

# THE EFFECT OF FILMS ON TOURISM: THE CASE OF GREECE

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### ABSTRACT

In this study, we set the framework of filming history in Greece and how it can affect tourism, presenting an extensive theoretical framework to support this claim. We base our quantitative analysis with the SPSS software on the statistical data available correlating the dependent variable of tourist arrivals from 2007, the beginning of crisis in Greece, until 2014 with independent variables related to film and the political and social factors. The tourist arrivals from the USA are examined separately and then compared with the worldwide because we focus on USA film productions and more specifically on the films, *Mamma Mia* and *Before Midnight*. These two films were chosen initially based on their film release date, 2007, the crisis outburst, and 2014 respectively which represent periods with a substantial time gap to compare the results. Based on the anecdotal evidence on a local level of the filming regions, the theoretical framework of previous studies and our results, it is concluded that there is ground to attract foreign film productions in Greece and this can have a major positive impact on tourism on a national level.

Keywords: film tourism, film-induced tourism, Greece, tourism, crisis, film, foreign productions, impact analysis

## PREFACE

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## Table of Contents

The effect of films on tourism: The case of Greece .....	2
ABSTRACT .....	2
PREFACE .....	3
ACKNOWLEDGEMENTS .....	3
1. INTRODUCTION .....	5
2. THEORETICAL FRAMEWORK .....	7
2.1 Introduction of terms .....	7
2.1.2 Film-induced Tourism .....	9
2.2. Film-induced Tourism in the Modern Society .....	14
2.3 Film-tourism and the Destination .....	15
2.4 Film-Tourism Case Studies .....	20
2.5 Filming in the Mediterranean Region .....	26
3. METHODOLOGY .....	30
3.1. Case studies from filming in Greece .....	30
3.2 Setting the methodological framework .....	34
4. RESULTS ANALYSIS .....	40
5. CONCLUSION .....	43
6. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH .....	46
7. APPENDIX .....	47
SPSS PEARSON BIVARIATE CORRELATION MODEL .....	47
References .....	56

## 1. INTRODUCTION

This study is a master thesis conducted as part of the MA Cultural Economics and Entrepreneurship programme in Erasmus University Rotterdam. The topic is film tourism and more precisely the effect that filming in a location can have on the inbound tourism of a country. In the theoretical framework, the reader is introduced to the topic and the definitions of tourism and film tourism as a niche of cultural tourism. In the same chapter, the literature is presented and the background research to support the hypothesis that film can induce tourism and increase the tourists arrivals in the locations depicted in the filming image. The region studied in the methodology is Greece and the specific factors and limitations that affect this relationship are presented and taken into consideration as variables in the quantitative analysis with the SPSS software. Sociopolitical variables are examined in relation to tourism, because the timeline used is during crisis (2007-2014) where the circumstances in the economy and culture as well changed significantly in Greece.

There are indications that the attraction of foreign productions in Greece can help the local economy and can create a significant amount of jobs in the audiovisual sector and not only (Athanasiades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014). Tourism in Greece is an important income source that can be strongly reinforced by film if the right actions are taken. In a secondary level, jobs in this sector can be generated due to film during the whole year in multiple sectors mainly concerning tourism and promotion, which can propose a solution to the problem of seasonality in Greece (Riley & C.S, 1992).

The location, natural environment, mild climate and rich history depicted in the architecture and heritage of Greece create a positive incline for filming there. The bureaucratic obstacles and the lack of tax incentives, however, discourage many productions from happening there, (e.g. the Bourne Ultimatum filmed in Tenerife with a Greek set). It is suggested that measures need to be taken from the authorities and further action from the Greek Film Commission to reintroduce Greece as a filming destination and reinforce tourism on a local and national level.

This derives from our research about whether filming in Greece can affect tourism and we hypothesize there is a positive relation between these two, especially when examined the USA inbound tourism and how it was affected by American film productions in Greece. During the examined period, there was political turbulence in

Greece due to the financial crisis, therefore we assume that this affected the tourism and the film productions in Greece, which may have been discouraged from the situation. Hence, we take into consideration specific sociopolitical factors as secondary variables that may have affected tourism, filming and tourism due to film and make the hypothesis that these factors have affected tourism in a negative way.

## 2. THEORETICAL FRAMEWORK

### 2.1 Introduction of terms

#### 2.1.1. Tourism

The definition of tourism varies among scholars, source by source and person by person (Mathieson & Wall, 1982) (McIntosh & Goeldner, 1986) et al. Nearly every institution defines tourism in a different way. The first to speak about tourism, though, were Guyer and Feuler, in 1905, who defined tourism as “a phenomenon unique to modern time which is dependent on the people's increasing need for a change and relaxing, the wish of recognizing the beauties of nature and art and the belief that nature gives happiness to human beings and which helps nations and communities' approaching to each other thanks to the developments in commerce and industry and the communication and transportation tools' becoming excellent” (Feuler & Guyer, 1905). This is a rather descriptive and outdated definition and nowadays, it is more common to use the one of the United Nations World Tourism Organization (UNWTO), which describes tourism as “traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes” (UNWTO, 1995). The purpose of travel is another criterion, which is expressed by the reason that travel happens at the place visited. Previously, tourism occurred mainly due to recreation and visiting family and friends, but now the reasons for travel are expanded to include a vast range of purposes. The duration, is the third criterion and shows that displacement in tourism, in other words travel, can occur with or without an overnight stay (UNWTO, 1995). The terminology, however, according to the UNWTO, requires that “a visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor), if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise.” (United Nations, 2010). Its classification is not easy and depends which field of study you are concentrated on. For example, the United Nations generally classified three forms of tourism in its Recommendations on Tourism Statistics, as mentioned above; these are domestic tourism, inbound tourism and outbound tourism (UN, 2008). This classification is clearly according to the place of origin of the traveler and does not involve conceptualization or the reason that induced his/her dislocation. Apart from the general term of tourism and tourist, the numerous definitions of the



terms are due to the multiple aspects they entail. Tourism can be classified accordingly to its purpose and motive into several categories. However, even if classification of tourism is somehow limiting or not always successful, it is necessary because it enables the easier management and organization of touristic activities.

Tourism, nowadays can and should be associated with concepts and ideas for a better classification. Some examples very different from each other that can express the scope of tourism are sports (fans following their team), religion (travel to holy and sacred places), love for food or wine (vineyard or culinary tours), admiration of a person (travel to its birthplace) and film lovers (travel to locations depicted in films). Cultural tourism is a branch of tourism that has a long history and interest. It is also one of the forms of tourism that most policy makers seem to be turning their eyes on in the future because of the increasing interest they notice. The World Tourism Organisation, for example, asserted that cultural tourism accounted for 37% of global tourism, and forecast that it would grow at a rate of 15% per year (UNWTO, 1995). Only in Europe, it is estimated that cultural tourism accounts for 40% of all European tourism; 4 out of 10 tourists choose their travel destination based on its cultural offering (EC, 2002). A recent study of the cultural consumption habits of European citizens (EC, 2002) indicated that people visited museums and galleries abroad almost as frequently as they did at their hometown. This underlines the growing importance of cultural tourism as a source of cultural consumption (Richards, 2003). In Fig. 2.1., we can identify cultural tourism in the scope of tourism. Saur-Amaral et. al (2013) studied which categories of tourism are more frequently encountered in academia. From all types, the one referred most frequently is indeed cultural tourism (32% of all types), appearing four times more often in the registered references than its followers (adventure tourism, medical tourism, urban tourism and wine tourism). As a subsequent, these types of tourism have been given more emphasis and have been marketed more than other reasons to induce tourism, such as visiting friends and relatives, conferences tourism, which are at the bottom of the list (only 1%).

But how do we define cultural tourism? In order to approach better the term, we need to define culture first. According to a preliminary term, culture is “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (Tylor, 1871). This rather favourable approach serves adequately in many cases until today since the definition can be used in a wide content, opening the way to a possible connection with

other disciplines, and at the same time, it remains exact and concrete. Subsequently, the broad nature of the cultural tourism phenomenon leads to a wide range of different definitions. Most of these definitions have been formed by a specific purpose, and therefore, tend to address only one aspect of cultural tourism. One of the most diverse yet specific definitions from the 1990s is provided by ICOMOS (International Centre of Monuments and Sites): “Cultural tourism can be defined as that activity which enables people to experience the different ways of life of other people, thereby gaining at first hand, an understanding of their customs, traditions, the physical environment, the intellectual ideas and those places of architectural, historic, archaeological or other cultural significance which remain from earlier times. Cultural tourism differs from recreational tourism in that it seeks to gain an understanding or appreciation of the nature of the place being visited.” (International Centre of Monuments and Sites, 1997).

### 2.1.2 Film-induced Tourism

Film is a form of art and therefore, film tourism can be defined as a branch of cultural tourism and refers to the increasing interest and demand for locations which became popular due to their appearance in films and television series. In this study, we will focus on film tourism induced only from film. According to Zimmermann (2003) film tourism includes all forms of travelling to destinations, which generally enable a connection with the world of film. Furthermore, it can be divided into three sub-categories, including film promotion tourism, travel film tourism and film induced tourism, which will be our core of analysis. The common axis in all categories is that it involves a journey that is stimulated by watching a movie that has a strong impact in the consumer decision making process. There are various reasons that turn people into film tourists and can be noticed in all categories and expressed through different activities, the main being:

- visit film parks and film studios (Disneyland, MGM etc.)
- visit locations that are directly connected with a certain film and have a special connection with it
- go on a film journey (tour) that offers them the possibility to be introduced into film worlds and uses the filmed destination as a benchmark. (Tomala & Faber, 2011)

However, defining the target group of film tourism can be challenging since some movies attract a broader part of the population, meaning more mainstream than others (e.g. Lord of the Rings, Fast and Furious), whereas others are watched by those interested in a specific genre or topic (e.g. Bollywood, Spaghetti western, sci-fi movies). This implies that film tourism is a niche market and in addition to that, it is a rather unexplored field, which provides little evidence and needs to be more extensively researched.

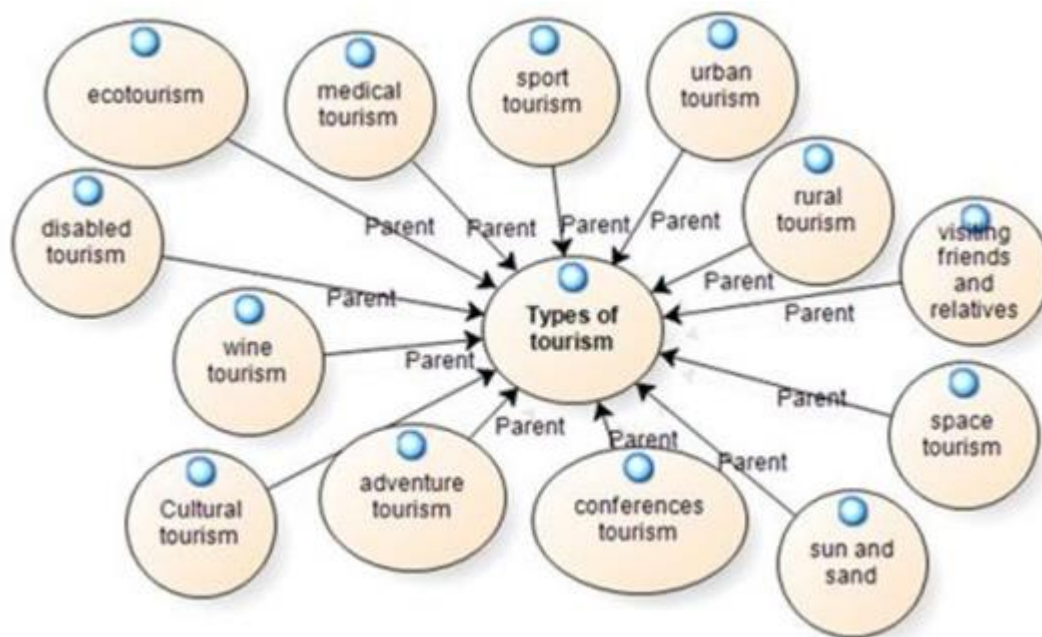


Fig. 2.1: The types of tourism (*Source:* (Saur-Amaral, Ferreira, & Conde, 2013))

According to Beeton (2005), film-induced tourism can be defined as the “visitation to sites where movies and TV programmes have been filmed as well as to tours to production studios, including film-related theme park” (Beeton, 2005). Film-induced tourism is a subject of cross-disciplinary academic study, relatively new, that meets increasing attention in the academic world and its body of knowledge is constantly growing. There is a considerable amount of dedicated study, confirming that films generate demand for tourism (Beeton, 2005; Jones & Smith, 2005; Tzanelli, 2008; Roesch, 2009; O’Connor, Flanagan, & Gilbert, 2010; Hudson, Wang, & Gil, 2011) mentioning in their majority “The Lord of the Rings” film trilogy (2001-2003), filmed in New Zealand over 10 years ago, and the interesting fact that it still manages to attract visitors to the country.

However, the wider interconnections among tourism, filmed location and media are only just starting to be more widely explored and understood (Connell, 2011) (See Fig. 2.2). Film-induced tourism can be considered as a branch of media tourism, at a wider scope, that describes the phenomenon of people travelling to places which they associate with novels, films or television series (Reinders, 2016). Another term about film tourism, that is encountered in academia, is movie tourism which refers to the same concept but to the early American cinema vocabulary of the 'moving image' (Connell, 2011). Some critics (e.g. Connell & Meyer, 2009; Fernandez-Young & Young, 2008; Olsberg, 2007) have suggested that the umbrella term "screen tourism" is more useful as it encompasses both media of film and television, reduces the complicated use of the dual terms and avoids potential misinterpretation of the wider phenomenon (i.e. it may be unnecessary to distinguish between film and television as it is not the form but the effect that is of interest) (Connell, 2011). However, film tourism appears to be the generic term established and adopted in most studies and although there are some differences between images perceived via film and television in the media literature, arguably the term is less important than the concept and we will use it as such. In the present study, it will be identified with film and not television series in order to be more specific and avoid confusion, because our methodological analysis concerns films, too.

