped in the first half of 2020, tourism activity in Algarve started a timid recovery as the summer began. A gradual and timid recovery was observed from the 2nd of May, when the state of emergency was officially over in Portugal. We can observe this on the data. The recovery will be strongly conditioned on households' confidence and the reassurance they will have in tourism products. Due to uncertainty during summer 2020, tourists allocated more low budgets than usual to their holidays but also made their stays shorter, more local, and favored non-commercial accommodations. Summer 2020 in the

Algarve was mainly resident tourists, very few arrivals of foreign customers and few departures outside of the region. The actors in the Algarve tourism sectors have to adapt to reassure customers.

The globally imposed travel restrictions dramatically reduced 2020 tourism numbers not only in Portugal and the Algarve region but in the whole world, just as the UNWTO alerted even before the state of emergency was declared in Portugal.

## **CHAPTER SIX**

## 6 CONCLUSION

This chapter presents the conclusions of the study, which are in line with the results and respective discussion highlighted in the previous chapters. Then, we will point out some limitations found in the present study. Finally, we will list some recommendations that we consider essential for elaborating future studies in this area.

### 6.1 Summary

This dissertation had its main objective to analyze and identify the socio-economic impact the Covid-19 pandemic has on the tourism industry of the Algarve region.

Tourism is a sector of great importance to the Portuguese economy. It is of particular importance at the macroeconomic level because of its participation in the country's GDP (15.4% of GDP in 2019) (INE, 2020a), its share of the active population it employs, and the revenues it generates. At the national, regional, and even global levels, tourism today constitutes an effective strategy for achieving sustainable growth, reduction of unemployment, and poverty reduction. It also aims to achieve sustainable development in these three dimensions: economic, social, and environmental. In other words, as an essential engine of the Portuguese and Algarve's economic growth, the tourist activity, by its importance and its impact on other sectors of activity, contributes to the economic and social performance of the country and sustainable development. The weight of tourism in the Algarve is even more, as tourism represents approximately more than 50% of the region's Gross Added Value and 40% of employment, with a direct intrinsic relationship between the Algarve's economy and tourism (Ordem dos Economistas, 2020).

Travel and tourism experiences worldwide had their activities interrupted due to political and commercial decisions induced by the effects of the coronavirus pandemic. But the activity will resurface, but over a prolonged period and at varying speeds in different countries. In many regions, domestic, regional, and perhaps visits to friends and relatives may lead the way back to tourism mobility. International travel slowly follows, "as countries relax their border controls and allow international flights" (Baum & Hai, 2020:2404). In Algarve, as in Portugal, the most affected activities were those which had been stopped or almost stopped following the containment measures taken by the government: like trading (except for food), construction industry, hotels and restaurants, cultural activities (art, entertainment, cinema, museum, etc.), and business services. Some sectors are specific to the Algarve, and their weight in total employment is greater than what is observed at the national level. This is the case for tourism, culture, operational services (that is, cleaning, temporary work, security), which are the sectors most heavily impacted, with challenges for the economic recovery of Algarve.

The Algarve suffered strong impacts on its tourism industry in the first half of 2020. The social isolation that led to the complete shut-down of the industry and restricted the provision of services generated tremendous economic and social losses, as the results demonstrated. Even the fact that the Portuguese government could better manage the pandemic during this first wave than some other countries (for example, nearby Spain where cases escalated) did not save the Algarve from the huge losses. The great isolation during March and April 2020 and the drastic fall in population's income led to the demand for travel & tourism services not being the same as before. As the willingness of people to spend on travel will still be conditioned to greater confidence in the health security of the destination to be visited. The huge decrease in international tourism is a problem for the Algarve that greatly depends on foreign markets such as Ireland, Germany, Spain, France, and the United Kingdom in particular (Bernardo, 2013). This situation made the region rely on domestic tourism to recover and resume tourism activities in the safest and fastest possible way.

The impact on the job market in the Algarve was devastating. With more than 18,000 jobs destroyed in the first half of the year 2020. Jobs in accommodation, catering, and similar activities in Portugal lost a total of 29,000 jobs in the first semester of 2020, as the results indicate.

