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Tourism product life cycle dynamics: a computational approach to identifying tourism stages in Italy and Greece

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Abstract: An adaptation of the tourist area life cycle model is used to computationally identify each stage of the tourism product life cycle to explain the dynamics of tourist arrivals to Italy and Greece. It was found that the first stage of the cycle started considerably earlier in Italy than in Greece, well before WWII, while in Greece, it started during the 1950s. A new life cycle began in Greece in 2012. Italy is still in the consolidation stage and has shown growth; and this stage will continue until 2044. However, if suitable policies are applied in terms of investments in infrastructure and human capital and in marketing, this cycle can be interrupted, and a new cycle could begin directly

from the development stage, where the growth rates of the number of tourist arrivals are exponential. Investing and providing services in alternative tourism may lead to this result.

Keywords: tourism; product life cycle; Italy; Greece.

JEL codes: C63, C65, Z32, Z38.

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1 Introduction

As a service sector, tourism has grown greatly over time and is crucial to the economic growth of many nations. As a result, in many countries, including Italy and Greece, international tourism today contributes significantly to gross domestic product (GDP) and employment. For Greece, the total contribution (direct plus indirect) of international tourism accounts for approximately 27% of the GDP and 30% of total employment (Menegaki et al., 2022), while for Italy, the corresponding figure is 13% of the GDP and 14.7% of the total employment (OECD, 2020).

Consequently, tourism is a significant sector in the formation of GDP for both of these economies, and as such, it is important to describe and understand its developmental process through time with the purpose of predicting future development.

Butler (1980) provided a conceptual framework called the tourist area life cycle approach (TALC) for explaining the dynamics of the number of tourist arrivals to a tourist destination. This idea focuses on how the tourist population changes as a result of the resources that are available in a location, the latter being a resort, a geographical area, or a country. The model considers the tourist services offered by a destination as a unique product and builds on the older notion of a product life cycle that dates as far back as Williams (1929), Schumpeter (1942), Kindleberger (1962), and Vernon (1966), adapting it to the idiosyncrasies of tourism as a service product offered by a specific destination where the consumer must travel to to consume it. Even though the lifecycle notion is a descriptive tool, knowing exactly the stage where a tourist destination is on would be helpful for forecasting and general tourism planning.

The problem with the majority of Butler-type models is that the time of the various lifecycle phases must be predetermined by researchers using qualitative analysis. In contrast, this study is better than earlier research because it allows the generation of data on the life cycle stages via the computational method described in the methodology section.

Therefore, the purpose of the study is to computationally identify the various stages of Italy's and Greece's tourism product life cycle and predict its future development. This will facilitate the diversification of tourism-growth policies to be appropriately tuned on the basis of the characteristics of the stage of the cycle for each country. The first stage of the cycle started considerably earlier in Italy than in Greece, before the 1930s, while in Greece, it started during the 1950s. Additionally, Greece did not enter the stagnation stage, and in 2012, a new life cycle began. Italy is still in the 'consolidation' stage of the cycle, during which growth occurs, and this stage will continue until 2044. However, if suitable policies are applied in terms of investments in infrastructure and human capital, and marketing, this cycle can be interrupted, and a new cycle could begin directly from the 'development' stage, where the growth rates of the number of tourist arrivals are exponential. Investing and providing services in alternative tourism may lead to this result.

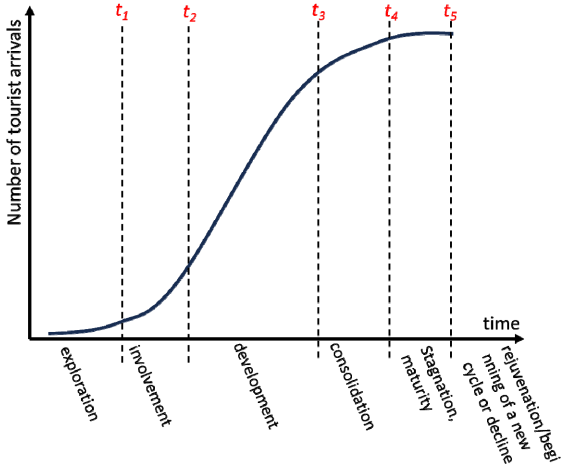
The paper proceeds as follows: Section 2 provides a literature review of the TALC model and its applications, Section 3 develops the methodology used for the adaptation of the model to the needs of the paper, Section 4 describes the data used and presents descriptive statistics, Section 5 presents the computational results, and Section 6 concludes and provides policy proposals.

