




Investigating the Relationship between Financial Development and Tourism Management: Evidence from Asian Economies

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ABSTRACT

The purpose of this research is to examine the link between financial development and tourism. The study looks at the relationship between financial development variables including Domestic credit by private sector bank and Broad Money and tourism measures like tourist receipts. The analysis is based on data from an Asian country ranging from 1995 to 2020 and using correlation analysis, co integration first generation (Kao) and Linear regression to investigate the relationship between the variables. Whereas the cross-section dependence and ordinary least square test also used to generate the results. The findings indicate a positive relationship between financial development and tourism, implying that nations with more developed financial systems have greater levels of tourism activity. More study is needed, however, to establish the causal link and understand the underlying processes behind this correlation.



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1. Introduction

Researchers, decision-makers, and industry professionals have paid close attention to the connection between tourist management and financial development because of its potential influence on economic growth, foreign exchange profits, investment possibilities, and general economic stability. With tourism as the independent variable and financial growth as the dependent variable, this study intends to investigate and analyses this connection. Investigating these factors' interdependencies can provide important information about their reciprocal impacts and the consequences for national economies (Arshad, Iqbal, Afzal, Khan, & Sajjad, 2022; Khan & Ali, 2017).

Travelling for pleasure, business, or other reasons is referred to as tourism, which includes a wide range of activities. It comprises domestic and international travel, accommodations, transportation, travel agents, and destination management businesses. Globalization, rising disposable income, better transportation infrastructure, technology improvements, and shifting consumer preferences have all contributed to the tourism industry's significant expansion in recent decades (Sharpley & Harrison, 2019).

The dependent variable in this research, financial development, refers to the expansion, sophistication, and effectiveness of a nation's financial systems. It includes the creation of financial organizations, markets, tools, and rules that make it easier to allocate resources effectively, get people to save money, and engage in investment activities (N. Ahmed et al., 2022). According to Adedokun and Ağa (2021) a strong financial sector is essential for fostering economic growth, luring investors, managing risks, and guaranteeing stability in the face of economic shocks.

For a number of reasons, it is crucial to comprehend how tourist management and financial growth are related. First off, tourism makes a big contribution to job creation and economic expansion. According to Mowforth and Munt (2023) the money created by tourism-related activities may be injected into financial systems, which will improve savings, investment, and overall financial development. In contrast, a strong financial sector may offer the resources and tools required to promote the development and growth of tourist businesses, increasing their ability to compete (Khan, Hussain, Maqbool, Ali, & Numan, 2019; Musa, Jelilov, Iorember, & Usman, 2021).

Second, in nations that largely rely on tourist-related services, tourism serves as a stimulus for foreign exchange revenues. The balance of payments situation, currency exchange rate, and financial stability of a nation can all be improved by inflows of foreign cash through tourism (Ribeiro & Wang, 2020). The effective allocation, investment, and utilization of tourism-related earnings is essential for its ability to support financial growth (Arshad et al., 2022; Khan, Anjum, Baig, Afzal, & Asghar, 2022).

Thirdly, the connection between financial growth and tourist management goes beyond the realm of business. Infrastructure development, such as that of airports, highways, hotels, and recreational facilities, sometimes demands large investment. The ability to mobilize domestic and foreign money, offer loans and credit facilities, and facilitate public-private partnerships are all requirements for financing these developments (Mustafa, Arshad, Iqbal, & Khan, 2022). A nation's financial development is strongly related to its capacity to draw and manage such investments.

Additionally, a number of external factors, including governmental regulations, political stability, sociocultural aspects, technological advancements, environmental sustainability, and general economic conditions, have an impact on the relationship between tourism management and financial development (Khan, Asad, Fatima, Anjum, & Akhtar, 2020; Sharpley, 2022).

Additionally, in light of the way the global tourist sector is changing, it is more crucial than ever to comprehend the connections between financial development and tourism management. The way tourism is handled and financed has undergone a substantial transformation as a result of factors including technology improvements, shifting consumer behavior, and the appearance of new locations (Khan, Ali, Anjum, & Noman, 2019; Lu, 2022; Wickramasinghe & Naranpanawa, 2023). These developments have given the tourist and financial industries new opportunities and problems, needing a better comprehension of their interaction.