This dissertation illustrates that the coronavirus pandemic negatively impacted the Algarve region's tourism sector. Important reductions and losses were registered in numbers of the key tourism indicators in the first half of 2020 compared to the same period of the previous year, 2019. The effects of the Covid-19 pandemic on the Algarve economy are still very difficult to determine with precision today, as they will be linked

to the duration of the crisis, to the effectiveness of the support mechanisms put in place within a national framework, but also to coordinated encouraging actions at the global (that is IMF, G20, etc.) and European level.

The slogan of faith and hope during the confinement that "everything will be fine (vai ficar tudo bem)" is not true for everyone, as many companies will not survive this, and many people will remain jobless. That is why the Portuguese government and all of us cannot stop ("estamos ON"). Therefore, it is important to have a huge sense of unity and, above all, solidarity.

### 6.2 Limitations of the study and suggestions for future research

During the elaboration of this dissertation, limitations emerged that, in one way or the other, conditioned the deepening of relevant aspects for this study. Measuring the economic impact of tourism is not an easy task because it is about measuring a service with very uncommon characteristics, and the fact that tourism is, by nature, a highly fragmented economic activity. There was limited data available as the coronavirus pandemic is currently happening globally. The researcher had to wait for a long time before most of the data were made available by responsible organizations and institutions. And when the data were finally published, they were just provisory data, which threatens the accuracy and reliability of the data. The lack of information on the number of employed people in the Algarve tourism sector during the selected time frame, led to the use of a general point of view on this point. This dissertation does not include a full dimension of the economic impact of the covid-19 pandemic on the Algarvian tourism industry, having opted to assess just data on the available key tourism indicators.

As for future research, the work carried out in this dissertation may serve as a basis and motivation for carrying out similar studies in other Portuguese and foreign regions in order to complete the literary insufficiency.

Another suggestion for future research could be to identify and study the factors that can influence the choice of the Algarve or any other similar tourist destination, by tourists during a pandemic.

# 7 **BIBLIOGRAPHY**

- Almeida, A. & Correia, A. (2010). Tourism Development in Madeira: An Analysis Based on the Life Cycle Approach. *Tourism Economics*, 16(2), 427–441. https://doi.org/https://doi.org/10.5367/000000010791305644
- Almeida, F. & Silva, O. (2020). The impact of covid-19 on tourism sustainability: Evidence from Portugal. Advances in Hospitality and Tourism Research, 8(2), 440– 446. https://doi.org/10.30519/ahtr.775340
- ANA, A. de P. (2019). *Management reports & Accounts 2019*. https://www.vinci-airports.com/en/airports/faro-airport
- Bahadur, S., Long, W., & Shuaib, M. (2020). Human coronaviruses with emphasis on the COVID-19 outbreak. In *Virus Disease* (pp. 1–5). Springer. https://doi.org/10.1007/s13337-020-00594-y
- Baum, T., & Hai, N. T. T. (2020). Hospitality, tourism, human rights and the impact of COVID-19. *International Journal of Contemporary Hospitality Management*, 32(7), 2397–2407. https://doi.org/10.1108/IJCHM-03-2020-0242
- Benjamin, S., Dillette, A., & Alderman, D. H. (2020). "We can't return to normal": committing to tourism equity in the post-pandemic age. *Tourism Geographies*, 0(0), 1–8. https://doi.org/10.1080/14616688.2020.1759130
- Bernardo, C. A. (2013). Contributo para a recuperação do turismo no Algarve: da imagética à gestão territorial. 359. https://core.ac.uk/download/pdf/62697094.pdf
- Calderwood, U. L., & Soshkin, M. (2019). *The Travel and Tourism Competitiveness Report* 2019 (M. Fisher (ed.)). World Economic Forum. http://www3.weforum.org/docs/WEF\_TTCR\_2019.pdf
- Caldwell, N., & João, F. R. (2004). The Differences Between Branding a Country, a region and a city: Applying the Brand Box Model. *Brand Management, VOL. 12*(NO. 1), 50–61. https://www.academia.edu/7505842/THE\_DIFFERENCES\_BETWEEN\_BRANDI NG\_A\_COUNTRY\_A\_REGION\_AND\_A\_CITY\_applying\_the\_Brand\_Box\_Mo del
- Camilleri, M. A. (2018). The Tourism Industry: An Overview. In *Travel Marketing*, *Tourism Economics and the Airline Product* (pp. 3–27). https://doi.org/10.1007/978-3-319-49849-2\_1

Cardoso, F. (2018). Portugal: an investment destination in tourism. Turismo De Portugal

-, 1–39.