2 Literature review

Tourist arrivals in countries that are well-known as tourist destinations change over time. These changes are caused by a number of factors, including shifts in visitor preferences and needs, gradual deterioration and potential replacement of physical structures and plants, and modifications to the original natural and cultural attractions that contributed to the region's initial popularity (Butler, 1980).

Instead of the four stages of a typical product life cycle model (introduction-growth-maturity-decline), Butler (op.cit.) developed the TALC model to identify and characterise the evolution of tourist regions in terms of a sequence of six stages, taking into account the factors that affect both tourism demand (mainly consumer tastes) and tourism supply (infrastructure development and social capital). The cycle has six stages and is shaped like a simple asymptotic S-curve (Figure 1), suggesting that tourist destinations go through a 'birth-to-decline cycle' with distinct characteristics for each step. The six stages are 'exploration', 'involvement', 'development', 'consolidation', 'stagnation' and 'decline' or 'rejuvenation'.

Figure 1 The stages of the tourism product life-cycle model for a country (see online version for colours)



Source: Authors, adapted from the general TALC model

During the first stage, in the 'exploration', there are limited visits by a few daring tourists who go independently and adhere to erratic visitation patterns. Expected visitors would be tourists drawn to the area through its natural and cultural attractions. There are no amenities specific to guests at visiting places. Visitors use local services, and interactions with them are frequent. The area's physical landscape and social climate are not altered as a result of tourism. The impact of visitor arrivals on the economic and social lives of locals is minimal.

During the second stage, 'involvement', the number of visitors rises and becomes somewhat predictable. Locals start building facilities primarily for tourists. Local contact is still prevalent. An identifiable seasonal variation pattern and distinct market area start to emerge as a result of increased advertising. To adapt to shifting economic conditions,

locals change their social patterns. Government and public institutions are under increasing pressure to provide or enhance visitor facilities, including transport.

During the third stage, during development, a clearly defined tourist market area develops, and advertising activity increases. Local participation and development control quickly declined. Local amenities are replaced by foreign organisations' larger, more elaborate, more modern amenities. In particular, developed and marketed attractions are both natural and cultural. Imported facilities are added to the original attractions. At peak times, the number of tourists is equal to or greater than the local population. It becomes necessary to import labour and use ancillary facilities and services. A wider market is reached, and the types of tourists shift.

During the fourth stage, consolidation, during which the number of tourists grows at a slower rate. The economy of a tourist destination now depends heavily on tourism, which is controlled by well-known corporations and franchises. To extend the visitation season and market region, marketing and promotion efforts have been expanded further. Older hosting infrastructure is seen as inferior and unpleasant.

At the 'stagnation' stage, a high degree of tourist visitation is attained. Many infrastructure capacity levels are exceeded, causing associated environmental, societal, and economic issues. Although the destination has a well-established reputation, it is no longer in style. The country heavily depends on returning visitors, conventions, and other types of comparable traffic. There are extra beds available. Natural and authentic cultural attractions are surpassed by imported artificial facilities. The historic tourist districts are surrounded by new constructions, and the existing properties frequently change hands. There has been a shift in tourist demographics toward mass-organised tourism. At this stage, the tourist product offered by a country is a mature product and has all the characteristics of standardised products. Package tourism, with similar services offered to all tourists who have bought a specific package, is dominant. Difference packages with varying prices are offered, and they differ from each other by location, type of accommodation, and services offered (e.g., all-inclusive, bed and breakfast, excursion to attractions).

The cycle ends with the final sixth stage, where either there is a 'decline' or 'rejuvenation'. At this stage, there is a decline in tourist arrivals, and the region is struggling to compete with newer attractions due to a diminishing market, both numerically and spatially. Tourists no longer find the destination appealing. At this stage, the destination might transit out of tourism. If this occurs, there is a high rate of property turnover, and tourist buildings are frequently replaced with non-tourist-related constructions. As facility costs decrease along with the market, local involvement is likely to increase. At this stage, the rate of growth is negative (as is the slope of the S-curve that depicts the tourism stages after t5 in Figure 1).