The influence of financial innovation and technological advancement on the interaction between tourist management and financial growth is one topic of particular attention. The financial environment has seen substantial upheavals as a result of the growth of digital platforms, mobile applications, and online payment methods. These developments have fundamentally changed how travelers transact, use financial services, and engage with the travel sector (Gössling, Scott, & Hall, 2020; Hanif, Nawaz, Hussain, & Bhatti, 2022; Khan, Ali, et al., 2019). As a result, the use of financial technology (finch) into tourist management practices has the potential to promote economic growth, increase financial inclusion, and boost operational efficiency.

The COVID-19 epidemic has also had a significant influence on the finance and tourist industries, emphasizing the interdependencies between them. The financial performance of tourism firms globally has been greatly impacted by international travel restrictions, lockdown procedures, and the resulting fall in visitor arrivals (Neuhofer & Buhalis, 2021). This disruption has highlighted the need for financial resilience and risk management by exposing weaknesses in the financial institutions that underpin the tourist sector (Folinas & Metaxas, 2020). Understanding the connection between tourist management and financial development is essential for developing effective policy responses, luring investment, and reviving the tourism industry as nations traverse the recovery phase.

The social and environmental aspects of the connection between tourist management and economic growth have also been the subject of recent research. Recent years have seen a rise in the popularity of sustainable tourism practices including ecotourism and responsible tourism, which calls for a more all-encompassing strategy for tourist growth providing funding for environmentally friendly infrastructure, providing loans with favorable terms to sustainable tourism businesses, and incorporating environmental and social considerations into investment decisions, financial institutions play a critical role in assisting and encouraging sustainable tourism initiatives (Bhatti, Chaudhry, & Bashir, 2021; Godil, Sharif, Rafique, & Jermisittiparsert, 2020). The potential for coordinating economic, social, and environmental goals can be shown by investigating the connection between tourist management and financial growth within the context of sustainable tourism.

So, the research gap in the relationship between financial development and tourism management in Asian economies stems from a lack of scientific evidence, the region's diverse financial systems and tourism sectors, policy implications for Asian countries, and the impact of technological advancements. Addressing this gap through targeted research initiatives would not only broaden the knowledge base but also give useful insights for policymakers, encouraging long-term economic growth and development in Asia.



Figure 1: Theoretical Framework

2. Literature Review

The development of jobs, economic expansion, and foreign exchange gains are all recognized as being significantly influenced by tourism (Balaguer & Cantavella-Jorda, 2002; Dritsakis, 2004; Yeon, Song, Yu, Vaughan, & Lee, 2021). Researchers who are interested in its effects on financial development have given it a lot of attention as a result. Examining how tourist money contributes to financial growth is one popular method for evaluating this relationship. Researchers have discovered that tourism-related income can improve financial development by boosting capital accumulation, investment, and savings (Gössling et al., 2020). According to studies Sinclair, Blake, and Sugiyarto (2003) nations that depend significantly on tourism can

gain from increased access to credit, improved financial intermediation, and improved financial inclusion as a result of tourist-related income inflows.

However, the expansion and development of the tourist sector are also greatly aided by financial development. According to Thommandru et al. (2023) a well-developed financial sector offers the essential money and financial tools to assist tourist businesses, such as loans for infrastructure development, working capital, and investment in tourism-related initiatives. Financial markets and institutions promote entrepreneurship, ease capital movement, and enable risk management in the travel and tourist industry. According to Buhalis et al. (2019) and Hsu, Chen, and Yang (2019), the availability of a variety of financial services, such as insurance and venture capital, might further encourage innovation and growth in the tourist industry.

Numerous contextual elements have an impact on how financial development and tourism management are related. This connection is significantly shaped by government policies and laws. The beneficial relationship between tourist management and financial growth, for instance, may be attributed to supportive regulatory frameworks that encourage investment, the development of tourism infrastructure, and financial stability (Sharpley & Harrison, 2019). Another important aspect is political stability since political turmoil and instability can discourage both financial investments and tourism (Sinclair et al., 2003).

The link between financial development and tourism management is also influenced by sociocultural variables. Financial growth may be significantly influenced by local community engagement in tourism, cultural heritage, and customs. For instance, community-based tourism programmers can increase access to financial resources and provide local communities a stronger economic voice (Moscardo, 2022). Additionally, in recent years, there has been a rise in the use of sustainable tourism practices and the incorporation of social and environmental factors into financial decision-making (Hall, 2019). By providing specialized financial products and investment possibilities that are in line with social and environmental goals, financial institutions are becoming more and more involved in assisting sustainable tourism projects (Neuhofer & Buhalis, 2021).