- Chan-Yeung, M., & Xu, R. H. (2003). SARS: Epidemiology. In *Respirology* (Vol. 8). https://doi.org/10.1046/j.1440-1843.2003.00518.x
- Chen, K. T. Twu, S. J., Chang, H. L., Wu, Y. C., Chen, C. T., Lin, T. H., Olsen, S. J., Dowell, S. F., & Su, I. J. (2005). SARS in Taiwan: An overview and lessons learned. *International Journal of Infectious Diseases*, 9(2), 77–85. https://doi.org/10.1016/j.ijid.2004.04.015
- Coelho, L. S. (2020). *Recuperação económica em Portugal: então e o Algarve?* ECO News. https://eco-sapo-pt.cdn.ampproject.org/c/s/eco.sapo.pt/opiniao/recuperacaoeconomica-em-portugal-entao-e-o-algarve/amp/
- Corfu, A., Breda, Z., & Costa, C. (2006). Eu Integration and Tourism Destination Management: The Case Of Portugal. *The AMFITEATRU ECONOMIC Journal*, 8(20), 20–29.
- Correia, A., Queirós, L., & Dias, J. (2010). Pandemic influenza A (H1N1) in the North of Portugal: how did the autumn-winter wave behave? *Revista Portuguesa de Pneumologia*, 16(6), 880–886. https://pubmed.ncbi.nlm.nih.gov/21067693/
- Costa, J. (2004). The Portuguese tourism sector: Key challenges for human resources management. In *International Journal of Contemporary Hospitality Management* (Vol. 16, Issue 7, pp. 402–407). https://doi.org/10.1108/09596110410559087
- Crouch, G. I., & Ritchie, J. R. B. (1999). Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 137–152. https://doi.org/10.1016/S0148-2963(97)00196-3
- De Groot, R. J., Baker, S. C., Baric, R. S., Brown, C. S., Drosten, C., Enjuanes, L., Fouchier, R. A. M., Galiano, M., Gorbalenya, A. E., Memish, Z. A., Perlman, S., Poon, L. L. M., Snijder, E. J., Stephens, G. M., Woo, P. C. Y., Zaki, A. M., Zambon, M., & Ziebuhr, J. (2013). Middle East Respiratory Syndrome Coronavirus (MERS-CoV): Announcement of the Coronavirus Study Group. *Journal of Virology*, 87(14), 7790–7792. https://doi.org/10.1128/jvi.01244-13
- Direção-Geral da Saúde. (2020). *COVID-19 Página Inicial*. Direção-Geral Da Saúde. https://covid19.min-saude.pt/
- EURES, E. C. (2020). EURES Informações sobre o Mercado de Trabalho Algarve -Comissão Europeia. European Commission Blog. https://ec.europa.eu/eures/main.jsp?catId=435&acro=lmi&lang=pt&countryId=PT &regionId=PT1&nuts2Code=PT15&nuts3Code=null

