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Tourism as an important impetus to promoting economic growth: A critical review

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ABSTRACT

This article reviews reasons why tourism is an impetus to promoting economic growth from perspectives of the measurement of its economic impacts, contributions to poverty reduction, the efficiency and productivity, and impacts of several external economic factors. To achieve this, a critical review was performed by selecting 346 papers from 11 tourism-related journals, published during 2000–2014. Main findings are summarized. First, previous studies confirmed tourism's positive economic impacts in most, but not all, circumstances. Second, through channels of prices, earnings, and government revenues, tourism can contribute to reducing poverty. Third, labor, capital, technology, environment, expenditures, revenues, and several external economic factors are key determinants of tourism efficiency and productivity. Additionally, to address how the issue has been researched, we perform an overview of primary data analysis techniques used in earlier studies. Finally, some policy considerations are proposed to promote tourism development, reduce poverty, improve tourism efficiency, and strengthen tourism competitiveness.

1. Introduction

Tourism refers to the activity of visitors who take a trip to a main destination outside of their usual environment, for less than a year, for any main purpose related to business, leisure, or other personal purposes, other than to be employed by a resident entity in the country or place visited (IRTS, 2008). Over the last several decades, there has been a substantial expansion in tourism, especially international tourism. According to UNWTO Tourism Highlights (2014), international tourist arrivals increased by 5% worldwide in 2013, reaching a record 1.087 billion arrivals, while international tourism receipts increased by 7.5%, achieving a record US$1.159 thousand billion in revenue. In 2013, the primary purpose of inbound tourism was 'leisure, recreation, and holidays', accounting for nearly 52% of all international tourist arrivals, followed by 'visiting friends and relatives, health, and religion', occupying around 27%, and then 'business and professional', accounting for 14%. By attracting international tourists, tourism contributes significantly to a destination's economic growth by accumulating foreign exchange earnings, providing employment opportunities, and improving infrastructure, among other reasons. Consequently, tourism has been widely regarded as an important impetus to promoting export trade and economic growth in many countries. However, the empirical studies have shown inconsistent results regarding the overall impact of tourism on economic growth. As a result, considerable attention has been devoted to tourism-related research from an economic perspective.

Tourism's economic impetus can be analyzed from the following perspectives. First, the economy is likely to be impacted by tourism receipts in direct, indirect, and induced ways. The direct effects usually involve changes in 'sales, employment, tax revenues, and income levels' due to the immediate impacts from tourist spending. The indirect effects are generally changes in 'prices, quality and quantity of goods and services, property and other taxes, and social and environmental impacts'. These effects are widely observed in tourism-related industries. The induced effects are often related to changes in household spending, a result of the additional income generated from tourist spending (Khan, Seng, & Cheong, 1990; Stynes & Arnold, 1997; Brida, Pereyra, & Devesa, 2008). Second, tourism's critical roles in accumulation of capital, alleviating poverty, and improving social welfare have aroused the interest of an increasing number of researchers (Deller, 2010; Lee, 2009; Scheyvens, 2007; Scheyvens & Russell, 2012). Third, tourism's efficiency and productivity shed light on the allocation of economic resources in order to reduce costs in tourism-related sectors, improve the performance of the tourism industry, and maintain a high

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level of tourism competitiveness (Chen, 2007; Dwyer, Forsyth, & Spurr, 2007; Goncalves, 2013; Hong, 2009). Finally, in the context of globalization, a country's tourism industry will interact with external economic factors. For example, the causal relationship between foreign direct investment (FDI) and international tourism was addressed by Fereidouni and Al-mulali (2014). As important exports of services, tourism demand is sensitive to exchange rates (De Vita, 2014; Tang, 2013) and global economic conditions (Boukas & Ziakas, 2013; Meng, 2014; Okumus & Karamustafa, 2005).

For the first time, a systematic review was undertaken to address tourism as an important impetus to promoting economic growth. This study contributes to the existing literature in a variety of ways. First, tourism's economic effect is reviewed among different income groups. Some potential explanations for tourism's negative impact on the economy are provided. Second, several efficient channels exploring tourism's position in accumulation of capital, alleviating poverty, and improving social welfare are reviewed. Third, key determinants of tourism efficiency and productivity are identified, together with some influencing external economic factors.

With this aim, the paper is divided into eight sections. Section 2 describes the collection of relevant papers and the review process. Section 3 reviews tourism's economic impacts, and Section 4 focuses on tourism's role in reducing poverty. Section 5 identifies key determinants influencing tourism efficiency and productivity. Section 6 reviews the impacts of FDI, exchange rate, and economic and financial crises on tourism. Section 7 shows the data analysis techniques, and Section 8 contains the conclusion and discussion.

2. Data collection and review process

To investigate how and why tourism is seen as an important impetus to promoting economic growth, this study undertook a systematic and thorough overview of the previous studies from an economic perspective. All of the reviewed papers were from academic journals. Related working papers, conference papers, research notes and comments, etc., were not included in this paper. Chosen from journals related to 'Hospitality, Leisure, Sport & Tourism' in the SSCI (Social and Science Citation Information, 2013[1]), 11 journals dating from 2000 to 2014 were reviewed for this paper and were shown in Table 1. As we focused on the perspective of tourism's economic implication, other tourism-related topics like ethical tourism, history of tourism, and tourist safety and security were not considered. As a result, these journals yielded 335 papers. After searching 'tourism and economic implications' in Google Scholar, another 11 papers were also chosen for inclusion, bringing the total number of collected papers to 346. As shown in Table 1, the journal with the largest number of applicable papers was 'Tourism Economics', with 91 papers, followed by 'Tourism Management', with a frequency of 40; 'International Journal of Tourism Research', with a frequency of 34; and 'Annals of Tourism Research' and 'Journal of Travel Research', both with a frequency of 33. Fig. 1 shows the publication year distribution of the papers. The number of relevant papers increased from 43 in the years 2000–2002 to 79 in the years 2006–2008 to 91 in 2012–2014, representing a steady increase of 111.63%.

First of all, according to the main topics addressed in each paper, all papers were classified: 'Economic contribution and inter-industry linkage (ECL)'; 'Poverty reduction, social welfare, employment, and capital (PWC)'; 'Efficiency, productivity, and competitiveness evaluation (EPC)'; 'FDI, exchange rate, and trade/globalization (FEG)'; 'Economic/financial crises and uncertainty (ECU)'; and 'Other, including tourism characteristics, and policy (OTHER)'.

