

Regional economic development and tourism: A literature review to highlight future directions for regional tourism research

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Abstract

This article reviews the literature on regional economics and economic geography, in connection with tourism to identify theoretical models, attempting to explain the role of tourism in regional development and growth, and their empirical applications. The review finds that in their early days, theories of regional development did not include tourism, mainly because the regional economics and location research community did not consider tourism significant enough to influence economic development but also because regional science researchers tend to give priority to manufacturing above services, while development planners tend to prioritize urban above rural. This neglect of tourism as a research field in its own right has led the tourism sector to develop its own scholarly agenda suitable to their own business needs, such as destination competitiveness and tourism promotion. The literature review here concludes upon suggested future directions required to further develop regional tourism research as a study based on economic development and growth.

Keywords

development, economics, growth, regional, tourism

Introduction

Although the importance of tourism to regional development and growth has been recognized by scholars and policymakers for several decades, tourism only emerged as a significant and

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distinctive field by the early 1990s. Indications that scholars began to treat tourism as an important multidisciplinary topic include developments such as 'New Economic Geography' (NEG) and 'Evolutionary Economic Geography' (EEG) from the early 1990s. An empirical development that has propelled the understanding of the importance of tourism to the national economy is the Tourism Satellite Account (TSA). The idea for the development of a TSA was first discussed in late 1970s, but the final concepts and data requirements for a TSA were approved by the UNWTO and other international economic and statistical bodies in 2008 and published in the 2008 Tourism Satellite Account: Recommended Methodological Framework (Frechtling, 2010). Nevertheless, despite the above theoretical and empirical developments, tourism research as a regional study is still in its infancy.

This review finds that the literature in the area of regional economics and tourism as a factor for regional economic development is very limited, with most of the work related to regional economic development and tourism, applying descriptive analysis (case studies, surveys and observation narrative).

Among the abundance of studies and models of tourism systems, at the national and global levels, there is a great diversity of methodological approaches and perspectives on tourism economic development, and the majority of this literature is macro-centric or prescribed at the macro level. This is indicated by the abundance of studies and models of tourism systems at the national and global levels. On the other hand, only a handful of works have explored representative tourism systems at the micro or subnational level.

In this article, the focus is on a positive economic approach with a neoclassical view and as such is focussed upon the current economic view of regional economic development. It is acknowledged that it would also be possible to examine the development of tourism in regions in other ways, such as normatively, and this may extend to approaches including the development of cultural awareness and diversity, social development and even demographic issues related to labour force development in regions.

Theories of regional economic development and tourism

Tourism research has been advancing continuously (Airey et al., 2015), and at times exponentially since the last decade. More recently, new advances have been stimulated by the emergence of the Asia Pacific region as a prime tourism destination – at current trends, this region is expected to account for 30% (up from 22% in 2010) of all international arrivals by 2030 – compared with 41% for Europe (the largest share of international tourism), a decline from 51% in 2010 (UNWTO, 2011). This rapid growth of the Asia Pacific region has generated a wave of tourism research (Leung et al., 2015) with tourism emerging as a discipline in its own right, with some innovative approaches to regional level tourism research. For example, Ma et al. (2018) apply the fuzzy evaluation method to evaluate a holistic approach being used for developing the area of Qionghai City in the province of Hanan. This is one of the first attempts at applying this method to evaluate the effects of tourism on regional development. Another paper by Zhang (2017) extends Uzawa's two sector model of national economy to a model of a small open economy under conditions of perfect competition. Although both these papers attempt to fill the theoretical gap in the literature, both papers fall short of providing a full theoretical framework to validate their assumptions and do not suggest empirical tests for their assumptions. This theoretical gap is discussed in the following section.

Theoretical gap

This review aims at documenting a theoretical gap in the regional development and tourism literature. This gap concerns the imbalance between the application of theoretical and empirical approaches in explaining issues associated with tourism and regional development. Although there is a myriad of empirical work attempting to measure the effects of the various factors affecting tourism development and regional development in general, most analysis has not been guided by a formal theoretical framework. Most of this literature proposes conceptual models applying descriptive research method. Therefore, these models do not provide causal analysis of the interaction of economic factors and tourism or provide testable propositions that can be empirically verified. This theoretical gap is a consequence of the special nature of the tourism product where consumers (external visitors) must travel from a country or region to consume non-traded goods and services, converting these goods and services into tradable goods and services (Hazari and Sgro, 2004a). In addition, a large component of these goods and services comprise transport, food and accommodation and tour services. Therefore, tourism supply cannot be stored or transported. Finally, tourist consumption cannot clearly be distinguished from local consumption (Luzzi and Flückiger, 2003; Mathieson and Wall, 1982; Morley, 1991, 1992; Sgro and Hazari, 2004). As Luzzi and Flückiger (2003: 240) note:

Tourism is not really an industry, but rather a collection of activities – which are also available for consumption by residents – in which foreigners partake. Tourism is thus a bundle of goods and services that can be viewed for analytical purposes as a single complex and differentiated product. It is complex because it includes a wide variety of goods and services, and differentiated because each destination has unique features.

A major concern by governments, especially in developing countries, but not limited so, is whether tourism is significant enough to drive the equalization of economic development and what competitiveness structure makes it so. However, most of these models in the literature are based on destination competitiveness and the interaction between stakeholders. These models can be said to be organizational models for tourism development and relative competitiveness.

A key feature of international tourism is the transformation of non-traded goods and services into tradable goods by the process of visits by foreign tourists, a form of international trade, generally regarded as a major source of growth (Nowak et al., 2004). However, there is only scant literature regarding the theory of trade and tourism, and practically no theoretical studies at the regional level (subnational). Luzzi and Flückiger (2003) note that there is little mention of tourism in the international literature on international trade, despite the large share of tourism expenditure in foreign expenditure items.