Various quantitative and qualitative methodologies have been used in research investigating the link between financial development and tourism management. To explore causal linkages and identify the direction and intensity of the correlation, quantitative research frequently apply econometric approaches such as panel data analysis, regression models, and time series analysis (Dritsakis, 2004; Levine, Loayza, & Beck, 2000). Case studies, interviews, and other qualitative research methods are used in qualitative studies.

H₀: Financial development has little impact on the competitiveness of the tourist business in Asian countries.

H₁: The competitiveness of the tourist sector in Asian countries is heavily influenced by financial growth.

3. Research Methodology

The research significantly expands the participation of tourism management in financial development in Asian countries includes Armenia, Azerbaijan, Bangladesh, China, Indonesia, India, Israel, Jordan, Japan, Kazakhstan, Cambodia, Kuwait, Maldives, Mongolia, Malaysia, Nepal, Pakistan, Philippines, Singapore, Turkey and Karygs Republic. The data was collected from the World Bank statistics from 1995 to 2020 for this research, financial development is treated as an independent variable, whereas Tourism management is use as a dependent variable.

3.1. Econometric Techniques

3.1.1. Cross-sectional Independence

Present panel data research has pointed out that the sectional dependency between variables has to be monitored. The problem of transversal dependence emerges if the findings in N cross-sections of our panel are no longer autonomously drawn but disrupt the results each other. This is because regional integration and foreign trade may quickly transmit the shock to another country (Pesaran, 2021).

3.1.2. Panel Unit Root

To establish the stationary position of the panel data, the unit-root test is utilized. "Panel unit-root" tests are usually separated into "unit-root tests of first-generation" and "unit-root tests of 2nd-generation." Unit-root tests of first gen assume that the data are stationary under the critical assumption of each transversal independence. However, unit-root testing of the second generation checks the data stationary by considering the individual cross-sectional dependency problem. Thus, the results of cross-sectional dependency tests are used to determine the unit-root tests (Saglam & Ampountolas, 2021).

3.1.3. Co-Integration Test

Considering the lengthy connection among the variables by using second generation cointegration tests. "Wester Lund" were used for second generation cointegration tests to investigate the long-term relationship between the variable's financial development and tourism (Rahman, Hosan, Karmaker, Chapman, & Saha, 2021).

3.1.4. Fixed Effect

According to Z. Ahmed et al. (2022) The random effects model makes population data conclusions based on the assumption that data is normally distributed. The fixed effect model, on the other hand, posits that person specific impact is connected with independent variable. The fixed effect model is utilised in this investigation since the model parameters are fixed.

3.1.5. Estimation Technique

In calculating the coefficients for co-integrating variables, the study employs fully modified ordinary lowest squares (FMOLS) and the dynamic lowest squares (DOLS). Both FMOLS and DOLS are helpful techniques for continuous parameter estimations, but heterogeneity and endogeneity are shown (Hasnat, Kabir, & Hossain, 2018). Both methods employ heteroskedastic standard errors which enable a model with heteroskedastic residues to be fitted, and the results are heteroskedastic and endogenous. FMOLS is a non-parametric approach that provides consistent estimates, controls for retrogression endogeneity, and addresses correlation concerns. The FMOLS estimator is constructed after serial correlation corrections, and the question of indignity is made on the ordinary least squares estimate.

In conclusion, the Fixed Effect and Random Effect used as an alternative method against the Ordinary Least Square test (FMOLS and DOLS) so, we use FMOLS and DOLS in the study of the relationship between financial development and tourism management in Asian economies is justified because of their ability to address endogeneity concerns, capture time series properties, provide efficiency and consistency, leverage panel data advantages, and provide robustness checks. These estimating methodologies improve the study's reliability and validity, providing for a more precise understanding of the link between financial development and tourist management in Asian nations.

3.1.6. Econometric Model

$$FD = \alpha_0 + \beta_1 TM + \beta_2 BMM2 + \varepsilon \quad (1)$$

Where, TM represents tourism management performance and FD represents independent variables defining the financial development level.