Second, considering the fact that the popularity of tourism-related topics in a country might be influenced by its income level, a comparative analysis was conducted based on the income levels of the investigated countries. We followed the World Bank's income level classification system of high-income, middle-income, and low-income countries. Only papers that dealt with a single country's data were considered. Papers without empirical data, or global/regional comparisons were excluded. China's data also included data from Hong Kong, Macao, and Taiwan. As a result, 275 of the 346 papers were collated and assigned to the given income groups. As shown in Figs. 2, 56% (155 of 275) of the papers were performed in high-income countries, 40% (110 of 275) were performed in middle-income countries, and only 4% (10 of 275) were performed in low-income countries. Table 3 shows the distribution of research topics across income groups. ECL was the most popular research topic in each income group, while the rest of the topics varied by group. The high-income group had a relatively equal distribution of research topics, while the middle-income group paid more attention to PWC, accounting for about 18.18% (20 of 110) of the papers. The low-income group also favored PWC.

Third, by identifying the primary research methods and data analysis techniques, the papers were categorized as follows: 'Survey, interview, or questionnaire approach (SIQ)'; 'Economic, mathematic, or statistical modelling (EMS)'; 'Case study (CS)'; 'Conceptual, content, qualitative, descriptive, or comparative analysis (CCQD)'; and 'Literature review (LR)'. Fig. 3 shows the distribution of papers by research method. Of the 346 papers, 203 (58.67%) used the EMS method, 74 (21.39%) employed the CCQD method, 45 (13.01%) applied the CS method, 18 (5.20%) utilized the SIQ method, and only 6 (1.73%) adopted the LR method. This information helped to better understand how the tourism-related research was conducted.

3. Estimating tourism's economic impacts

Because of tourism's potential contributions to economic growth, efforts have been made to measure the economic impacts of different forms of tourism. The existing research included studies in sports tourism (Daniels, Norman, & Henry, 2004; Li & Jago, 2013), rural tourism (Fleischer & Tchetchik, 2005; Park, Lee, & Yoon, 2014), ethnic tourism (Theerapappisit, 2009), park tourism (Ma, Bao, & Ryan, 2009; Mayer, 2014; Saayman & Saayman, 2006), conference, convention, and exhibition tourism (Hanly, 2012; Lee, Lee, & Yoon, 2013), religious tourism (Saayman, Saayman, & Gyekye, 2014), festival tourism (Clarke & Hoaas, 2007; Saayman & Rossouw, 2011), casino gaming tourism (Benar & Jenkins, 2008; Wan, 2012), and heritage tourism (Dredge, 2004), among others.

However, the previous literature has yielded inconsistent conclusions. Table 4 shows the distribution of empirical conclusions regarding tourism's effect on economic growth. An inspection of Table 4 reveals that nearly 69.27% (124 of 179) of papers confirmed a positive economic impact, about 8.94% (16 of 179) suggested a negative effect, and around 10.62% (19 of 179) found a weak or unclear impact. These results show that, in most circumstances, tourism has the potential to promote economic growth. These results hold across different income groups.

Particular attention should be paid to negative economic impacts. Table 4 shows that there were twelve papers on negative economic impacts in the high-income group, three papers in the middle-income group and one paper in the low-income group. Table 5 presents a summary of papers addressing negative impacts of tourism. After reviewing these 16 papers, we could explain the sources of negative impacts from the following three perspectives. First, when a shocking event occurs, tourism might have a negative impact on the economy. For example, economic growth was negatively affected by the foot-and-mouth disease outbreak (Blake, Sinclair, & Sugiyarto, 2003; Smorfitt, Harrison, & Herbohn, 2005), terrorist attacks (Pambudi, McCaughey, & Smyth, 2009; Zhang & Lee, 2007), critical events, like the Iraq War and SARS (Dwyer, Forsyth, Spurr, & VanHo, 2006), and others. Second, inefficient tourism policies and environment factors will have a negative economic impact. For instance, a carbon tax on the

[1] http://science.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=SS&SC=MW.

Table 1
Distribution of papers by journal and by year.

Journals	2000–02	2003–05	2006–08	2009–11	2012–14	Total	%
Annals of Tourism Research	5	7	5	7	9	33	9.54
Asia Pacific Journal of Tourism Research	2	4	2	8	5	21	6.07
Current Issues in Tourism	4	2	9	9	7	31	8.96
International Journal of Tourism Research	4	4	9	8	9	34	9.83
Journal of Sustainable Tourism	5	3	5	3	13	29	8.38
Journal of Travel & Tourism Marketing	2	2	1	0	0	5	1.45
Journal of Travel Research	6	5	8	8	6	33	9.54
Scandinavian Journal of Hospitality and Tourism	0	4	0	1	1	6	1.73
Tourism Economics	8	12	26	20	25	91	26.3
Tourism Geographies	3	2	1	3	3	12	3.47
Tourism Management	1	6	10	11	12	40	11.56
Other	3	1	3	3	1	11	3.18
Total	43	52	79	81	91	346	100

Source: The authors.

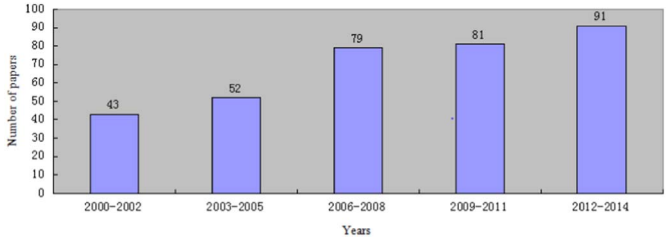

Fig. 1. Distribution of papers by year of publication.
(*Source*: The authors)

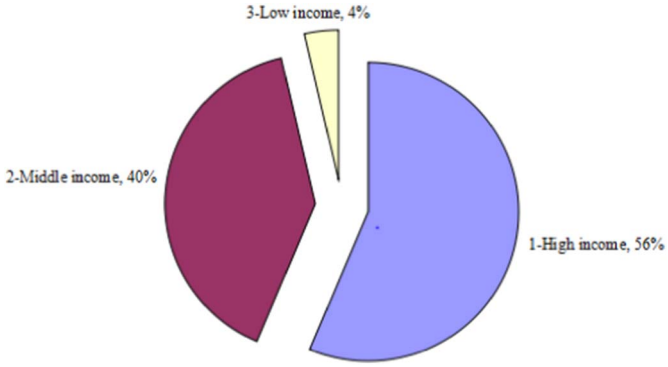

Fig. 2. Distribution of papers by income level.
(*Source*: The authors)

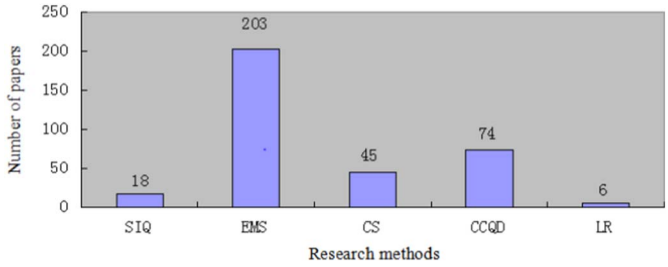

Fig. 3. Distribution of papers by research method.
(*Source*: The authors)

tourism industry (Dwyer, Forsyth, Spurr, & Hoque, 2013), climate change via tourism activities (Pham, Simmons, & Spurr, 2010), policies related to currency devaluation (Pratt, 2014), foreign investment in tourism (Sheng & Tsui, 2010), and wind farms (Riddington, McArthur, Harrison, & Gibson, 2010) were all found to generate negative economic effects. Third, the form of tourism and its share in the tourism sector could be another source of negative economic impacts. Among the reviewed papers, Agarwal (2012) and Akama and Kieti (2007) examined the impacts of resorts, Iverson (2010) considered the Marine National Monument, and Gal, Gal, and Hadas (2010) focused on rural tourism. Finally, side effects of economic, social, and political effects (Sheng & Tsui, 2010), leakage effects between gateway and hinterland economies (Agarwal, 2012), and diminishing marginal income effects might also be used to explain the observed negative economic impacts affecting the tourism industry.