- European Commission. (2020a). North Region of Portugal Internal Market, Industry, Entrepreneurship and SMEs. https://ec.europa.eu/growth/tools-databases/regionalinnovation-monitor/base-profile/algarve-region-portugal-0
- European Commission. (2020b). State aid: Commission approves €3 billion Portuguese guarantee schemes for SMEs and midcaps affected by Coronavirus outbreak No Title. European Commission Press Release. https://ec.europa.eu/commission/presscorner/detail/en/IP\_20\_506
- European Commission, E. (2020c). *Algarve Region of Portugal Economy*. European Commission Blog. https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/algarve-region-portugal
- Fabião, E., & Calado, J. M. (2011). Algarve Perfil de Saúde da Região. *ARS Algarve*, 9–11.
- G20 Summit, information Centre. (2020). G20 Tourism Ministers' Statement on COVID-19 Ministerial Statement. http://www.g20.utoronto.ca/2020/2020-g20-tourism-0424.html
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 1–20. https://doi.org/10.1080/09669582.2020.1758708
- Governo de Portugal. (2020). Decreto n.o 2-A/2020. *Diario Da Republica Eletronico*, 1– 11. https://www.portugal.gov.pt/download-ficheiros/ficheiro.aspx?v=3f8e87a6-3cf1-4d0c-b5ee-72225a73cd4f
- Graham, A. (2018). *Managing airports: An international perspective* (5th Edition). Routledge. https://doi.org/https://doi.org/10.4324/9781315269047
- Hall, C. M., Scott, D., & Gössling, S. (2020). Pandemics, transformations and tourism: be careful what you wish for. *Tourism Geographies*, 22(3), 577–598. https://doi.org/10.1080/14616688.2020.1759131
- Heeley, J. (1980). The definition of tourism in Great Britain: Does terminological confusion have to rule? *The Tourist Review*, 35(2), 11–14. https://doi.org/10.1108/eb057811
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., ... Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506. https://doi.org/10.1016/S0140-6736(20)30183-5

- IEFP. (2020a). *Informação mensal do mercado de emprego 2020*. IEFP ONLINE Publicações Estatísticas. https://www.iefp.pt/estatisticas
- IEFP. (2020b). *Mercado de Emprego Estatísticas Mensais*. https://www.iefp.pt/estatisticas
- ILO, (2020). Country policy responses (COVID-19 and the world of work) -PORTUGAL. In *Burkina Faso* (Issue September, pp. 1–2). https://www.ilo.org/global/topics/coronavirus/regional-country/countryresponses/lang--en/index.htm#PT
- IMF, (2020). World Economic Outlook Update June 2020. In World Economic Outlook (Issue
   https://www.imf.org/en/Publications/%0AWEO/Issues/2020/06/24/WEOUpdateJu ne2020
- INE, (2020a). *Conta Satélite do Turismo para Portugal*. https://www.gee.gov.pt/pt/indicadores-diarios/ultimos-indicadores/30866-ineconta-satelite-do-turismo-para-portugal-3
- INE, (2020b). Dest\_Turismo\_Set20\_Quadros\_Tables. Instituto Nacional de Estatisticas.
- INE, (2020c). Estatísticas Demográficas 2019. www.ine.pt
- INE, (2020d). *Estatísticas do Turismo 2019* (I. P. Instituto Nacional de Estatística (ed.); 2020th ed.).
- INE, (2020e). Press Release Tourism Activity. INE.PT. https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_destaques&DESTAQUE Sdest\_boui=415251753&DESTAQUESmodo=2
- INE, (2020f). REGIÃO ALGARVE EM NÚMEROS 2018. In I. . Instituto Nacional de Estatística (Ed.), *Instituto Nacional de Estatística, I.P.* (2020th ed., Vol. 53, Issue 9). https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_publicacoes&PUBLICA
  - COESpub\_boui=419426950&PUBLICACOESmodo=2
- INE, (2020g). Tourist Activity May 2020 Flash estimate Tourist activity maintained almost complete interruption in May (Issue May). https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_destaques&DESTAQUE Sdest\_boui=441661584&DESTAQUEStema=5414335&DESTAQUESmodo=2
- INE, (2020h). *Transportes* 2*T* 2020 *Quadros*. https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_destaques&DESTAQUE

