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# **The Nexus between Tourism and Economic Growth: A Systematic Literature Review and Future Research Directions**

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## **Abstract**

The study aims to review tourism and economic growth in developing countries. The paper systematically reviews the literature on tourism and economic growth from 2004 to 2019. The Scopus database has been selected for the literature search to make the process transparent. The literature search was based on the keywords of tourism and economic growth, and the PRISMA 2009 helped the selection and exclusion process. The final 40 articles in the excel sheet with at least one citation for the review have been used in the literature classification to find the gap and directions of tourism and economic growth. The results revealed that literature on multiple country studies face difficulties in finding a specific relationship than single-country studies, and most studies have only focused on the relationships but missed the growth strategies. The present systematic review recommends the future research should focus on multiple country studies and growth strategies.

**Keywords:** Economic growth, PRISMA, Scopus database, Systematic literature review, Tourism

**JEL Classifications:** Z00

## **1. Introduction**

Tourism has been steadily increasing, taking a portion of the global economy. Many countries have paid attention to the tourism industry to achieve economic growth over the past decades. It is difficult to precisely define what the tourism industry is, because unlike other industries, tourism has no specific, precise products, but incorporates various sectors such as lodging, transport, attractions, travel, and transport. Globally, travel and tourism directly contributed approximately 2.9 trillion U.S. dollars to the GDP in 2019 (WTTC). The WTTC produces policy reviews, studies, and research reports focusing on issues, and published a globally acceptable survey on the economic impact of Travel & Tourism, which covers 185 countries and 25 regions. Recently, a considerable number of researchers have focused on tourism and economic growth (Gamage et al., 2020; Kumar et al., 2019; Risso, 2018; Alodadi & Benhin, 2015).

The tourism industry plays a prominent role in many countries' economic growth (Sudharshan et al., 2018; Lin et al., 2017; Gamage et al., 2018). In most developing countries, the tourism sector contributes significantly to its GDP or economy. Thus, proper management of the tourism sector may improve government revenue, foreign exchange earnings, and local employment, which positively contributes to the economy. The tourism industry's impact on economic growth has been well documented in previous literature findings. Many developing countries faced economic challenges with current account deficits, increasing the burden of foreign debt, as most are dependent on foreign exchange earnings. However, if the tourism industry is developed, whether it contributes to economic growth is a dependent factor for a country. Most of the available findings suggest that a large portion of government revenue consists of tourism sector incomes. Many scholars have found a relationship between tourism and economic growth (Gamage, et al., 2017). Durbarry (2004) revealed a counteraction and causality between tourism and economic growth in Mauritius, and tourism has contributed to economic growth. Most studies in tourism and economic growth address the linkages between tourism and economic growth and a considerable number of past findings are available in this area. Thus, this systematic literature review paper may be significant in identifying previous literature, existing gaps, and future directions related to the subject.

Most past scholars have focused on the impact of tourism on economic growth. They have sufficient evidence to prove the positive effects of tourism on the economic growth of different

countries. Many such previous studies have centered only on the potential impact of tourism on economic growth rather than on other areas. Thus, the study reviews the tourism industry for identifying the lacking areas and future directions to contribute to economic growth. The review targeted tourism and economic growth from the year 2004 to 2019, pertaining to the areas and research articles made by scholars. Tourism and the economy are highly dependable factors in developing economies, and the current study aims to analyze the research work published on tourism and economic growth during the last 15 years. The review will outline the literature and how researchers have contributed to tourism and economic growth. Also, it will consider broad research areas and recommending future agendas. As the first step of the study, a quality screening process will be conducted using the PRISMA statement. Next, it includes the data inclusion and exclusion process, followed by descriptive analysis and literature classification. Finally, after the review process, a discussion will offer future agendas via recommendations and conclusions.

## **2. Methodology**

Most recently, researchers have given the highest priority for tourism while discussing the economic growth of developing economies. Thus, this study addresses the overview of existing literature towards the future direction of tourism and economic growth and reviews the past literature on Tourism and Economic growth in the Scopus database. Search for the critical words of *Tourism* and *Economic Growth* retrieved a total number of 4404 articles in the Scopus database. However, limiting the records according to the published year (from 2004 to 2019), developing countries, and the Scopus database, reduced the article number to 46. The process has filtered to achieve a quality assessment of the review by selecting the language English, and the subject area of Management. The PRISMA diagram 2009 (Figure 1) shows the selection process. The data is imported to excel sheets for further assessment. The excel sheets have excluded six articles with zero citation, and, then, 40 items were chosen for the review. The excel sheets are extended by descriptive analysis and literature classification to map the literature. The descriptive analysis has identified articles' distributions in terms of a year, the highest citations, published journals, publisher, and country, for better and purified analysis of articles. The final 40 articles for the review were selected for literature classification, to find the gap and directions of tourism and economic growth.