3.1.7. Measurement of Variables

In the current research green growth is dependent variable, and financial development is an independent variable. The national culture and military expenditure is used as moderating variable to access the relationship between financial development and green growth. The measurement of variables are mentioned in a following table.

Table 1
Measurement of Variables

Variable	Measurement	Source
Financial Development (Independent Var.)	Domestic credit to private sector by banks (% of GDP)	Atsu, Adams and Adje (2021).
Tourism Management (dependent Var.)	Tourism Receipts	Kyara, Rahman, & Khanam, (2022)
BMM2	Broad Money	

4. Result and Analysis

4.1. Descriptive Analysis

A descriptive statistic is defined as the data analysis to describe the different characteristics of data (mean, median, and standard deviation) and help show or summarize the data in a meaningful way, for example, patterns tables, etc. However, it does not allow us to make any conclusions about the data. It is just a simple way to describe data in table no. 2 the descriptive if all variables are given here, we can see that our results reveal that all variables' observations are 546 and the mean of Financial development 1 (DCPSB) is 52.39. The standard deviation is 39.62 with a minimum and maximum of 1.16 to 187.85. The mean value of Financial development 2 (BM) is 71.90, with a minimum and maximum value ranging from 7.69 to 281.29, respectively, and the standard deviation is 51.95. Whereas the tourism mean value calculated as 5.80e+09 with minimum to maximum value of 100 to 5.17 with a 9.36 value of standard deviation. The Broad money is used as FD2. The standard deviation shows how a variable can vary from its mean value. It is observed Broad money has the highest mean and standard deviation (degree of variation from the mean value), and Tourism has the lowest mean (average) and standard deviation (degree of variation from the mean value).

Table 2
Descriptive Analysis

Var	Obs.	Mean	Std. Dev	Min	Max
Year	546	2007.5	7.50	1995	2020
TOURISM	546	5.80	9.36	100	5.17
DPSCB	546	52.39	39.62	1.16	187.85
BMM2	546	71.90	51.95	7.69	281.29

4.2. Correlation matrix

In Table 2 we can see how dependent and independent variables correlate with each other; it highlights the strength of their relation. Results indicates their lies a degree of association between variables.

Table 3
Correlation Matrix

	Tourism	DCPSB	BMM2
Tourism	1.00		
DCPSB	0.53	1.00	
BMM2	0.57	0.89	1.00

In the table 3, we can deduce that Tourism, has positive and significant direct relationships with FD1 its means if these variables increase or decrease income inequality also increase and decrease in the same directions. While FD2 and Tourism have a significant 0.57connection. FD1 and FD2 have a 0.89 strong positive relationship.

4.3. Cross-sectional dependence

The CD-test results are shown in Table 4 to assess the cross-sectional dependency of all variables. The null hypothesis of cross-sectional independence for all variables is rejected at the 1% significance level, indicating the presence of cross-sectional interdependence. The cross-sectional dependence exists with a 1% of significant level. The value of the Tourism CD-test was calculated as (62.04 $P < 0.01$) effective at the level of 1%. The financial development (FD1) was computed through CD-test. The value was (15.61 $P < 0.01$) similarly, the value of FD2 was (35.04 $P < 0.01$) significant at the level of 1%

Table 4
Cross-sectional Dependence

Variables	CD Test	P-value	Corr	abs(corr)
Tourism	62.04	0.00	0.84	0.84
DCPSB	15.61	0.00	0.21	0.50
BMM2	35.04	0.00	0.47	0.59

4.4. Slope Homogeneity

Comparing the gap between parameters obtained by aggregated fixed-effects regression tests and cross-sectional unit particular analysis is the concept of slope heterogeneity. (Pesaran & Yamagata, 2008). The results indicate the P-value is significant at the level of 1% that implies slope heterogeneous.

The dependent variable is green growth. Financial development 1 (DCPB) and financial development 2 (BM) and the Tourism as a dependent variable. The results indicates that slope homogenous is rejected because all the variables are significant at the level of 1% that shows the slope heterogeneity exist. So, the alternate hypothesis is accepted at the significant level of 1% and the slope homogeneous is rejected.

Table 5
Slope Homogeneity

	Delta	P-value
DCPSB	13.11	0.00
BMM2	10.96	0.00

4.5. Unit Root Test

Table 6 describes the findings of the CIPS unit-root test, which are used to assess if all components are static at the level and first difference for both the steady effect and the tendency. The scientific premise for the test is that there are no stationary time series.