From a policy perspective, tourism's role in an economy must be approached cautiously, although, in recent years, tourism has become widely accepted as a relatively effective means of promoting economic growth. Tourism's economic impacts are clearly substantial. Nevertheless, the impacts of social, environmental and political influences should also be considered when assessing the overall effect of tourism on sustainable economic development. At the same time, balancing gateway and hinterland economies by redistributing tourism revenues is still challenging for policymakers. From a social welfare viewpoint, tourism might be an effective means of reducing poverty and accumulating capital through the redistribution mechanism. More evidence of this is discussed below.

4. Evaluating tourism's contribution to poverty reduction

As shown in Table 2, 10 of the reviewed papers examined tourism's role in accumulating capital and welfare, 37 papers looked at its role in alleviating poverty, and three papers addressed employment and income issues. However, these papers did not reach a consensus. Several reviewed papers addressed tourism's positive contributions to generating revenue, creating jobs, and reducing poverty (Blake, Arbache, Sinclair, & Teles, 2008; Scheyvens & Russell, 2012). Conversely, Lindberg, Andersson, and Dellaert (2001) suggested that the gains obtained by tourists from the expansion of tourism were not sufficient to outweigh the net losses suffered by residents, resulting in a negative

Table 2
Distribution of research topics by year.

	2000–04		2005–09		2010–14		Total	
	No.	%	No.	%	No.	%	No.	%
ECL	54	75	76	59.84	88	59.86	218	63.01
PWC	5	6.94	18	14.17	27	18.37	50	14.45
EPC	1	1.39	15	11.81	2	1.36	18	5.2
FEG	6	8.33	8	6.3	10	6.8	24	6.94
ECU	4	5.56	5	3.94	13	8.84	22	6.36
OTHER	2	2.78	5	3.94	7	4.76	14	4.05
Total	72	100	127	100	147	100	346	100

Source: The authors.

Table 3
Distribution of research topics by income level.

	High-income		Middle-income		Low-income		Total	
	No.	%	No.	%	No.	%	No.	%
ECL	108	69.68	66	60	5	50	179	65.09
PWC	12	7.74	20	18.18	5	50	37	13.45
EPC	10	6.45	5	4.55	0	0	15	5.45
FEG	10	6.45	6	5.45	0	0	16	5.82
ECU	8	5.16	8	7.27	0	0	16	5.82
OTHER	7	4.52	5	4.55	0	0	12	4.36
Total	155	100	110	100	10	100	275	100

Source: The authors.

Table 4
ECL across income level.

	High-income		Middle-income		Low-income		Total	
	No.	%	No.	%	No.	%	No.	%
Positive impact	74	68.52	46	69.7	4	80	124	69.27
Negative impact	12	11.11	3	4.54	1	20	16	8.94
Weak or unclear impact	7	6.48	12	18.18	0	0	19	10.62
Irrelevant issue	15	13.89	5	7.58	0	0	20	11.17
Total	108	100	66	100	5	100	179	100

Source: The authors.

impact on overall welfare. Deller (2010) found that tourism and recreation played a small role in explaining the changes in poverty rates. Using the Gini coefficient, Lee (2009) revealed greater income inequality in countries dependent on U.S. tourism services.

Three potential channels including prices, earnings, and government revenue were identified as channels through which tourism influenced the poverty rate (Blake et al., 2008). First, prices were likely to negatively influence the poor. As noted by Blake et al. (2008), higher tourism consumption usually led to higher output, prices, and wages in tourism-related industries. Then, wages in other industries have to be increased to retain labor, which increases the costs as well as prices for products in these industries. As a result, the overall price level will be higher. For poor households, on one hand, they have to pay more for the same products. On the other hand, the increased overall price level reduces their real income levels. Second, the earnings channel might positively affect the poor when they are employed in tourism-related industries that benefit from tourism expansion. Higher incomes tend to increase the poor's consumption and improve their living standards. However, it should also be noted that the poor who are not employed might not benefit from the earnings channel. Through self-employment in a small tourism business, Zhao (2009) stated that the poor could benefit from pro-poor tourism. With the help of Grootberg Lodge, secure wage revenues have improved the livelihoods of some rural households (Lapeyre, 2011). More relevant studies were completed by Gartner and Cukier (2012), Lacher and Oh (2012). The third channel through which tourism affects the poverty rate is government revenue. To achieve this, tourism-related taxes and charges are usually applied. For instance, by imposing and collecting taxes on tourism-related business, the government will obtain more revenues which can be used to improve infrastructure provision in poor areas, increase health and accommodation subsidies to the poor, and provide pre-employment training. However, the overall impact of the government revenue on the poor depends on how the government reallocates revenues, which is uncertain (Blake et al., 2008).

Evaluating tourism's contribution to poverty reduction is still a challenge. Using geographically weighted regression, Deller (2010) addressed the small role of tourism and recreation in explaining changes in poverty rates. Thomas (2014) discussed two tourism value chains and showed that tourism's impact was strongly dependent on the chosen poverty threshold. Many other studies have contributed to this issue, including Spenceley and Goodwin (2007), Butcher (2011), and Hummel, Gujadhur, and Ritsma (2013). Another section of the literature on the topic of poverty reduction mainly involves research frameworks and guidelines. For example, Scheyvens (2007) explored theoretical debates on the tourism-poverty nexus, and Zhao and Ritchie (2007) identified a number of research needs and opportunities in this area.

From a policy perspective, alleviating poverty and reducing income inequality are ever-challenging problems for any government. Tourism is widely recognized as a way to provide alternative means of relieving poverty by generating foreign exchange earnings, creating new jobs, attracting foreign investments, and increasing incomes. Compared to the channels of price and earning, the government is likely to play a more proactive role in tourism's contributions to reducing poverty. For example, by properly redistributing greater shares of tourism revenues to the poor, governments can increase the income levels and living conditions of the poor. By providing work training, governments can increase the employment rates of the poor.

Table 5
Summary of papers addressing negative impacts of tourism.