Sdest\_boui=415204649&DESTAQUEStema=55488&DESTAQUESmodo=2

- International Greeter Association, (2021). *About Greeters and their Concept*. International Greeter Association. https://internationalgreeter.org/greeter-idea
- Johnson, N. P. A. S., & Mueller, J. (2002). Updating the accounts: global mortality of the 1918-1920 "Spanish" influenza pandemic. *Bulletin of the History of Medicine*, 76(1), 105–115. https://doi.org/10.1353/bhm.2002.0022
- Joo, H., Maskery, B. A., Berro, A. D., Rotz, L. D., Lee, Y. K., & Brown, C. M. (2019). Economic Impact of the 2015 MERS Outbreak on the Republic of Korea's Tourism-Related Industries. *Health Security*, 17(2), 100–108. <u>https://doi.org/10.1089/hs.2018.0115</u>
- Judd, Dennis. (2006). "Commentary: Tracing the Commodity Chain of Global Tourism." Tourism Geographies, 8(4): 323–336.
- Kuqi, B., Elezaj, E., Millaku, B., Dreshaj, A., & Hung, N. T. (2021). The impact of COVID-19 (SARS-CoV-2) in tourism industry: evidence of Kosovo during Q1, Q2 and Q3 period of 2020. *Journal of Sustainable Finance and Investment*, 0(0), 1–12. https://doi.org/10.1080/20430795.2021.1883986
- Lacey, M., & Jacobs, A. (2009). Even as Fears of Flu Ebb, Mexicans Feel Stigma. *The New York Times*. https://www.nbcnews.com/id/wbna30572038
- Laranjeiro, A. (2021). Vinci: Aeroportos portugueses com quebra de 70% em 2020. Www.Dinheirovivo.Pt, 1-undefined. https://www.dinheirovivo.pt/empresas/vinciaeroportos-portugueses-com-quebra-de-70-em-2020-13249543.html
- Leung, K., Wu, J. T., Liu, D., & Leung, G. M. (2020). First-wave COVID-19 transmissibility and severity in China outside Hubei after control measures, and second-wave scenario planning: a modelling impact assessment. *The Lancet*, 395(10233), 1382–1393. https://doi.org/10.1016/S0140-6736(20)30746-7
- Martins, F. S., Cunha, J. A. C. da, & Serra, F. A. R. (2018). Secondary Data in Research – Uses and Opportunities. *Revista Ibero-Americana de Estratégia*, 17(04), 01–04. https://doi.org/10.5585/ijsm.v17i4.2723
- Mason, P., Grabowski, P., & Du, W. (2005). Severe acute respiratory syndrome, tourism and the media. *International Journal of Tourism Research*, 7(1), 11–21. https://doi.org/10.1002/jtr.519
- Morens, D. M., Folkers, G. K., & Fauci, A. S. (2009). What is a pandemic? *Journal of Infectious Diseases*, 200(7), 1018–1021. https://doi.org/10.1086/644537

- Neto, V. (2015). Património/Cultura e Turismo. In C. F. Santos, A. P. D. Oliveira, & A. R. Gonçalves (Eds.), *Fragmentos para a História DO TURISMO NO ALGARVE* (Centro de, pp. 33–40). Centro de Estudos em Património, Paisagem e Construção Universidade do Algarve. https://sapientia.ualg.pt/handle/10400.1/8743
- Netto, P. A. (2009). What is tourism? Definitions, theoretical phases and principles. In J. Tribe (Ed.), *Philosophical Issues in Tourism* (pp. 43–61). Channel View Publications. https://doi.org/https://doi.org/10.21832/9781845410988
- OECD. (2020a). OECD Employment Outlook 2020 (Issue 2003). https://www.oecdilibrary.org/employment/oecd-employment-outlook-2020\_1686c758-en
- OECD. (2020b). OECD Tourism Trends and Policies 2020 (Summary in Japanese). In OECD Publishing. https://doi.org/10.1787/d3cee5e1-ja
- OECD. (2020c). Tourism Policy Responses to the coronavirus (COVID-19). In OECD Publishing. https://read.oecd-ilibrary.org/view/?ref=124\_124984-7uf8nm95se&title=Covid-19\_Tourism\_Policy\_Responses&\_ga=2.187193576.1171083985.1626717659-1442609328.1624308494
- Oliveira, P. (2018). Considerações sobre o clima do Algarve. *Direção Regional de Agricultura e Pescas Do Algarve*, 6. http://www.drapalg.min-agricultura.pt/ema/images/artigos/DRAPALG EMAs clima no Algarve.pdf
- Ordem dos Economistas, A. (2020). *Ideias para a Economia do Algarve na era pós-Covid19*. www.Sulinformacao.pt. https://www.sulinformacao.pt/2020/04/ideiaspara-a-economia-do-algarve-na-era-poscovid19/?fbclid=IwAR3huKXfMsFpPZNncBl3fKX01yPKOz1C02byWy6\_4r08U a5Em7L2uX36HOU
- Pfefferbaum, B., & North, C. S. (2020). Mental Health and the Covid-19 Pandemic. *New England Journal of Medicine*, 383(6), 510–512. <u>https://doi.org/10.1056/nejmp2008017</u>
- Provenzano, D. (2012). The "power" of tourism in Portugal. Tourism Economics, 18(3), 635–648. <u>https://doi.org/10.5367/te.2012.0127</u>
- Público Comunicação Social, S. (2020). Pandemia põe em risco mais de 40% dos empregos no Algarve / OCDE / PÚBLICO. publico.pt https://www.publico.pt/2020/07/07/economia/noticia/pandemia-poe-risco-40empregos-algarve-1923411