Moreover, our analysis will be focused on how tourism, and by extension the economy, can benefit from the film industry (See Table 1). We can observe from Table 1, that not only it can bring an increase to the tourist arrivals but also generate reported revenues in the filming place. Only in 2011, filming in the UK directly contributing £1.6 billion to national GDP, generated 43,900 full time equivalent (FTE) jobs (Oxford Economics, 2012, p. 9). In general, an increase in visitor numbers can only benefit the local economy. One unique positive economic factor of film tourism is that viewing film locations can often be an all-year, all-weather attraction, thus it alleviates problems that are generated from seasonality. Especially in some destinations, like Greece, where tourism occurs during summer season when solely induced by the location, film can boost the tourist visitation as a 365day way of promotion. Due to their association with famous stories, buildings and even streets that were formerly considered commonplace and ordinary, they suddenly acquire interest, status and added value. Also, they have a wide socioeconomic appeal, potentially broadening the motives of the visitor market. Another interesting aspect of film tourism is its endurance and continuity. A film can continue to draw visitors year after year. Riley & C.S (1992) found that although the peak

of interest comes after a film is released, a 54 per cent increase in visitation was evident at least five years later in the 12 films they studied, and filming images are often reproduced for a long time. These enduring effects would explain the success of some destinations that have redeveloped locations to make film connections more apparent and boosted tourism even when the film is not new. Apart from the enduring effect of film tourism, another interesting aspect is that it can take several forms and it can be expressed through different activities as noted and discussed by many authors (Beeton, 2005; Busby & Klug, 2001; Croy & Heitmann, 2011) (see Fig. 2.3). In the Fig. 2.3. it is vividly illustrated that this type of tourism has the advantage of taking several forms, from which we can choose the best for each occasion. When, for example, it is not possible to visit the set while filming, the set can be preserved or rebuilt so that the future visitors can see it afterwards or attend a tour at the filmed locations. This indicates how film tourism can overcome the obstacle of seasonality and retain its continuity through creativity and marketing.

From the aspect of the viewer, Macionis (2004) extensively conceptualised film-induced tourism motivators as a combination of general increasing interest in film and self-realisation motivations (as drawn from Dann, 1977). Due to this evolutionary relationship of the traveler with film, we can see the increasing importance of film tourism (see Fig 2.4.). She suggests three types of film tourist and associated motivations, which include the:

- Serendipitous film tourist: his presence in the filmed location is unrelated to the film, although he may or may not participate in film tourist activities. Motivations are based on social interaction and novelty;

- General film tourist: participates in film tourist activities but was not specifically attracted to a destination because of a film. Motivations are based around novelty, education and nostalgia;

- Specific film tourist: actively visits a destination to seek locations viewed in a film. Motivations might include nostalgia, romance, fantasy, self-identity and self-realisation, and might also be rooted in the idea of pilgrimage (Macionis, 2004).

It is distinctive that film tourists seek increasingly self-motivation factors and associate the experience strongly with the destination and decreasingly with the authenticity. The importance of the filmed location as the travel destination of the film tourist will be further analysed in Chapter 2.3.

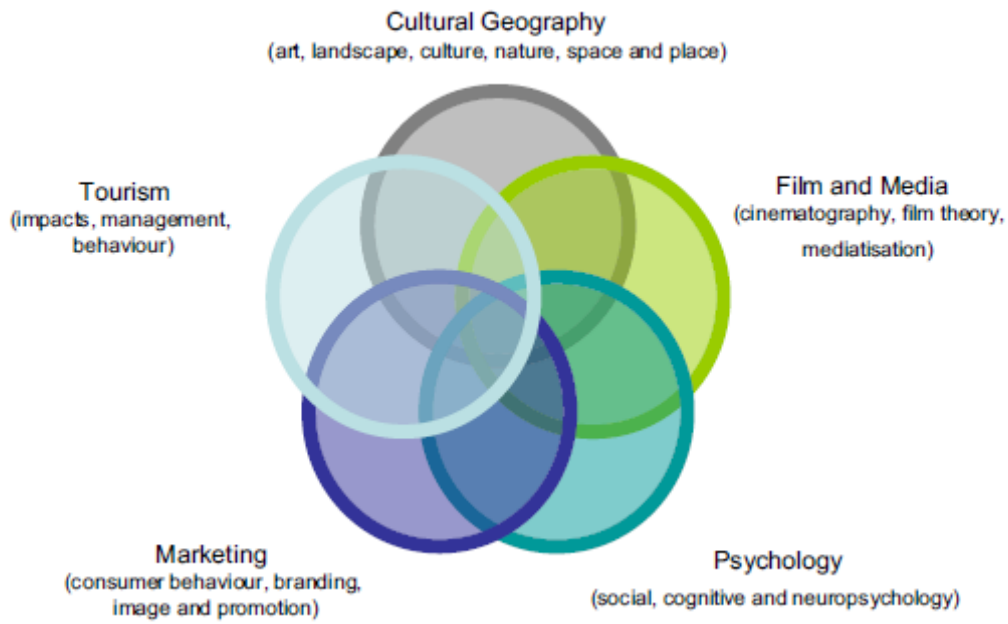


Fig. 2.2: The emerging research dimensions of film tourism within a social science paradigm. (Source: (Connell, Film Tourism: Evolution, progress and prospects, 2011)

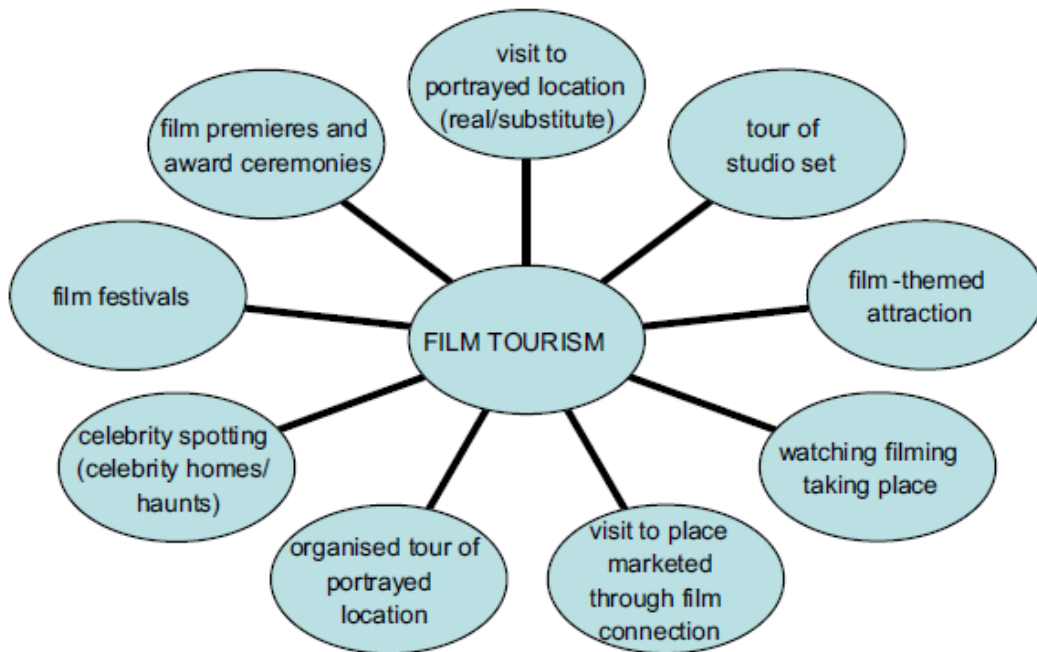


Fig. 2.3: The Scope of Film Tourism (Source: Connell, Film Tourism: Evolution, progress and prospects, 2011)

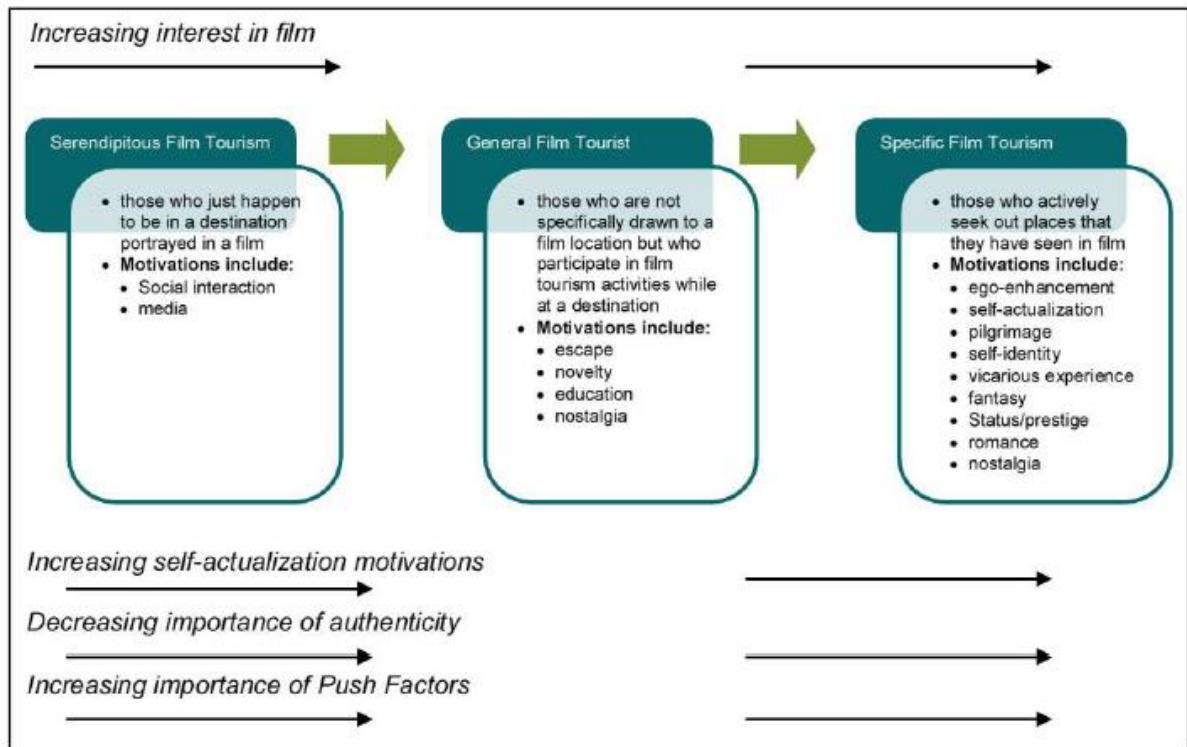


Fig.2.4: Continuum of Film-Induced motivators (Source: Macionis N. , 2004)

## 2.2. Film-induced Tourism in the Modern Society

More recently, Macionis (2009) researching on the same subject has introduced slightly different motivations for film-specific tourists, which are novelty, prestige and personalization. Either way, the film-induced tourist can be characterised by personal motives such as ego enhancement, fantasy or escape, status or prestige, search for self-identity, or vicarious experience. This type of tourists may be drawn to visit the filmed place for personal reasons, such as reviving childhood memories, which then becomes a sentimental journey (Macions & Sparks, 2009).

Adding to the feature of personalization, film-induced tourism can be referred to as a post-modern experience of a place that has been depicted in some form of media representation. That is a highly personalized experience, unique for each individual, based on his/her own interpretation and consumption of moving images (Beeton, 2005; Macionis, 2004). The post-modern tourist is looking for new ways of experiencing travel that he/she can associate with personal experiences or identify with experiences of others. "The post-modern world is characterised by globalisation, hyper-consumerism, the experience economy and new developments in technology." (Smith, Macleod, & Hart

Robertson, 2010). Consumers undertake multiple tasks simultaneously and use various means in order to make optimal use of all the available choices and their taste is also becoming more sophisticated and demanding through the multiple choices provided. Film as a medium and a form of art can educate us and inform us about a place; this way, it can fit more easily to the multitasking modern life either by experiencing a place through the screen or by getting a better idea before actually visiting the site; thus, it can inform and entertain at the same time by minimizing the time spent to achieve that. Film tourism can be a result of the above combined with escapism of the modern citizen and his tendency to flee from the rigorous everyday life. There is a general trend that the contemporary citizen of the big city and the western way of living needs to escape, but at the same time, come closer to the nature and their roots (Calcatinge, 2011). This is obvious from the increasing consumption of outdoor activities and sports, too. The screen either small or big can be our medium of experiencing vigorous circumstances virtually.

### 2.3 Film-tourism and the Destination

Media has the potential to influence general public opinion as well, playing a very important role in providing consumers with information through imagery and presentation of icons and stories that provide the consumer with a frame of reference or schema for interpretation (Hirschman & Thompson, 1997). Feature films are often produced at locations that can gain increased popularity as tourist destinations. There would appear to be a strong correlation between the place of film production and the tourist to visit that location. Film tourism as a niche itself is a parameter that contributes strongly to the research of film tourism. It appears that elements of having a unique and novel experience, associated with visiting film locations pose a strong motivator to travel (Macionis & Sparks, 2009). It has been discussed that to physically be in the place of the moving image is a strong motivation for the film-induced tourist. The reason why film can be perceived as more influential to the viewer than other media is because it is not necessarily commercial as traditional, direct promotion means (e.g. printed material, brochures) and viewers still receive information about the place (Butler, 1990; Schofield, 1996). Some consider films as part of their appreciation for the finer things in life, regarding film as art (Baumann, 2001; Bordieu, 1984; Holbrook & Addis, 2008). It depends on the case, of course, but we could say it is a more sophisticated means of



advertisement than TV, too, and for that we focused our study on it from all the means that can trigger screen tourism.

Film tourism is defined by some as a genre within tourism that provides a link with the location of a film or a TV series – during or after the shooting. The film tourist is attracted by the first-hand experience of the locality captured on the silver screen. When, for instance, Audrey Hepburn and Gregory Peck visited the Roman sculpture Bocca della Verità (translated as the Mouth of Truth) in the film *Roman Holiday* (1953), the sculpture's popularity rose tremendously. Until today, people are waiting in long queues in front of the small entrance of the church, where "the mouth of the truth" is on display (Elmgaard & Holmgaard Christophersen, 2012). A visit to a location will take the tourists into the very core of the film's universe where, through their own senses, they will experience a new dimension of the film production. Film tourism represents a gateway to new and more intense ways of experiencing destinations.

Nowadays, it is necessary to challenge, though, the consumer by providing new ways of experiencing film tourism. You can no longer count on the fact that guests will visit a place just because this is what they usually do, but provide them with new attractions and challenge their interest. Via the internet, they will – to increasing extents – create their own experiences and mark their holiday routes created by a precise match with their preferences. Hence, the industry will have to find new ways and means to meet the tourists' demands (Elmgaard & Holmgaard Christophersen, 2012). Package tourism, that used to be a huge trend, is by no means becoming extinct; but the guests are increasingly expressing a desire to influence what the package should contain and auto-organize their leisure time and holiday.