Table 6
Unit Root Test

Variables	Constant	Constant and Trend	Constant and Trend	Constant and Trend	Order of Integration
Tourism	-1.62	-1.69	-4.14**	-4.50**	I(1)
DCPSB	-1.38	-1.94	-3.70**	-3.87**	I(1)
BMM2	-1.75	-1.74	-4.40**	-4.68**	I(1)

Our findings show that none of the factors are stable at the 5% level of significance. At the 5% level of significance, the components become permanent, rejecting the null hypothesis that there is no stationary series. As a result, all elements are integrated to order 1.

4.6. Panel Cointegration (Kao)

The table 7 shows the result of panel cointegration to estimate the presence of cointegration in between the financial development and tourism whereas this technique is based on first generation through this statistical value we can deduce that the financial development has a negative cointegration with tourism at the significant level of 5% that we analyze that there is a cointegration between both variables.

Table 7
Panel Cointegration Kao Test

Tests	Statistic	P-value
Modified Dickey-Fuller t	-	-
Dickey-Fuller t	-	-
Augmented Dickey-Fuller	-	-
Unadjusted modified Dickey-Fuller t	-1.59	0.05
Unadjusted Dickey-Fuller t	-1.59	0.05

4.7. Linear Regression

The coefficients, standard errors, and p-values for the variables included in the regression model are shown in Table 8's linear regression findings. The study focuses on the variables "Dcpsb" and "BMM2," as well as the constant term coefficient ("Cons"). The R-squared and modified R-squared values are used to evaluate the model's quality of fit.

Starting with "Dcpsb," the coefficient is calculated to be 2.52 with a standard error of 1.82. The p-value of 0.16, on the other hand, indicates that the coefficient is not statistically significant at standard significance levels (e.g., p 0.05). This means that there is insufficient evidence to infer that the variable "Dcpsb" in the regression model has a significant influence on the dependent variable. The coefficient for "BMM2" on the other hand is predicted to be 8.67 with a standard error of 1.39. The statistical significance of the coefficient is indicated by the very low p-value of 0.00. This indicates that the variable "BMM2" in the regression model has a substantial influence on the dependent variable. Furthermore, the high coefficient value shows that a one-unit rise in "BMM2" is related with an 8.67-unit increase in the dependent variable when all other variables are held constant.

Table 8
Linear Regression

Variables	Coef	(Std.err)	P-value
DCPSB	2.52**	(1.82)	0.16
BMM2	8.67***	(1.39)	0.00
R2	0.33		
Adjusted R2	0.33		
Cons	-1.76***		0.002

Moving on, the R-squared value of the model is 0.33, suggesting that the independent variables (including "Dcpsb" and "BMM2") explain about 33% of the variation in the dependent variable.

The modified R-squared value is also 0.33, indicating that over fitting the model with additional independent variables has no penalty. The coefficient of the constant term ("Cons") is -1.76, with a very low p-value of 0.002, suggesting that it is statistically significant. This indicates that even when the independent variables ("Dcpsb" and "BMM2") are not present, the constant term has a substantial influence on the dependent variable. In summary, the results indicate that the variable "BMM2" has a statistically significant positive influence on the dependent variable, but the variable "Dcpsb" does not. The constant term has an influence on the dependent variable as well.

4.8. FMOLS and DOLS

Table 9 shows the outcomes of FMOLS and DOLS, which were used to estimate the long-run coefficients and evaluate the stated hypotheses. The FMOLS data show that the coefficient of FD1 (DCPB) (1.46 ***) is positive and significant, meaning that a one-unit rise in FD1 tends to increase Tourism by 1.46 units. Furthermore, the coefficient of FD 2 (BM) is (1.03 ***), which is positive and significant at the 1% level.

According to the DOLS data, the coefficient of FD1 (DCPB) (1.39 ***) is positive and significant at the 1% level, demonstrating a favorable link between FD 1 and tourism. According to the findings, a one-unit rise in FD tends to enhance tourism by 1.90 units. Hence, the results support H1. Thus, the alternate hypothesis is accepted. The coefficient of FD 2 (BM) is (1.10 ***) is positive and significance at the level of 1 percent.