Rasmussen, A. S., Watson, K. A., & Swerdlow, L. D. (2016). Middle East Respiratory

Syndrome(MERS).MicrobiologySpectrum,4(3).https://doi.org/https://doi.org/10.1128/microbiolspec.ei10-0020-2016

- Remote Portugal, T., & Digital, N. (2020). Remote Tour Portugal O impacto e os "porquês" de uma experiência de Trabalho Remoto no nosso país - Remote Portugal. https://remoteportugal.pt/remote-tour-portugal-balanco/
- Ruiz Estrada, M. A. (2020). Economic waves: The effect of the U.S. economy on the world economy. *Contemporary Economics*, 8(3), 247–256. https://doi.org/10.5709/ce.1897-9254.143
- Sandman, P. M. (2009). Pandemics: Good hygiene is not enough. *Nature*, 459(7245), 322–323. https://doi.org/10.1038/459322a
- Santana, G. (2008). Crisis Management and tourism: Beyond Rhetoric. Journal of Travel & Tourism Marketing, 15:4(13 October 2008), 299–321. https://doi.org/10.1300/J073v15n04\_05
- Smith, S. L. J. (1988). Defining tourism, a supply-side view. *Annals of Tourism Research*, *15*(2), 179–190. https://doi.org/10.1016/0160-7383(88)90081-3
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., Iosifidis, C., & Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). In *International Journal of Surgery* (Vol. 76, pp. 71–76). Elsevier Ltd. https://doi.org/10.1016/j.ijsu.2020.02.034
- St. Aubyn, M. (2020). O impacto económico da pandemia Covid-19 em Portugal. *Conselho Das Finanças Pública. Universidade de Lisboa*, N 9, 42–50.
- TravelBi, by T. de P. (2020a). *Estatísticas / Hóspedes 2010-2020*. Turismo De Portugal. https://travelbi.turismodeportugal.pt/en-us/Pages/PowerBI/guests.aspx
- TravelBi, by T. de P. (2020b). *Estatísticas | Taxa de Sazonalidade 2015-2019*. Turismo De Portugal. https://travelbi.turismodeportugal.pt/enus/Pages/PowerBI/Sustentabilidade/seasonality-rate.aspx
- TravelBi, by T. de P. (2020c). *Statistics / Overnight Stays 2010-2021*. Turismo De Portugal. https://travelbi.turismodeportugal.pt/en-us/Pages/PowerBI/overnightstays.aspx
- TravelBi, by T. de P. (2021). *População Empregada | 2020 Alojamento e Restauração e Similares*. https://travelbi.turismodeportugal.pt/pt-pt/Paginas/População-Empregada--2020.aspx