On the other hand, if there is rejuvenation at this stage, there is a comprehensive transformation of tourist attractions. Either a brand-new collection of attractions is built, or untouched natural resources are used. It becomes economically possible to build new facilities. A brand-new recreational option emerges. This stage can be the beginning of a new cycle. Moore and Whitehall (2005) and Corak (2006) argue that the TALC model can be used to study the evolution of multiple life cycles based on origin, time, and product. The difference from the new cycle is that it starts from the third stage, 'development'.

Many papers have used the TALC model for different purposes (Kakishima and Yamada, 2016); this model can be used to:

a examine the significance of destination planning

b create management strategies for various tourism products and services

c study the evolution of multiple life cycles.

We build on the latter idea to examine the current stage in which the tourism activities of the two countries are ongoing and by using a long time series of tourist arrivals starting from 1955 for Greece and from 1956 for Italy, we fit the TALC model to the aggregate annual tourist arrival data of the two countries to:

a identify the points in time of the different stages of the tourism product life cycle of each country

b pinpoint the current state of the tourism product on the cycle

c identify the existence or absence of multiple cycles over time.

The TALC model has been criticised for 'limited empirical support for the concept' and for 'restricted pragmatic utilisation of the model' (Almeida and Correia, 2010). These criticisms stem from the fact that, in the vast majority of the literature, the analysis for identifying the various stages of the tourism product cycle was qualitative, leaving a large margin of error in the identification of each stage; therefore, this approach cannot be used for tourism policy planning. This drawback is alleviated by the computational analysis that computationally identifies each stage by fitting the model to real data.

3 Methodology

We computationally identify the stages of tourism in Italy and Greece according to the TALC model by an adaptation of the method proposed by Nejad and Tularam (2010). Additionally, we identify the current stage of the cycle in which tourism occurs in these two countries, and we check for the existence of more than one cycle over time in each country.

Let x(t) denote the tourist number at time t; the simplest model to describe tourist arrivals is:

$$x'(t) = mx \tag{1}$$

where x is the number of arrivals, t is the time and m is a parameter.

The solution of (1) is

$$x(t) = x_0 e^{mt_0}$$

For $m > 0$, the number of tourists will increase, which can explain the first three stages of the TALC model. The number of facilities at a destination increases with increasing tourist demand, and this in turn reciprocally influences demand over time.

The tourist number approaches a maximum that accounts for a flattening in numbers over time, reaching the stagnation period. Over time, a destination may not be as desirable as it was earlier, commonly due to social, economic, or environmental issues. This will imply a decrease that will balance the increase to a peak of tourist numbers, called the *capacity for growth*.

Let X be the maximum capacity of the tourist number the country can accommodate measured by the maximum tourist number of the time series. Then, growth is assumed to be proportional to:

$$(X - x(t)) / X$$

The differential equation that describes this situation is:

$$\frac{dx}{dt} = mx(t)\left(\frac{X - x(t)}{X}\right)$$

or

$$\frac{dx}{dt} = mx(t) - m\frac{x^2(t)}{X} \tag{2}$$

The analytical solution of (2) is:

$$x(t) = \frac{X}{1 + e^{-m(t-\alpha)}} \tag{3}$$

where α is a constant that depends on the initial conditions.

We define

$$\beta(t) = \frac{1}{1+e^{-m(t-\alpha)}} \tag{4}$$

then

$$\beta(t) = \frac{x(t)}{X}.$$

Therefore, $\beta(t)$ is the proportion of tourists at time t to capacity X.

The function x(t) is fitted to real data to determine the values of the parameters m and α. The stage of the tourism product (exploration, involvement, development, consolidation, stagnation) can be determined using the derivatives of $\beta(t)$ up to the sixth order:

$$\frac{d\beta}{dt} = m(-\beta^2+\beta)$$

$$\frac{d^2\beta}{dt^2} = m^2\beta\left(2\beta^2 - 3\beta + 1\right)$$

$$\frac{d^3\beta}{dt^3} = m^3\beta\left(-6\beta^3 + 12\beta^2 - 7\beta + 1\right)$$