## PRISMA 2009 Flow Diagram

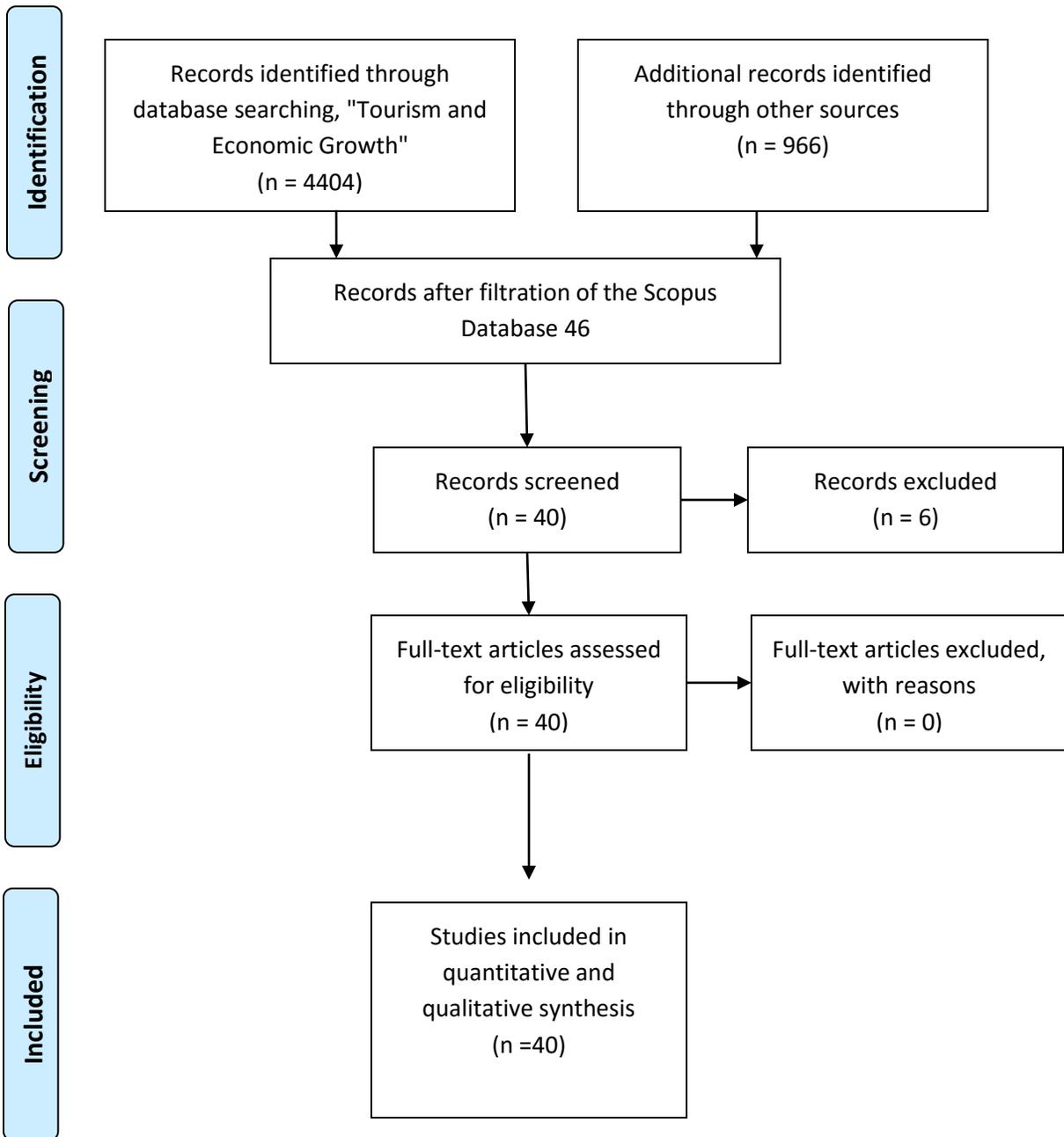


Figure 1: PRISMA 2009 diagram of selection and screening process

### **3. Results and Interpretations**

#### **3.1 Eligibility and Inclusive Criteria**

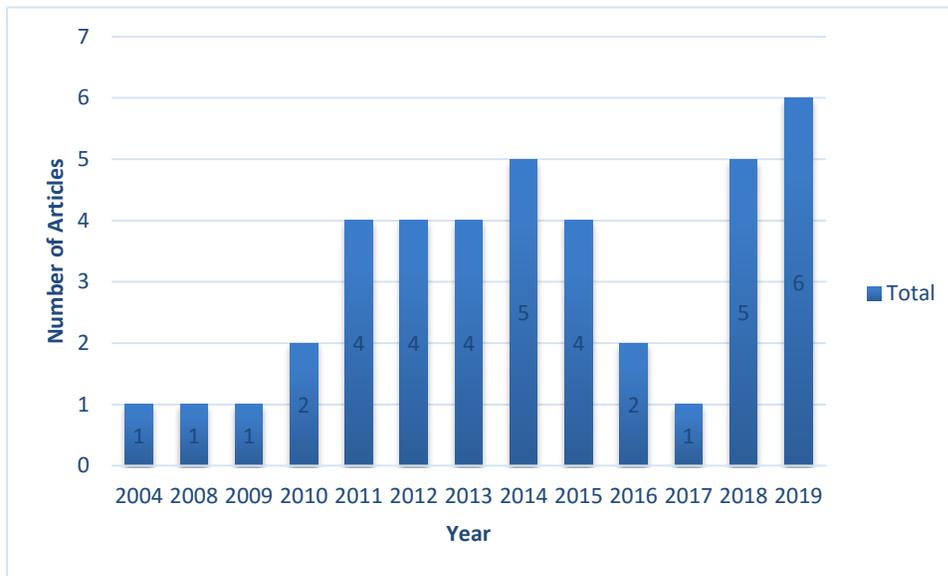
The eligibility and inclusion of articles is the concern of the most significant and absolute way to purify the best possible articles for the study. Review articles written in the English language were selected as it is universally accepted, and the maximum number of literature is published in English. Research articles from the database were selected only from the social science subject. The review considered open-access articles. The concluding 40 studies were selected from the research conducted from 2004 to 2019, and used for the final process to find the future direction and missing areas.

#### **3.2 Descriptive Analysis of the review**

Analyzing the records were based on the criteria of year, citation, published journals, publisher, and the country, to have a better and a purified analysis.

##### **3.2.1 Year-wise Publications**

The review is limited to the period from 2004 to 2019. In 2004, one article was published in the Scopus indexed journals on the topic of tourism and economic growth in developing countries, and this number is the same for the next two years. The number of articles published gradually increased up to the year 2014, and then shows a declining trend from 2014 to 2017. Then the articles published in the Scopus database increased up to 06 in 2019. Figure 2 illustrates the number of articles published each year.



*Figure 2: Distribution of Papers by the Publication Year*

### **3.2.2 Most Cited Papers**

Research publications of tourism and economic growth are appreciated and mentioned by other researchers in their articles. This study used the records with at least one citation by other researchers. The most cited paper of tourism and economic growth is “Tourism and economic growth: The case of Mauritius” by Durbarry R., in 2004. This paper was cited 271 times until 2019. The second most cited article is “Tourism and economic growth: A panel data analysis for Pacific Island countries,” with 103 citations published in 2010. The third most cited article is “Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region” with 96 citations. Table 1 presents the papers that have reached more than 20 citations, and all the other papers are within the papers that have reached less than 20 citations by others.

*Table 1: Distribution of Papers by Citation (Most Cited)*

| <b>Title of the Article</b>  | <b>Citation</b> |
|--|-----------------|
| Tourism and economic growth: The case of Mauritius   | 271             |
| Tourism and economic growth: A panel data analysis for Pacific Island countries                                  | 103             |
| Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region | 96              |
| How strong is the linkage between tourism and economic growth in Europe?   | 68              |
| Tourism and economic growth: The case of Jordan  | 42              |
| Causality between tourism and economic growth: Empirical evidence from India                                     | 41              |
| Tourism and Economic Growth  | 35              |