Author	Tourism-related topic	Variables measuring tourism	Income level	Conclusion
Agarwal (2012)	Coastal resorts	Tourism consumption and production	High	Businesses are poorly integrated into the local economy
Iverson (2010)	Marine national monument	Cost of fishing leases and staffing	High	Key benefits fell in the areas of visitor spending
Gal et al. (2010)	Rural tourism	Profit	High	The variance of profit has been increased
Sharpley (2002)	Tourism	Tourist arrivals and receipts	High	It is difficult and costly to develop a successful tourism sector
Riddington et al. (2010)	Wind farms	Number of tourists	High	A very small but significant negative economic impact
Pham et al. (2010)	Climate change	Income from tourism	High	Nationally insignificant but regionally considerable
Dwyer et al. (2013)	Carbon tax	Tourism employment; tourism output	High	Reduction in key macroeconomic variables
Blake et al. (2003)	Foot and mouth disease	Tourism expenditures	High	Larger adverse effects on GDP
Smorfitt et al. (2005)	Foot and mouth disease	Cost estimation	High	Impose a large cost to the regional economy
Dwyer et al. (2006)	Tourism crisis	Savings, purchases	High	Reduction in inbound and outbound tourism
Zhang and Lee (2007)	Terrorist attacks of 9–11	The value of wildlife recreation	High	Large losses from 2001 to 2010
Oh (2005)	Tourism	Tourism receipts; GDP	High	Tourism-led economic growth is not held
Pratt (2014)	Currency devaluation	Tourism consumption	Middle	The overall effect will be negative
Sheng and Tsui (2010)	Foreign investment	Capital flows	Middle	It reduces the true benefits for host communities
Pambudi et al. (2009)	Bali bombing	Tourism exports	Middle	GDP in Bali is worst affected
Akama and Kieti (2007)	Mombasa resort	Length of stay; expenditure per person	Low	Tourism industry has not played an effective role

Source: The authors.

Table 6
Determinants of tourism efficiency and productivity.

Author	Field	Technique	Determinant
Chen and Soo (2007)	Hotel industry	SUR	*Inputs*: labor, capital, and materials *Outputs*: accommodation services, food and beverage services, and other services
Pérez-Rodríguez and Acosta-González (2007)	Lodging industry	SCF	*Price variables*: ratio of the total annual labor costs to the number of full time annual equivalent, ratio of the annual depreciation of the fixed assets to constant-price fixed assets, ratio of financial expenses to debt *Cost variables*: total operating annual expenditure, annual operating revenue
Barros et al. (2009)	Hotel industry	LPI	*Inputs*: number of employees, physical capital *Outputs*: sales, added value
Blake et al. (2006)	Tourism industry	CGE	Physical capital, skills and human capital, technology and innovation, competitive environment
Peypoch (2007)	Tourism industry	LPI	*Inputs*: number of tourist bed-nights in hotel, number of tourist bed-nights in campsites *Outputs*: tourism receipts
Ma et al. (2009)	National parks	MPI-DEA	*Inputs*: area, expenditure, investment, employee *Outputs*: revenues
Sigala et al. (2004)	Tourism settings	DEA	*Inputs*: number of rooms, restaurant seats plus banqueting covers, full-and part-time employees, number of managers and/or heads of departments and IT staff, number of full-time employees per division, material and other expenses per division, payroll expense per division, total energy expenses, management fees, training costs, demand variability, percentage of annual room nights from repeat guests, percentages of annual reservations *Outputs*: number of room nights, occupancy, length of stay, average room rate, number of restaurant and banqueting covers served, total annual revenue
Goncalves (2013)	Ski resorts	LPI	*Inputs*: total number of slopes, number of days of opening in the ski area, number of seasonal employment, number of permanent employment, ski-lift power *Outputs*: turnover of the ski-lifts operator, number of days/skier, number of traffic to the ski-lifts

Notes: SUR is seemingly unrelated regression; SCF is a stochastic cost frontier function; LPI is Luenberger productivity indicator; CGE is computable general equilibrium modeling, DEA is data envelopment analysis, and MPI is the Malmquist productivity index.
Source: The authors.

5. Measuring tourism efficiency and productivity

Tourism efficiency and productivity is another topic of great interest to researchers. As shown in Tables 2 and 5, 2% (18 of 346) of the selected papers were related to this issue. For a tourism destination, higher tourism efficiency and productivity generally indicate higher connectivity among transportation, accommodation, shopping sites, and tourism attractions, which are more likely to attract tourists, enhance tourism competitiveness, and promote the local economy. To identify the key determinants influencing tourism efficiency and productivity, we reviewed the selected papers and reported some popular input and output variables in Table 6. Labor, capital, technology, and environment were the most popular input variables in evaluating tourism efficiency and productivity, while expenditure, revenue, and length of stay were widely adopted as output variables (Barros, Peypoch, & Solonandrasana, 2009; Blake, Sinclair, & Soria, 2006; Chen & Soo, 2007; Goncalves, 2013). After eliminating the possible bottlenecks in the identified inputs and outputs, a country or a region's tourism efficiency and productivity might be improved.

On the other hand, to investigate how this topic has been researched, we reviewed the commonly used techniques. Among the reviewed papers, techniques used to evaluate tourism efficiency and productivity included data envelopment analysis (DEA; Ma et al., 2009), computable general equilibrium modeling (CGE; Blake et al., 2006), Luenberger productivity indicator (LPI; Goncalves, 2013), total factor productivity (TFP; Roget & González, 2006), and stochastic frontier analysis (SFA; Chen, 2007). In addition, a conceptual analysis was adopted to construct an indicator framework to evaluate tourism efficiency and productivity (Reddy, 2008; Such & Zamora, 2006) and to describe the structural characteristics and competitive advantages of tourism sectors (Succurro, 2008).

From a policy perspective, tourism efficiency and productivity is important to a government. Identifying key determinants and evaluating tourism efficiency and productivity can offer guidance for policy making. For instance, by working with tourism enterprises, governments can hold pre-employment training, providing trainees with tourism-related expertise and knowledge. Employing people with qualified skills and knowledge in tourism enterprises is helpful not only for improving a company's service levels and operational performance, but also for accumulating human capital and assisting the increase in tourism efficiency and productivity. Regarding the physical capital, it has traditionally been regarded as a crucial driver of tourism efficiency and productivity (Blake et al., 2006). Through physical capital investments, tourism-related infrastructure is likely to be upgraded, improving the accessibility of tourist destinations. During this process, the government can play a significant role by directly investing in infrastructure or by attracting foreign direct investment (FDI). In addition, considering the fact that growth in tourism efficiency and productivity might come from technology advancements and competitive environment, governments could offer subsidies to the tourism industry and establish tourism-related environmental standards to encourage the adoption of advanced technology and to foster a regular tourism market.