When a destination appears on screen, at the same time, a set of opportunities pop up for the local business community provided that the relevant players cooperate. There is a need for a national as well as an international scope for that, because films, nowadays, may tell a story happening in a small place in the world, but travel around the globe very fast through the Internet and the media exposure. The American soap opera 'Sex and the City' is one of the examples that has become such a big hit not only in the United States but globally. Hundreds of restaurants, bars and shops featured in the film turn out to be must-see destinations for tourists visiting New York (Rewtrakunphaiboon, 2015). Globalisation and the media can change radically the demand and the several stakeholders are in need of adjusting constantly their strategies to the trends. Who they are and how they can achieve that is further analysed below.

If we are talking about film tourism and not just solely filming a movie, the stakeholders concerned are numerous. The interaction among the several stakeholders varies from one production to another. Some of them which are very important are the film and TV industry, the film crew, the film commission, the press, the municipality, the destination/tourist agency and the players within the tourism and business sectors. The TV industry, as mentioned before, will not be examined in this case, the film crew is the core of creation and technical development of the films and play a major role in film but are not involved in film-induced tourism and the role of the rest of the stakeholders will be described briefly. The film commission has an interest in attracting productions to a certain region and it acts as the link between the tourist industry and the film and TV trade. The press can be used as a resourceful channel for communicating associated stories – before, during and after a production. Regarding communication as a whole, the press will obviously be a central player. In close cooperation with the local or regional destination and the film commission, the municipality will be in the position to provide financial as well as strategic support in connection with attracting a production to the area. However, the film commission is not always present or active due to various reasons. The municipality is an important player, particularly where film-tourism initiatives involve major organisational and public efforts. The destination managed by the DMO (Destination Management Organization) or the tourist agency, represents the entity involved in the strategic tourism work focused on increasing the number of tourists visiting a town, a region or a country. The destination's work spans wide, encompassing the fields of marketing as well as business and organisational development. They possess valuable knowledge about the local environment, with respect to the business community as well as locations. Last but not least, the local players within the tourist trade and the business community are extremely important for the creation of healthy and sustainable film tourism. Regardless of whether these players meet the tourist in their ordinary work or not, they are equally important. Both parties are in possession of vital local knowledge and the key to financial benefits, should a production pick their locality. Any price-reduction arrangements or other agreements entered for the purpose of attracting a production may return in the form of increased tourism. The infographic (Fig. 2.5) shows the idea that working with film tourism begins long before the actual filming starts. During the production, there are numerous opportunities for the destinations to cooperate with the production team. After the production has ended, the

idea is to keep the tourist interest alive and going and create the right environment for future collaborations. (Elmgaard & Holmgaard Christophersen, 2012).

The foundation and widespread of Destination Marketing Organisations is an important consequence of the impact on filming locations and the involvement of local stakeholders in the process. DMOs come in many different forms, but are the principal organization of a given political division or subdivision that is organized to promote its respective destination and to attract visitors. It is defined and authorized by its appropriate incorporated government entity as the representative organization exercises those functions. These organizations have as a goal to represent a specific destination and help the long-term development of communities through an implemented travel and tourism strategy. From the visitors' point of view, DMOs are like a key to the city. They can serve as an official point of contact both for business people and leisure travelers. They assist planners in dealing with preparation and encourage business travelers and visitors alike to visit local historic, cultural and recreational sites. The value of the DMOs is substantial, because they invest in travel and tourism through destination marketing, they promote the long-term development and marketing of a destination, focusing on convention sales, tourism marketing and services. Within the local community, they represent the hotels, facilities, attractions, restaurants and other service providers to travelers. While their approaches and strategies vary, DMOs are the masterminds behind marketing campaigns for an entire destination to a variety of audiences, including meeting professionals, business travelers, tour operators and individual visitors and travelers. They also strive for the continued success of the local economy by engaging businesses, residents, and elected officials with the travel and tourism industry (DMAI, 2017).

Therefore, DMOs as far as film is concerned are the main intermediaries in the whole process to make the most out of filming in a respective location and benefit the local community. Infrastructure investments are a part of this process. For example, in the region of Florida, USA, there was noticed a booming in the construction sector due to filming there. Film and entertainment production that has been encouraged through the Florida Film and Entertainment Industry Incentive Program (type of DMO) has helped attract infrastructure investments in the level that can generate substantial economic impacts. It is commonplace for the industry to invest in reconstructing used or vacant facilities for film production. While Florida does not provide infrastructure tax credits it has been successful in developing local infrastructure as a result of the growth

in the film and entertainment industry. Examples of infrastructure investments that have been made include the following; the series *Magic City* leases the former Bertram Yacht facility for its production and has converted the space into sound stages and production offices, the producers of the series spent \$8 million in four months to convert a vacant facility into a fictional hotel where the majority of the series is shot. The television series *Burn Notice* is filmed in the Coconut Grove Convention Center, a facility that was once registered for demolition but in the meantime has been purposed as a production facility. An industrial warehouse space at Pembroke Park has been converted into a studio for the television series *The Glades*. The Golf Channel has acquired a large space in an office park to convert to digital media space for increased interactive website production in the region of Orange County (MNP, 2013).

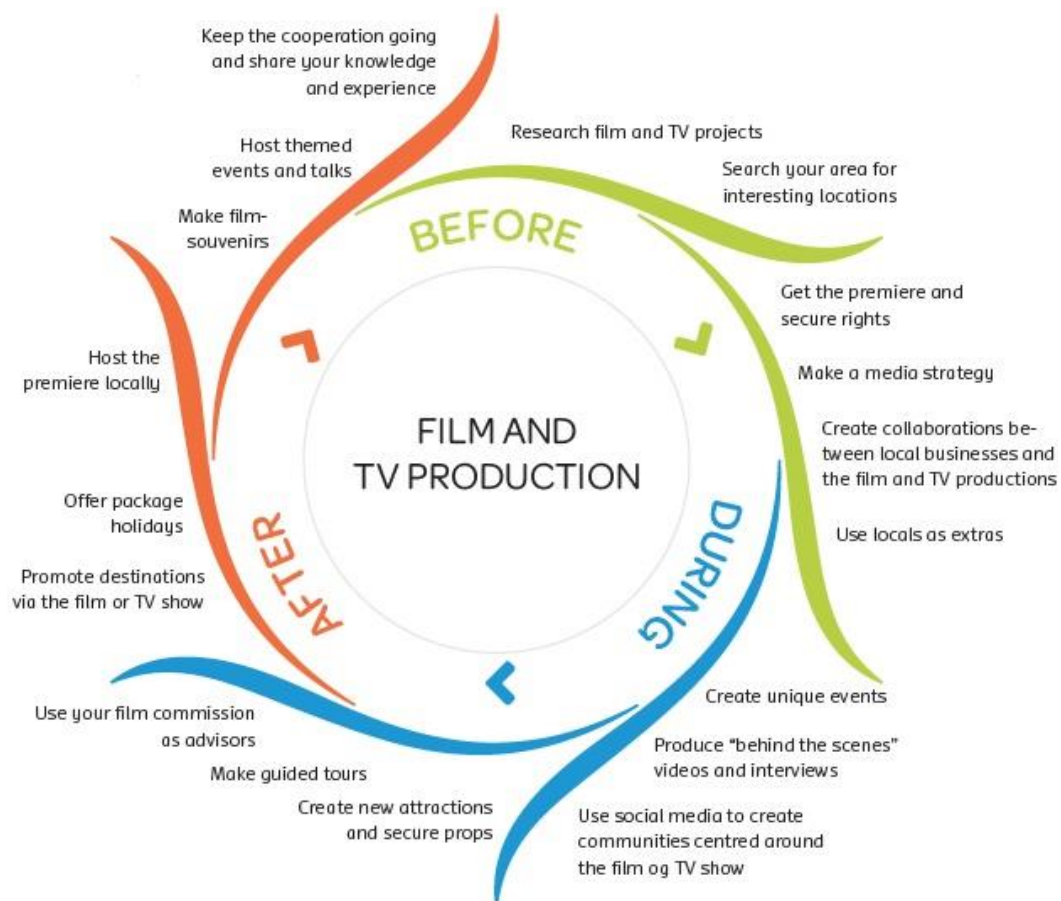


Fig 2.5: Film Tourism Activities Before -During and After Filming (Source: (Elmgaard & Holmgaard Christophersen, 2012))

Considering we have all these different means to deal with or create film tourism(see Fig. 2.5), there are more aspects to consider due to the massive impact in the

local community. A film production provides an array of profit-generating opportunities, for instance, providers of overnight accommodation can profit from having the film crew stay at their hotel. In the course of the shooting, the destination will have the opportunity to attract attention to the location, as it is often feasible to make agreements with the producer in respect to obtaining audience access to the locations. It is obviously easier for a destination to profit from a production if the film generates a certain amount of interest nationally as well as internationally. Another equally important prerequisite, however, is the destination's ability to incorporate the attention associated with the film and the respective locations into the destination's marketing, long-term as well as short-term. It is essential that the destination perceives the film as a supplement to and an underpinning of the destination's basic profile (SLÆGGERUP, 2012). There are many opportunities generated from film and ways of marketing associated with the filming process (see Fig. 2.3), but the local community needs to keep the character and the originality of the place and not be completely driven by the potential success of the film and the generated profit by extensively exploiting the place's sources.

#### 2.4 Film-Tourism Case Studies

Film locations have been extensively promoted by DMOs, having an important impact on the local communities. According to Morgan and Pritchard, "placing a destination in a film is the ultimate in tourism product placement" (Hudson & Ritchie, 2006, p. 387). Product placement is a quite new way of promotion and has been defined as the planned entries of products into films or television shows that may influence viewers' product beliefs and/or behaviors favorably (Balasubramanian, 1994). Its growth has been triggered by the diminishing effectiveness of traditional advertising techniques, such as leaflets and printed material (Kaikati & Kaikati, 2004), and marketers are realizing that communications via product placement, including films, can be more sophisticated, more targeted and more widely seen than traditional advertising methods (Karrh, McKee, & Pardun, 2003). Of the numerous studies related to product placement, few have looked at the placement of destinations in films and its influence on tourism. However, some of the findings, are indeed relevant for those interested in film tourism. Most countries try to promote their tourist products using various marketing techniques and this increases competition. International experience reveals that movies constitute an important marketing tool which can effectively serve the strategy for promotion of

tourism destinations (Vagionis & Loumioti, 2011). In most of the studies, respondents have a positive view towards product placement in films, which is evident from the increase of brand loyalty and purchases decisions of the consumers (Hart, 2003). It is confirmed that this technique can have greater impact on audiences, to whom the conventional means of marketing don't appeal (Karrh, McKee, & Pardun, 2003) and some researchers have found that a simple visual placement in the background can be just as effective as a highly integrated placement (Russell, 2002).

In an increasingly competitive and crowded marketplace, destination placement in films and TV shows is an attractive marketing medium that increases awareness, enhances destination image and results in significant increase in tourism numbers, succeeding where traditional marketing efforts usually fail. Film tourism offers destinations the opportunity to generate significant incremental revenue, tourist visits and economic development. Measuring the success of product placement, however, is not always easy and clear. Some attempts have been made with relative indicators; the New Zealand Tourism Board looked at the first *The Lord of the Rings* film as the equivalent of a promotional piece and concluded what the exposure would have cost to access commercially. Based on attendances and making a range of assumptions, they estimated the exposure was worth over 41 million US\$ (New Zealand Institute of Economic Research, 2002). Similar attempts have been made internationally, more systematically or not. Apart from marketing companies, public organizations and governmental cultural agencies have also turned their interest in film tourism; *VisitScotland*, the Scottish National Tourism Organization is actively engaged in research into film tourism in order to understand its function and reap its benefits (Tarnaras, 2014). In our analysis, we will also try to assess the impact of films on national tourism, because recent data of tourist arrivals on a local level was not available. Table 1 is indicative of the impact that several films had in the national economy of the country that the films took place, according to the assessments that have been previously made by Riley & C.S (1992), Anderek (1993), Tooke & Baker (1996), Riley, Baker, & van Dore (1998) and Grihault (2003). Just as product placements will influence a viewer's attitude toward a brand, so too will films have an impact on destination image if the location appears on the screen. Because destination images influence tourist behavior, a destination must be favorably differentiated from its competitors and positively positioned in the minds of consumers (Pike & Ryan, 2004; Echtner & Ritchie, 1991; Joppe, Martin, & Waalen, 2001). Schofield (1996) suggested that contemporary tourists'

organic images of places are shaped through the vicarious consumption of film and television without the perceptual bias of promotional material. In support of this claim, it has been discussed how the 1960s film *La Dolce Vita* transformed the image of Rome in Italy. In the minds of the public worldwide, Rome became the city of sin and pleasure, of Liz Taylor, Ava Gardner, and Frank Sinatra, of elegance and nightclubs, of aristocrats and Latin lovers, of fast cars and stylish intellectuals. The image depicted in American films and books, provided Roman tourist industries and fashion ateliers with a useful tool that has lasted to this day. Roman glamour was identified as Italian glamour for the world.

Further empirical proof of how films can impact destination image came from Kim & Richardson (2003), who employed an experimental design to assess the extent to which viewing a specific film altered cognitive and affective images of the place portrayed. They found that the 1995 movie *Before Sunrise*, a prequel of *Before Midnight*, which is examined in this study, significantly affected some of the destination image components and interest in visiting Vienna in Austria. However, as Croy & Walker (2003) have indicated, more research is needed to assess to measure the effect films have on the image.

In some cases, we can notice enhancement of the film as product placement in the local community and promotion through the films produced. A representative example of this phenomenon is New Zealand and the case of *Lord of the Rings*, *Hobbit* etc. In Images 1 & 2 respectively, we notice that there is a strong connection of local regions with the film *Lord of the Rings* and that the local airlines are commercially promoted and advertised as the airlines the characters of the film would use. In Image 3, we notice that local tour guides of Catalunya are depicting Hollywood stars of films that were shot there. The attraction of foreign productions appears not only to reinforce tourism but also the national film industry (Athanasziades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014). Many producers decide to implement a project because they believe that previous touristic attraction to the filmed place will mean more attention and promotion to their film (Athanasziades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014).