However, emerging literature includes Copeland (1991), Hazari and Sgro (1995) and Hazari and Sgro (2001, 2004b). There is also growing literature on international tourism and its effect on national economies, including studies at the national level including Chesney and Hazari (2003) and Nowak et al. (2003). These articles analyse the effects of tourism on resident welfare through the economic restructuring of tourism on manufacturing and agriculture and illegal migrants, respectively. Hazari and Nowak (2003) use a simple two-country model to show the specific nature of the offer curve and trade equilibrium and the difficulties of taxation. The model illustrates the need for an optimal tariff to avoid immiserization of a home country region.

Emerging literature on regional studies

Hazari and Nowak (2003) analyse the effects of tourism in rural and urban areas on regional incomes, welfare and urban unemployment using an extension of the generalized Harris–Todaro (HT) model, where two urban and two rural goods are produced. The authors find that a tourism boom in the urban region will immiserize the rural area. This is one of the very few studies including tourism at the regional level which applies a sound economic theoretical framework. However, the authors use descriptive growth theory and do not provide suggestions for an empirical verification of these results. Therefore, regional economic theory that includes tourism as a form of international trade is scarce (Zhang, 2015, 2017). Other studies apply conceptual descriptive models without providing empirical tests of the model propositions. These include Chao et al. (2006) who extend earlier work in a dynamic four good generalized HT economy. They find that a tourism boom always improves urban welfare, while the effect on rural welfare is indeterminate. However, a key finding of this study is that a rural tourism boom raises both rural and urban welfare.

Nevertheless, this aspect of research on tourism and regional development is improving with works from Sgro and Hazari (2004) who are the first to formally integrate tourism into the pure theory of trade and specifically model international tourism as a traded good and service. Another advancement in this area is a book studying tourism from a theoretical and empirical viewpoint, examining both static and dynamic models of tourism by Hazari and Hoshmand (2011). A more recent study by Zhang (2015) applies the Solow–Uzawa growth model within a neoclassical theory framework. The model is a multi-country growth model, and this model is unique in that it introduces endogenous tourism within a general dynamic equilibrium framework. Zhang (2017) provides an extension of his previous model (Zang, 2016; Zhang, 2012) by studying interregional economic development with interactions between wealth accumulation, economic structure, interregional trade and tourism under assumptions of profit maximization, utility maximization and perfect competition.

Despite these theoretical advancements, there are no empirical models of tourism and regional development, providing sound theoretical support for determining the efficacy of policy initiatives, and no measures of competitiveness that looks at the cause and effect of linking factors. Therefore, descriptive analysis is the most widely published type of work. However, it can be noted that descriptive analysis is a method with many advantages such as more realism since it is based on the observation of reality. However, it can be very expensive to collect the required data, and it is highly localized, since generally it is based on surveys on local tourism stakeholders. This makes this type of study incomparable with other studies or even replicable in different settings. What is most needed are models at the regional level that can be generalized. This article argues that although it is not possible to develop a general theory that will predict what will happen in a particular region, it is possible to develop partial theories which combined with empirical modelling can inform regional development policy (Higgins and Savoie, 2017) in relation to other regions.

The nature of tourism and regional development research

Tourism and regional development research is focused primarily on the role of tourism in regional development and whether tourism leads to balanced or unbalanced growth. Most research in tourism and regional development informs policies for reducing regional disparity and creating more employment (Vu and Turner, 2006; Zhou-Grundy and Turner, 2014).

The literature review found that despite the recognition of tourism as an important driver of regional development, sound theoretical work attempting to explain the link between regional development and tourism is limited. This theoretical gap is evident in the divide between theoretical and empirical modelling in tourism and regional development research, where most of this analysis provides little or no theoretical justification (Martin, 2015). Although many of these works refer to regional economic theory or theories of consumer choice, they do not develop systematic theoretical frameworks to guide their analysis or to develop testable hypothesis to provide theoretical support for their findings.

A lack of a sound theoretical framework limits research capacity to provide deeper and more insightful findings. Therefore, it is imperative that this research is based on a sound theoretical basis to allow a more complete set of information for policy development and business decision-making. For example, there is an ongoing perception that Australian tourism regions suffer a problem of disparity in economic growth and inequality in income and social advantage or disadvantage, but this research is limited to empirical analysis. Consequently, there are many misconceptions about the extent and nature of this disparity (Sorensen, 2010).

In the area of geography of tourism, Cole (2007) comments that scholars have repeatedly called for more sophisticated analysis, citing Pearce (1989, 2001) who commented on the lack of theoretical methodological sophistication, and lack of a strong theoretical base in their analysis. But this comment also applies to most types of empirical studies in tourism research, for example, Morley et al. (2014) note that one of the main problems of gravity model specifications is their lack of theoretical foundation. As such, the lack of theoretical background in empirical tourism research at a regional level is widespread.

On the other hand, there is a vast literature on empirical work based on statistical and econometric methods with a wide-ranging degree of sophistication. These techniques can be classified as either structural or time-series analysis. The most widely used include the input–output model (Lamonica and Mattioli, 2015; Polenske and Hewings, 2004; Pratt, 2015; Smeral, 2015; vanWyk et al., 2015; Watson et al., 2008; Williams, 2016) or computable general equilibrium (CGE) (Allan et al., 2017; Cao et al., 2017; Dong et al., 2018; Dwyer et al., 2016; Inchausti-Sintes, 2015; Li et al., 2017; Mahadevan et al., 2017a, 2017b; Sun and Pratt, 2014). The problem with using the static CGE (or the input–output approach) is that it is an inter-industry model generally used to analyse the economic impact of specific events (a downturn in the economy or an industry, e.g. tourism (global financial crisis) or a specific major sporting event). Therefore, it does not model demand components such as elasticities that govern demand and supply as it responds to price changes and consequently does not estimate the broader economic effects.