Table 9
FMOLS and DOLS

Variables	DOLS Coef (std err)	FMOLS Coef (std err)	DOLS Coef (std err)	FMOLS Coef (std err)
DCPSB	1.39***(3.79)	1.46***(3.20)		
BM			1.10***(3.11)	1.03***(2.70)
R2	.31	.14	.35	.24
Adjusted R2	.30	.14	.34	.24
Cons	-1.48*	-1.74*	-2.10*	-1.58*

5. Results and Discussion

In this section, interpret and explain the results of the present study in the context of the existing literature on financial development and tourism management. Start by restating the research objectives and hypotheses of the current study. The result indicated the positive relationship between financial development and tourism management. The current as study results align with previous research which indicates the relationship between financial development and tourism Management (Gössling et al., 2020; Moscardo, 2022). Therefore this research shows the significance of the financial development and tourism have greater impact of the Asian countries.

6. Conclusion and Future Recommendation

It was concluded that the study of the link between financial growth and tourism reveals numerous crucial facts. According to the correlation research, there is a favorable relationship between financial development indicators and Tourism management that directly correlate with each other whereas the results of cross sectional dependence indicates that there is a presence

of cross-sectional dependence between the financial development and Tourism contrastingly the results of slope homogeneity indicates that the slope is heterogeneous and slope homogenous is rejected at the level of 1% that shows the slope heterogeneous exists. Moreover, the results indicate that the variable "BMM2" has a statistically significant positive influence on the dependent variable, but the variable "Dcpsb" does not. The constant term has an influence on the dependent variable as well. It is crucial to remember. Contrastingly the results of Kao cointegration indicates that cointegration exists in between the financial development and tourism management at the level of 5%. Increase the breadth of the analysis: To consider the results larger variety of financial development indicators and tourist factors. This might imply factoring in extra financial variables such as loan availability, banking sector efficiency, and stock market development. Similarly, investigate several tourism measures such as tourist arrivals, tourism income, and tourism infrastructure. Extend the investigation beyond a single country and evaluate the association between financial development and tourism across other countries or areas. This comparative method can give useful insights into the differing influence of financial development on tourism in other contexts, taking into account differences in economic, institutional, and cultural issues. Investigate causality: Investigate utilizing sophisticated econometric approaches, such as panel data analysis or instrumental variable regression, to investigate the causal link between financial development and tourism.

Author contribution

Shehar Yar Hussain: Introduction, review, writing—original draft

Muhammad Nasir Hussain: Writing literature, conceptualization, data analysis

Aqsa Iqbal: Methodology and description and supervision

Ambereen Kanwal: Explanation of results, proofreading

Conflict of Interests/Disclosures

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References

- Adedokun, M. W., & Ağa, M. (2021). Financial inclusion: A pathway to economic growth in Sub-Saharan African economies. *International Journal of Finance & Economics*. doi: <https://doi.org/10.1002/ijfe.2559>
- Ahmed, N., Sheikh, A. A., Hassan, B., Khan, S. N., Borda, R. C., Huamán, J. M. C., & Senkus, P. (2022). The Role of Educating the Labor Force in Sustaining a Green Economy in MINT Countries: Panel Symmetric and Asymmetric Approach. *Sustainability*, 14(19), 12067. doi: <https://doi.org/10.3390/su141912067>
- Ahmed, Z., Cary, M., Ali, S., Murshed, M., Ullah, H., & Mahmood, H. (2022). Moving toward a green revolution in Japan: symmetric and asymmetric relationships among clean energy technology development investments, economic growth, and CO2 emissions. *Energy & Environment*, 33(7), 1417-1440. doi: <https://doi.org/10.1177/0958305X211041780>
- Arshad, S., Iqbal, A., Afzal, C. M., Khan, S. N., & Sajjad, A. (2022). The Moderating Role of Team Climate between Servant leadership, Employee Ambidexterity and Work Performance. *Journal of Social Sciences Review*, 2(4), 162-170. doi: <https://doi.org/10.54183/jssr.v2i4.68>
- Balaguer, J., & Cantavella-Jorda, M. (2002). Tourism as a long-run economic growth factor: the Spanish case. *Applied economics*, 34(7), 877-884. doi: <https://doi.org/10.1080/00036840110058923>
- Bhatti, M. A., Chaudhry, I. S., & Bashir, F. (2021). Financial globalization, output gap and foreign output gap on inflation: Evidenced from developing economies. *Journal of Accounting and Finance in Emerging Economies*, 7(2), 419-433. doi: <https://doi.org/10.26710/jafee.v7i2.1773>