| Research note: Tourism and economic growth in Latin American countries - Further empirical evidence              | 27              |
| Relationship between tourism and economic growth   | 24              |
| International tourism and economic growth: the case of Morocco and Tunisia                                       | 22              |
| Tourism and economic growth: The case of Singapore   | 22              |
| Tourism and Economic Growth in Sri Lanka: An ARDL Bounds Testing Approach  | 20              |

### **3.2.3 Journal Base Publications**

As per the data in Table 2, various journals have published the papers, and most articles had been published in the journal “Tourism Economics.” It has published six papers out of the 40 papers on tourism and economic growth from 2004 to 2019. The journal “Tourism Analysis” has given space to publish five papers. Particularly, the Journal of travel research has published three papers, and two articles were published in each journal of Anatolia, Economic Bulletin, and the European Journal of Social Sciences. As per Table 2, different journals have selected the highest number of articles.

*Table 2: Distribution of Papers by Published Journals*

| <b>Name of the Journal</b>                                      | <b>Articles Published</b> |
|---|---------------------------|
| Actual Problems of Economics                                    | 1                         |
| Anatolia  | 2                         |
| Annals of Tourism Research                                      | 1                         |
| Asia Pacific Journal of Tourism Research                        | 1                         |
| Economic Modelling  | 1                         |
| Economics Bulletin  | 2                         |
| Economies   | 1                         |
| Ekonomiska Istrazivanja   | 1                         |
| Environment and Urbanization Asia                               | 1                         |
| European Journal of Social Sciences                             | 2                         |
| International Journal of Applied Business and Economic Research | 1                         |
| International Journal of Economics and Management               | 1                         |
| International Journal of Tourism Research                       | 1                         |
| Journal of Computers  | 1                         |
| Journal of Environmental Management and Tourism                 | 1                         |
| Journal of North African Studies                                | 1                         |
| Journal of Policy Research in Tourism, Leisure and Events       | 1                         |
| Journal of Travel Research                                      | 3                         |
| Regional and Sectoral Economic Studies                          | 1                         |
| Regional Science Inquiry  | 1                         |
| Service Industries Journal                                      | 1                         |
| Tourism Analysis  | 5                         |
| Tourism Economics   | 6                         |
| Tourism Management  | 1                         |
| Tourism Management Perspectives                                 | 1                         |
| Worldwide Hospitality and Tourism Themes                        | 1                         |
| <b>Grand Total</b>  | <b>40</b>                 |

