Entrepreneurial Business and Economics Review

2022, Vol. 10, No. 4

10.15678/EBER.2022.100409

Impact of tourism development on latent entrepreneurship in BRICS

Folorunsho M. Ajide

ABSTRACT

Objective: The study aims to examine the impact of tourism development on latent entrepreneurship in BRICS countries (Brazil, Russia, India, China, and South Africa).

Research Design & Methods: The study used panel data of BRICS countries for the period of 2001-2020. The article employs the quantitative method including the panel dynamic ordinary least square approach to analyse the data.

Findings: The results showed that tourism provides greater opportunities for latent entrepreneurs in BRICS countries. The results of the control variables showed that economic complexity did not spur entrepreneurial inspiration while foreign direct investment improves entrepreneurial development in BRICS economies.

Implications & Recommendations: The study concluded that policymakers should concentrate efforts on improving the tourism sector to accelerate the pace of entrepreneurial development. Appropriate policies should be implemented to further ease the business activities in the group of BRICS economies.

Contribution & Value Added: The study adds value to the literature by providing an empirical analysis of the nexus between tourism development and entrepreneurship. The study focused on BRICS countries to see how tourism development springs up entrepreneurial inspiration among adults in emerging economies. The study models entrepreneurship function within the framework of the panel co-integrating regression approach. This is a powerful technique that accounts for endogeneity and serial correlation based on the first-different stationary of the variables.

Article type: research article

Keywords: dynamic ordinary least square; emerging economies; entrepreneurial intentions; tourism

JEL codes: M13, Z30

Received: 10 August 2022 Revised: 11 November 2022 Accepted: 17 November 2022

Suggested citation:

Ajide, F.M. (2022). Impact of tourism development on latent entrepreneurship in BRICS. *Entrepreneurial Business and Economics Review,* 10(4), 143-154. https://doi.org/10.15678/EBER.2022.100409

INTRODUCTION

The importance of tourism development in the economy is well documented in the literature. It contributes to income growth (Usmani, Akram, & Praveen, 2020) by enhancing international reserves, improves investment in infrastructures, stimulates human capital development, creates job opportunities, generates positive externalities, and increases relative competitiveness of the economy (Rani & Kumar, 2021). However, one important area that has been empirically overlooked is the impact of tourism development on entrepreneurial development (Ferreira *et al*., 2019; Subramaniam & Masron, 2021). Therefore, the objective of the study is to examine the impact of tourism development on latent entrepreneurship in BRICS economies. Tourism offers new ideas and opportunities to meet the needs of consumers and influences latent entrepreneurial process, namely the *situation of nursing the ambition of being self-employed or establishing new business activities in few months' time*. It is generally agreed that the first stage of entrepreneurship starts with conceiving business ideas that trigger the exploration of entrepreneurial opportunities within the environment (Barraza, 2018; Le Trinh, 2019).

Tourism provides opportunities to lunch new businesses ranging from hospitality businesses and transportation to entertainment and cultural services. It supports the diffusion of innovations and ideas among tourist entrepreneurs. Despite the significance of tourism, so far, no study has investigated the impact of tourism development within the bloc of BRICS countries (Brazil, Russia, India, China, and South Africa). This study fills the void in the literature by examining the impact of tourism development on latent entrepreneurship in BRICS countries. This study focuses on BRICS countries because they are the leading emerging economies representing a bloc of countries that caters for major tourists from advanced nations (Usmani *et al.,* 2020). Tourism development has become the major focus of these nations after the Chinese-Xiamen Summit in 2017. Over the years, these countries have recorded robust economic growth with a 30% increase in GDP in 2014, from 11% in 1990. The countries have been the focal destination for world tourists (World Travel & Tourism Council, 2012; 2015).