Another econometric approach by Cao et al. (2017) applies a combination of econometric model and a two-household CGE model that complement each other. The econometric model (a tourism demand elasticity model) produces price elasticity changes in tourism demand which are then used as inputs in the CGE model to estimate changes in rural urban disparities and associated welfare of urban and rural households. Although, this innovative approach provides useful insights for policy development, its lack of a theoretical framework to model and test the hypothesis and assumptions made in the simulations limit the depth of the results, for example, it cannot comment on whether tourism development will cause deleterious effects on income, or other industries, in the long run.

Time-series and structural vector autoregressive (VAR) approaches include studies by Andraz et al. (2015) and Cashin et al. (2014). Gravity models (Morley et al., 1991; Park and Jang, 2014; Santana-Gallego et al., 2016) and neuron network systems and fuzzy logic (Ma et al., 2018). Ma

et al.'s evaluation method of holistic resources is based on the theory and framework proposed by Porter (2008) based on perspectives by which existing and potential competitors are analysed. This is one of the first attempts at applying this method to evaluate the effects of tourism on regional development. The neuron network model is applied as a tourism resource evaluation tool. The study does not model the economic interaction of tourism and regional development, but rather the competitiveness of a destination to attract tourists. This is a short-term perspective because if a destination is identified as competitive, then the 'holistic tourism' strategy would be recommended. However, there is no assessment of the long-term effect of this strategy over long-term economic development of the area/region.

Although, there is recent literature attempting to provide a theoretical framework for the analysis of the role of tourism in regional development, none of these works is supported by a consistent and unified theoretical framework or provide empirical application. A theoretical framework is very important for a deeper and more complete understanding of the role of tourism in regional development and growth –

As the founder of Regional Science, argued Walter Isard – The region has its own essence, which can be grasped in full only by tools, hypotheses, models and data processing techniques specifically designed for regional analysis. (Papers and Proceedings of the Regional Science Association 1956) (Cole 2007: 186)

The literature review finds that most studies do not meet all these requirements. Recent studies, for example, Zhang (2017), go a long way towards developing a regional growth model that includes tourism but do not provide an empirical application of the model.

The difficulties for developing a consistent and unified theoretical framework in tourism studies arise from the ubiquitous nature of tourism, overlapping many industries and other socio-economic elements of supply and demand, making it very difficult to develop an all-encompassing economic theory of tourism. In the words of Ioannides et al. (2014: 535): 'Tourism does not exist in isolation as an economic activity and is embedded in numerous highly complex internal and external networks. As such, understanding tourism's relations to places and regions is a challenging task'. Finally, another obstacle to developing theoretical analysis of tourism is that the theories, as they stand today, do not account for the wide divergence of regional development (Capello, 2011). This theoretical vacuum is summarized by Cole (2007):

A number of theories and models surrounding the tourism phenomenon have been posed; each grounded in numerous disciplines and methodologies, developed over shifting paradigms, seeding a vast and eclectic array of tourism knowledge. Yet seemingly, the tourism sector continues to struggle, [...], to identify, define, and implement clear stratagems for competitiveness and overall economic growth.

Further, Baggio (2008: 1) notes that tourism is difficult to measure and analyse because 'it [tourism] is an "industry" with no traditional production functions, no consistently measurable outputs and no common structure or organization across countries or even within the same country' (Organisation for Economic Co-operation and Development, 2000).

In tourism research, two of the major questions being studied are the role of tourism in regional disparities and the role and nature of tourism in regional development and growth. Both these issues are discussed in the rest of this article, which is organized as follows: 'Tourism and the

regional development hypothesis' and 'Tourism and regional development'. Both these sections discuss the trends in tourism and regional development research with a view to exploring the models used and their empirical applications by reviewing representative papers on these topics.

Tourism and the regional convergence hypothesis

The study of the impact of tourism on regional development and growth has generated an extensive literature, with some supporting the positive economic effects of tourism, while others show the opposite or ambiguous results. The convergence hypothesis implies that in the long run all regions will achieve the same income and growth rate regardless of their initial level of development (Viegas and Antunes, 2013). In the study of tourism, convergence theory is about the impact of tourism on economic development (Sharpley and Telfer, 2014). Convergence or equalization is reflected in wage levels and interest rates across regions generally, that is, an equalization of return on resources across regions. Although there is a wide range of circumstance in Australian regions, and inequality might not be as pronounced as in other parts of the world, regional disparity among some Australian regions is prevalent (Sorensen, 2010). The question is, what explains these differences, is it initial endowments or their ability to attract greater investment (destination competitiveness), what is the nature and extent of the role of tourism in this disparity?

The convergence hypothesis – a neoclassical theory of steady decline in differences in regional incomes – has dominated the study of regional growth over many years (Alexiadis, 2013; Islam, 2003). However, evidence of increasing disparity in regional incomes tends to favour the divergence argument. The literature review reveals that in broad terms studies of convergence can be grouped into two broad classifications: neoclassical-based models and post-Keynesian models (Alexiadis, 2013). The neoclassical approach relies on market forces leading to a general convergence of incomes across regions over time. On the other hand, the post-Keynesian-based models lead to an end divergence of per capita incomes.

In tourism and regional development, there is only a handful of articles relating to regional economic development and tourism. The so-called tourism led growth hypothesis. Most of these studies are based on the regional growth models in the neoclassical framework first developed by Borts (1960). Most of these articles are empirical and do not provide analysis which can be applied in a more universal context, that is, they are highly localized and aimed at their particular local concerns. For example, Wei (2013) analysed ecotourism and its development characteristics in China using convergence theory and found convergence between the East and West provinces, but not in the Middle provinces, and between the major regions. The author applies a single root test and co-integration analysis on regional eco-agricultural tourism income in each province in China. Then applies a VAR model of likelihood, tests for convergence of the series. Although this research discusses convergence theory based on neoclassic economic growth, this research is based purely on statistical analysis with little theoretical justification. However, this study supports in part the convergence hypothesis by finding evidence of convergence of eco-agricultural tourism income in Chinese regions. Ma et al. (2018) assessed the tourism resources in Hanan Island using the fuzzy logic method and provided descriptive analysis of the potential and limits of holistic tourism development in Qionghai. Although this measure is statistically sound, the collection of the data through a survey of opinions about the value of these resources is subjective, and therefore its data reliability cannot be estimated. Other works include Andraz et al. (2015) who support the convergence hypothesis, and Mérida et al. (2016) who do not support convergence.