### 3.2.4 Publisher-based Records

Table 3 presents the publishers who published the articles. Accordingly, most articles belong to the Cognizant Communication Corporation publisher, who has published five papers out of the 40 articles on tourism and economic growth, while Routledge has published the second-highest number of articles. Only 27 papers have mentioned their publishers while the rest have not specifically mentioned their publisher.

*Table 3: Distribution of Papers by the Publisher*

| <b>Name of the Publisher</b>                         | <b>Articles Published</b> |
|--|---------------------------|
| ASERS Publishing House                               | 1                         |
| Cognizant Communication Corporation                  | 5                         |
| Economics Bulletin                                   | 1                         |
| Elsevier   | 1                         |
| Elsevier B.V.  | 1                         |
| Elsevier Ltd   | 1                         |
| Faculty of Economics and Tourism 'Dr. Mijo Mirkovic' | 1                         |
| Hellenic Association of Regional Scientists          | 1                         |
| IP Publishing Ltd                                    | 2                         |
| John Wiley and Sons Ltd                              | 1                         |
| MDPI Multidisciplinary Digital Publishing Institute  | 1                         |
| National Academy of Management                       | 1                         |
| Routledge  | 4                         |
| SAGE Publications Inc.                               | 1                         |
| SAGE Publications Ltd                                | 3                         |
| Scientific Publishers                                | 1                         |
| Universita Putra Malaysia                            | 1                         |
| <b>Grand Total</b>                                   | <b>27</b>                 |

### 3.2.5 Country-wise Publications

Research on tourism and economic growth is performed in a global context. This review has distinguished articles based on developing countries in a specific period. Figure 3 specifies the published country of the articles. India and the USA have published the maximum number (04 each) of articles. The second-highest numbers of research publications are from Malaysia, and the researchers from Austria, China, Fiji, United Kingdom, and Uruguay have contributed to the research area of tourism and economic growth, by producing two articles each. Figure 3 identifies the other countries which have researched in this field.

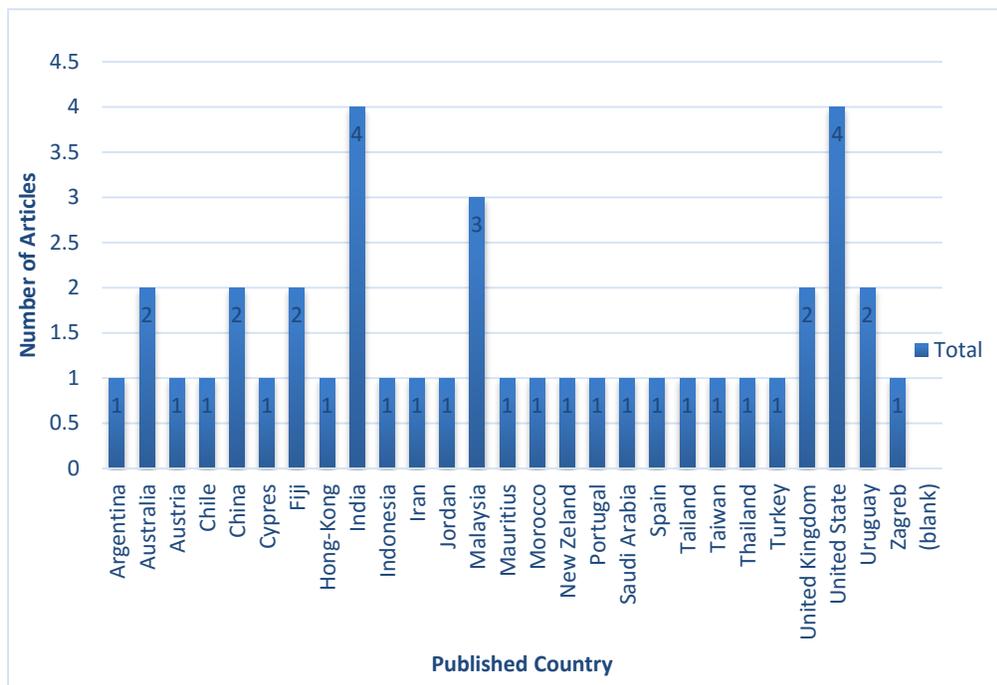


Figure 3: Distribution of Papers by the Published Countries

The base country of scholars is different from single-country studies and multiple country studies. The country setting of research can be illustrated, as shown in Figure 4.