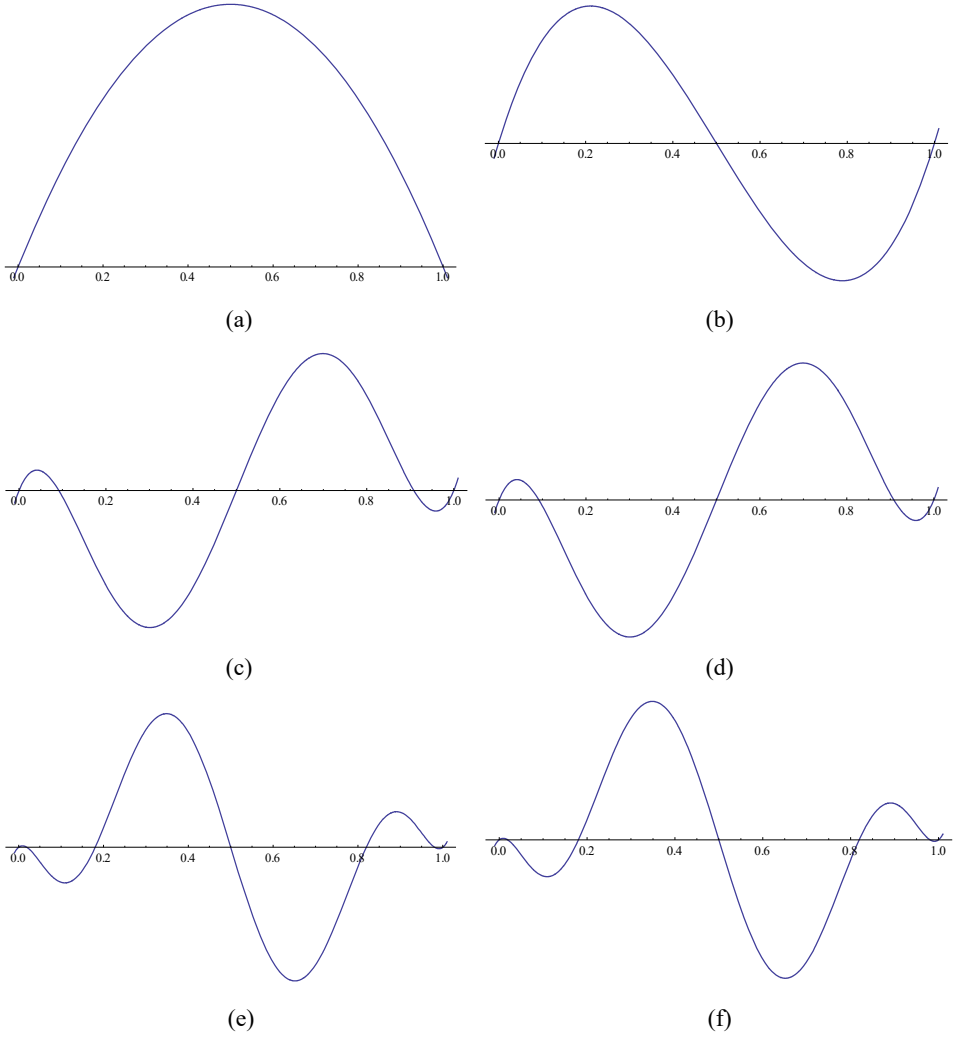
$$\frac{d^4\beta}{dt^4} = m^4\beta\left(24\beta^4 - 60\beta^3 + 50\beta^2 - 15\beta + 1\right)$$

$$\frac{d^5\beta}{dt^5} = m^5\beta\left(-120\beta^5 - 360\beta^4 + 390\beta^3 - 180\beta^2 - 31\beta + 1\right)$$

$$\frac{d^6\beta}{dt^6} = m^6\beta(-\beta)\left(-720\beta^5 + 1800\beta^4 - 1560\beta^3 + 540\beta^2 - 62\beta + 1\right)$$

The critical points (in parentheses and in bold are the critical points of the derivatives for identifying the start and end of each stage in Figure 1) of the first derivative are 0; 1 for the second derivative, 0.5; 1 for the third derivative, 0.2113 (t_2) and 0.7887 (t_3); 1 for the fourth derivative, 0.0917; 0.5 and 0.9082; 1 for the fifth derivative, 0.0413 (t_1) and 0.3010, 0.6990 and 0.9587 (t_4); and 1 for the sixth, 0.0192, 0.1804, 0.5, 0.8196, 0.9809, and 1 (Figure 2).

Figure 2 The (a) 1st (b) 2nd (c) 3rd (d) 4th, (e) 5th and (f) 6th derivatives of β(t) (see online version for colours)



Source: Authors' calculations

The first to sixth-order derivatives can be used to identify the stages on the S-curve (Figure 1). The first derivative of the TALC model curve shows the rate of growth of the tourist numbers to the destination (in terms of Figure 1, it is the slope of the tangent at each point of the S-curve), and it is positive until the decline stage, after t_5, where it becomes negative (note that this stage may not exist if a rejuvenation succeeds the stagnation/mature product stage).