6. Appraising the external economic factors influencing tourism

The tendencies of economic globalization encourage countries to connect to the global economy due to the rise of networked production through global and regional value chains. Accordingly, there is an ever-increasing interdependence among countries, and the overall global economy is better connected than ever before. In this context, a country's tourism industry will also be influenced by external economic factors which have been extensively examined in the previous studies. As noted in Table 2, 13.3% (46 of 346) of papers dealt with external economic factors such as FDI, exchange rate, and economic and financial crises.

For example, by attracting FDI in tourism-related activities like transportation, hotels and restaurants, travel agents, and tour operators, the accessibility, attractiveness, and convenience of a tourism destination will be improved. This is beneficial to strengthen its tourism competitiveness. Exchange rate between the origin and destination currencies usually affects a tourist's tourism cost in the destination country or region, and then it will influence the tourism demand for the destination. With respect to economic and financial crises, it is commonly believed that it could decrease tourism demand, tourist arrivals, tourist departures, tourism receipts, and tourism expenditure (Li,

Blake, & Cooper, 2010). Among the empirical studies, a long-term, bi-directional, causal relationship between FDI and international tourism was addressed by Fereidouni and Al-mulali (2014) while a one-directional causality relationship running from FDI to tourism was found by Tang, Selvanathan, and Selvanathan (2007). Endo (2006) argued that the role of FDI in tourism was much more critical in developing countries, and that careful analyses should be conducted before attracting FDI in tourism. A number of papers focused on the relationship between tourism and the exchange rate (De Vita, 2014; Tang, 2013). Economic and financial crises is another substantial factor that has drawn a great deal of attention in the existing literature (Li et al., 2010; Okumus & Karamustafa, 2005; Stylidis & Terzidou, 2014). Sugiyarto, Blake, and Sinclair (2003) and Khan, Toh, and Chua (2005) emphasized trade and globalization, while Latzko (2005) investigated tourism industry's sensitivity to fluctuations in a foreign country's economy.

For a specific country or region, due to the globalization tendency, the external economic factors mentioned above are unavoidable. Therefore, policy-makers need to be aware of the advantages and disadvantages of these factors when looking to eliminate or reduce adverse economic impacts. For example, regional imbalances in economic development are likely to worsen after the introduction of FDI in tourism. Governments must establish income distribution and redistribution policies to mitigate regional inequality. In general, frequent and fierce exchange rate volatility makes tourism less attractive because it affects a tourist's decision to travel to the destination country. A decrease in inbound tourism demand will reduce domestic job opportunities, decrease tourism revenues, and lead to adverse impacts on the economy. Hence, it is still a challenge for the government to maintain a relatively stable exchange rate, which is beneficial to enhancing the competitiveness of its tourism industry.

7. Assessing data analysis techniques applied in tourism

After reviewing tourism as an important impetus to promoting economic growth, the question of data analysis techniques must be addressed. Particular attention was given to various data analysis techniques due to its popularity, which is commonly involved in EMS method (Fig. 3). More specifically, computable general equilibrium (CGE) models, input-output (I-O) analyses, and time-series techniques were frequently used to examine the interactions between tourism and economic growth, as well as the inter-industry linkage. For example, a CGE model was used by Alavalapati and Adamowicz (2000) to investigate the interactions among tourism, other economic sectors, and the environment, Dwyer, Forsyth, Madden, and Spurr (2000), Pratt (2011), and Li, Blake, and Cooper (2011) to analyze tourism's economic contribution. An I-O analysis was applied by West and Gamage (2001), Oosterhaven and Fan (2006), and Hanly (2012) to measure the economic contributions of tourism-related activities. Time-series techniques, particularly for cointegration and the Granger causality test, were commonly employed to reveal long-run and causality relationships between tourism and economic factors (Aslan, 2014; Cortes-Jimenez & Pulina, 2010; Tang & Abosedra, 2014).

In addition to the CGE models, the Autoregressive Distributed Lag Model (ADLM), and the Error Correction Model (ECM) were also popular in modeling the impacts of economic and financial crises. For instance, the ADLM was adopted by Song and Lin (2009) to forecast inbound tourism; by Song, Lin, Zhang, and Gao (2010) to forecast tourist arrivals; and by Song, Lin, Witt, and Zhang (2011) to model the demand for hotel rooms. ECM was utilized by Smeral (2010) to predict the demand for international travel; and by Liu (2014) to explore the cost of extreme weather disasters.

To reflect tourism's contributions to issues of poverty reduction, social welfare and capital, and employment, logit model (Zhao, Ritchie, & Echtner, 2011), Gini coefficient (Lee, 2009; Urtasun & Gutiérrez, 2006), CGE models (Blake et al., 2008), and I-O models (Blake, 2008) were frequently used.

Turning to tourism efficiency and productivity, DEA was used by Sigala, Airey, Jones, and Lockwood (2004) to assess the productivity of the information and communication technologies in the tourism industry; by Wang, Hung, and Shang (2006) to measure international tourist hotels' cost efficiency; by Ma et al. (2009) to evaluate the total factor productivity growth of national parks; and by Hadad, Hadad, Malul, and Rosenboim (2012) to analyze tourism's economic efficiency. The Luenberger productivity indicator (Goncalves, 2013) and SFA (Chen, 2007) were also frequently used to measure tourism efficiency and productivity.

Finally, for the analysis of interactions between tourism and external economic factors, vector autoregressive (VAR) and structural VAR (SVAR) models were quite efficient. Tang et al. (2007) explored the causal linkage between FDI and tourism under a VAR framework, while Cheng, Kim, and Thompson (2013) examined the effects of the exchange rate on tourism trade under a SVAR framework. In addition, Sanford and Dong (2000) used a Tobit approach to show the relationship between tourism and new FDI, Lee and Jang (2011) used the nonlinear technique to test the existence of nonlinearity, asymmetry and lagged effects in sample firms' cash flow exposure, and Morley, Rosselló, and Santana-Gallego (2014) used a gravity model to model tourism demand.

8. Conclusion

Although the empirical literature on the relationship between tourism and economic growth is still inconclusive, tourism, especially international tourism, has traditionally been regarded as an important impetus to promoting national and regional economies. This is because tourism plays a substantial role in accumulating foreign exchange earnings, providing employment opportunities, and improving infrastructure. After a systematic review, tourism's economic impetus was researched by estimating its economic impacts, evaluating its contribution to poverty reduction, measuring tourism efficiency and productivity, and appraising external economic factors influencing tourism. A total of 346 papers published during 2000–2014 were selected.