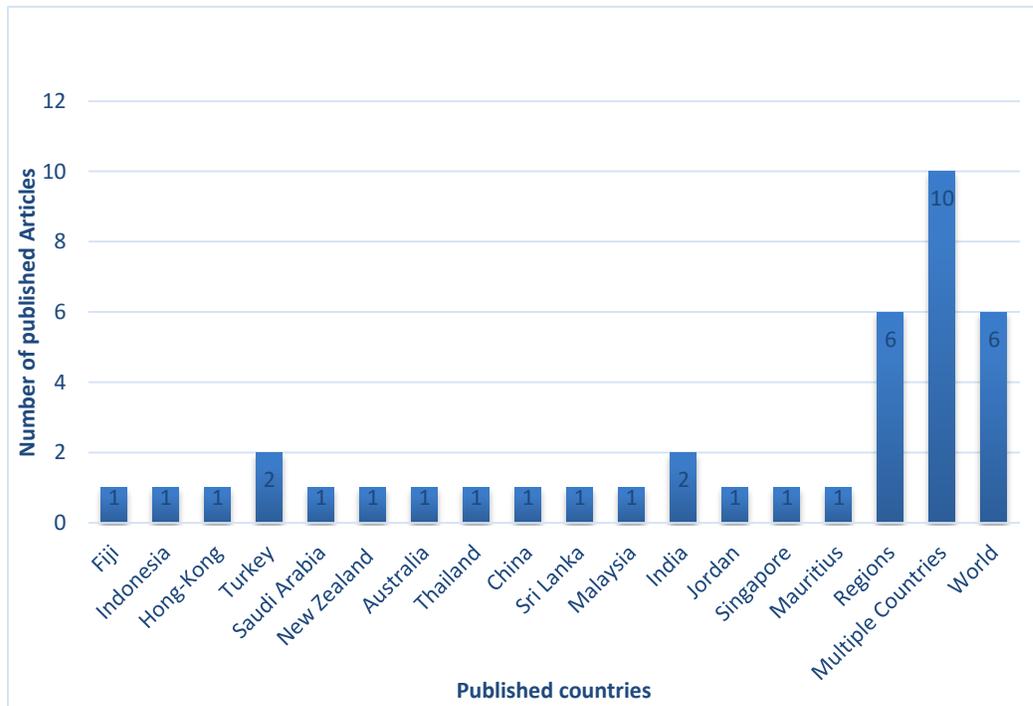


Figure 4: Distribution of Articles based on the Country Setting

#### 4. Literature Classification

The collected literature was classified according to specific findings of different scholars in each research, as specified in descriptive analysis. They were classified after identifying the main findings concerning the relationships, primary purpose (focus), setting (context), data analysis method, sample, and paper type in the abstract. One article was removed from the excel sheet due to duplication of articles with different years of 2018 and 2019. Literature was classified into two primary areas, as shown in Tables 4 and 5.

Table 4 was constructed as the first literature classification, based on the studies focused on single country settings. It discusses investigations on a single country to explore findings from the keywords, i.e., tourism and economic growth.

*Table 4: Summary of Literature Review on Tourism and Economic Growth – Single Country Studies*

| <b>Author(s)</b>  | <b>Country</b>  | <b>Methodology</b>  | <b>Key Results</b>  |
|---|-----------------|---|---|
| Kumar N.,<br>Kumar R.R.,<br>Patel A.,<br>Stauvermann<br>P.J. (2019) | Fiji            | Autoregressive<br>distributed lag<br>bound procedure                        | The short and long-run positive relationship between tourist arrivals and per capita income.<br>The greater impact of tourism on economic growth realized from tourism-related investments.<br>Unidirectional causality from economic growth to tourism.<br>Mutually reinforcing effect between capital investment and tourism. |
| Primayesa E.,<br>Widodo W.,<br>Sugiyanto F.X.<br>(2019)             | Indonesia       | Dynamic panel<br>data estimation<br>approach and<br>Convergence<br>Analysis | Supply characteristics of the tourism sector are considered as an alternative source for stimulating economic growth.   |
| Liu H., Song<br>H. (2018)   | Hong-<br>Kong   | Granger causality<br>test   | Unstable relationship between tourism and economic growth in both magnitude and direction.<br>The relationship is highly dependent on economic and tourism events.  |
| Afonso-<br>Rodríguez J.A.<br>(2017)                                 | Turkey          | Regression<br>Analysis  | The negative impact of terrorism on real GDP, through a reduction of the contribution of tourism demand on economic growth.   |
| Alodadi A.,<br>Benhin J.<br>(2015)                                  | Saudi<br>Arabia | Time-series<br>approach   | Tourism only plays a minor role in improving economic growth.<br>The impact of tourism has a greater influence on economic growth.  |