The second derivative shows the change in the rate of growth. It can be either positive or negative. It can be used to identify the maximum of the first derivative (the point where it becomes zero), i.e., the middle of the S-curve. The maximum and minimum of the second derivative are the points where the 'development' stage starts and ends, respectively. In Figure 1, these are the points t_2 and t_3. The maximum of this derivative represents the start of the development stage because it represents the maximum rate of growth, and the minimum represents the end of the rapid growth. The third derivative depicts the change in the second derivative and can be used to distinguish the minimum and maximum of the second derivative. This derivative pinpoints the start and end of the 'development' stage (the points where the derivative becomes zero).

Thus far, we have divided the S-curve into three parts identifying the start and end of the development stage. The fourth derivative shows the change in the third derivative; its left-maximum and right-minimum values show (see Figure 2) the start of the 'involvement' and the 'stagnation/maturity' stages, respectively. These are the points t_1 and $t_{/-*}$ in Figure 1. The derivative has another minimum and maximum that are within the 'development' stage. During the 'involvement' stage, the rate of growth is accelerated, while during the 'stagnation' stage, the rate of growth is decelerated. To find these values, we need to calculate the points where the fifth derivative becomes zero.

Finally, the sixth derivative is used to distinguish between the minimum (point t_1 in Figure 1) and the maximum of the fifth derivative (point t4 in Figure 1).

4 Data description

The most frequent factor used to measure tourism demand is visitor arrivals. The total number of travellers arriving at a destination from an origin typically provides this variable (Witt et al., 2018).

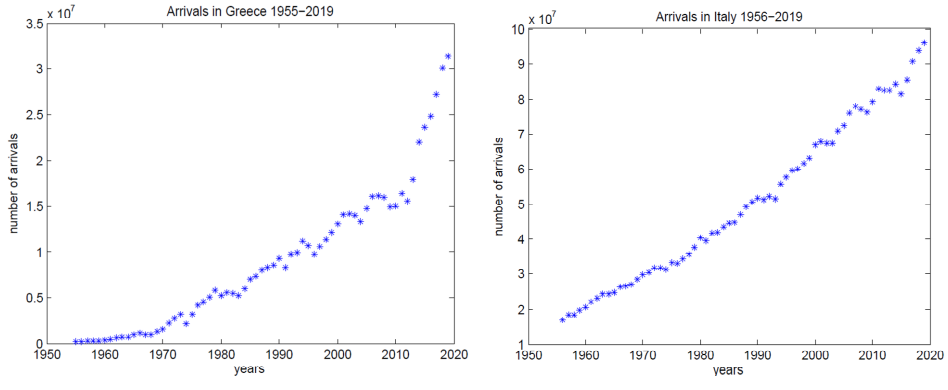
The Hellenic Statistical Authority has been reporting information about foreign nationals arriving in Greece since 1955 (ELSTAT, 2023). There were 208 thousand arrivals in 1955, and by 1965, there had nearly been one million (see Figure 3). As shown in this figure, the first observation of the series is very close to the time axis; therefore, it can be safely assumed that tourism started in Greece in the 1950 s. The start of the exploration stage was located near the start of our time series because tourism could not have started before the end of the ferocious Greek civil war that succeeded the devastation of the German occupation in 1944 and ended in 1949.

However, this is not the case for Italy; this is not the case, as is seen from the RHS of Figure 3. The first observation of the series is not very close to the time axis; therefore, it cannot be assumed that tourism started in Italy in the 1950 s; in 1956, the first year of the data series, there were approximately 17 million tourists; therefore, the first stage started for Italy well before the 1950 s.

Figure 3 shows that, with the exception of the years 1966 to 1967, when the number of arrivals decreased from 1,132 million in 1966 to 996 thousand, the pace of change in

tourist arrivals in Greece was positive. The following negative indication of the rate of change is seen in 1974, when arrivals fell by 31% from 1973 to 2,188 million before recovering to 3,172 million in 1975. Political unrest occurred in the nation in 1967 and 1974 and appeared to have had an impact on arriving tourists.