Evidence against the convergence hypothesis is found by Pascariu and Țigănașu (2014) who study sustainable tourism in France and Romania from the perspective of the NEG. The authors provide comparative analysis of regional development in these countries by applying a descriptive analysis method. The authors calculate the economic impacts of tourism in the regions by applying regression analysis on a selection of variables based on three aspects of development (socio-economic and environmental, stability and convergence as described in the NEG) and summarize the results using factor analysis. The authors find that France's recognition of the economic value of tourism is reflected in policies that allow France to remain a highly competitive nation even in times of global downturns. The authors note France's approach to development is a lesson for Romania, which puts emphasis on peripheral areas for more sustainable tourism growth. This study is also another example of purely empirical research without a theoretical rationale in the analysis to test the validity of the variables used in the study.

Convergence and core-periphery effects are investigated by Nilsson et al. (2005). The authors look at the periphery issue in Northern Sweden from the perspective of tourism management and issues of cooperation between different firms. The authors argue that periphery issues in Swedish regions are similar to regions around the world. They find that within the European Union (EU), there is a distinct tendency for the poorest regions to be situated on the geographical periphery, and the more prosperous regions, with the benefit of market access, to be centrally located. They also find that commercial success and lifestyle are not mutually exclusive to small and medium enterprises (SMEs) but can be combined by adjusting the support mechanisms to the individual businesses, such as training and leadership training. Although the authors provide some theoretical analysis using macro-economic theory, by applying a business model where three price and cost options available to government and business are surveyed. Overall, this article provides descriptive analysis based on results from a telephone survey of SMEs. The authors discuss the EU experience of uneven development of regions in the periphery, compared with core areas, and that it has become an important issue for policymakers in the EU.

A more relevant study to the regional divergence issue is an empirical analysis by Andraz et al. (2015) who use the VAR method to estimate the tourism contribution to regional asymmetries in Portugal. This study finds that tourism has also contributed to the concentration of economic activity in the largest regions while reducing the gap between the smaller regions. This is a thorough analysis using time-series techniques.

In summary, although there is an increasing literature in tourism and regional development, this literature applies mostly descriptive or empirical analysis to analyse regional and tourism convergence. Although there are some works supporting the convergence theory, most of these analyses find that convergence can only be achieved in the long term by applying policy based on the growth pole theory (GPT). In addition, these analyses are not supported by a theoretical framework and are mostly based on survey data, and therefore difficult to replicate or generalize.

The following section discusses the other major issue in tourism and regional development and the role of tourism in economic growth. This section is divided into subsections discussing the theories and their empirical application for studying this issue. These subsections include cumulative causation theory, GPT, tourism and pure trade theory and tourism and economic geography.

Tourism and regional development and growth theory

The significance of the impact of tourism spending on economic development and growth has prompted a vast literature studying the ability to increase tourism market share, that is, destination

competitiveness. Although there is extensive literature on competitiveness and the interaction between stakeholders applying organizational models for studying tourism development and relative competitiveness, studies of tourism that include regional economic theory are scarce.

Nevertheless, this situation appears to be changing with works from Mellon and Bramwell (2016), Polukhina (2016), Sgro and Hazari (2004), Sinclair and Stabler (1997), Sinclair et al. (2009) and Yang et al. (2018) and works in Asia (Zhang, 2017). Evolutionary theory is also becoming more widespread (Brouder, 2017; Brouder and Fullerton, 2015; Ma and Hassink, 2014; Meeke et al., 2017; Randelli et al., 2014; Sanz-Ibáñez and Anton Clavé, 2014; Tonts et al., 2014; Yang et al., 2017).

As noted by Formica (2004: 29), tourism as a geographical interest goes back to early last century with works from Carlson (1938) and Deasy (1949) and as an academic interest appears to have started with works from Vuoristo (1969) and Ginier (1974) who investigated the spatial variations of resorts and attractions in Finland and France, respectively. However, the majority of publications in this field have been published since 2001. Several models have been proposed and some of these have become popular for the analysis of regional development. One of the most popular is the Nordic model, which is an evaluation tool of tourism economic impact. This model is a frequently used model in Northern Europe for studying the economic impact of tourism at the national and subnational levels. Examples of the application of the Nordic model include study of the effects of climate change in rural tourism in the Nordic region (Saarinen et al., 2017); evaluation of tourism impacts on the regional and local tourism economy in Finland (Rinne and Saastamoinen, 2005; Saarinen, 2003); case studies on regional economic impacts of particular industries, for example, Kauppila and Karjalainen (2012) investigate the effects of fishing tourism in the catchment area of the Iijoki river, Northern Finland. Additionally, Saarinen (2001, 2003) and Saarinen and Kauppila (2002) apply the Nordic model for assessing regional economic impact of tourism, affecting incomes and increased employment over various spatial scales. Vuoristo and Arajärvi (1990) assess the effectiveness of the Nordic model by reviewing area and community surveys of specific tourism issues in Finland since 1980 and apply the model to a study Lohja. The authors suggest extensions to the scope of the model for more comprehensive management of local impact.

Another model is the tourism area life cycle (TALC), which is a simple descriptive conceptual model (Butler and Weidenfeld, 2012). The model describes how tourist destinations develop over time and decline or become revitalized. Studies using the TALC and the Nordic models are mostly concerned with specific local level tourism issues. For example, a modified TALC model, which includes the concept of path dependence, has been used to explain the last 40 years of evolution of tourism in the Guilin area of China (Ma and Hassink, 2014).