Table 1: Film-Tourism Impacts

**TABLE 1**  
**FILM TOURISM IMPACTS**

Film or TV Series	Location	Impact on Visitor Numbers or Tourist Revenue
Braveheart	Wallace Monument, Scotland	300% increase in visitors year after release
Heartbeat	Goathland, North Yorkshire, England	Three times the number of normal visitors in 1991
Deliverance	Rayburn County, Georgia	20,000 film tourists a year Gross revenues \$2 to 3m
Dances with Wolves	Fort Hayes, Kansas	25% increase compared with 7% for previous 4 years
Close Encounters of the Third Kind	Devils Tower, Wyoming	75% increase in 1975 20% visit now because of the film
Thelma and Louise	Arches National Monument in Moab, Utah	19.1% increase in 1991
Field of Dreams	Iowa	35,000 visits in 1991 Steady increase every year
Dallas	Southfork Ranch, Dallas	500,000 visitors per year
The Lord of the Rings	New Zealand	10% increase every year 1998 to 2003 from UK
Steel Magnolias	Louisiana	48% increase year after release
Last of the Mohicans	Chimney Rock Park, North Carolina	25% increase year after release
The Fugitive	Dillsboro, North Carolina	11% increase year after release
Little Women	Orchard House, Concord, Massachusetts	65% increase year after release
Bull Durham	Durham, North Carolina	25% increase in attendance year after release
Harry Potter	Various locations in U.K.	All locations saw an increase of 50% or more
Mission: Impossible 2	National parks in Sydney	200% increase in 2000
Gorillas in the Mist	Rwanda	20% increase in 1998
Crocodile Dundee	Australia	20.5% increase in U.S. visitors 1981 to 1988
The Beach	Thailand	22% increase in youth market in 2000
All Creatures Great and Small	Yorkshire Dales	Generated £5m for Yorkshire Dales
To the Manor Born	Cricket St Thomas, Leisure Park, England	37% increase between 1978 to 1980
Middlemarch	Stamford, Lincolnshire, England	27% increase in 1994
Four Weddings and a Funeral	The Crown Hotel, Amersham, England	Fully booked for at least 3 years
Mrs. Brown	Osborne House, Isle of Wight, U.K.	25% increase
Notting Hill	Kenwood House, England	10% increase in 1 month
Saving Private Ryan	Normandy, France	40% increase in American tourists
Sense and Sensibility	Saltram House, England	39% increase
Pride and Prejudice	Lyme Park in Cheshire, UK	150% increase in visitors
Cheers	Location in Boston	\$7m in unpaid promotional advertising each year
Miami Vice	Miami	150% increase in German visitors 1985 to 1988
Forrest Gump	Savannah, Georgia	7% increase in tourism
Troy	Canakkale, Turkey	73% increase in tourism
Captain Corelli's Mandolin	Cephalonia, Greece	50% increase over 3 years

Sources: (Riley & C.S, 1992), (Tooke & Baker, 1996), (Grihault, 2003), (Walker & Croy, 2003), (Anderek, 1993), (Busby, Brunt, & Lund, 2003), (Riley, Baker, & van Doren, 1998), retrieved from (Hudson & Ritchie, Promoting Destinations via Film Tourism: An Empirical Identification of Supporting Marketing Initiatives, 2006)





Image 1: Region in New Zealand/Source: (Athanasiaades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014)



Image 2: New Zealand Airlines/Source: (Athanasiaades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014)

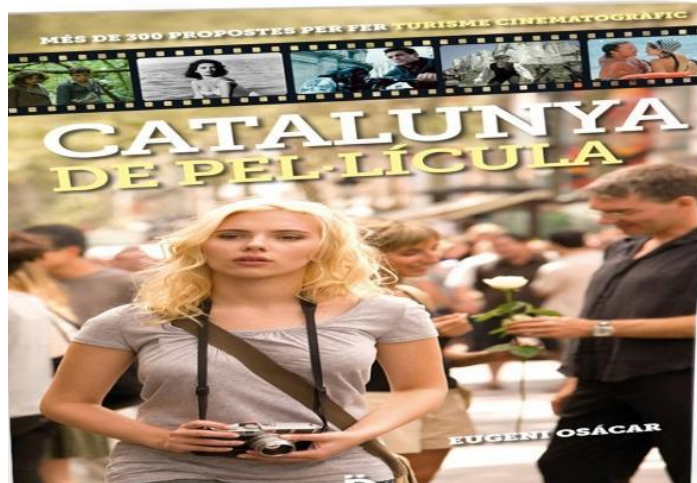


Image 3: Local tour guide of Catalunya/Source: (Athanasiaades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014)

In our research, we will focus on filming in Greece and especially on the impact that shooting films there has on tourism; this includes all films regardless the origin of the production company or the cast and crew, resulting in mostly US production with English-speaking films. There are indications that several films that were produced in Greece led to tourism increase in a local level, for example the Captain Corelli's Mandolin that was filmed in Cephalonia, a Greek island in the Ionian Sea (50% increase of local tourism over three years, see Table 1 and 14% increase over one year, see Table 2). Mamma Mia is another case study that evidently boosted tourism in Greece in a local level. After the film premiered, the first positive changes in tourist traffic to Skopelos, where it was filmed, were noticed in summer of 2008. In particular, the increase of tourist numbers was so great that many stated a tourist limit up on the island (Kontos, 2008), with approximately 30.000 visitors. The Mayor of the island reported that the tourist arrivals increased in August by 5% compared to the respective period in 2007 (Moirá, Mylonopoulos, & Kontoudaki, 2009). We will elaborate on than at the part exclusively about case studies from filming in Greece when introducing our methodology.

Table 2: Increase of tourism in certain parts of Greece due to film

	<b>Budget(mil. \$)</b>	<b>Receipts(mil. \$)</b>	<b>Filmed location</b>	<b>Impact on local tourism*</b>
<b>Captain Corelli's Mandolin</b>	57	87,7	Cephalonia	+14%**
<b>Lara Croft: Tomb Raider</b>	115	405,9	Santorini, Kenya, Hong Kong	+12%**
<b>Mamma Mia</b>	52	753,9	Scopelos, California	+5%***

Source: Foundation for Economic & Industrial Research in Greece (2014)

(\*) Arrival of foreign tourists in hotels per region

(\*\*) In comparison with the achieved touristic performance, in case the film was not produced in the examined area

(\*\*\*) Not so strong, maybe because the impact is focused on a certain area of the region, in Scopelos, where the shooting took place

## 2.5 Filming in the Mediterranean Region

In order to analyse and assess the impact of filming on local tourism, but also pick the right location for filming we have to take several parameters into consideration due to the unique conditions of each nation and region. Some places are more likely than others to host film and film-induced tourism activities, because of several geographical and sociopolitical circumstances. Some countries and moreover, some regions are more hospitable and provide higher security in terms of political and economic stability. In location like these, cultural and artistic events, like film shootings, are more likely to take place and flourish. The Mediterranean region offers a welcoming environment with a temperate climate and mild temperatures throughout the year. In addition, there are four seasons that give colour and many possibilities for filming, since the scenery is changing and the geography offers mountains and sea, urban and rural options at the same time. Therefore, the circumstances for the filmmakers and the crew are quite ideal for external location shootings and for providing inspiration.

Apart from the geography and the natural environment, there are other parameters that the location scouters and on the whole a film production needs to take into account. That is the local regulations and informal rules, the legislation and the sociopolitical circumstances. The above may apply to the whole Mediterranean region,

but in some parts there is political turbulence and instability (see Arab Spring), censorship and social discrimination, which doesn't enable the artistic activities to flourish. It depends strongly on how welcoming is the local community to artistic interventions and initiatives and Egypt is an example where the mentality of a nation was an obstacle to art, including local writers. The role of the artist, the writer or the creative person there is not encouraged or in other parts of the Arab world more generally, and like many artists around the world, they are not appreciated during their lifetimes and are perceived as outcasts. The arts are widely viewed as a second-class option for those who do not enter the worlds of medicine, engineering or law – “the three of which constitute the staple diet of Egyptian career options” (Zakzouk, 2011).

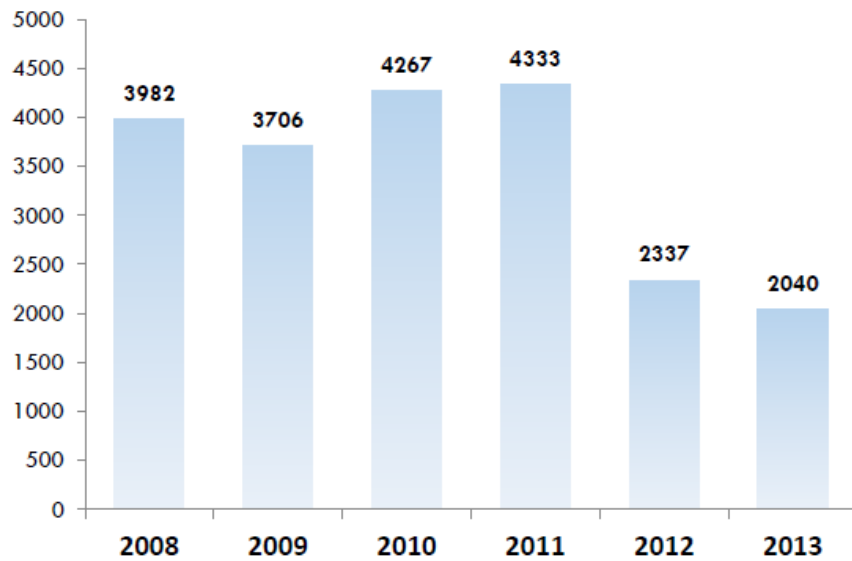
Film productions would naturally avoid locations that could be unwelcoming or even put the health and the physical integrity of the crew at stake. The result is that they turn to locations in the north of the Mediterranean Sea, where the situation is more politically stable and culturally open-minded and they are often offered better opportunities in financial terms (e.g. Film Commissions). In Croatia, for example, the government through “the Incentive Program”, since 2012, has been offering a financial incentive for film and tv productions shot there. If they follow certain regulations, the international and local filmmakers are offered a discount up to 20% in the form of a rebate to their spendings there (Pleština, 2016). These positive terms had led many productions to shoot in Croatia, from the HBO TV series, *Game of Thrones*, to art house films (e.g. *Kiss of Life*, an indie film released in 2003).

In the case of Greece, filming there has a long history and got through many changes. In the 60's and 70's, there was an increasing interest of filmmakers in Greece and many foreign productions were made there (e.g. *Never on Sunday*, *Zorba the Greek*). In the 80's, there were few big productions, such as *James Bond*, that was shot in Meteora and Corfu. At the 90's, fewer films were shot, such as *Mediterraneo* (1991) and during the 00's, there were many important international and Greek co-productions (e.g. *A Touch of Spice*, *Brides*), including Hollywood productions (e.g. *Mamma Mia*) and a significant development of distribution companies. Here, we also have to take into account the financial crisis outburst within the last years, the strikes and riots throughout these years and the international media coverage of these news. Since the financial crisis outburst, the workforce met a significant decline and the unemployment rate on the media and film sector increased steadily as in most of the sectors and strikingly among youth (See Chart 1 & Chart 2). We need to mention here that the peak of the unemployment rate in

Greece was noted in 2013 and since then it seems to decline slowly but steadily (see Chart 2). However, the titles in the international media that millions of people follow and inform themselves were relatively exaggerating mentioning from the very start of the crisis in 2008 until today that “Greek strikes paralyze basic infrastructure” (Deutsche Welle, 2016) and “Strikes in Greece cause travel chaos” (Calder, 2017) and as a result tourism inbound as well as incoming cultural activities decreased. News for strikes like that, although may be true are not a constant phenomenon but create a climate of fear and inconvenience and discourage big productions from shooting and investing in Greece. Moreover, Greece may not be in the zone of Arab spring, which is sometimes synonym of fear and prejudice, but the financial crisis led to social crisis so in our analysis we will examine how criminality rates and the feeling of safety in Greece varies through the years concerned and how this affected inbound tourism.

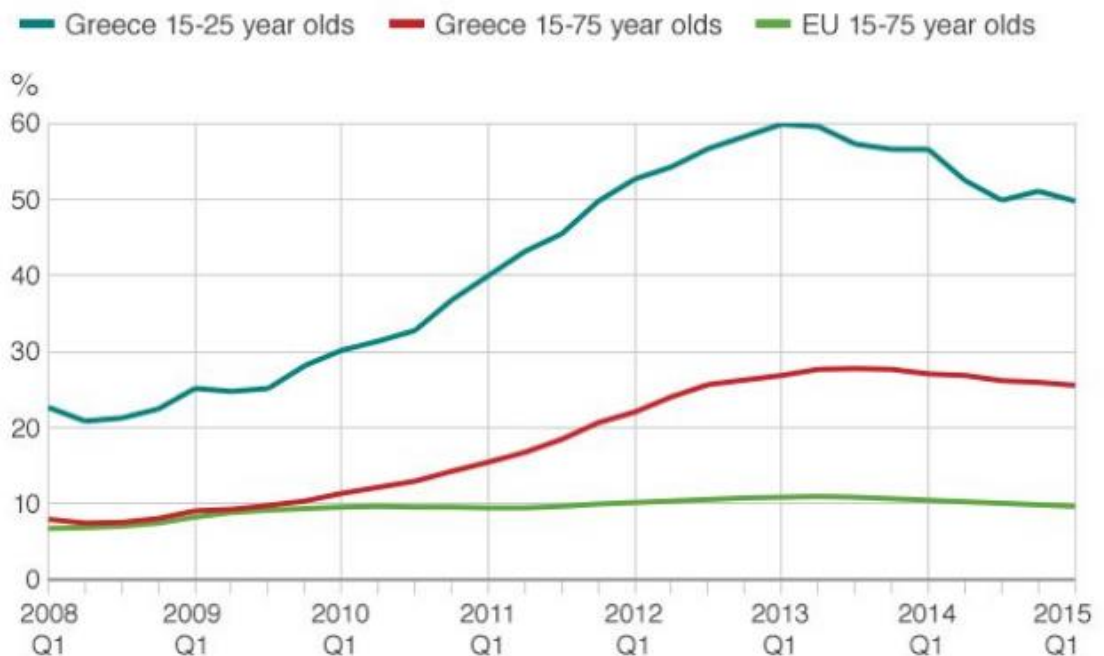
These circumstances will be taken into account in our analysis and explanation of results in addition to the weak activity and low incentive offerings of the Greek Film Commission, which is of great importance especially in situations of crisis because it is the competent body to attract foreign film productions. The main problems that have been reported by foreign film producers are that although they are willing to bring their projects to the country, they found the bureaucracy and the lack of a coordination impossible to bypass (Kontos, 2007). The significant weaknesses in the existing institutional framework for attracting foreign film productions are divided into two categories, the bureaucratic obstacles and the weak economic incentives. The bureaucratic obstacles include complex procedures, overlapping responsibilities of more than one institutions, lengthy procedures for access to specific areas of interest, ambiguities in the legislation, which leave room for subjective interpretations from each institution and lack of a set pricing list. The above describe exactly the public sector in Greece in most of the sectors and not only when referring to foreign film productions. As far as the weak economic assistance is concerned, there is low contribution from the Greek Film Center and lack of effective tax incentives (e.g. VAT return). It has been studied by the Foundation for Economic and Industrial Research in Greece (2014) that from a significant foreign film production with expenditure of 25 million Euros in Greece, the estimated GDP increase can reach the 39 mil. Euros. In terms of employment, a single large foreign production can maintain over 755 jobs during the shooting period, of which 223 are in the sectors directly involved in production (Athanasiaides, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014).