Figure 3 Tourist arrivals in Italy and Greece from 1955 (1956 for Italy) to 2019 (see online version for colours)



(a) (b)

Source: Authors' calculations, ELSTAT (2023) and Istat (2023)

Until 1979, when arrivals totalled 5.798 million, tremendous growth persisted. With the exception of 1979–1980, which experienced a 9% decline, and 1990–1991, which experienced an 11% reduction that was offset by an increase of 18% in 1991–1992, the rate of change was positive in the years that followed. Arrivals ranged between 15 and 16.5 million from 2006 to 2012; after this year, visitor numbers climbed quickly, reaching 31 million in 2019. The year 2012 seems to be a critical year since, from this year, the number of tourists who arrived increased rapidly to 31 million in 2019. We observe that a full product cycle was completed in 2012, and a new cycle started with a rejuvenation stage from 2012 onwards, during which a sharp increase in tourist arrivals was observed.

The Italian National Institute of Statistics has been reporting information about foreign nationals arriving in Italy since 1956 (Istat, 2023). There was a continuous increase in the number of arrivals in all years except for 12 sporadic years out of the 63 included in the time series. The decrease that occurred in these years did not last for more than one time period. By optically observing the data, we cannot detect an end of the life cycle.

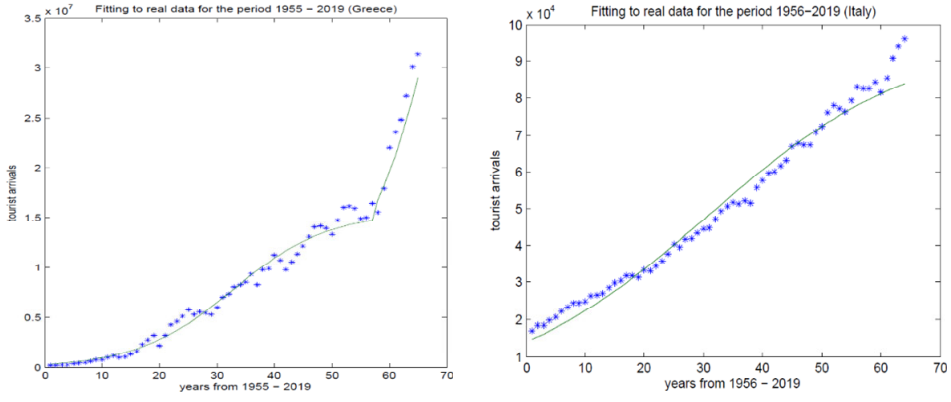
5 Model fitting and computational results

The parameters α and m are estimated by fitting (3) to the data for Italy and Greece using nonlinear least squares. The estimated values for α were 32.75 for Greece and 31.10 for Italy, while those for m were 0.12 for Greece and 0.055 for Italy; the R^2 was very high, 0.98 for Italy and 0.95 for Greece. (3) was estimated for all the years available in the time

series for Italy, while for Greece, the model was estimated for the period 1955–2012. After that year, a new cycle of tourism emerged in the country.

Then, from (4), the critical values of β(t) are calculated, and the points at the start and end of each stage according to the predictions of the model are found for each country.

Figure 4 Fitting the life cycle model to the data for Greece and Italy (see online version for colours)



(a) (b)

Source: Authors' estimations, ELSTAT (2023) and Istat (2023)

After the estimation of the two parameters, β and its derivatives can be calculated for the two countries, and the critical points t_1, t_2, t_3, and t_4 (Figure 1) can be calculated to determine the stages of the life cycle. This is presented in Table 1.