Moreover, BRICS countries benefited from tourism development compared to other developing countries. Tourism opens up the economy for higher entrepreneurial opportunities and enables countries to gain from technology diffusion. For instance, the BRICS economies are currently in transit from an efficiency to an innovation economy-driven stage (Coulibaly *et al.,* 2018). These countries account for 35% of the global GDP. In terms of doing business, China is ranked third in 2020 with Brazil positioned at 124th in the global ranking. Russia is ranked 28th and doing better as shown in all the business indicators. South Africa and India are ranked 84th and 63rd respectively. It is generally agreed that these countries have benefited from better entrepreneurial opportunities brought by tourism development which have improved the growth and development of these nations (Rani & Kumar, 2021). Data from Global Entrepreneurship Monitor (GEM) shows that in Russia, about 6.29% of the adult population involves in latent or new entrepreneurial activities. In India, Brazil, and China, about 84.5%, 61.9%, and 66.9% of the adult population respectively have sufficient skills and awareness to commence new business venturing (GEM, 2019; 2020).

To my knowledge, apart from the study by Subramaniam and Masron (2021) that focuses on developing nations, no studies have empirically examined the impact of tourism development on entrepreneurship. My study is novel in many ways. Firstly, in contrast to Subramaniam and Masron (2021), I focused on BRICS countries. These countries are a group of leading emerging economies in the World. Secondly, this study focused on latent entrepreneurship to see how tourism development springs up entrepreneurial inspiration among adults in emerging economies. The tourism sector is an engine of economic prospects and outperformed some sectors in most BRICS nations. Small and medium enterprises play enormous roles in the tourism sector in enhancing youth empowerment, national building and economic stimulus. Additionally, entrepreneurial activities in this sector are nature-based which means they focus on preserving nature. Finally, this study modelled entrepreneurship function within the framework of panel co-integrating regression approach. This is a powerful technique that accounts for endogeneity and serial correlation based on the first-different stationary of the variables. The results revealed that tourism promotes latent entrepreneurship in BRICS economies.

Literature Review and Hypothesis Development

The economic literature regards the entrepreneurial process as the key ingredient in economic development (Schumpeter, 1934). Entrepreneurial actions could be better explained as the process of combining economic resources and coordinating them for effective usage for economic change through innovation and modern technologies (Mishra & Zachary, 2014). Entrepreneurial actions are the driving forces for firm creation and economic dynamics. It is the force that pushes the economic system out of equilibrium through innovation and technology; leading to new products and other innovative activities (Ajide, 2022). Latent entrepreneurship theory can be rooted in the theory of reasoned or planned behaviour (Linan & Chen, 2006; Ajzen & Fishbein's, 1975; Shapero & Sokol, 1982; Fatoki & Chindoga, 2012). Because latent entrepreneurship includes individuals who prefer to be self-employed but are still under wage employment in an economy, therefore, the theory of reasoned actions could better accommodate such a planned behaviour (Ajzen & Fishbein, 1975). This theory stresses that latent entrepreneurial behaviour is highly influenced by planned intension and attitude of individuals. However, in this study, I explore the theory of economic Entrepreneurship (Eisenhauer, 1995; Ripsas, 1998).

Mishra and Zachary (2014) propose entrepreneurial value creation theory which enables economists to incorporate economic variables in the entrepreneurship model. It is believed that there are many economic factors influencing entrepreneurial mindsets which include: competitiveness and innovation, the level of the country's economic transformation proxy by economic complexity (Nguyen *et al.,* 2021; Ajide, 2022), foreign direct investment (Munemo, 2018), business regulation (Chambers & Munemo, 2019), monetary and fiscal policy, economic globalization, income, and remittance among others (Rosser, 2010; Coulibaly *et al*., 2017; Ajide *et al*., 2021). In the same vein, entrepreneurial value creation offers a holistic approach to the complex and disordered activities in entrepreneurial processes as a multidisciplinary study. Tourism development is another economic factor affecting entrepreneurship development (Subramaniam & Masron, 2021). Higher tourist flows may improve latent entrepreneurship, because it opens a new market and new employment opportunities. Entrepreneurship is a process by which latent entrepreneurial activity happens to be the first stage. Tourism opens new business thinking and ideas, a process that further accelerates the pace of achieving sustainable development (Barraza, 2018).