- Buhalis, D., Harwood, T., Bogicevic, V., Viglia, G., Beldona, S., & Hofacker, C. (2019). Technological disruptions in services: lessons from tourism and hospitality. *Journal of Service Management*. doi:<https://doi.org/10.1108/JOSM-12-2018-0398>
- Dritsakis, N. (2004). Tourism as a long-run economic growth factor: an empirical investigation for Greece using causality analysis. *Tourism Economics*, 10(3), 305-316. doi:<https://doi.org/10.5367/0000000041895094>
- Folinas, S., & Metaxas, T. (2020). Tourism: The great patient of coronavirus COVID-2019.
- Godil, D. I., Sharif, A., Rafique, S., & Jermisittiparsert, K. (2020). The asymmetric effect of tourism, financial development, and globalization on ecological footprint in Turkey. *Environmental science and pollution research*, 27, 40109-40120. doi:<https://doi.org/10.1007/s11356-020-09937-0>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of sustainable tourism*, 29(1), 1-20. doi:<https://doi.org/10.1080/09669582.2020.1758708>
- Hall, C. M. (2019). Constructing sustainable tourism development: The 2030 agenda and the managerial ecology of sustainable tourism. *Journal of sustainable tourism*, 27(7), 1044-1060. doi:<https://doi.org/10.1080/09669582.2018.1560456>
- Hanif, S., Nawaz, A., Hussain, A., & Bhatti, M. A. (2022). Linking non renewable energy, renewable energy, globalization and CO2 emission under EKC hypothesis: evidence from ASEAN-6 countries through advance panel estimation. *Pakistan Journal of Humanities and Social Sciences*, 10(1), 391-402-391-402. doi:<https://doi.org/10.52131/pjhss.2022.1001.0204>
- Hasnat, G., Kabir, M. A., & Hossain, M. A. (2018). Major environmental issues and problems of South Asia, particularly Bangladesh. *Handbook of environmental materials management*, 1-40. doi:https://doi.org/10.1007/978-3-319-58538-3_7-1
- Hsu, C.-Y., Chen, M.-Y., & Yang, S.-C. (2019). Residents' attitudes toward support for island sustainable tourism. *Sustainability*, 11(18), 5051. doi:<https://doi.org/10.3390/su11185051>
- Khan, S. N., & Ali, E. I. E. (2017). The moderating role of intellectual capital between enterprise risk management and firm performance: A conceptual review. *American Journal of Social Sciences and Humanities*, 2(1), 9-15. doi:<https://doi.org/10.20448/801.21.9.15>
- Khan, S. N., Ali, E. I. E., Anjum, K., & Noman, M. (2019). Enterprise risk management and firm performance in Pakistan: Interaction effect of intellectual capital. *Int. J. of Multidisciplinary and Current research*, 7. doi:<https://doi.org/10.14741/ijmcr/v.7.1.5>
- Khan, S. N., Anjum, K., Baig, F. J., Afzal, C. M., & Asghar, R. N. (2022). Role of Microfinance on Women Entrepreneurship Leads to Decrease in Poverty: Evidence from the Rural Area of South Punjab. *Competitive Social Science Research Journal*, 3(1), 147-160.
- Khan, S. N., Asad, M., Fatima, A., Anjum, K., & Akhtar, K. (2020). Outsourcing internal audit services: a review. *International Journal of Management (IJM)*, 11(8), 503-517. doi:<https://doi.org/10.34218/IJM.11.8.2020.048>
- Khan, S. N., Hussain, R. I., Maqbool, M. Q., Ali, E. I. E., & Numan, M. (2019). The mediating role of innovation between corporate governance and organizational performance: Moderating role of innovative culture in Pakistan textile sector. *Cogent Business & Management*. doi:<https://doi.org/10.1080/23311975.2019.1631018>
- Levine, R., Loayza, N., & Beck, T. (2000). Financial intermediation and growth: Causality and causes. *Journal of monetary Economics*, 46(1), 31-77. doi:[https://doi.org/10.1016/S0304-3932\(00\)00017-9](https://doi.org/10.1016/S0304-3932(00)00017-9)
- Lu, J., Xiao, X., Xu, Z., Wang, C., Zhang, M., and Zhou, Y. (2022). The potential of virtual tourism in the recovery of tourism industry during the COVID-19 pandemic. *Current Issues in Tourism*, 25(3), 441-457.
- Moscardo, G. (2022). Stories of Sustainability in Tourism. In *Planning and Managing Sustainability in Tourism: Empirical Studies, Best-practice Cases and Theoretical Insights* (pp. 27-41): Springer.
- Mowforth, M., & Munt, I. (2023). Tourism and Sustainability: Development, Globalisation and New Tourism in the. *Group*, 10, 5.