Table 1 Estimated stages of the tourism product life cycle in Italy and Greece

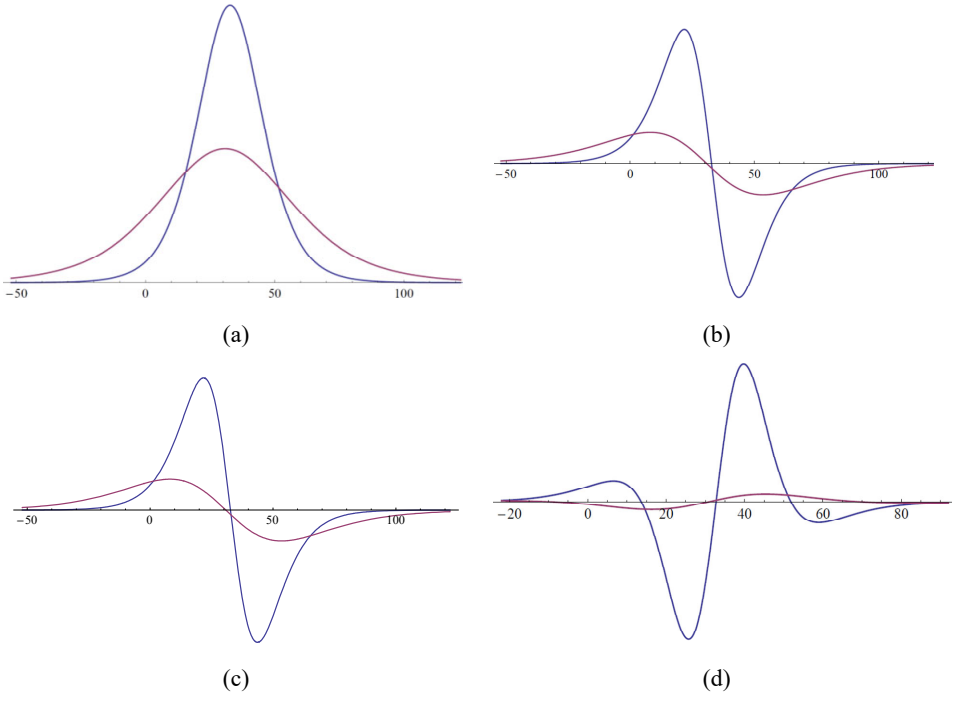
Stage	*Greece*			*Italy*	
	Order of derivative	*Year(s) (duration)*	*Point in time**	*Year(s) (duration)*	*Point in time**
Exploration		up to 1962		up to 1930	
Critical point	5th	1962 [t_1]	6.54	1930 [t_1]	–26.07
Involvement		1962–1977 (16 years)		1930–1963 (34 years)	
Critical point	3rd	1977 [t_2]	21.78	1963 [t_2]	7.16
Development		1977–1999 (23 years)		1963–2010 (48 years)	
Critical point	3rd	1999 [t_3]	43.72	2010 [t_3]	55.05
Consolidation		1999–2014 (16 years)		2010–2044 (35 years)	
Critical point	5th	2014 [t_4]	58.95	2044 [t_4]	88.27
Stagnation/ Maturity		2014 up to the end of the cycle		2044 up to the end of the cycle	

Note: *Years after the starting year of the series.

Source: Authors' calculations

Table 1 shows that the exploration stage started considerably earlier in Italy than in Greece. This stage ended in 1930 in Italy, while in Greece, the end of this stage was in 1962. This is an expected result because although the two countries offer similar types of tourism (summer tourism in the Mediterranean, similar types of archaeological sites of the Greco-Roman civilisation, and religious sites from early Christianity), Greece, up to the first half of the 20th century, was tormented by a series of wars and civil unrest, making it very difficult for tourism to start.

Figure 5 The derivatives of the β function for Greece and Italy (from left to right, the first, second, third, and fourth derivatives; blue and red lines depict Greece and Italy, respectively) (see online version for colours)



Source: Authors' calculations

A second observation from this table is that the cycle is considerably longer for Italy. According to the projections of the model, Greece entered the stagnation stage in 2014, while the corresponding year for Ital was 2044. A longer tourism product cycle for Italy is also shown in Figure 4, where the S-curve for Italy is flatter than that for Greece and from the smaller kurtoses of the derivatives of the β function in Figure 5. From the 4th and the 6th columns (Table 1), we see that, according to the estimations of the model, Greece entered the stagnation stage 59 years after 1955 (the starting point of our time series for Greece), while Italy entered this stage 88.3 years after 1956 (the starting point of our time series for Italy); there was also a 30.3-year time lag for Italy to start. Italy is still in the consolidation stage where its product has not reached full maturity, and there is still a growth perspective, though at a slower rate. This is because Italy is a considerably larger country than Greece; therefore, its tourism capacity in each cycle is greater. Additionally, the tourism sector accounts for only 13% of the total country's GDP, while

for Greece, the corresponding figure is 27%; therefore, it has greater potential for increase in terms of product value and number of tourist arrivals. Overall, in Italy, each stage lasts approximately double the duration of that in Greece (Table 1).