Chart 1: Employment in the audiovisual sector in Greece during the timespan 2008-2013



Source: Hellenic Statistical Bureau (elstat), Workforce Research

Chart 2: Unemployment rate in Greece per age group from 2008-2015



Note: The unemployment rate is based on a survey. It equals the number of people who say they are looking for work as a percentage of the total number either in work or seeking it.

Source: Eurostat

### 3. METHODOLOGY

#### 3.1. Case studies from filming in Greece

The power of the filming image is a powerful means to achieve the goal of tourism. Nowadays, according to TRAVELSAT Competitive Index, 10 out of the 100 tourists that travelled in 2012 to a certain country they first saw a film that depicted their destination of visit. Film proves to be a rather efficient medium to induce tourism, because it has an impact on audiences that would not be targeted by the conventional means of advertisement, therefore it attracts many marketing companies. Product placement can be achieved in the film, through publishing scenes from the shooting, the trailer, the film stars often sign contracts to promote certain products etc, but it is hard to measure and assess. Measurements of the tourism impact in a region can be achieved indirectly by comparison of arrivals before a movie is projected and immediately afterwards (Tarnaras, 2014). This is what we will measure, analyse and compare, based on data from the films *Mamma Mia* and *Before Midnight* (Linklater, 2013).

Film tourism has the advantage of highlighting travel destinations and creating iconic places. Often the advent of tourists does not happen at the same time with the film's projection period in cinemas. However, in order for tourism to have long-term results, certain actions can contribute like maintaining the set of filming and creating thematic activities that can meet the expectations of the cinema tourist. Even "Captain Corelli's Mandolin" case was not such, the location depiction had such a strong visual effect that the tourist movement related to the film was strong (Ritchie & Hudson, 2005) even if the film was not a major success and met brutal reactions from critics, generating a controversy in online film databases. Over 200 reviews appeared on IMDB and Amazon websites alone, discussing the virtues and pitfalls of John Madden's cinematic adaptation of the book. However, the film had a very positive impact for the island's tourism industry both during and after filming (Ritchie & Hudson, 2005). The cinematic narrative invests in the Cephalonian landscape, the picturesque scenery and the traditional Greek lifestyle (Ritchie & Hudson, 2005). Based on statistical data for the years 1993-2010 that were selected and published in Fortune Greece on 2013, two local entrepreneurs decided on developing their hotel business in Cephalonia. According to their individual research, arrivals from the United Kingdom without advertising or influence from the film would have been 30.576 in 2001 and 33.727 in 2002, while the



numbers recorded were 44.207 and 43.108 respectively; in other words, they have seen an increase of 44% and 28% (Christodoulou, 2013). The numbers of overnight stays were formed accordingly. This phenomenon reinforces the claim that filming in a location affects positively the local tourism.

*Mamma Mia* (Lloyd, 2008), filmed in the island of Scopelos, is another interesting case study. The former mayor of Skopelos, George Michelis, was the man who, for five consecutive years after the screening of the film did 40 political weddings of tourists in Agios Ioannis, the chapel that the wedding of the film itself took place. In one British wedding, the marrying couple chose for the soundtrack of their wedding the “Mamma Mia” theme playing in the background. With the soundtrack of the film still ringing in his ears, Mr. Michelis explained that "Mamma Mia" was the occasion for visitors to come to the island from Argentina or even from New Zealand. “Today may not be the first year's flood, but tourists, on the occasion of the film, continue to come.” (Christodoulou, 2013). This phenomenon of reproducing scenes or concepts of a film in real life occurs until today in Scopelos. Only for the 2016, 80 wedding ceremonies took place, according to the deputy mayor, Mache Clonari, at the pick of the touristic season, attracting also international celebrities, such as Jessie Ware, the English songwriter and soul singer that got married there (Kontra News, 2016).



Image 4: Amanda Seyfried, starring actress of the film, in wedding dress, at the break of shooting “Mamma Mia” (Source: [vangelisphotography.com](http://vangelisphotography.com))





Image 5: British wedding in the island of Scopelos (*Source: kontranews.gr*)



Image 6: From the wedding of Jessie Ware in Scopelos (*Source: kontranews.gr*)

A similar case was the film *The Big Blue* (original title: *Le Grande Bleu*, 1988), which was written and directed by Luc Besson and it was entirely shot in the island of Amorgos, Ios and Koufonisia in Cyclades, Greece. Some actors that starred in the film

are Jean-Marc Barr, Jean Reno and Rosanna Arquette. It depicts the idyllic life on the island in the summer and had quite an impact on the local community. There is even a hotel called “The Big Blue” in Amorgos, the main film location, and because the origin of the director and the production is French, the main audience of the movie was also French. It is also, the most financially successful French film of the 1980s and was selected to be the opening film at the 1988 Cannes Film Festival, which shows the impact of the film to the critics and festival experts (IMDB, 1988). Due to the success of the movie, the island of Amorgos saw an increase on the visitors, especially French, even from the month of May, which is off season. Some of the French tourists have even bought their own house on the island (MtX, 2015).

*Before Midnight* was filmed in Messinia, in the south part of the Peloponnese region in continental Greece. Scopelos did not meet the needs in terms of infrastructure to welcome this sudden rise in inbound tourism; on the contrary, the region of Messinia had the prerequisites to achieve a pleasant stay for the incoming tourists induced from the film. Kalamata, the capital of the region was connected in 2013, the year of the release of the film, by air via Aegean Airlines with Germany, Sweden, Russia and Tel Aviv, via Ryanair with Milan and via EasyJet with London. At the same time, charter flights started landing there from central and northern Europe. The reason, of course, is not just the film but the low cost fares of the airport and the tourist development of the area, especially after the construction of Costa Navarino, a 5 star hotel that offered a luxurious experience to its visitors that happened in parallel with the shooting (Christodoulou, 2013). The film is the most recent that can be studied in terms of impact on tourism, because some years need to pass after the film release in order to have valid results and a better picture of the numbers before and after. Therefore, the most recent films, such as *Suntan* (Papadimitropoulos, 2016), filmed in the island of Antiparos, have not completed their journey in the big screen nor the time following the release is enough to measure and analyse the changes and effects on tourism.

### 3.2 Setting the methodological framework

It is supported from the present and previous literature that films and TV have a positive impact on a certain destination, but there is often no method of calculating this effect (Li, Li, Song, Lundberg, & Shen, 2017). In the present study, we focused on film as a medium for reasons referred to on Chapters 2.2 and 2.3. Moreover, evaluating the economic impacts of films on tourism demand and the local economy is important in justifying investment and by monitoring the effects of these investments, future investment strategies can be supported (Li, Li, Song, Lundberg, & Shen, 2017).

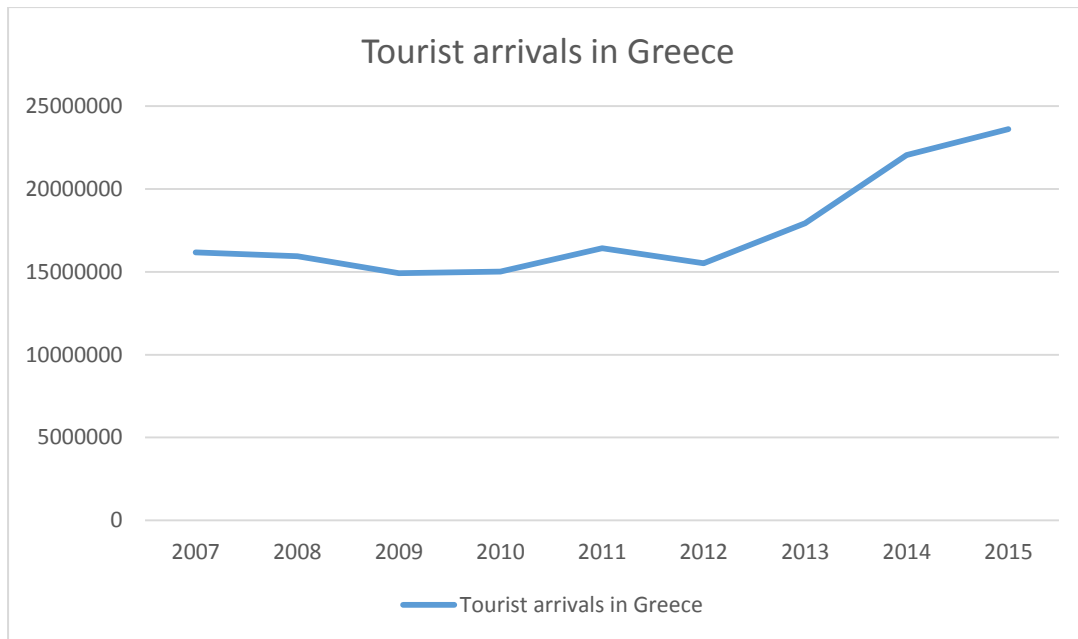
Before our analysis, we hypothesize that filming in a location can have a significant impact on tourist arrivals so as to lead to film-induced tourism and especially when the origin of the film is the same with the origin of the tourists. In our case, we examine the USA productions in Greece and we hypothesize that they will affect positively the USA tourist arrivals. On a secondary basis, we were skeptical about the outcome due to the financial crisis, henceforth, we correlated the tourist arrivals with sociopolitical factors that might have discouraged tourists from visiting Greece even if they were positively inclined from films. Observing that international websites that depict the pulse in Greece, including the official US embassy website in Greece (U.S. Embassy and Consulate in Greece, 2017), made daily announcements about strikes and demonstrations in Greece we were led to analyse factors that we found relative data, such as criminality and homicide rate and to assume that it might have a negative impact on inbound tourism, especially from the USA.

It is important for our analysis and results to have a good picture of the inbound tourism generally as well as related to film; this method has been previously followed by several researches of film tourism (Mitchell & Stewart, 2012, p. 3, Hudson & Ritchie, 2006, p. 264 et. al). On the timeline of Chart 3, we notice a steady increase on tourist arrivals since 1995 with some booming periods that may relate to films shot in Greece. For example, the period when Captain Corelli's Mandolin was released and the year after there is a peak (2001 & 2002) and the years following the inbound tourism is quite steady, next peak emerged with the musical *Mamma Mia* with quite the same steady years following and the biggest increase on tourist input took place after 2012 with the release of *Before Midnight* on 2013 with the couple of years after the tourists inbound reaching 24 million (The World Bank, 2015). After 2015, to have a better image of the continuity of tourism, we can observe on bar chart that the tourists' arrivals continued to increase with

the high season from April till October and the peak on July. An interesting fact is that tourist arrivals in Greece averaged in 1040030.32 persons from 2007 until 2017, reaching an all-time high of 3303014 persons in July of 2016 and a record low of 140107 persons in February of 2013 due to seasonality (Greek Tourism Confederation, 2016). Previous research for tourism in Greece in the course of more than forty years revealed that tourist revenues in Greece are to some extent seasonal, which implies that most involving parties should extend tourist period aiming at developing tourism of all seasons (Dritsakis, 2008). This is a parameter that has to be taken into account when analyzing the results.

Although there is anecdotal evidence of the effect of film and the filming location in the local tourism, in our research we want to examine the correlation between film and tourism on a national level, based on the data available, using the Pearson statistical analysis and engaging the sociopolitical parameters. In this way, we can see in a bigger scale how films are affecting tourism in Greece and frame our research in the environment that it is conducted. New Zealand, for example, is a country with minimal political changes, therefore, possible changes in tourism due to *Lord of the Rings* can be more easily attributed to the movie. In Greece, since the first referendum vote, a consequence of strikes and demonstration spurred that met extensive media coverage and this is another important parameter. In four years (2010-2014) 20.210 marches and demonstrations took place in Greece, from which the 6.266 happened in Athens, as published by the government (Kathimerini, 2014). The U.S.A. embassy in Greece issues everyday announcements informing about the demonstrations and strikes (U.S. Embassy and Consulate in Greece, 2017). This is also essential for our research because the films and the tourist we examine in detail are from the U.S.A.

Chart 3: International Tourist arrivals in Greece 2007-2015



In order to assess the success of the movie and then correlate it with tourism, we used variables such as the award nominations and wins in film festivals. The award nominations and award wins add value to the film and accreditation to the audience that is more likely to pay to watch the film and will potentially lead to increase in the revenues of the film company. We focused on the variable of the Academy Award nomination (Oscar) because it is indicative of the success of the film and we operationalized it to nominal as it whether the film was nominated or not. The Oscar award is the most prestigious award for the film industry in the USA and therefore, may contribute to our results since the films we examine are mainly funded by North American production companies. It was placed as an independent variable and the tourist arrivals is the dependent variables. As previous research has been conducted (Mitchell & Stewart, 2012), we wanted to examine a timespan of ten years, five before and five after the release of the films in order for our results to be more reliable. Unfortunately, there was no relative data available for each case. The films were premiered in the USA and most of the screenings took place there, too. Therefore, the target group that mostly watched the film, and which we can study, is the USA citizens and their arrival in Greece. We compared two films of American production because as said before the big foreign production can be a major contribution to decrease the local unemployment rate (Athanasiaides, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014) and the arrivals of American tourists with the international arrivals, because the majority of screenings takes

place at the country of release so it was interesting to assess the impact the films had on the viewers in order to induce film tourism.

One of the independent variables will be whether during our years of study, there was a film shot in Greece and we will refer their year of release. This is the timeline we will use (Table 3):

Table 3: Films shot in Greece in 2007-2014 and the box office globally and in the U.S.A of *Mamma Mia* and *Before Midnight*.