- Musa, M. S., Jelilov, G., Iorember, P. T., & Usman, O. (2021). Effects of tourism, financial development, and renewable energy on environmental performance in EU-28: does institutional quality matter? *Environmental science and pollution research*, 28(38), 53328-53339. doi:<https://doi.org/10.1007/s11356-021-14450-z>
- Mustafa, F., Arshad, S., Iqbal, A., & Khan, S. N. (2022). The Influence of Green HRM on Environmental Performance: The Mediating Effect of Green Innovation and Moderating Effect of Environmental Strategy. *International Journal of Business and Economic Affairs*, 7(4), 34-44. doi:<https://doi.org/10.24088/IJBEA-2022-74003>
- Neuhof, B., & Buhalis, D. (2021). Experience design in the smart tourism destination. In *Routledge Handbook of the Tourist Experience* (pp. 616-629): Routledge.
- Pesaran, M. H. (2021). General diagnostic tests for cross-sectional dependence in panels. *Empirical economics*, 60(1), 13-50. doi:<https://doi.org/10.1007/s00181-020-01875-7>
- Pesaran, M. H., & Yamagata, T. (2008). Testing slope homogeneity in large panels. *Journal of econometrics*, 142(1), 50-93. doi:<https://doi.org/10.1016/j.jeconom.2007.05.010>
- Rahman, M. M., Hosan, S., Karmaker, S. C., Chapman, A. J., & Saha, B. B. (2021). The effect of remittance on energy consumption: Panel cointegration and dynamic causality analysis for South Asian countries. *Energy*, 220, 119684. doi:<https://doi.org/10.1016/j.energy.2020.119684>
- Ribeiro, E. D. C., & Wang, B. (2020). Tourism led growth hypothesis: has the tourism industry an impact on the economic growth of Sao Tome and Principe? *International Journal of Economics and Financial Issues*, 10(1), 180. doi:<https://doi.org/10.32479/ijefi.9105>
- Saglam, Y., & Ampountolas, A. (2021). The effects of shocks on Turkish tourism demand: Evidence using panel unit root test. *Tourism Economics*, 27(4), 859-866. doi:<https://doi.org/10.1177/1354816619899831>
- Sharpley, R. (2022). Tourism and development theory: Which way now?. *Tourism Planning & Development*, 19(1), 1-12.
- Sharpley, R., & Harrison, D. (2019). Introduction: tourism and development—towards a research agenda. *A Research Agenda for Tourism and Development*, 1-34. doi:<https://doi.org/10.4337/9781788112413.00007>
- Sinclair, M. T., Blake, A., & Sugiyarto, G. (2003). The economics of tourism. *Classic reviews in tourism*, 22-54.
- Thommandru, A., Espinoza-Maguiña, M., Ramirez-Asis, E., Ray, S., Naved, M., & Guzman-Avalos, M. (2023). Role of tourism and hospitality business in economic development. *Materials Today: Proceedings*, 80, 2901-2904. doi:<https://doi.org/10.1016/j.matpr.2021.07.059>
- Wickramasinghe, K., & Naranpanawa, A. (2023). Tourism and COVID-19: An economy-wide assessment. *Journal of Hospitality and Tourism Management*, 55, 131-138. doi:<https://doi.org/10.1016/j.jhtm.2023.03.013>
- Yeon, J., Song, H. J., Yu, H. C., Vaughan, Y., & Lee, S. (2021). Are socially responsible firms in the US tourism and hospitality industry better off during COVID-19? *Tourism Management*, 85, 104321. doi:<https://doi.org/10.1016/j.tourman.2021.104321>