It is also observed (Table 1 and Figure 5) that for both countries, there is symmetry in the duration of the 'involvement' and the 'consolidation' stages for Greece; both last 16 years. The same applies to Italy, with the difference that the duration of each stage is greater, approximately 35 years. The maximum growth rate is approximately observed in 1988 for both countries (see the first derivative of Figure 5); however, this rate is lower in Italy, and the increase in the growth rate extends over a longer time period. The change in the growth rate is also sharper in Greece, as shown by the second derivative in Figure 5.

In Greece, the 'consolidation' stage, according to the estimates of the model, started in 2014. However, from Figures 3 and 4, we see that in reality, the tourism life cycle in this country did not enter this stage, and in 2012, a new life cycle began. Since both physical and societal infrastructures were well developed, the new life cycle did not include the 'exploration' or 'involvement' stages; rather, it started from the 'development' stage, where tourist arrivals grew at an exponential rate at the beginning of this stage. The Schumpeterian theory of creative destruction (Schumpeter, 1942) provides an explanation of the causes of the start of the new cycle of tourism in Greece. Up to 2012, the tourist product offered by a country had the characteristics of a mature product with standardised features. The majority of the tourists involved package tourism with similar services offered to all tourists who bought a specific package. Different packages with varying prices are offered, and they are differentiated from each other by location, type of accommodation, and services offered (e.g., all-inclusive, bed and breakfast, excursion to attractions). However, after 2012, tourist agents were rapidly switching to alternative tourism[1]. The period from 2010 to 2015 presented many opportunities for real estate investments from abroad because prices were plumed due to the deep recession the country experienced from the sovereign debt crisis. Many investors from abroad invested in luxury tourism, and the market was transformed into a luxury product market with a simultaneous large increase in capacity. Therefore, the name of the tourism product offered by the country switched to a large extent from a standardised product of package mass tourism to a luxury tailor-made product with a high degree of differentiation.

6 Conclusions and future research

An adaptation of the TALC model has been used to computationally identify each stage of the cycle by fitting the model to real data to explain the dynamics of the number of tourist arrivals to Italy and Greece, two countries for which the tourism sector plays an important role in the formation of GDP and employment. The tourism life cycle model identifies and characterises the evolution of tourism in terms of a sequence of six stages, taking into account the factors that affect both tourism demand and tourism supply.

The model described in this work could be used to predict whether the tourism sector of a country is likely to enter the stagnation or decline phases, allowing the implementation of suitable countercyclical policies at both the national and local levels.

It was found that the first stage of the cycle, the exploration stage, started considerably earlier in Italy than in Greece, well before WWII in Italy, while in Greece, it started during the 1950s. The tourism life cycle in Greece did not enter the stagnation stage, and in 2012, a new life cycle began. Since both physical and societal

infrastructures were well developed, the new life cycle did not include the 'exploration' or 'involvement' stages; rather, it started from the development stage, where tourist arrival grew at an exponential rate at the beginning of this stage. Italy is still in the 'consolidation' stage of the cycle, during which growth occurs, and this stage will continue until 2044. However, if suitable policies are applied in terms of investments in infrastructure and human capital and in marketing, this cycle can be interrupted, and a new cycle could begin directly from the 'development' stage, where the growth rates of the number of tourist arrivals are exponential. Investing and providing services in alternative tourism may lead to this result.

Based on this study some beneficial policy implications can be drawn. These policy implications aim to leverage the tourism advantages on one country for the benefit of the other as well as to foster sustainable long-term growth if tourist arrivals. Both Italy and Greece can benefit from the development and implementation of bilateral agreements to encourage tourism cooperation. That is, to establish mechanisms for exchanging best practices, knowledge, and expertise in tourist management and promotion. Moreover, policies for environmental and cultural conservation can be implemented to ensure the sustainability of tourist arrivals. These policies seek to promote responsible tourism practices that protect natural and cultural resources. On the other hand, the implementation of regulations that encourage eco-friendly initiatives and sustainable tourism development can preserve that attractiveness of destinations in the long run.

The limitations of this work are that, due to data unavailability, all types of tourism and all tourists, irrespective of their origin, are considered together. Different origins and products may have different life cycles. Future research can shed light on these issues and examine the tourism life cycle model for these countries, taking into account the origin of tourists and the type of tourist product.

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Notes

1 Alternative tourism differs from mass tourism in terms of supply, organisation, and the use of human resources. It combines tourist goods with personalised tourist services. In addition to the concept of devoted tourism, it also contains the concepts of active tourism, explorer travel, and encounter travel.