Cumulative causation theory and tourism

The cumulative causation theory, or concept, has been used as a framework that embodies various partial theories of regional development and growth. The most commonly used of these theories include GPT and trade theory.

In the cumulative causation process, Post-Keynesian economists argue that regional convergence is unlikely to take place due to the cumulative causation process. The Swedish economist Myrdal (1957) in his theory of cumulative causation put forward the argument that once regional disparities take place it is unlikely they will converge. Hirschman (1958) had a similar view to Myrdal's cumulative causation; however, he also suggested that any convergence

would require government interference. Given that disparities or spatial imbalance are prevalent throughout the world, various theories and approaches have been applied to redress this imbalance with mixed success.

This situation is clearly illustrated in an article researching the spatial economic imbalance in the United Kingdom by Martin (2015: 235) who argues

neither the new spatial economics, with its obsession with agglomeration, nor regional studies, with its plethora of concepts and paradigms but lack of integration and synthesis, offers a particularly convincing basis for devising policies capable of redressing the spatial imbalance in the UK's economic landscape.

This gap in the literature is the focus of this research. Although it should be noted that recent literature is starting to cover this issue (Andraz et al., 2015; Bureau of Infrastructure Transport and Regional Economics (BITRE), 2014; Fotopoulos and Storey, 2017; Hassink and Ma, 2016; Ma and Hassink, 2013; Winters and Derrell, 2010), Winters and Derrell (2010) investigate cumulative causation using narrative analysis and time-series analysis techniques to explain underdevelopment and regional disparity in the island of Hispaniola, while Ma and Hassink (2013, 2014) apply the EEG concept of the TALC model – a descriptive framework for research on tourism area development through time – to explain the development of tourism over time in the Gold Coast, Australia, and Guilin, China. Although a descriptive framework is used, these studies provide valuable insights into the process of development in those regions. However, this method does not allow empirical verification of testable propositions about the dynamic interaction of the factors affecting tourism and regional development.

GPT and the trickle-down concept

The GPT advocates targeting a region identified as suitable for preferential funding (core) to promote balanced development across the surrounding areas (periphery). The idea is that the growth pole (the pole) will drive growth in a region because intrinsically its historical economic structure is relatively more competitive, potentially has more skilled labour and more complex production mechanisms which will lead to the polarization of regional development (pole effect). Consequently, stimulating a region that has potential growth pole attributes within a more economically disadvantaged area of a country. The stimulation comes from the diffusion effect (trickle-down effect) which gradually drives growth in the periphery regions at the later stages of development, ultimately leading to balanced development.

The growth pole approach was abandoned in the early 1980s due to contradicting empirical evidence (Dawkins, 2003). Despite the confusion and disagreement among researchers on the benefits of GPT-based policy (Richardson, 1975), this theory is still being applied in tourism development. For example, the EU in 1997 presented a paper 'Urban Problems – Guidelines for a European debate', which documented its intention to examine policies for promoting a polycentric and balanced urban system (Mustatea, 2013). Consequently, GPT has been applied for the promotion of industrialization of regions in developing countries in the context of urban planning, resource allocation, real estate and community regeneration (Lo and Salih, 2013). A case study of resort development found that GPT as an approach for tourism development, and trickle-out by association, might exist in development situations (Lee, 2016). However, most of this literature refers to assessing the performance of policy based on GPT but not before its implementation. Mustatea (2013) provides a descriptive analysis of the policy of developing the Iași

Metropolitan Area as the main regional centre (pole) of the North-East Region, Romania, thus, polarizing the surrounding areas (periphery). The author concluded that the major centre should be able to generate a positive impact on the periphery, but the mechanism generating this impact is not stated. The main functional problem is that the trickle-down effect is a concept and not an economically defined and understood process that can be applied through an economic mechanism and then assessed.

The Kuznets curve depicting the path of an initial state growing to a point and then declining has also been used to describe the trickle-down effect, which argues stimulus favouring the rich (or richer regions) will lead to an increase of wages in the less-developed regions up to a point. After that point, any further stimulus will fail to reach the lower levels (Aghion and Bolton, 1997). However, the trickle-down effect in tourism development only gets a mention as an outcome of policy implementation based on GPT but appears to remain untested (Erisman, 1983; O'Donovan, 2011). In conclusion, GPT appears to be the more frequently used policy for tourism and regional development, with many works assessing the impacts of the implementation of this policy. However, there is little work investigating the possible effects of GPT-based policies before their implementation. In fact, Parr (1999: 1247) claimed '*growth-pole strategy has never been evaluated in terms of an adequate conceptual framework, and the rudiments of one such framework outlined*'. Among the very few of these types of studies (Jin et al., 2012), Zhang et al. (2014) propose the application of GPT-based policy for tourism and regional development in the Zhenjiang province and Dabie Mountains in China, respectively.

As a separate practical observation of tourism trends, there is an accelerating trend of tourists venturing beyond the core and into the periphery, a trend also associated with increasing tourist autonomy. Tourists are more willing to penetrate regions that are peripheral (to engage more deeply in culture and environment). However, when we consider tourism, core regions are those with tourism attractions and the periphery without (or less accessible) one could argue this trend in the form of the new independent traveller is more capable of a trickling down effect and more capable of regional growth in the periphery, and away from the core. Such a proposition could be tested by analysing the trends of dispersion by nationality and how it correlates with regional growth.

Tourism and pure trade theory

Despite the significance of international tourism as a source of foreign income, and therefore economic growth, as noted by Sgro and Hazari (2004), there is an abundance of empirical literature on the economics of tourism, but tourism has not been integrated into pure trade theory. The earliest incorporation of tourism in models of trade theory did not occur until Gray (1970) who recognized the relevance of international trade theory. Although Gray's study provides valuable empirical analysis, its conceptualization and analysis of tourism as a form of international trade is the more enduring contribution to the literature of tourism research. Nevertheless, Gray's analysis is based on a descriptive method.