On empirical font, there are limited studies that examine tourism as a factor influencing the entrepreneurship process. Fatoki and Chindoga (2012) examined the barriers to latent entrepreneurship in South African high school students. Using random sample and structured questionnaires to generate data for the study with the use of the five-points Likert scale, the results showed that latent entrepreneurship was low due to financial constraints and the lack of market opportunities. Kazakhstan, Tleuberdinova, Shayekina, Salauatovam and Pratt (2021) estimate the model of entrepreneurship based on data spanning a period of 1996-2018. The results based on the autoregressive distributed lag (ARDL) model showed that there was a positive relationship between wages in the tourism sector and entrepreneurship development in the short run, implying that an increase in wage rate attracts entrepreneurial activities. However, in the long run, there was a negative association between the two variables, implying that an increase in wage rate leads to a higher cost of entrepreneurial operation. Using structural equation modelling, Rodríguez-Aceves, Saiz-Alvarez, and Muñiz-Avila (2019) showed that the latent entrepreneurial launching process was being delayed in Mexico due to fear of failure and perceived opportunities. The recent study of Subramaniam and Masron (2021) shed further light on the nexus between tourism and entrepreneurial development. The authors estimated an entrepreneurship model in which tourism served as the key independent variable within a period of 2010-2017. The results based on the generalized method of moment revealed that tourism improves entrepreneurship. This suggests that the importance of tourism in the entrepreneurial process should not be overlooked in developing economies (Cristache, Soare, Nastase, & Antohi, 2021). The outcomes of the existing studies made us formulate the following hypothesis: *tourism development has a positive and significant impact on latent entrepreneurship in BRICS economies.*

On other determinants of entrepreneurship, Filipiak *et al*. (2021) suggest that digitization or ICT improves the efficiency in tourism towards enterprise development. According to Fu *et al.* growth-oriented entrepreneurship should be encouraged through a conducive business environment. Tourism entrepreneurship accelerates economic development by providing employment and generating income for innovative entrepreneurs (Ahmad *et al.*, 2014). Abbasi *et al.* (2021) showed that tourism activities relate to economic complexity. Dias *et al.* (2021) confirmed that Covid-19 caused an unprecedented crisis in the development of tourism activities (Polukhin *et al.* 2021). Rubbo *et al.* (2021) confirmed that innovation and economic complexity have significant effects on firm productivity in BRIC nations. Contrary to Nguyen *et al.* (2021), the study of Ajide (2022) did not confirm a nonlinear relationship between entrepreneurship and economic complexity.

RESEARCH METHODOLOGY

Data Sources and Model Specification

To empirically achieve the objective of this study, I utilized data from BRICS countries (Brazil, Russia, India, China, and South Africa) for the period of 2001-2020. This period is limited by data availability. The author specified the empirical model as shown in equation (1).

$$LATENT_{it} = \varphi_0 + \varphi_1 LTA_{it} + \varphi_2 ECOCI_{it} + \varphi_3 FDI_{it} + \varphi_4 INF_{it} + \varphi_5 LGDPPC_{it} + \varphi_6 LSSE_{it} + \varphi_7 MOB_{it} + \varepsilon_{it} \quad (1)$$

In equation (1), *i* and *t* are the country and time identity respectively. The LATENT presents latent entrepreneurship which is the dependent variable while the LTA is the number of tourism arrivals (the key independent variable). I included a number of control variables to mitigate against variables omission bias. Moreover, my choice of control variables was informed by the extant literature. The control variables included: economic complexity (*ECOCI*) as a proxy for economic transformation (see Nguyen *et al*., 2021; Ajide, 2022), foreign direct investment (FDI) to proxy the presence of multinational firms in the economy which may influence the intention to engage in entrepreneurial activities (Munemo, 2018; Ajide & Soyemi, 2022), the inflation rate was used to capture the level of macroeconomic volatility (Ajide, 2022; Gomes & Ferreira, 2022). The LGDPPC represents economic growth (Chambers & Munemo, 2019; Asongu *et al.,* 2018). Next, LSSE is secondary school enrolment. It serves as a proxy for human capital development (Nguyen, 2020; Chambers & Munemo, 2019) while MOB is the mobile telephony an indicator of ICT development in the economy (Asongu *et al.,* 2018). For the measurement of variables and source of data, see Table 1.