| Author(s)                                     | Country     | Methodology   | Key Results  |
|---|-------------|---|--|
| Jaforullah M. (2015)                          | New Zealand | Unit root tests<br>Cointegration tests<br>Vector error correction model | A positive relationship between tourism and economic growth.   |
| Panahi H., Mamipour S., Nazari K. (2015)      | Turkey      | Time-varying parameter<br>Kalman filter approaches                      | Tourists have a positive impact on economic growth.<br>Physical and human capital and government consumption expenditure have positive effects on economic growth.<br>A real effective exchange rate has a negative effect on economic growth. |
| Corrie K., Stoeckl N., Chaiechi T. (2013)     | Australia   | Granger causality analysis  | Bi-causal link between tourism and economic growth.<br>The tourism expenditure sector facilitates the growth of other industries.  |
| Nonthapot S. (2013)                           | Thailand    | Rolling window estimation<br>causality analysis                         | International tourist arrivals create the tourism sector and expand to the sector of GDP.<br>Tourist arrivals have a positive impact on economic growth.   |
| Wang L., Zhang H., Li W. (2012)               | China       | Co-integration analysis<br>Granger causality test                       | Bidirectional causality between domestic tourism and economic growth.<br>Short-term disequilibrium relationship between domestic tourism and economic growth.<br>China may enhance its economic growth strategically.                          |
| Srinivasan P., Kumar P.K.S., Ganesh L. (2012) | Sri Lanka   | Autoregressive Distributed Lag (ARDL)                                   | Tourism has a positive impact on economic growth both in the short-run and the long-run.   |
| Kadir N., Karim M.Z.A. (2012)                 | Malaysia    | Time-series approach<br>Granger causality test                          | Significance contribution of the tourism industry to economic growth with tourism infrastructure and facilities.   |

| Author(s)  | Country   | Methodology                             | Key Results   |
|--|-----------|---|---|
| Mishra P.K.,<br>Rout H.B.,<br>Mohapatra S.S.<br>(2011) | India     | Time-series<br>model                    | Long-run unidirectional causality from tourism activities to economic growth of the country.    |
| Kreishan<br>F.M.M. (2010)                              | Jordan    | Time-series<br>techniques               | The positive relationship between tourism development and economic development in the long-run. |
| Jauhari V.,<br>Jauhari V.<br>(2009)                    | India     | Roundtable<br>discussions               | Discusses the potential that tourism holds and its economic growth.                             |
| Lee C.G.<br>(2008)                                     | Singapore | Bound test<br>Granger causality<br>test | Cointegrating relationship between tourism and economic growth is not found.                    |
| Durbarry R.<br>(2004)                                  | Mauritius | Cointegration<br>Causality tests        | Tourism has a significant positive impact on economic development.                              |

Out of 40 studies, 17 were published as a single country setting. The most general classification of the study was based on their findings and methodologies. The 14 of the published articles discussed in the study have revealed a positive relationship between tourism and economic development. Among them, only one emphasizes an unstable relationship between tourism and economic growth, both magnitude and direction, but relationships are highly dependent (Liu H., Song H., 2018). Also, two articles in China and Australia emphasized bidirectional causality between domestic tourism and economic growth and further revealed that the tourism expenditure sector facilitates the growth of other industries (Wang L., Zhang H., Li W., 2012; Corrie K., Stoeckl N., Chaiechi T., 2013). The highest percent of single-country studies identified a positive relationship between tourism and economic growth.

The methodology also plays a vital role in the reviews. Scholars have predominantly employed quantitative methods. Most previous studies have used Granger causality tests and time-series techniques for data analysis in determining the relationships. Also, the scholars have used the Dynamic panel data estimation approach, Convergence Analysis, Regression Analysis, Unit root

tests, Co-integration tests, Vector error correction model, Kalman filter approaches, Rolling window estimation, Autoregressive Distributed Lag (ARDL), and the Bound test. Although the studies used completely different methods, the result is the same. Roundtable discussions are another significantly different methodology that has been used, which discusses the potential of tourism and its economic growth (Jauhari V., Jauhari V., 2009).

As the second step of the literature classification, Table 5 has been constructed based on study settings as multiple countries. These studies focus on multiple countries to explore findings for the keywords of tourism and economic growth, as discussed in Table 5.