	FILM	BUDGET(in US\$)	Global Box Office(in US\$)	USA Box Office (US\$)
2007	The Bourne Ultimatum(USA) <sup>1</sup>	110.000.000		
2008	Mamma Mia(USA)	52.000.000	609.841.637	144.130.063
2009	My Life in Ruins(USA)	17.000.000		
2010	-	-	-	-
2012	Dead Europe(UK)	?		
2013	Before Midnight(USA)	3.000.000	23.380.979	8.114.627
2014	Two Faces of January(USA)	?		
2014	The Island of Secrets(Greece)	1.355.790		

From Table 3 we have a clearer image of which films are successful or not, at least in terms of box office. First we compared the international box office with the international tourist arrivals and then the box office of the films in the U.S.A. with the U.S.A. tourist arrivals in Greece. Box office is a strong indicator of whether a film is successful and when specified per region can show us better results to assess in terms of tourism arrivals. We converted the numbers using the US dollar because most of the data was found in this currency. The data available for the box office of the films per region and globally were found from IMDB.

Another reason we chose to make a comparison between *Before Midnight* and *Mamma Mia* was the big difference in their budget, 3 mil. US\$ and 52 mil. US\$ respectively, and there is a substantial gap of time between their release dates so that the tourist arrival numbers do not get confused. In this way, we can better analyse the impact

<sup>1</sup> Actually filmed in Tenerife, Spain, but with a Greek film set, therefore is included in our timeline

it had on each period and how the social circumstances, which changed in this time gap affected the tourist advent.

Last but not least, is the social and political part of our analysis, which is crucial when studying Greece during the years of crisis. It is important to include in our analysis factors that are not directly connected with film but can affect our results. Tourism is a major source of income for Greece and in order to show its importance we not only need to find what induces it but also what discourages it; the outcome will help us assess the situation more substantially and find solutions in obstacles like how to overcome seasonality (Greek Tourism Confederation, 2016).

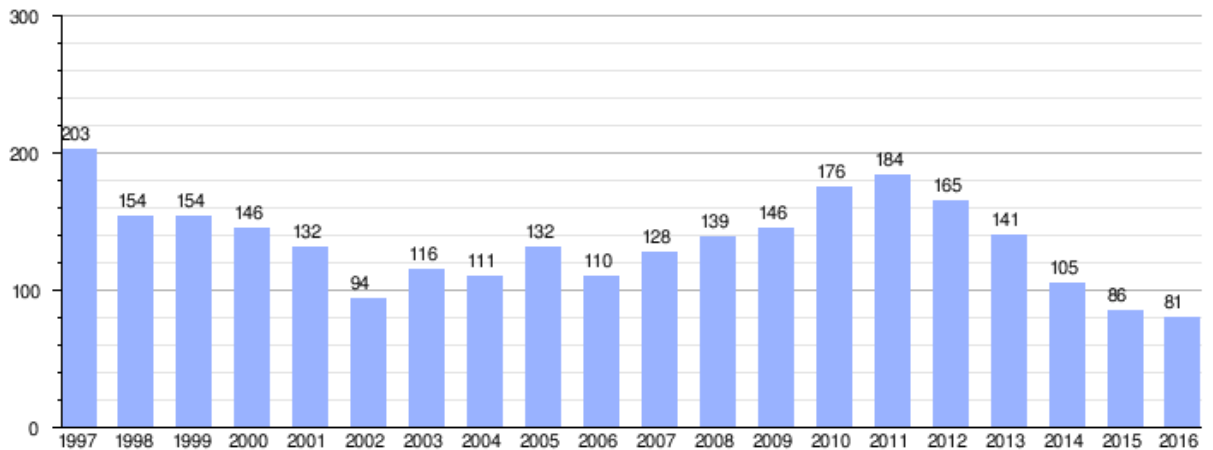
Currently, Greece performs well in some measures of well-being in comparison to most other countries in the Better Life Index according to the Organisation for Economic Co-operation and Development economic survey. Greece ranks above the average in health status and work-life balance, but below average in income and wealth, civic engagement, housing, environmental quality, subjective well-being, social connections, and jobs and earnings (OECD, 2017). From these evidence, we can assume that the results of the Better Life Index were not very different or were even worse three years before the years we examine as a top limit in our research. In order to have a better picture of the situation in Greece throughout the years, we reported the annual findings of the Hellenic Police regarding homicides and we correlated them with the tourist arrivals; some of the statistical data of the Hellenic Police reports are retrieved from Eurostat (See Table 4). On Table 4, we can observe the data we used from the years examined and on Charts 4 and 5, we can see an overview of the homicide rate and the number of violent crimes in Greece until recently.

Table 4: Number of homicides in Greece per year, 2007-2014

<i>Year</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Homicide rate</i>	128	139	146	176	184	165	141	105

*Source: Hellenic Police. Annual crime data reports*

Chart 4: Number of homicides per year in Greece from 1997 to 2016



Source: Hellenic Police. Annual crime data reports

Table 5: Number of violent crimes in Greece per 1000 citizens per year, 2007-2014

Year	2007	2008	2009	2010	2011	2012	2013	2014
Homicide rate	10.9	11.2	12.2	12.3	9.8	8.7	7.4	5.5

Source: Eurostat

We can observe from the bar chart 4, that there is a steady increase of homicides since 2006 with the peak in 2011 and then a decline until 2016. We correlated these data with tourism arrivals in order to see if this indicator of criminality worked as an inhibitor to tourism and how this can be related with the effect of our studied films. The evolution on the number of violent crimes is quite similar.

By using the bivariate Pearson correlation in SPSS software, which is the most common tool for statistical analysis, the results can be compared with most of previous and future studies, and we can analyse our data with an upper goal to make some prediction about the evolution of this relation. Positive correlation would indicate for example, that the bigger the box office of a film the more the tourist arrivals in the filmed location, but running the correlation analysis is necessary to conclude to all that. The p-value is in the decimal 0.01 and in the two-tailed test conducted in each correlation we followed the decision rule of:



-if  $p \leq 0.05$ , the test is significant (there is a significant relationship between independent and dependent variable)

-if  $p \geq 0.05$ , the rest is not significant (there is not a significant relationship between the independent and the dependent variable)

The model according to APA style to report our results is as follows:  $r(n)=x$ ,  $p=0.05$ , where  $x$  is the result of correlation coefficient,  $r$  is the Pearson's  $r$ ,  $n$  are the degrees of freedom found from  $N$  (our sample) minus 2 and the  $p$  value (level of significance) set as 0.05. For the  $r$  value it always applies that  $-1 < r < 1$ ; when  $r=-1$  we have perfect negative correlation and when  $r=1$  we have perfect positive correlation (Landau & Everitt, 2004). We have to check the  $p$  value to confirm our  $r$  Pearson correlation, then when  $p < 0.05$  we can derive that we have a statistical significance of the  $r$ , otherwise our result is not statistically significant or our evidence was not sufficient to suggest that the correlation derived is valid or the correlation was an outcome of coincidence.

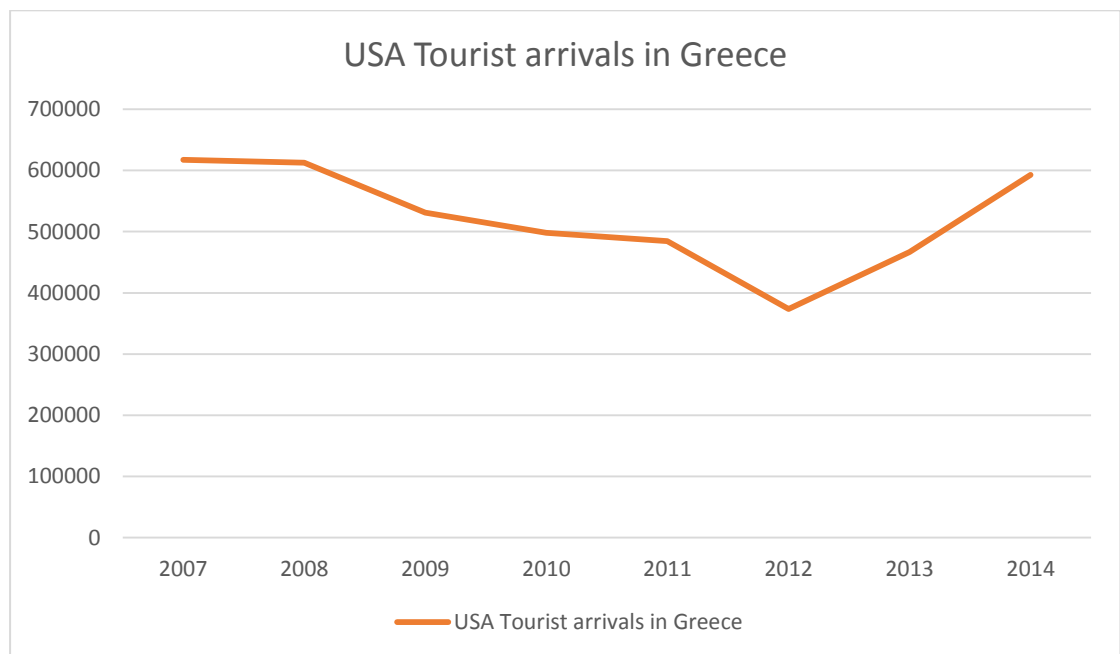
#### 4. RESULTS ANALYSIS

For the operationalized variable of filming in Greece each year between years 2007-2014, we hypothesized that it will have an impact to the variable of the tourist arrivals in Greece, therefore, we expected a positive correlation.

From the charts 3 and 5, we notice that the arrivals of international and USA tourists have small variations. It is noticeable that since 2007 there is a decline, which can be due to the outburst of the financial crisis in Greece and the extensive exposure to the international media. As mentioned before, usually the results in tourism will not be immediately obvious after the film release, therefore, the changes we may notice start from the following year of the release. This is not the rule though because sometimes the production companies start a marketing campaign long before the premiere. *Mamma Mia* is also a theatrical musical play and the soundtrack of the band "Abba" is an important addition to the film that became its signature. The UK is well known for having a musical and theatre culture and that is the reason why the film was premiered there and the revenues are in a big percentage from the UK box office, therefore, the film may not have stopped the decline of USA tourist arrivals in Greece after the film release. The crisis outburst may have affected the arrival of tourists no matter where they come from. However, the decline of inbound USA tourists is smaller the years following (2009-2011) and the international tourist arrivals increased slightly during the year 2010.

After 2012, there is a steady increase and especially after 2013 (the release year of *Before Midnight*) tourism is increasing with a faster pace. Although, precise data for the tourists arrivals were not found for the following years of 2014 so that we have a better picture, reports have been published, claiming that in 2016, the highest amount of incoming tourists has been recorded (Greek Tourism Confederation, Greece Tourist Arrivals, 2016). After 2012, the increase of USA tourists arrivals is noticeable, although we need to bear in mind that this can be related to the better financial situation of Greece and the fewer demonstrations and riots that take place in comparison to the first years of the crisis; this change in the sociopolitical circumstances make the tourists feel safer and they travel more willingly to Greece.

Chart 5: USA Tourist arrivals in Greece 2007-2014



Considering the above facts, we will analyse our Pearson correlation results having as reference the aggregate Table 7 (see Appendix). According to our model, the correlation of filming in Greece with the tourist arrivals the same year has a positive correlation ( $r=0,27$ ). However, this is not statistically confirmed by the 2-tailed significance test ( $p=0,518 > 0,5$ ). The same applies for the  $r$  value of the USA tourist arrivals, when correlated with filming in Greece. There is a difference in the two significances though and the one related to the USA tourist arrivals is marginally important (near 0,5), which means there is a slightly bigger effect to the audiences that

originate from the USA, possibly because the films we examined are American productions.

The nomination for an Oscar award had a perfect positive correlation with the tourist arrivals both worldwide and from the USA ( $r=1$  in both cases), which is statistically confirmed by the p value ( $p=0$ ). The Oscar award is confirmed to be a great measure of success for a film and that appears to be acknowledged by the audiences and induce tourism to the filmed location. The box office on the contrary had a negative correlation with the tourist arrivals(worldwide and USA), which shows that the audience is more affected by qualitative(Oscar nomination) criteria than quantitative(box office) in order to travel to a film location; this negative correlation can also be explained by indirect, social factors like the criminality and homicide rate that we examined and the fact that the tourist arrivals sometimes are not directly increased the year of film release but from the following year. However, the *Mamma Mia* in comparison with *Before Midnight* did an extensive marketing campaign before the release, which can explain the negative correlation of the two films with the box office variable.

Last but not least, when correlated the social variables (number of homicides and criminality rate) with the tourist arrivals in Greece we notice once again a negative relation, which is statistically significant. This is quite predictable, because the bigger the criminality rate and the more the homicides the least the security and safety climate a country provides to the tourists. The negative news travel fast and the USA embassy keeps always updated their website for the USA citizens that were affected by the social instability during the financial crisis (U.S. Embassy and Consulate in Greece, 2017). If we were to observe a statistically insignificant relation of the social factors to our dependent variables, then possibly the tourist arrivals in Greece would have been affected positively by the films shot there.

Moreover, what is worth noticing from our results is the difference between international tourist arrivals and USA tourist arrivals when correlated with the operationalized variable of whether there was a film shot in Greece or not for the years examine. Our sample of films is in their majority productions from the USA(see Table 3), which means they are of international appeal but certainly have an impact and are better known in the American audience. It appears that the origin of the film has a positive effect on the tourist arrivals of the same origin. Each correlation value between the operationalized variable of filming in Greece as mentioned before and the tourist arrivals and the USA tourist arrivals respectively seems to be weak individually, but when

compared with each other we can notice something interesting. The second correlation value of the USA tourist arrivals is statistically more significant than the correlation value of the international tourist arrivals. This can be interpreted into that USA citizens are more likely to visit Greece when watching a film that shows locations of the country; it is important to take into account that the language of the film and the familiar faces of famous actors may have contributed to that.

We observed through previous evidence that tourism can be boosted on a local level due to a movie. The islands of Skiathos and Amorgos met tourism increase from people that saw the locations and wanted to visit them. But, on a national level, it is not possible to derive a significant tourism increase that can be attributed to the movies we examined. However, it is interesting to observe why this occurred and what was the reason behind it and for that we included social and political parameters to have sound explanation for the results. Overall, we can see from the results of SPSS analysis that the dependent variables are prone to change due to social parameters and this needs a strong support from the state, and not just involvement of local stakeholders, to guarantee stability and employability in the sector in the course of time.