The main findings are as follows: First, regarding the overall economic impacts of various forms of tourism, the existing research yielded mixed and inconsistent conclusions. In most circumstances, tourism potentially promotes economic growth. Nevertheless, taking into account negative shocks, inefficient tourism policies, environmental factors, potential side effects, leakage effects, diminishing marginal income effects, and more, negative impacts on economic growth might be observed in tourism practice. Second, with respect to tourism's contribution to poverty reduction, the current paper reviewed three potential channels through which tourism influenced the poverty rate: prices, earnings, and government revenues. Third, key determinants of tourism efficiency and productivity, including labor, capital, technology, and environment, were identified as input variables, while expenditure, revenue, and length of stay were adopted as output variables. A variety of evaluation methods including DEA, CGE, LPI, TFP, SFA, and conceptual analysis were also reviewed. Fourth, the impacts of external economic factors on a country's tourism were examined from the perspective of FDI, exchange rates, economic and financial crises, trade, and globalization. Finally, considering the ever-increasing popularity of quantitative analysis in tourism research, the various data analysis techniques were reviewed. CGE, I-O, and time-series techniques were frequently used to examine the interaction between tourism and economic growth, while ADLM and ECM were adopted to model the influence of external economic factors. In addition, other models, like the logit model, and the Gini coefficient, were also popular tools to reflect tourism's contribution to poverty reduction.

Government can play a substantial role in enhancing tourism's economic impetus. By balancing tourism's economic impacts and social, environmental, and political influences, governments can efficiently

guide tourism investment. With the assistance of proper redistribution policies and work training projects, the goal of poverty reduction might also be achieved. Additionally, there is potential for the government to improve tourism efficiency, enhance tourism competitiveness, and eliminate the adverse impacts of external economic factors by providing pre-employment training, attracting FDI, offering tourism subsidies, encouraging the adoption of advanced technology, and fostering a standard tourism market.

However, there are still some limitations to this paper. We only considered tourism-related journals included in the SSCI rather than looking at all tourism-related journals. Also, compared to other literature reviews, the target period of 2000 to 2014 is short. Despite these limitations, the current paper is still meaningful in providing a systematic and comprehensive investigation of tourism as an important impetus in promoting economic growth. This paper is likely to pave the way for future research on quantitatively analyzing tourism-related issues. In addition, policy considerations were also proposed to assist governments in promoting tourism development, reducing poverty rates, improving tourism efficiency, and strengthening their country's tourism competitiveness.