- Tureac, C., & Turtureanu, A. (2010). Types and Forms of Tourism. Acta Universitatis Danubius. Œconomica, 4(1), 92–103. http://journals.univdanubius.ro/index.php/oeconomica/article/view/60/56
- Turismo de Portugal, I. (2019). WTTC destaca Portugal como o país europeu com maior crescimento no setor do turismo. WTTC Destaca Portugal Como o País Europeu Com Maior Crescimento No Setor Do Turismo. http://www.turismodeportugal.pt/pt/Noticias/Paginas/wttc-destaca-portugal-comopais-europeu-com-maior-crescimento-turismo.aspx
- Turismo do Algarve, R. de T. do A. (2020). *ALGARVE CONJUNTURA TURISTICA Boletim 30 T2*. https://www.turismodoalgarve.pt/pt/menu/545/publicacoes.aspx
- UNWTO. (2019). International Tourism Highlights International tourism continues to outpace the global economy. In Unwto. https://doi.org/https://doi.org/10.18111/9789284421152
- UNWTO. (2020a). TOURISM AND COVID-19.
- UNWTO, W. T. O. (2013). UNWTO Tourism Highlights, 2013 Edition. In UNWTO Elibrary. https://doi.org/10.18111/9789284415427
- UNWTO, W. T. O. (2020b). UNWTO World Tourism Barometer and Statistical Annex, December 2020. UNWTO World Tourism Barometer, 18(7), 1–36. https://doi.org/10.18111/wtobarometereng.2020.18.1.7
- Van Den Bulck, J., & Custers, K. (2009). Television exposure is related to fear of avian flu, an Ecological Study across 23 member states of the European Union. *European Journal of Public Health*, 19(4), 370–374. https://doi.org/10.1093/eurpub/ckp061
- Vilhena, F., & Freire, H. D. (2020). ÚLTIMA HORA: Primeiro caso de coronavírus no Algarve registado em Portimão - Postal do Algarve. Postal Jornal Algarve. https://postal.pt/sociedade/2020-03-08-ULTIMA-HORA-Primeiro-caso-decoronavirus-no-Algarve-registado-em-Portimao
- Visit Algarve, P. (2018). *Demografia e Geografia*. Região de Turismo Do Algarve. https://www.visitalgarve.pt/pt/menu/363/demografia-e-geografia.aspx
- WHO. (2020). *WHO Timeline COVID-19*. WHO Timeline COVID-19. https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19
- World Tourism Organization, U. (2019). International Tourism Highlights, 2019 Edition.
  In International Tourism Highlights, 2019 Edition.
  https://doi.org/10.18111/9789284421152

- World Tourism Organization, U. (2021). 2020: The worst year in the history of tourism, with one billion fewer international arrivals. https://www.unwto.org/news/2020worst-year-in-tourism-history-with-1-billion-fewer-international-arrivals
- Worldometer. (2021). Portugal COVID-19: 930,685 Cases and 17,207 Deaths -Worldometer. https://www.worldometers.info/coronavirus/country/portugal/
- WTTC. (2020). COVID-19 WTTC Government Policies / World Travel & Tourism Council (WTTC). https://wttc.org/COVID-19/Government-Policies#portugal
- Yin, Y., & Wunderink, R. G. (2018). MERS, SARS and other coronaviruses as causes of pneumonia. In *Respirology* (Vol. 23, Issue 2, pp. 130–137). John Wiley & Sons, Ltd. https://doi.org/10.1111/resp.13196
- Zhong, N.-S., & Wong, G. W. K. (2004). Epidemiology of severe acute respiratory syndrome (SARS): Adults and children. *Pediatric Respiratory Reviews*, 5(4), 270– 274. https://doi.org/10.1016/j.prrv.2004.07.011
- Zhong, N. S., Zheng, B. J., Li, Y. M., Poon, L. L. M., Xie, Z. H., Chan, K. H., Li, P. H., Tan, S. Y., Chang, Q., Xie, J. P., Liu, X. Q., Xu, J., Li, D. X., Yuen, K. Y., Peiris, J. S. M., & Guan, Y. (2003). Epidemiology and cause of severe acute respiratory syndrome (SARS) in Guangdong, People's Republic of China, in February, 2003. *The Lancet*, 362(9393), 1353–1358. https://doi.org/10.1016/S0140-6736(03)14630-2
- Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., Zhao, X., Huang, B., Shi, W., Lu, R., Niu, P., Zhan, F., Ma, X., Wang, D., Xu, W., Wu, G., Gao, G. F., & Tan, W. (2020). A Novel Coronavirus from Patients with Pneumonia in China, 2019. *New England Journal of Medicine*, 382(8), 727–733. https://doi.org/10.1056/nejmoa2001017