## 5. CONCLUSION

One major problem we observed during this study is the problem of lack of continuity and the lack of support from the government. The foreign film productions we studied are two from the few that happened almost by chance in Greece. Although it is recognized by the Greek authorities that there is a need to attract foreign film productions in Greece especially during the difficult years of the crisis, the moves towards this direction were small. In 2007, the Minister of Culture then, Yorgos Voulgarakis, said that the plans for tax rebate and a Film Commission aimed at attracting international productions would definitely proceed. Voulgarakis said that the two initiatives are included in the yet to be passed new film law, which has been the subject of new discussions in Greek cinema circles. According to the minister, too many opportunities were lost in the past, when foreign producers willing to bring their projects to the country found the bureaucracy and the lack of a coordinating body impossible to bypass (Athanasiaades, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014). He did not specify details on tax deduction percentages though or who and when would work in the

Film Commission, initiatives which are now a standard in most countries across Europe that are considered major filming destinations (Kontos, 2007).

The Hellenic Film Commission Office was finally established in 2007. However, this office does not seem to be fully operational. Law N.3905/2010 envisages the establishment of a promotion division (Hellas Film) and a directorate of international audiovisual productions (Thessaloniki Film Commission). These offices still do not seem to be operating (Athanasiaides, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014), which means that seven years during the financial and social crisis the authorities did not proceed in any measures that will attract foreign productions and still from our study we can see filming in Greece was still going on without having though a strong impact on a national level though. The result was big Hollywood productions to be pushed away and film in competitor locations like the case of *The Bourne Ultimatum* (2007) that was shot in Tenerife, turning it to a Greek set, complete with anti-austerity demonstrations, and thousands of extras making some decent money during the shoot (Pappas, 2015). The reason for abandoning the project being filmed in Greece was the same reason as numerous other film projects have given; an unfriendly government environment with impossible bureaucracy blocking the process. Greece's former culture minister Nikos Xydakis confirmed that the production had been turned away from filming in Greece because a tax-break structure for films doesn't exist. He made comments on Skai TV and confirmed that what exists (tax breaks for film productions) in other countries, doesn't exist in Greece. Xydakis claimed that he had begun drafting legislation for film production tax breaks. Previous governments have all made such claims, including the creation of a "film commission" to lure international productions (Pappas, 2015). Olga Kefalogianni, the Minister of Tourism in 2014, claimed the same at meetings with the President and General Director of the Hellenic Cinema Center, Mr. Petros Markaris and Mr. Grigoris Karantinakis, the President of the Hellenic Academy of Cinematography, Mr. Even more recently, the Greek Culture Minister, Aristides Baltas, told a local Athens radio station that the government has committed to creating a commission similar to film organizations in other EU countries, and plans to release details as early as next month. "They have this in all countries and we will launch one as well," he said, as he added that one of the main complications that discourages foreign film producers from filming in Greece is bureaucratic problems in the country, which eventually leads them to go elsewhere. In contrast to Greece, many European countries subsidise 15-30% of the production cost/e.g. in Croatia, 20% of the production expenses can be claimed back if

the expenditure made in the country exceeds €1 million (Athanasopoulos, Danchev, Papadakis, Paratsiokas, & Tsakanikas, 2014). During the radio interview, Baltas said that the new commission would inform foreign producers on all issues involving taxes and regulations. However, at this time there is no word on whether Greece will join other EU countries in practical measures, as well as countries around the world by offering tax incentive programs such as VAT tax exclusion, in order to better attract the film industry to Greece (Greece, 2016). There is only a positive incline of the authorities to the direction of attracting productions in Greece. It is important that the last years there is movement in the Tourism Ministry apart from the Culture Ministry, which means that the importance of filming in Greece is acknowledged not only from artistic reasons but also for economic motives. As part of its strategy to approach the markets of South Korea and Southeast Asia, the Greek National Tourism Organization (GNTO) participated in the Korea Travel Fair (KOFTA) in Seoul last year. KOFTA is the leading tourism exhibition in Korea. According to their announcement, the GNTO is participating in the KOFTA expo with a stand of 90 sq.m. and the regions of Crete and the Ionian Islands as co-exhibitors (GTP, 2016).

The Greek government and bureaucrats need to turn their words into action and make more moves like the above after years of discussion. When there are measures that will boost the production, especially during peaceful periods, it is predicted that the tourist arrivals will increase, taking into consideration that although in crisis, financial and social, Greece does not appear to have serious terrorist incidents. Terrorist attacks appear to increase in Europe and its big capitals and in the neighbor country, Turkey, meaning that many productions as well as tourists will avoid these airports and regions. This may have contributed the last years to the tourism activity in Greece (see Chart 5) excluding potential filming locations after North Africa that could be potential competitors.

## 6. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

In our research, we had to deal with statistical data in a national level and although there was anecdotal evidence on a local level from the regions used as film locations in Greece, there was not empirical evidence. Hence, we could not come to sound conclusions about the change in tourist arrivals in the respective regions due to film. The sociopolitical factors we included as variables were also for the whole country, therefore, our study had to be referred to a national level, which ended up being interesting in comparison with the tourism in a local level that is quite evident. Furthermore, the films that we could examine were limited due to the small activity of the foreign productions in Greece during the years examined.

It would be very interesting to examine the tourism advent on a national level after 2014, when the Film Commission in Greece seems to be more active and the government appears to be more willing to attract foreign productions and support filming in Greece regardless the origin of the production. Moreover, since filming in Greece is a niche itself, it would be interesting to examine and compare the effect that Greek cinema has with the foreign productions filmed in Greece and which would contribute to the local economy greater. As an extension to the present study, after tourism is induced by film it can be valuable to examine how the wealth generated from the tourists is distributed to the local economy (sectors) and which stakeholders have directly and indirectly benefited. As mentioned by previous researchers (Li, Li, Song, Lundberg, & Shen, 2017), this study can pose a benchmark for further evaluating the economic impacts of films on tourism demand and the local economy in detail. It is important to use studies like this as a tool to justify investments' efficiency and by monitoring and evaluating the effects of these investments, to develop future investment strategies (Li, Li, Song, Lundberg, & Shen, 2017).

## 7. APPENDIX

## SPSS PEARSON BIVARIATE CORRELATION MODEL

Table 6: Aggregate table of variables

<i>Variable</i>	Tourist arrivals in Greece in 2007-2014	USA tourist arrivals in Greece in 2007-2014	Films in Greece 2007-2014	Nomination for Oscar award	Worldwide box office in US\$	USA box office in US\$	Number of homicides in Greece	Number of violent crimes
<i>Type of variable</i>	Scale	Scale	Nominal	Nominal	Scale	Scale	Scale	Scale

Table 7: Aggregate table of SPSS Pearson correlations

<i>Dependent Variable</i>	<i>Independent Variable</i>	<i>Pearson Correlation(r)</i>	<i>Sample(N)</i>	<i>2-tailed Significance(p)</i>	<i>Model r(n)=x</i>	<i>Interpretation</i>
<i>Tourist arrivals in Greece 2007-2014</i>	Films in Greece 2007-2014	0,27	8/8	0,518	r(6)=0,27	Positive correlation/No statistical significance
	Nomination for Oscar award	1	8/2	0	r(6)=1	Positive correlation/Statistical significance
	Worldwide box office in US\$	-1	8/2	0	r(6)=-1	Negative correlation/Statistical significance
	Number of homicides in Greece	-0,689	8/8	0,050	r(6)=-0,689	Positive correlation/Marginal statistical significance
	Number of violent crimes	-0,158	8/8	0,007	r(6)=-0,158	Positive correlation/Statistical significance
<i>USA tourist arrivals in Greece 2007-2014</i>	Films in Greece 2007-2014	0,226	8/8	0,591	r(6)=0,226	Positive correlation/No statistical significance
	Nomination for Oscar award	1	8/2	0	r(6)=1	Positive correlation/Statistical significance



US box office in US\$	-1	8/2	0	$r(6)=-1$	Negative correlation/Statistical significance
Number of homicides in Greece	-0,648	8/8	0,008	$r(6)=-0,648$	Negative correlation/Statistical significance
Number of violent crimes	-0,460	8/8	0,025	$r(6)=-0,460$	Positive correlation/Statistical significance

- I. Independent variable: Films shot in Greece between 2007-2014  
 Dependent variable: Tourist arrivals in Greece between 2007-2014

**Correlations**

		Tourist arrivals in Greece	Films in Greece 2007-2014
Tourist arrivals in Greece	Pearson Correlation	1	,270
	Sig. (2-tailed)		,518
	N	8	8
Films in Greece 2007-2014	Pearson Correlation	,270	1
	Sig. (2-tailed)	,518	
	N	8	8

- II. Independent variable: Films shot in Greece between 2007-2014  
 Dependent variable: Tourist arrivals from the USA between 2007-2014

**Correlations**

		Films in Greece 2007-2014	American tourist arrivals in Greece
Films in Greece 2007-2014	Pearson Correlation	1	,226
	Sig. (2-tailed)		,591
	N	8	8
American tourist arrivals in Greece	Pearson Correlation	,226	1
	Sig. (2-tailed)	,591	
	N	8	8

III. Independent variable: Oscar nomination

Dependent variable: Tourist arrivals in Greece 2007-2014

**Correlations**

	American tourist arrivals in Greece	Nomination for Oscar
American tourist arrivals in Greece	1	1,000**
Pearson Correlation		
Sig. (2-tailed)		.
N	8	2
Nomination for Oscar	1,000**	1
Pearson Correlation		
Sig. (2-tailed)		.
N	2	2

\*\* . Correlation is significant at the 0.01 level (2-tailed).

- IV. Independent variable: Worldwide box office in US\$  
 Dependent variable: Tourist arrivals in Greece 2007-2014

**Correlations**

		Tourist arrivals in Greece	Worldwide Box Office
Tourist arrivals in Greece	Pearson Correlation	1	1,000**
	Sig. (2-tailed)		.
	N	8	2
Worldwide Box Office	Pearson Correlation	1,000**	1
	Sig. (2-tailed)	.	
	N	2	2

\*\* . Correlation is significant at the 0.01 level (2-tailed).

- V. Independent variable: U.S. box office in US \$  
 Dependent variable: USA tourist arrivals in Greece 2007-2014

**Correlations**

		USA tourist arrivals in Greece	USA Box Office
USA tourist arrivals in Greece	Pearson Correlation	1	1,000**
	Sig. (2-tailed)		.
	N	8	2
USA Box Office	Pearson Correlation	1,000**	1
	Sig. (2-tailed)	.	
	N	2	2

\*\* . Correlation is significant at the 0.01 level (2-tailed).

VI. Independent variable: Number of homicides in Greece

Dependent variable: Tourist arrivals in Greece

**Correlations**

		Number of homicides in Greece	Tourist arrivals in Greece
Number of homicides in Greece	Pearson Correlation	1	-,689
	Sig. (2-tailed)		,050
	N	8	8
Tourist arrivals in Greece	Pearson Correlation	-,689	1
	Sig. (2-tailed)	,050	
	N	8	8

VII. Independent variable: Number of homicides in Greece

Dependent variable: USA tourist arrivals

**Correlations**

		Number of homicides in Greece	USA tourist arrivals in Greece
Number of homicides in Greece	Pearson Correlation	1	-,648
	Sig. (2-tailed)		,008
	N	8	8
USA tourist arrivals in Greece	Pearson Correlation	-,648	1
	Sig. (2-tailed)	,008	
	N	8	8

VIII. Independent variable: Number of violent crimes in Greece in 2007-2014

Dependent variable: Tourist arrivals in Greece 2007-2014

**Correlations**

		Number of violent crimes	Tourist arrivals in Greece
Number of violent crimes	Pearson Correlation	1	-,158
	Sig. (2-tailed)		,007
	N	8	8
Tourist arrivals in Greece	Pearson Correlation	-,158	1
	Sig. (2-tailed)	,007	
	N	8	8

IX. Independent variable: Number of violent crimes in Greece in 2007-2014  
 Dependent variable: USA tourist arrivals in Greece 2007-2014

**Correlations**

		Number of violent crimes	USA tourist arrivals in Greece
Number of violent crimes	Pearson Correlation	1	-,460
	Sig. (2-tailed)		,025
	N	8	8
USA tourist arrivals in Greece	Pearson Correlation	-,460	1
	Sig. (2-tailed)	,025	
	N	8	8



## References

- Anderek, C. a. (1993). Movie Generated Tourism in North Carolina: Two Case Studies. *In Proceedings of the 24th Travel and Tourism Research Association*. Wheat Ridge: Travel and Tourism Research Association.
- Athanasiades, T., Danchev, S., Papadakis, M., Paratsiokas, N., & Tsakanikas, A. (2014). *Poduction of films in Greece: The impact on the economy*. Athens: Foundaton of Economics and Industrial Research.
- Balasubramanian, S. (1994). Beyond Advertising and Publicity: Hybrid Messages and Public Policy Issues. *Journal of Advertising*, 29-47.
- Baumann, S. (2001). Intellectualization and art world development: Film in the United States. *American Sociological Review*, 404-426.
- Beeton. (2005). *Film-induced tourism*. Clevedon: Channel View Publications.
- Beeton, S., Bowen, H., & Santos, C. (2006). State of knowledge: Mass media and its relationship to perceptions of quality. In G. Jennings, & N. Nickerson, *Quality tourism experiences* (pp. 25-37). London: Butterworth-Heinman.
- Bogahavatta, C. (2013, April 1). *Introduction to Tourism and Cultural Resources*. Retrieved from archeology.lk: [https://www.archaeology.lk/si/materials/Introduction-to-Tourism-and-Cultural-Resources\\_2013\\_04\\_01.pdf](https://www.archaeology.lk/si/materials/Introduction-to-Tourism-and-Cultural-Resources_2013_04_01.pdf)
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge: Harvard University Press.
- Busby, G., & Klug, J. (2001). Movie-induced tourism: the challenge of measurement and other issues. *Journal of Vacation Marketing*, 316-332.
- Busby, G., Brunt, P., & Lund, J. (2003). In Agatha Christie Country: Resident Perceptions of Special Interest Tourism. *Tourism*, 287-300.
- Butler, R. (1990). The influence of the media in shaping international tourist patterns. *Tourism Recreation Research*, 46-53.
- Calcatinge, A. (2011). *Visions of the Real: An Architect's Approach on Cultural Landscape Studies*. New Brumswick and London: Transaction Publishers.
- Calder, S. (2017, May 17). *Strikes in Greece cause travel chaos*. Retrieved from The Independent: <http://www.independent.co.uk/author/simon-calder>
- Christodoulou, C. (2013, July 22). Can a film change a region? Athens, Greece.
- Connell, J. (2011). Film tourism e Evolution, progress and prospects. *Tourism Mnagement*, 1007-1029.