But, how does tourism differ from other forms of trade? Tourism differs from both free flow of commodities and free flow of factors across countries, in that tourism trade is a temporary movement of consumers from one country (region) to another, so that they can consume nontraded goods, for example, UK tourist consumption on goods and services in the snowfields of Switzerland, art galleries or museums in Europe and so on. Tourism affects the price determination procedure of non-traded goods. The non-traded goods become an exportable good. However, since

its price is not determined in the international market, it gives the tourist destination monopoly power in trade. This monopoly power in trade must be linked with the theory of trade and distortions.

Sgro and Hazari (2004) use the Komiya model (Komiya, 1967) as an extension of trade theory to include non-traded goods. However, the authors note this model is both unrealistic and unsatisfactory, because in this model, the international terms of trade fix the relative price of non-traded goods. It is well known that even in the small-country case, the relative prices of non-traded goods change for a variety of reasons, as non-tradable goods and services by definition, have relatively little exposure to international competition. Consequently, their prices are more likely to be influenced by developments in the domestic economy, particularly the extent of spare capacity in both production and the labour market. Therefore, there is a need for models on non-traded goods that allow for flexible prices; but how do we achieve these objectives? One solution is to introduce flexible models using the well-known dependency model of the specific factor model of trade (Hazari and Sgro, 2004a). The authors apply pure trade theory to study tourism as a traded good.

International tourism is a special type of traded good and service because of the following characteristics; consumption takes place where it is produced, so tourists travel to where the goods and services are delivered; tourism is a service provided in person to the consumer; and it can be treated as a monopolistic good (or monopolistic competition). However, there has been little attempt at accounting for the spatial nature of tourism. The few works that have done include Suresh and Tiwari (2017) who use the newly developed asymmetric Granger causality tests and frequency analysis to study the relationship between tourism and regional development in India between 1991 and 2012. This is a purely statistical analysis showing that international trade and tourism are correlated and under certain conditions international trade can promote tourism and boost economic growth and (Zhang, 2017) extends Uzawa's two-sector model of a national economy to an economy of any number of regions as interregional tourism. But, these do not introduce the elements of monopoly power in trade in the tourism sector. The element of monopoly is also a key quality of international tourism (assuming flexible prices), as foreign demand for non-trade goods necessarily creates a monopoly power distortion (Hazari and Sgro, 2004b).

Economic geography and tourism

Research in economic geography that includes tourism and its newer theories, such as NEG and EEG, is even more limited. A new impetus took place from mid-2000 with a growing interest in tourism studies spreading to the fields of regional economics and economic geography (Boschma and Frenken, 2011; Boschma and Frenken, 2006; Brouder, 2014; Ioannides et al., 2014; Sanz-Ibáñez and Anton Clavé, 2014). This recent research focuses mainly in the areas of economic development, income distribution and policy development. Previously, the focus in tourism studies combined neoclassical economic principles to develop models of tourism demand and supply (Song et al., 2012).

NEG and EEG are two emerging theories/disciplines/sub-disciplines, which are developing very quickly. However, systematic and unified theoretical analysis of tourism dynamics and its economic interaction with regions is only beginning to receive research attention.

These relatively new theories are discussed below.

NEG and tourism

The NEG as proposed by Krugman (1991a) is a two-region model based on the Dixit and Stiglitz (1977) monopolistic competition framework. The model consists of two sectors with two types of goods each: one good from a homogeneous agricultural sector and the other good from a manufacturing sector, producing a large variety of goods with constant elasticity of substitution between any two varieties, that is, they share the same Cobb-Douglas tastes for the two types of goods. This highly simplified model demonstrates that under certain circumstances, circular causation can become established in whichever region gets a head start. However, as Tabuchi (2014: 52) observes

the scopes of most of the theoretical studies published thus far have been limited to two regions in order for the researchers to reach meaningful analytical results. However, the NEG models tend to demonstrate that spatial distribution is dispersed in the early period (high trade costs or low manufacturing share) and agglomerated in one of the two regions in the late period (low trade costs or high manufacturing share). However, it is no doubt that the two region NEG models are too simple to describe the spatial distribution of economic activities in real world economies. Since there are only two regions, their geographical locations are necessarily symmetric, and thus diverse spatial distributions cannot occur.

Krugman claims that the model demonstrates how tools from industrial organization theory can assist in formalizing regional economics and economic geography models. However, the author does not suggest an empirical application or attempt to test the intuitions derived from his model. Moreover, as Zhang (2017) notes, in almost all the dynamic models of the NEG, physical capital is completely neglected, and regional amenities do not play a significant role in determining land rent and population mobility. Zhang (2017: 95) further quotes Tabuchi (2014: 50) although this approach claims to have ‘enabled researchers to gain further insights into the space economy and transition’ [...], ‘it is difficult to imagine any modern economy whose dynamics can be properly modelled with neither wealth nor capital accumulation’.

So far, most of the formal models in NEG have not succeeded in including capital/wealth accumulation as endogenous processes of industrialization and agglomeration. A reason for the lacking of wealth accumulation in interregional economic dynamics is that there is no proper microeconomic foundation of household behaviour for including the growth factor (Zang, 2016).