*Table 5: Summary of Review on Tourism and Economic Growth – Multiple Country Studies*

| <b>Author(s)</b>   | <b>Country</b>  | <b>Methodology</b>                        | <b>Key Results</b>   |
|--|---|---|--|
| Škrinjarić T. (2019)                                     | Central and Eastern European and South and Eastern European countries | Rolling indices                           | Mixed dynamic results for all the countries throughout the sample.   |
| Sokhanvar A. (2019)                                      | Seven European Union (EU) Countries                                   | Block Exogeneity Wald test                | Tourism receipts and FDI as critical factors in accelerating economic growth. FDI has a negative impact on the economic growth of five of these countries and, surprisingly, stimulates the tourism industry in none of the countries. |
| Wu T.P., Wu H.C. (2019)                                  | 11 Asian-region Countries   | Multivariate panel Granger causality test | Growth hypothesis: Cambodia, China, and Malaysia.<br>Reverse relationship: Hong Kong, Indonesia, Philippines, South Korea.<br>A reciprocal causal relationship: Macau and Singapore.   |
| Antonakakis N., Dragouni M., Eeckels B., Filis G. (2019) | Destination across globe - 113 Countries                              | Autoregressive model                      | Bi-directional relationships are established for stronger, democratic economies, with high levels of government effectiveness.   |

| Author(s)  | Country  | Methodology  | Key Results  |
|--|--|--|--|
| Mohapatra S. (2018)                                      | South Asian Association for Regional Cooperation (SAARC) | Granger causality tests<br>Panel fully modified ordinary least squares | The bidirectional causal linkage between growth and tourism expenditure.<br>Tourism receipts were found to influence growth.<br>Tourism expenditure was found to have a negative effect on growth.                             |
| Barrera F., Garrido N. (2018)                            | Argentina<br>Chile<br>United States                      | Schumpeterian structure model  | Inverted u-shaped relation between the number of public holidays and the growth of an economy.<br>Nonlinear relationship.  |
| Risso W.A. (2018)  | Worldwide - 179 Countries                                | Granger causality test   | The positive relationship of several arrivals, tourism receipts, and tourism expenditure with per capita GDP.  |
| Antonakakis N., Dragouni M., Eeckels B., Filis G. (2016) | Worldwide - Democratic and non-democratic countries      | VAR Methodology<br>Autoregressive structure                            | Countries with democratic regimes exhibit bidirectional relationship, and the importance of panel country investigation of the tourism and economy based on criteria that extend pure geographic and economic characteristics. |
| Brida J.G., Lanzilotta B., Pizzolon F. (2016)            | 4-MERCOSUR Countries                                     | Co-integration with the asymmetric adjustment thresholds               | The relationship between tourism and economic growth is not linear for Brazil.<br>The transitory situation of tourism and growth.  |
| Antonakakis N., Dragouni M., Filis G. (2015)             | 10 European countries                                    | Spillover index approach   | Tourism and economic growth relationship is not stable over time in terms of both magnitude and direction.<br>Tourism-led economic growth (TLEG) and the economic-driven tourism growth (EDTG) hypotheses are time-dependent.  |

| Author(s)                               | Country   | Methodology   | Key Results   |
|---|---|---|---|
| Tugcu C.T., (2014)                      | European, Asian, and African countries  | Granger causality analysis  | The relationship between tourism and economic growth depends on the country group and tourism indicator.<br>European countries are better able to generate growth from tourism in the Mediterranean region.   |
| Du D., Lew A.A., Ng P.T. (2014)         | 109 countries - International tourism   | Tourism growth model extension of Solow                           | Investments in tourism appear to be insufficient for economic growth.<br>Tourism's contribution to the long-term growth of an economy.  |
| Harasarn A., Chancharat S. (2014)       | Most essential countries to visit (Thailand, Korea, China, England, Japan, Malaysia)                | Engle and Granger co-integration method<br>Granger causality test | The long-run relationship between tourist arrivals and income <ul style="list-style-type: none"> <li>- Korean-most loyal</li> <li>- Chinese-slowest</li> <li>- England-bidirectional</li> <li>- Unidirectional-Japan/ Korea</li> <li>- No causality-Malaysia</li> </ul> |
| Lean H.H., Chong S.H., Hooy C.W. (2014) | Singapore & Malaysia  | Dynamic model   | The economic-driven tourism growth hypothesis is supported in Malaysia, while the tourism-led economic growth hypothesis has been identified for Singapore.   |
| Fawaz F., Rahnama M., Stout B. (2014)   | Developing countries - 144 countries  | Fixed effect and Random effects Model<br>Regression Analysis      | The relationship between international tourism and economic growth is consistent among all different types of regions and classification countries of the world.  |
| Brida J.G., London S., Rojas M. (2013)  | Economy producing a non-traded consumption good consumed by domestic residents and foreign tourists | Dynamic Model   | Tourism allows the local population to enjoy a given welfare level with a lower saving rate. Human capital accumulation in the tourism industry acts negatively on the rate of change in terms of trade unbalanced relationship between domestic and tourism demands.   |