Reference

Agarwal, S. (2012). Resort economy and direct economic linkages. *Annals of Tourism Research, 39*(3), 1470–1494.
Akama, J. S., & Kieti, D. (2007). Tourism and socio-economic development in developing countries: A case study of Mombasa Resort in Kenya. *Journal of Sustainable Tourism, 15*(6), 735–748.
Alavalapati, J. R. R., & Adamowicz, W. L. (2000). Tourism impact modeling for resource extraction regions. *Annals of Tourism Research, 27*(1), 188–202.
Aslan, A. (2014). Tourism development and economic growth in the Mediterranean countries: Evidence from panel Granger causality tests. *Current Issues in Tourism, 17*(4), 363–372.
Barros, C. P., Peypoch, N., & Solonandrasana, B. (2009). Efficiency and productivity growth in hotel industry. *International Journal of Tourism Research, 11*(4), 389–402.
Benar, H., & Jenkins, G. P. (2008). The economics of regulation and taxation policies for casino tourism. *Tourism Economics, 14*(3), 483–510.
Blake, A. (2008). Tourism and income distribution in East Africa. *International Journal of Tourism Research, 10*(6), 511–524.
Blake, A., Arbache, J. S., Sinclair, M. T., & Teles, V. (2008). Tourism and poverty relief. *Annals of Tourism Research, 35*(1), 107–126.
Blake, A., Sinclair, M. T., & Soria, J. A. C. (2006). Tourism productivity: Evidence from the United Kingdom. *Annals of Tourism Research, 33*(4), 1099–1120.
Blake, A., Sinclair, M. T., & Sugiyarto, G. (2003). Quantifying the impact of foot and mouth disease on tourism and the UK economy. *Tourism Economics, 9*(4), 449–465.
Boukas, N., & Ziakas, V. (2013). Impacts of the global economic crisis on Cyprus tourism and policy responses. *International Journal of Tourism Research, 15*(4), 329–345.
Brida, J. G., Pereyra, J. S., & Devesa, M. J. S. (2008). Evaluating the contribution of tourism to economic growth. *Anatolia, 19*(2), 351–357.
Butcher, J. (2011). Can ecotourism contribute to tackling poverty? The importance of 'symbiosis'. *Current Issues in Tourism, 14*(3), 295–307.
Chen, C. F. (2007). Applying the stochastic frontier approach to measure hotel managerial efficiency in Taiwan. *Tourism Management, 28*(3), 696–702.
Chen, C. F., & Soo, K. T. (2007). Cost structure and productivity growth of the Taiwanese international tourist hotels. *Tourism Management, 28*(6), 1400–1407.
Cheng, K. M., Kim, H., & Thompson, H. (2013). The exchange rate and US tourism trade, 1973–2007. *Tourism Economics, 19*(4), 883–896.
Clarke, G. D., & Hoaas, D. J. (2007). Festival economics: The case of the Red River Revel. *Tourism Economics, 13*(1), 163–175.
Cortes-Jimenez, I., & Pulina, M. (2010). Inbound tourism and long-run economic growth. *Current Issues in Tourism, 13*(1), 61–74.
Daniels, M. J., Norman, W. C., & Henry, M. S. (2004). Estimating income effects of a sport tourism event. *Annals of Tourism Research, 31*(1), 180–199.
De Vita, G. (2014). The long-run impact of exchange rate regimes on international tourism flows. *Tourism Management, 45*, 226–233.
Deller, S. (2010). Rural poverty, tourism and spatial heterogeneity. *Annals of Tourism Research, 37*(1), 180–205.
Dredge, D. (2004). Development, economy and culture: Cultural heritage tourism planning, Liangzhu, China. *Asia Pacific Journal of Tourism Research, 9*(4), 405–422.
Dwyer, L., Forsyth, P., Madden, J., & Spurr, R. (2000). Economic impacts of inbound tourism under different assumptions regarding the macroeconomy. *Current Issues in Tourism, 3*(4), 325–363.
Dwyer, L., Forsyth, P., & Spurr, R. (2007). Contrasting the uses of TSAs and CGE models: Measuring tourism yield and productivity. *Tourism Economics, 13*(4), 537–552.
Dwyer, L., Forsyth, P., Spurr, R., & Hoque, S. (2013). Economic impacts of a carbon tax on the Australian tourism industry. *Journal of Travel Research, 52*(2), 143–155.
Dwyer, L., Forsyth, P., Spurr, R., & VanHo, T. (2006). Economic effects of the world tourism crisis on Australia. *Tourism Economics, 12*(2), 171–186.
Endo, K. (2006). Foreign direct investment in tourism-flows and volumes. *Tourism Management, 27*(4), 600–614.
Fereidouni, H. G., & Al-mulali, U. (2014). The interaction between tourism and FDI in real estate in OECD countries. *Current Issues in Tourism, 17*(2), 105–113.
Fleischer, A., & Tchetchik, A. (2005). Does rural tourism benefit from agriculture? *Tourism Management, 26*(4), 493–501.
Gal, Y., Gal, A., & Hadas, E. (2010). Coupling tourism development and agricultural processes in a dynamic environment. *Current Issues in Tourism, 13*(3), 279–295.
Gartner, C., & Cukier, J. (2012). Is tourism employment a sufficient mechanism for poverty reduction? A case study from Nkhata Bay, Malawi. *Current Issues in Tourism, 15*(6), 545–562.
Goncalves, O. (2013). Efficiency and productivity of French ski resorts. *Tourism Management, 36*, 650–657.
Hadad, S., Hadad, Y., Malul, M., & Rosenboim, M. (2012). The economic efficiency of the tourism industry: A global comparison. *Tourism Economics, 18*(5), 931–940.
Hanly, P. A. (2012). Measuring the economic contribution of the international association conference market: An Irish case study. *Tourism Management, 33*(6), 1574–1582.
Hong, W. C. (2009). Global competitiveness measurement for the tourism sector. *Current Issues in Tourism, 12*(2), 105–132.
Hummel, J., Gujadhur, T., & Ritsma, N. (2013). Evolution of tourism approaches for poverty reduction impact in SNV Asia: Cases from Lao PDR, Bhutan and Vietnam. *Asia Pacific Journal of Tourism Research, 18*(4), 369–384.
IRTS, Department of Economic and Social Affairs, Statistics Division (2008). *International Recommendations for Tourism Statistics (IRTS Series No. 83/Rev.1)*. New York: United Nations Publication.
Iverson, T. (2010). The economic impact of the Mariana Trench Marine National Monument. *Asia Pacific Journal of Tourism Research, 15*(3), 319–338.
Khan, H., Seng, C. F., & Cheong, W. K. (1990). Tourism multiplier effects on Singapore. *Annals of Tourism Research, 17*(3), 408–418.
Khan, H., Toh, R. S., & Chua, L. (2005). Tourism and trade: Cointegration and Granger causality tests. *Journal of Travel Research, 44*(2), 171–176.
Lacher, R. G., & Oh, C. O. (2012). Is tourism a low-income industry? Evidence from three coastal regions. *Journal of Travel Research, 51*(4), 464–472.
Lapeyre, R. (2011). The Grootberg lodge partnership in Namibia: Towards poverty alleviation and empowerment for long-term sustainability? *Current Issues in Tourism, 14*(3), 221–234.
Latzko, D. A. (2005). Economic conditions and Japanese tourism to Hawaii. *Asia Pacific Journal of Tourism Research, 10*(2), 151–156.
Lee, C. K., Lee, M. J., & Yoon, S. H. (2013). Estimating the economic impact of convention and exhibition business, using a regional Input-Output model: A case study of the Daejeon Convention Center in South Korea. *Asia Pacific Journal of Tourism Research, 18*(4), 330–353.
Lee, S. (2009). Income inequality in tourism services-dependent counties. *Current Issues in Tourism, 12*(1), 33–45.
Lee, S. K., & Jang, S. C. S. (2011). Foreign exchange exposure of US tourism-related firms. *Tourism Management, 32*(4), 934–948.
Li, S. N., Blake, A., & Cooper, C. (2010). China's tourism in a global financial crisis: A computable general equilibrium approach. *Current Issues in Tourism, 13*(5), 435–453.
Li, S. N., Blake, A., & Cooper, C. (2011). Modelling the economic impact of international tourism on the Chinese economy: A CGE analysis of the Beijing 2008 Olympics. *Tourism Economics, 17*(2), 279–303.
Li, S. N., & Jago, L. (2013). Evaluating economic impacts of major sports events - A meta analysis of the key trends. *Current Issues in Tourism, 16*(6), 591–611.
Lindberg, K., Andersson, T. D., & Dellaert, B. G. C. (2001). Tourism development: Assessing social gains and losses. *Annals of Tourism Research, 28*(4), 1010–1030.
Liu, T. M. (2014). Analysis of the economic impact of meteorological disasters on tourism: The case of typhoon Morakot's impact on the Maolin National Scenic Area in Taiwan. *Tourism Economics, 20*(1), 143–156.
Ma, X. L., Bao, J. G., & Ryan, C. (2009). Evaluating the total factor productivity growth of national parks in China with data enveloped analysis. *Asia Pacific Journal of Tourism Research, 14*(4), 385–402.
Mayer, M. (2014). Can nature-based tourism benefits compensate for the costs of national parks? A study of the Bavarian Forest National Park, Germany. *Journal of Sustainable Tourism, 22*(4), 561–583.
Meng, X. (2014). Is a tourism subsidy the best response to the global financial crisis? A short-run CGE simulation for Singapore. *Asia Pacific Journal of Tourism Research, 19*(3), 325–341.
Morley, C., Rosselló, J., & Santana-Gallego, M. (2014). Gravity models for tourism demand: Theory and use. *Annals of Tourism Research, 48*, 1–10.
Oh, C. O. (2005). The contribution of tourism development to economic growth in the Korean economy. *Tourism Management, 26*(1), 39–44.
Okumus, F., & Karamustafa, K. (2005). Impact of an economic crisis: Evidence from Turkey. *Annals of Tourism Research, 32*(4), 942–961.
Oosterhaven, J., & Fan, T. (2006). Impact of international tourism on the Chinese economy. *International Journal of Tourism Research, 8*(5), 347–354.
Pambudi, D., McCaughey, N., & Smyth, R. (2009). Computable general equilibrium estimates of the impact of the Bali bombing on the Indonesian economy. *Tourism Management, 30*(2), 232–239.
Park, D. B., Lee, H. J., & Yoon, Y. S. (2014). Understanding the benefit sought by rural tourists and accommodation preferences: A South Korea case. *International Journal of Tourism Research, 16*(3), 291–302.
Pérez-Rodríguez, J. V., & Acosta-González, E. (2007). Cost efficiency of the lodging industry in the tourist destination of Gran Canaria (Spain). *Tourism Management, 28*(4), 993–1005.
Peypoch, N. (2007). On measuring tourism productivity. *Asia Pacific Journal of Tourism Research, 12*(3), 237–244.
Pham, T. D., Simmons, D. G., & Spurr, R. (2010). Climate change-induced economic