- Connell, J. (2011). Film Tourism: Evolution, progress and prospects. *Tourism Management*, 1007-1029.
- Connell, J., & Meyer, D. (2009). *Tourism Management*, 194-207.
- Croy, & Heitmann. (2011). Tourism and film. In P. Robinson, S. Heitmann, & P. Dieke, *Research themes in tourism* (pp. 188-204). Wallingford: CABI.
- Croy, & Walker. (2003). Rural Tourism and Film: Issues for Strategic Regional Development. In Hall, Roberts, & Mitchell, *New Directions in Rural Tourism* (pp. 115-133). Aldershot, UK: Ashgate Publishing.
- Dann. (1977). Anomie, ego-enhancement in tourism. *Annals of Tourism Research*, 184-194.
- Deutsche Welle. (2016, May 6). *Greek strikes paralyze basic infrastructure*. Retrieved from Deutsche Welle: <http://p.dw.com/p/1lj75>
- DMAI. (2017). Retrieved from Destination Marketing Association International: <http://www.destinationmarketing.org/topics/about-industry>
- Dritsakis, N. (2008). Seasonal Analysis of Tourist Revenues: An Empirical Research for Greece. *TOURISMOS: An International Multidisciplinary Refereed Journal of Tourism*, 57-71.
- EC. (2002). *Europeans and their holidays*. Brussels: European Commission.
- Echtner, C. M., & Ritchie, J. (1991). The Meaning and Measurement of Destination Image. *Journal of Tourism Research*, 2-12.
- Elmgaard, M., & Holmgaard Christophersen, S. (2012). *Experience films in real life: A Handbook on film tourism*. Aarhus: Filmby Aarhus.
- Fernandez-Young, A., & Young, R. (2008). Measuring the effects of film and television on tourism to screen locations: a theoretical and empirical perspective. *Journal of Travel & Tourism Marketing*, 195-212.
- Feuler, & Guyer. (1905).
- Greece. (2016, May 23). *GREEK CULTURE MINISTRY ANNOUNCES NEW GREEK FILM COMMISSION, AIMS TO ATTRACT FILM PRODUCTIONS TO GREECE*. Retrieved from Greece.com: [http://www.greece.com/news/22090/Greek\\_Culture\\_Ministry\\_Announces\\_New\\_Greek\\_Film\\_Commission\\_Aims\\_to\\_Attract\\_Film\\_Productions\\_to\\_Greece.html](http://www.greece.com/news/22090/Greek_Culture_Ministry_Announces_New_Greek_Film_Commission_Aims_to_Attract_Film_Productions_to_Greece.html)
- Greek Tourism Confederation. (2016). *Greece Tourist Arrivals*. Retrieved from Trading Economics: <http://www.tradingeconomics.com/greece/tourist-arrivals>
- Greek Tourism Confederation. (2016). *Greece Tourist Arrivals*. Retrieved from Trading Economics: <http://www.tradingeconomics.com/greece/tourist-arrivals>
- Grihault, N. (2003). Film Tourism: The Global Picture. *Travel and Tourism Analyst*, 1-22.

- GTP. (2016, June 9). *GNTO Exhibits in Seoul, Plans to Promote Greece Through TV and Film*. Retrieved from Greek Travel Pages: <http://news.gtp.gr/2016/06/09/gnto-seoul-promote-greece-tv-film/>
- Hart, P. (2003). Product Placement for Dummies.”. *Marketing Magazine*, 108.
- Hirschman, E., & Thompson, C. (1997). Why Media Matter: Toward a richer understanding of consumers’ relationships with advertising and mass media. *Journal of Advertising*, 43-60.
- Holbrook, M., & Addis, M. (2008). Art versus commerce in the movie industry: A two-path model of motion-picture success. *Journal of Cultural Economics*, 87-107.
- Hudson, S., & Ritchie, B. (2006). Promoting Destinations via Film Tourism: An Empirical Identification of Supporting Marketing Initiatives. *Journal of Travel Research*, 387–396.
- Hudson, S., Wang, Y., & Gil, S. M. (2011). The influence of a film on destination image and the desire to travel: a cross-cultural comparison. *International Journal of Tourism Research*, 177-190.
- IMDB. (1988). *Trivia*. Retrieved from [http://www.imdb.com/title/tt0095250/trivia?ref\\_=tt\\_trv\\_trv](http://www.imdb.com/title/tt0095250/trivia?ref_=tt_trv_trv)
- Institute of Statistics, U. (n.d.). UNESCO.
- International Centre of Monuments and Sites. (1997). *Charter for Cultural Tourism*. Retrieved from ICOMOS: <http://www.icomos.org/en/charters-and-texts>
- Jones, D., & Smith, K. (2005). Middle-earth Meets New Zealand: Authenticity and Location in the Making of The Lord of the Rings. *Journal of Management Studies*, 923-945.
- Joppe, M., Martin, D., & Waalen, J. (2001). Toronto's Image Destination: A Comparative Importance-Satisfaction Analysis by Origin of Visitors. *Journal of Travel Research*, 252-260.
- Kaikati, A. M., & Kaikati, J. (2004). Stealth Marketing: How to Reach Consumers Surreptitiously. *California Management Review*, 6-22.
- Karrh, J. A., McKee, K., & Pardun, C. (2003). Practitioners’ Evolving Views on Product Placement Effectiveness. *Journal of Advertising Research*, 138-149.
- Kathimerini. (2014, April 5). 20,210 marches and demonstrations in the four years of the Memorandum. *Kathimerini*.
- Kim, H., & Richardson, S. (2003). Motion Picture Impacts on Destination Images. *Annals of Tourism Research*, 216-237.

- Kontos, S. (2007, May 4). *Greek tax rebates, film commission to proceed*. Retrieved from CineEuropa: <http://www.cineuropa.org/nw.aspx?t=newsdetail&l=en&did=76824>
- Kontra News. (2016, May 11). *Kontra News*. Retrieved from <http://www.kontranews.gr/KOINONIA/212945-To-diko-toys-Mamma-Mia-zoyn-oi-toyristes-sten-Skopelo-Aytos-einai-o-protos-gamos-gia-to-2016-PHOTO>
- Landau, S., & Everitt, B. (2004). *A Handbook of Statistical Analyses using SPSS*. New York: Chapman & Hall.
- Li, S., Li, H., Song, H., Lundberg, C., & Shen, S. (2017). The economic impact of on-screen tourism: The case of The Lord of the Rings and the Hobbit. *Tourism Management*, 177-187.
- Linklater (Director). (2013). *Before Midnight* [Motion Picture].
- Lloyd, P. (Director). (2008). *Mamma Mia* [Motion Picture].
- Macionis. (2004). Understanding the film-induced tourist. *Proceedings of the international tourism and media conference* (pp. 86-97). Melbourne: Tourism Research Unit, Monash University.
- Macionis, N. (2004). Understanding the Film-Induced Tourist. *International Tourism and Media Conference Proceedings* (pp. 86-97). Melbourne: Tourism Research Unit, Monash University.
- Macionis, N., & Sparks, B. (2009). Film-Induced Tourism : An Incidental Experience. *Tourism Review International* , 93-101.
- Macions, N., & Sparks, B. (2009). Film-Induced Tourism: An Incidental Experience. *Tourism Review International*, 93-101.
- Mathieson, A., & Wall, G. (1982). *Tourism: Economic, Physical and Social Impacts*. New York: Longman House.
- McIntosh, R., & Goeldner, C. (1986). *Tourism: Principles, Practices and Philosophies*. New York: John Wiley & Sons.
- McKercher, B., & Du Cros, H. (2002). *Cultural Tourism: the partnership between tourism and cultural heritage management*. New York: Haworth Press.
- Mitchell, H., & Stewart, M. (2012). Movies and holidays: The empirical relationship between movies and tourism. *Applied Economics Letters*, 1437-1440.
- MNP. (2013). *Economic and Social Impacts of the Florida Film and Entertainment Industry Financial Incentive Program*. Miami: MNP.

- Moira, P., Mylonopoulos, D., & Kontoudaki, A. (2009). Using Films as a Tourism Promotional Tool: The Case of Greece. *International Conference on Impact of Movies and Television on Tourism*, (pp. 21-23). Hong-Kong: The Hong Kong Polytechnic University .
- MtX. (2015, July 20). *Mixani tou Xronou*. Retrieved from <http://www.mixanitouxronou.gr/to-aperanto-galazio-ton-kikladon-to-nisi-pou-egine-gnosto-se-olo-ton-kosmo-apo-mia-galliki-tenia-to-entiposiako-monastiri-pou-krimmeno-se-enan-vracho-ipsous-300-metron-vinteo/>
- New Zealand Institute of Economic Research. (2002). *Scoping the Lasting Effects of The Lord of the Rings. A Report to the New Zealand Film Commission*. Thorndon, Wellington: New Zealand Institute of Economic Research.
- O'Connor, Flanagan, & Gilbert. (2010). The integration of film-induced tourism and destination branding in Yorkshire. *International Journal of Tourism Research*, 423-437.
- OECD. (2017). *Better Life Index*. Retrieved from Organisation for Economic Co-operation and Development: <http://www.oecdbetterlifeindex.org/countries/greece/>
- Olsberg. (2007). *How film and TV programmes promote tourism in the UK*. London: Film Council.
- Oxford Economics. (2012). *The Economic Impact of the UK*. British Film Institute, Pinewood Shepperton plc, British Film Commission, Creative England.
- Papadimitropoulos, A. (Director). (2016). *Suntan* [Motion Picture].
- Pappas, G. (2015, September 17). *Tenerife becomes Athens in latest Bourne film installment as Greece turns away massive Hollywood production*. Retrieved from The Pappas Post: <http://www.pappaspost.com/photos-tenerife-becomes-athens-in-latest-bourne-film-installment-as-greece-turns-away-massive-hollywood-production/>
- Pike, S., & Ryan, C. (2004). Destination Positioning Analysis through a Comparison of Cognitive, Affective, and Conative Perceptions. *Journal of Travel Research*, 333-342.
- Pleština, S. (2016). *Filming in Croatia 2016: Production Guide*. Zagreb: Croatian Audiovisual Centre(HAVC): Filming in Croatia Department.
- Reinders, S. (2016). Stories that Move. Fiction, Imagination, Tourism. *European Journal of Cultural Studies*, 672-689.
- Rewtrakunphaiboon, W. (2015). *Film-induced Tourism: Inventing a Vacation to a Location*. Surrey: CABI .
- Richards, G. (2003). What is Cultural Tourism? In A. van Maaren, *Erfgoed voor Toerisme*. Nationaal Contact Monumenten.

- Riley, R., & C.S, v. D. (1992). Movies as Tourism Promotion: A Pull Factor in a Push Location. *Tourism Management*, 267-274.
- Riley, R., Baker, D., & van Doren, C. (1998). Movie Induced Tourism. *Annals of Tourism Research*, 919-935.
- Ritchie, & Hudson. (2005). Film tourism and destination marketing: The case of Captain Corelli's Mandolin. *Journal of Vacation Marketing*, 256-268.
- Roesch, S. (2009). *The Experiences of Film Location Tourists*. Toronto: Channel View Publications.
- Russell, C. (2002). Investigating the Effectiveness of Product Placements in Television Shows: The Role of Modality and Plot Connection Congruence in Brand Memory and Attitude." *Journal of Consumer Research*, 306-319.
- Saur-Amaral, I., Ferreira, P., & Conde, R. (2013). Linking past and future research in tourism management through the lens of marketing and consumption: a systematic literature review. *Tourism and Management Studies*.
- Schofield, P. (1996). Cinematographic images of a city: Alternative heritage tourism in Manchester. *Tourism Management*, 333-340.
- SLÆGGERUP, K. B. (2012). Midtjysk Turisme's view on film tourism.
- Smith, M., Macleod, N., & Hart Robertson, M. (2010). Post-Tourism. In *Key Concepts in Tourist Studies*. Sage Publications.
- Tarnaras, D. (2014, April 10). Cinematic Tourism and Destination Marketing. Greece.
- The World Bank. (2015). *International Tourism: Number of arrivals*.
- Tomala, K., & Faber, F. (2011). Film Tourism: The answer of becoming part of your own favorite movie? In A. Papathanassis, *The Long Tail of Tourism: Holiday Niches and their Impact on Mainstream Tourism* (pp. 149-150). Gabler.
- Tooke, N., & Baker, M. (1996). Seeing is Believing: The Effect of Film on Visitors Numbers to Screened Locations. *Tourism Management*, 87-94.
- Tylor, E. (1871). *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom*. Boston: Harvard University.
- Tzanelli, R. (2008). 'Cultural intimations and the commodification of culture: Sign industries as makers of the "public sphere"'. *The Global Studies Journal*, 1-10.
- U.S. Embassy and Consulate in Greece. (2017). *Safety and Security Information*. Retrieved from U.S. Embassy and Consulate in Greece: <https://gr.usembassy.gov/u-s-citizen-services/security-and-travel-information/>
- UN. (2008). *International Recommendations for Tourism Statistics*. New York: United Nations.

- United Nations, D. o. (2010). *International Recommendations for Tourism Statistics 2008*. New York: United Nations Publication.
- UNWTO. (1995). *Collection of Tourism Expenditure Statistics*. WTO.
- Vagionis, N., & Loumiotis, M. (2011). Movies as a Tool Of Modern Tourist Marketing. *TOURISMOS: AN INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF TOURISM*, 353-362.
- Walker, W., & Croy, R. D. (2003). Rural Tourism and Film: Issues for Strategic Regional Development. In D. Hall, L. Roberts, & M. A. Mitchell, *New Directions in Rural Tourism* (pp. 115-133). Aldershot, UK: Ashgate Publishing.
- Zakzouk, S. (2011). Egypt's Cultural Revolution: The Legacy Of The Arab Spring. Cairo, Egypt.
- Zimmermann, S. (2003). Reisen in den Film-Filmtourismus in Nordafrika. In H. Egner, *Tourismus: Lösung oder Fluch?: Die Frage Nachhaltige Entwicklung peripheren Regionen* (pp. 75-83). Mainz.