| Author(s)   | Country   | Methodology   | Key Results   |
|---|---|---|---|
| Bouzahzah M., El Menyari Y. (2013)                      | Morocco and Tunisia   | Error correction model<br>Cointegration and Granger causality tests | A short-term positive relationship between tourist arrivals and economic growth.<br>Long term, there is a strong unidirectional causality from economic growth to international tourism receipts.                             |
| Wang Y.S. (2012)  | Top 10 countries in the 2008 Country Brand Index - (Australia, Canada, USA, Italy, Switzerland, France, New Zealand, UK, Japan, and Sweden) | Two-stage linear least square, Regression model                     | Tourism can potentially contribute to economic development, and so governments should dedicate strategic resources to tourism to boost short-term economic growth.  |
| Fayissa B., Nsiah C., Tadesse B. (2011)                 | 18 Heterogeneous Latin American countries   | The conventional neoclassical growth model                          | Revenues from the tourism industry contribute positively to both the current level and the growth rate of the per capita GDP.   |
| Nissan E., Galindo M.A., Méndez M.T. (2011)             | Denmark, Finland, France, Germany, Italy, Japan, The Netherlands, Spain, Sweden, the UK, and the USA - 11 countries                         | Ordinal least square  | Tourism not only supplies necessary funds to finance firms' activities but also stimulates the local firms' productivity and creates new job opportunities.   |
| Leitão N.C. (2011)                                      | Portugal and 20 partners  | Dynamic Panel model - Serial correlation and the endogeneity        | Tourist arrivals have a positive impact on economic growth.   |
| Narayan P.K., Narayan S., Prasad A., Prasad B.C. (2010) | Pacific Island Countries (PIC) (Fiji, Tonga, the Solomon Islands, and Papua New Guinea)   | Panel Cointegration   | Contribution of tourism to economic growth in Fiji, Tonga, the Solomon Islands, and Papua New Guinea is expected to grow.<br>The relationship between tourism exports and GDP is positive in both the long-run and short-run. |

More than half of the study settings are multiple countries. The 22 studies regarding tourism and economic growth fall within this range. The reviews are a combination of multiple countries, specific regions of countries, or global. Among them, six studies are for the European region, the Asian region, South Asian Association for Regional Cooperation (SAARC), MERCOSUR

Countries, and Pacific Island Countries (PIC). The six studies have also focused on the Destination across the globe as the study settings of the research. The remaining ten studies are conducted by a combination of two or more countries.

All reviews fall within quantitative nature, with specifically different data analysis methods used for various studies. Among them, the most popular methodology is the Granger causality test with panel data. Most studies have used specific models in the survey, such as the Dynamic model, Fixed effect and Random-effects model, Error correction Model framework, Conventional neoclassical growth model, Dynamic Panel model, Multivariate panel model, Schumpeterian structure model, and Tourism growth model extension of Solow. These models are standard in many multiple country studies, and also, used for data analysis of Rolling indices, Spillover index approach, Block Exogeneity, Wald test, Autoregressive model, Ordinary least squares, VAR Methodology, Cointegration method, and Regression Analysis with models.

The findings show mixed dynamic results of the relationship between tourism and economic growth. The experiments have discussed dynamic, positive, negative, nonlinear, and bidirectional relationships with tourism and economic growth. Most studies have identified a positive relationship between tourism and economic growth in past literature. The dynamic relationship in multiple countries is a prevalent feature in the literature (Škrinjarić T., 2019; Wu T.P., Wu H.C., 2019; Antonakakis N., Dragouni M., Eeckels B., Filis G., 2016; Harasarn A., Chancharat S., 2014; Lean H.H., Chong S.H., Hooy C.W., 2014). As illustrated in Wu T.P. & Wu H.C. (2019), Growth, Reverse, and Reciprocal relationships have been identified in Asian region countries. Further, the long-run relationship between tourist arrivals and income is most significant to the countries. Thailand destinations also revealed dynamic relationships (Harasarn A., Chancharat S., 2014). The findings emphasize that bidirectional relationships are established for economies that are stronger, democratic, and with higher levels of government effectiveness (Antonakakis N., Dragouni M., Eeckels B., Filis G., 2019). Besides, the studies have an inverted u-shaped relation between the number of public holidays and the growth of an economy with nonlinear relationships (Barrera F., Garrido N., 2018).

## 5. Conclusion

Processing of 40 research papers from the Scopus database on tourism and economic growth, from 2004 to 2019, revealed that most of the work from tourism and economic growth is based on a single country and multiple countries. This review analyzed the research work on tourism and economic growth according to the publication year, citation, publishers, source journals, and the country of research.

This review, like other studies, has several limitations and research gaps. The research was restricted to the studies using the keywords of *tourism* and *economic growth in developing countries* in the SCOPUS database from 2004 to 2019. This survey expects future researchers to perform a survey on multiple countries and the impact of other significant areas on tourism and economic growth. Also, future researchers could focus on review articles in other databases to reach all the studies and have a complete portrait of the subject. Most studies have identified a positive relationship between tourism and economic growth in single-country studies than multiple country studies. Multiple country studies used a specific model for analysis purposes. The literature heavily focuses on the relationship between tourism and economic growth in single and multiple country studies, but multiple country studies have produced effective results in various studies. A gap remains in the literature to discuss tourism and economic growth, as all scholars had paid attention to the relationship between tourism and economic growth. Thus, this systematic review recommends future research to focus more on multiple country studies and growth strategies in tourism and the economy.

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