impacts on tourism destinations: The case of Australia. *Journal of Sustainable Tourism, 18*(3), 449–473.
Pratt, S. (2011). Economic linkages and impacts across the TALC. *Annals of Tourism Research, 38*(2), 630–650.
Pratt, S. (2014). A general equilibrium analysis of the economic impact of a devaluation on tourism: The case of Fiji. *Tourism Economics, 20*(2), 389–405.
Reddy, M. V. (2008). Sustainable tourism rapid indicators for less-developed islands: An economic perspective. *International Journal of Tourism Research, 10*(6), 557–576.
Riddington, G., McArthur, D., Harrison, T., & Gibson, H. (2010). Assessing the economic impact of wind farms on tourism in Scotland: GIS, surveys and policy outcomes. *International Journal of Tourism Research, 12*(3), 237–252.
Roget, F. M., & González, X. A. (2006). Occupancy level and productivity in rural tourism establishments: The case of Galicia, Spain. *Tourism Economics, 12*(2), 279–289.
Saayman, A., Saayman, M., & Gyekye, A. (2014). Perspectives on the regional economic value of a pilgrimage. *International Journal of Tourism Research, 16*(4), 407–414.
Saayman, M., & Rossouw, R. (2011). The significance of festivals to regional economies: measuring the economic value of Grahamstown National Arts Festival in South Africa. *Tourism Economics, 17*(3), 603–624.
Saayman, M., & Saayman, A. (2006). Estimating the economic contribution of visitor spending in the Kruger National Park to the regional economy. *Journal of Sustainable Tourism, 14*(1), 67–81.
Sanford, D. M., & Dong, H. (2000). Investment in familiar territory: Tourism and new foreign direct investment. *Tourism Economics, 6*(3), 205–219.
Scheyvens, R. (2007). Exploring the tourism-poverty nexus. *Current Issues in Tourism, 10*(2–3), 231–254.
Scheyvens, R., & Russell, M. (2012). Tourism, land tenure and poverty alleviation in Fiji. *Tourism Geographies, 14*(1), 1–25.
Sharpley, R. (2002). The challenges of economic diversification through tourism: The case of Abu Dhabi. *International Journal of Tourism Research, 4*(3), 221–235.
Sheng, L., & Tsui, Y. (2010). Foreign investment in tourism: The case of Macao as a small tourism economy. *Tourism Geographies, 12*(2), 173–191.
Sigala, M., Airey, D., Jones, P., & Lockwood, A. (2004). ICT paradox lost? A stepwise DEA methodology to evaluate technology investment in tourism settings. *Journal of Travel Research, 43*(2), 180–192.
Smeral, E. (2010). Impacts of the world recession and economic crisis on tourism: Forecasts and potential risks. *Journal of Travel Research, 49*(1), 31–38.
Smorfitt, D. B., Harrison, S. R., & Herbohn, J. L. (2005). Potential economic implications for regional tourism of a foot and mouth disease outbreak in North Queensland. *Tourism Economics, 11*(3), 411–430.
Song, H., & Lin, S. (2009). Impacts of the financial and economic crisis on tourism in Asia. *Journal of Travel Research*(Dec 3), http://dx.doi.org/10.1177/0047287509353190.
Song, H., Lin, S., Witt, S. F., & Zhang, X. (2011). Impact of financial/economic crisis on demand for hotel rooms in Hong Kong. *Tourism Management, 32*(1), 172–186.
Song, H., Lin, S., Zhang, X., & Gao, Z. (2010). Global financial/economic crisis and tourist arrival forecasts for Hong Kong. *Asia Pacific Journal of Tourism Research, 15*(2), 223–242.
Spenceley, A., & Goodwin, H. (2007). Nature-based tourism and poverty alleviation: Impacts of private sector and parastatal enterprises in and around Kruger National Park, South Africa. *Current Issues in Tourism, 10*(2–3), 255–277.
Stylidis, D., & Terzidou, M. (2014). Tourism and the economic crisis in Kavala, Greece. *Annals of Tourism Research, 44*, 210–226.
Stynes, D. J., & Arnold, V. (Eds.). (1997). *Economic impacts of tourism: A handbook for tourism professionals. Illinois Bureau of Tourism*. Urbana-Champaign: Illinois Department of Commerce and Community Affairs, Tourism Research Laboratory at the University of Illinois.
Succurro, M. (2008). Concentration, productivity and profitability in the Italian commercial accommodation sector. *International Journal of Tourism Research, 10*(4), 379–392.
Such, M. J., & Zamora, M.d. M. (2006). Spanish productivity: A regional approach. *Annals of Tourism Research, 33*(3), 666–683.
Sugiyarto, G., Blake, A., & Sinclair, M. T. (2003). Tourism and globalization: Economic impact in Indonesia. *Annals of Tourism Research, 30*(3), 683–701.
Tang, C. F. (2013). Temporal Granger causality and the dynamics relationship between real tourism receipts, real income and real exchange rates in Malaysia. *International Journal of Tourism Research, 15*(3), 272–284.
Tang, C. F., & Abosedra, S. (2014). Small sample evidence on the tourism-led growth hypothesis in Lebanon. *Current Issues in Tourism, 17*(3), 234–246.
Tang, S., Selvanathan, E. A., & Selvanathan, S. (2007). The relationship between foreign direct investment and tourism: Empirical evidence from China. *Tourism Economics, 13*(1), 25–39.
Theerapappisit, P. (2009). Pro-poor ethnic tourism in the Mekong: A study of three approaches in Northern Thailand. *Asia Pacific Journal of Tourism Research, 14*(2), 201–221.
Thomas, F. (2014). Addressing the measurement of tourism in terms of poverty reduction: Tourism value chain analysis in Lao PDR and Mali. *International Journal of Tourism Research, 16*(4), 368–376.
UNWTO, World Tourism Organization (2014). UNWTO tourism highlights. http://mkt.unwto.org.
Urtasun, A., & Gutiérrez, I. (2006). Tourism agglomeration and its impact on social welfare: An empirical approach to the Spanish case. *Tourism Management, 27*(5), 901–912.
Wan, Y. K. P. (2012). The social, economic and environmental impacts of casino gaming in Macao: The community leader perspective. *Journal of Sustainable Tourism, 20*(5), 737–755.
Wang, F. C., Hung, W. T., & Shang, J. K. (2006). Measuring the cost efficiency of international tourist hotels in Taiwan. *Tourism Economics, 12*(1), 65–85.
West, G., & Gamage, A. (2001). Macro effects of tourism in Victoria, Australia: A non-linear input-output approach. *Journal of Travel Research, 40*(1), 101–109.
Zhang, J., & Lee, D. J. (2007). The effect of wildlife recreational activity on Florida's economy. *Tourism Economics, 13*(1), 87–110.
Zhao, W. (2009). The nature and roles of small tourism business in poverty alleviation: Evidence from Guangxi, China. *Asia Pacific Journal of Tourism Research, 14*(2), 169–182.
Zhao, W., & Ritchie, J. R. B. (2007). Tourism and poverty alleviation: An integrative research framework. *Current Issues in Tourism, 10*(2–3), 119–143.
Zhao, W., Ritchie, J. R. B., & Echtner, C. M. (2011). Social capital and tourism entrepreneurship. *Annals of Tourism Research, 38*(4), 1570–1593.

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