The NEG theory by Krugman and colleagues (Fujita et al., 2014; Krugman, 1991a, 1991b) puts forward an internal scale of agglomeration economics. There are many previous studies on industrial agglomeration, and all previous research is mainly focused on the following three aspects: the causes of industrial agglomeration, the effects of industry agglomeration and the measurement of industrial agglomeration. Coles et al. (2008) note that there has been reluctance among geographers for studies of tourism applying NEG postulates. Coles also points out that the more discursive, sociocultural perspectives to NEG carries the danger of reducing economic geography to superficial ‘story-telling’ reliant on trends and fast-moving jargon that constantly evades any rigorous evaluation (Martin and Sunley, 2001). In the words of another critic of the current state of regional analysis

Regional analysis is increasingly populated by fuzzy concepts that lack clarity and are difficult to test or operationalize: flexible specialization, windows of opportunity, resurgent regions, world cities, cooperative competition. Many analyses rely on anecdote or singular case studies, while contrarian cases and more comprehensive and comparative inquiries are ignored. Methodology is often not discussed adequately. (Markusen, 2003: 701)

Currently, there are no studies providing sound economic theoretical framework as suggested by NEG, limiting themselves to descriptive narrative analysis. However, there are some worthy attempts at developing such models. Some examples include Zhao and Dong (2017) who empirically investigates the influence of tourism agglomeration on urbanization using China's provincial panel data for years 1999–2012. The authors develop a simple spatial version of the Dixit–Stiglitz model based on a standard NEG model (Dixit and Stiglitz, 1977; Fujita, 1999; Krugman, 1991), which has multiple destinations and travel costs (i.e. money or time costs) between the pairs of places of origin and destination. But this is not adequately tested, for example, there is no mention of the effects of wealth and or physical capital accumulation.

Yang (2014) uses a spatial model of industry development. This study uses Chinese tourism panel data to analyse the relationship between market potential, industry density and the firm's revenue. A simple spatial version of the Dixit–Stiglitz model based on a standard NEG model (Dixit and Stiglitz, 1977; Fujita, 1999; Krugman, 1991) is developed, which has multiple destinations and travel costs (i.e. money or time costs) between the pairs of places of origin and destination. But this is not adequately tested, for example, there is no mention of the effects of wealth and or physical capital accumulation.

In summary, given there are theoretical and technical difficulties to be resolved for the NEG models, and it is understandable there have been very few attempts at developing a theoretical framework or empirically testing the assumptions of the NEG-based models.

EEG and tourism

Sanz-Ibáñez and Anton Clavé (2014) propose a new approach to tourism research. This approach is an amalgamation of NEG and relational economic geography (REG) and called EEG. They propose this approach in considering various studies which explicitly state that there are weaknesses in conventional methods in tourism geography. For example, in some situations such as destinations with colonial or post-colonial societies, the Butler life cycle model (Butler and Weidenfeld, 2012) could predict at what point or under what circumstances a destination would move to the next stage of development (Douglas, 1997). Although this proposed approach is promising, it seems more suitable for the monitoring of competitiveness of a tourism destination. It also does not offer any suggestions for empirical testing of propositions.

The interest in EEG is broadening among tourism scholars because EEG represents an emerging framework for studies of the tourism economy. This diffusion of EEG into tourism studies is noteworthy since the first ever conceptual paper on EEG appeared in 2006 (Boschma and Frenken, 2006), and the Handbook of EEG was published as recently as 2010 (Boschma and Martin, 2010).

The evolutionary approach to economic geography focuses on the historical processes that produce patterns of economic activity and their current outcome. This outcome is assumed to be a path-dependent, historical processes, or as Dosi (1997, p. 1531) says: 'the explanation to why something exists intimately rests on how it became what it is'. (Boschma and Frenken, 2011: 296).

Tourism destinations are dynamic systems and as such, they need to be managed to maintain their competitiveness. Consequently, it is of the utmost interest for tourism geographers not only to identify the changes occurring at the destination level over time but also to disentangle the mechanisms underlying these changes. This article maintains that this issue can be powerfully addressed by adopting and integrating the EEG and REG notions of human agency, conceptually with path dependence as triggers of local tourism destination evolution. EEG is still an evolving approach, for example, Sanz-Ibáñez and Anton Clavé (2014) notes that the geographical analysis

of tourism destination evolution requires a proper translation of EEG and REG notions and concepts. In addition, since EEG and REG are still in development, this search can generate problematic issues. On the other hand, it would be necessary to find appropriate and effective methods of conducting empirical analyses to understand how, and to what extent, human agency and path dependence influence the evolving paths of tourism localities.

Path dependence, for example, figures prominently in spatial agglomeration models, the history referred to is not 'real history', where there is no sense of the real and context specific periods over which actual spatial agglomeration have evolved. Instead, NEG's location models the notion of time employed as an abstract concept (Martin, 1999).

As a new 'theoretical paradigm', this theory has been used in combination with the geographic information system (GIS) to trace the development of agglomeration of businesses in regional locations. For example Yang et al. (2017) apply the four states described in EEG to trace the evolution of tourism firms in the West Lake Scenic Area between 1978 and 2013. The authors conducted longitudinal analysis of tourism-related enterprises using data collected through a survey. Using deductive/descriptive analysis, they were able to provide a better understanding of the changes of tourism firms over time and across the geographic space. However, this work is not applicable here, because it does not allow comparative analysis across regions, because it is based on the exclusive and unique characteristics of one region.

Ma and Hassink (2014) use the path dependence model of tourism area evolution to explain the emergence, rise and decline of a tourist area (Guiling, China). In this case, the authors use the TALC model (Butler, 1980).

EEG is premised on the assumption of uniqueness in the economic development of regions and the institutional rules governing firm behaviour in a region. Therefore, EEG analyses how the institutions in a region affect the economic behaviour and local patterns of that region. This is evident in the almost entirety of studies taking this approach, which are based on the interaction of firms and their location, and of their institutions, which obviously are different between regions because each face a different set of circumstances.

A disadvantage of this approach is that analysis is supported mainly by data from surveys and data defined according to the needs of the region or locality being studied. Therefore, it is not possible to extend this approach and develop an integrated and systematic approach for analysis to other regions. Moreover, these approaches require an inductive process to analyse the issues faced by the regions being studied.

Summary and conclusion

The aim of this literature review is to uncover the economic theories used to understand the dynamics of tourism in regions (subnational level) and regional economic development.

The literature suggests that despite the theoretical developments such as NEG and EEG in the 1990s and early 2000s, regional tourism research is still in its infancy. Although there is a myriad of empirical work attempting to measure the effects of the factors affecting tourism and regional development, most of these studies lack a systematic theoretical framework to guide this analysis. Most of the work produced in relation to regional economic development and tourism is empirical in nature or applies descriptive analysis using either qualitative or quantitative methods. Descriptive analysis can provide valuable insights on the interaction of the economy and tourism. However, it does not allow development of testable hypothesis of cause and effect among these interactions.

Although there is significant sophistication in the quantitative analysis of these approaches, the lack of a theoretical framework means these studies cannot provide testable hypothesis and cause and effect findings. These works do not allow a quantification of these interactions and, more importantly, do not allow statistical verification of these interactions. For example, EEG is mostly based on descriptive research methods, that is, it is based primarily on observation, surveys or case studies. It uses various descriptive theoretical frameworks. An example of this is the TALC model (Brouder and Eriksson, 2013; Ioannides et al., 2014; Ma and Hassink, 2014). TALC takes a historic path-dependent approach. The core of the theory is the concept of stages in development, including a new establishment stage, preliminary development stage, acceleration of development stage and stability and maturity stage. However, this simple framework provides a suitable platform for analysing regional development through index methods (Gini coefficient or Ellison Glaser index) or GIS spatial analysis (Yang et al. 2017) or correlation analysis combined with advanced econometric techniques, for example, Chhetri et al. (2013), Chhetri et al. (2017) and Chhetri et al. (2008) apply a spatial econometric approach to determine the correlation between spatial factors and high concentration of tourism-related employment (employment clusters) in the Gold Coast tourism localities of South East Queensland and Victorian regions.

Another finding from this review is that the study of tourism as an economic activity is still in its infancy. This situation is due to the fact that regional scientists have tended to give priority to manufacturing industries rather than service industries (Debbage et al., 1998). Another reason is that tourism activity is pervasive, encompassing wide-ranging social and economic aspects of human activity. Finally, tourism was considered a frivolous topic (Eadington and Redman, 1991; Smith and Eadington, 1992). The irony is that as Wall (2007: 163) puts it: 'tourism is too important to be left to specialists'. Specialists presumably refers to practitioners/stakeholders in the industry.

This situation led the hospitality industry having to develop its own research agenda, focused on the needs of business concerned with tourism promotion (Cole, 2007). Nevertheless, over the last decade, a wide range of disciplines, mainly economics, geography and anthropology, earth and planetary sciences, engineering, medicine, among many others, have paid attention to tourism (Marcouiller, 2007). The multidisciplinary nature of tourism makes it impossible for a single discipline to address all the aspects of such a complex dynamic industry nor draft a single theory (Crick, 1989). Scarpino (2011) remarks that among the abundance of diverse methodological methods and approaches to tourism economic development, the majority are macro-centric in origin or prescribed at the macro level.

Finally, tourism research has not used spatial context and is only based on aggregates such as demand and supply, that is, macroeconomic theories of consumer choice and utility theory of choice (Morley, 1992). Morley pointed out as far back as 1992 that economic theory has been used primarily to suggest independent variables for the models. Although some authors have used economic methods of analysis, they do not attempt to develop a system of analysis within the context of international trade. For example, Gray (1970) devotes most of his work to the description and analysis of tourism in the economy. Nevertheless, systematic and unified theoretical analysis of tourism dynamics and its economic interaction with regions is only beginning to receive research attention. For example, Zhang (2017) analyses interregional development by introducing tourism into a multiregional growth model. This model is an extension of the Oniki and Uzawa (1965) two-sector model of a national economy to an economy with any number of regions and interregional tourism.

Future directions

Theoretical gap

Although there is a myriad of empirical work attempting to measure the effects of the various factors affecting tourism development, and regional development in general, most analysis has not been guided by a formal theoretical framework.

It is worth noting that international tourism is an export or tradeable good and service. Therefore, international tourism is a form of international trade, and as such it seems appropriate to be part of a theory of international trade. However, there is only scant literature regarding trade theory and tourism and practically no theoretical studies at the regional level (subnational).

Most models are based on competitiveness and the interaction between stakeholders. These can be said to be organizational models for tourism development and relative competitiveness. The models are concerned with tourism as a development factor for regional development in rich countries and as a factor for economic development in less-developed countries.

An ontological issue in tourism is the lack of consensus on where tourism geography and regional economics belong. Does tourism belong in regional economics because it's a combination of economics and location theory, and therefore tourism can be treated as another economic factor? Or is regional economics part of economic geography because economic geography is based on the study of location of the firm (Martin, 1999). The problem is that regional science is a multi-disciplinary field, which applies techniques from different fields but does not embrace them completely. Therefore, it has become subdivided into 'topics' such as location theory or spatial economics, transportation modelling, migration analysis, land use and urban development, inter-industry analysis, environmental and ecological analysis, resource management and many other disciplines. However, this lack of agreement on a definition is understandable, given the wide variety and complexity of regional issues, where the common denominator is that they have a spatial context.

Finally, this review finds that tourism research has not used a spatial context, as it is only based on aggregates such as demand and supply, that is, macroeconomic theories of consumer choice, and utility theory of choice. Economic theory is used primarily to suggest independent variables for models. Although some authors have used economic methods of analysis, they do not attempt to develop a system of analysis, for example within the context of international trade.

It is reasonable to argue that a direction forward from a positive economics approach would be a significant development for the planning of regional economic development, albeit not the only approach. It is also reasonable to argue that the first step would be the development of conceptual modelling at the broader scale. Such modelling would need to address the issue of the systematic interaction between the smaller regions (e.g. regions within states) and the larger regions (states and nation). Additionally, such a conceptual model would need to encompass destination competitiveness in tourism as a driver of regional development and economic growth. This in turn would imply that both supply factors (transport, accommodation, labour and remoteness, e.g.) and demand factors (price, attractions and income for example) would be dynamic aspects of the conceptual model to be tested via hypotheses with a competitive framework.


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