Table 1. Sources of data and variables' measurements

Variable	Acronyms	Measurement	Sources of data
Latent entrepreneurship	LATENT	This is the percentage of adults' population that are latent entrepreneurs. These people intend to commence businesses in the next three years.	Global Entrepreneurship Monitor database
Economic complexity	ECOCI	Index of economic complexity	MIT's Observatory of Economic Complexity database
Tourism Arrivals	LTA	International tourism (number of arrivals). The logarithm form of the data is taken.	World Development Indicators, online version
Foreign direct investment	FDI	Foreign direct investment (as a percentage of GDP).	World Development Indicators, online version
Inflation rate	INF	Annual percentage change in the consumer price index.	World Development Indicators, online version
Economic growth	LGDPPC	GDP per capita (constant 2015 USD). This is taking in logarithm form	World Development Indicators, online version
Human capital development	LSSE	School enrollment, secondary (% gross)	World Development Indicators, online version
ICT penetration	MOB	Mobile cellular subscriptions (per 100 people)	World Development Indicators, online version
Tourism receipts	TR	International tourism, receipts (current USD. The logarithm form of the data is taken.	World Development Indicators, online version

Source: own study.

Estimation Technique

To ensure efficiency and reliable estimation technique, this study involved a number of preliminary tests. This included panel unit root test via Im *et al.* (2003), test (IPS), and augmented dickey fuller (ADF) to ascertain the level of stationarity of the variables and panel co-integration test via Pedroni (1999) which enabled us to confirm whether there was a long-run equilibrium. After confirming the stationarity of the variables and the co-integration, this study subsequently estimated the model using the pooled, weighted dynamic ordinary least square (DOLS) to examine the impact of tourism development on latent entrepreneurship in BRICS economies.

The estimation technique is robust in the presence of serial correlation and very effective in dealing with the endogeneity problem common in economic modelling. The panel DOLS is an extension of Stock and Watson (1993). In this estimation, the long run estimator is efficient by employing the lead and lagged differences in the independent variables to reliably deal with endogeneity feedback. The panel version of the DOLS was obtained in equation (2).

$$y_{it} = \alpha_{it} + x'_{it}\beta + \sum_{j=-p}^{p} \pi_{it} \Delta X_{i,i+j} + u_{it} \quad (2)$$

The estimated coefficient is β while p represents the number of leads and lags in the first differenced variables. π_{it} represents the associated parameters and ΔX is the independent variable in the first different form. The parameter was assumed to be asymptotically and normally distributed. The coefficients of dynamic ordinary least square were obtained from equation (3).

$$\hat{\beta} = \sum_{i=n}^{N} \{\sum_{t-1}^{T} z_{it} z'_{it}\}^{-1} \{\sum_{t-1}^{T} z_{it} \hat{y}_{it}^{+}\} \quad (3)$$

$z_{it} = \{x_{it} - \bar{x}_i, \Delta X_{i,t-1}, \Delta X_{i,t+1}\}$ is $2(p+1) \times 1$ vectors of independent variables. The panel DOLS is applicable when the time/period (T) sufficiently exceeds the number of cross-sectional units (N). In this study, T=20 and N=5. Therefore, panel dynamic ordinary least square was appropriate because it takes lead and lags, in which the model is estimated based on the first-different stationary of all the variables as confirmed by the panel unit root tests. However, the technique has a limiting Gaussian distribution which is based on the fixed number of cross-sections. Furthermore, its Wald test statistic also has a limiting distribution (Mark & Sul, 2003). Notwithstanding, the technique offers computational convenience as an alternative to the fully modified OLS estimator suggested by Pedroni (1997).

Results and Discussion

Table 2 presents the descriptive statistics of the variables. The percentage of latent entrepreneurs was approximately 18.83% which falls within the minimum and maximum values. The standard deviation was very close to the mean, implying that the level of dispersion was relatively minimal in BRICS economies. The key independent variable was tourism development with an average value of 7.2 percentage points. This value was within the maximum and minimum percentage points.

Table 2. Descriptive statistics

Variable	Obs	Mean	Std	Min	Max
LATENT	97	18.839	12.189	2.12	52.70
ECOCI	100	0.499	0.237	-0.015	0.967
LTA	100	7.200	0.518	6.377	8.210
FDI	100	2.293	1.212	0.205	5.368
INF	100	5.913	3.819	-0.731	21.477
LGDPPC	100	3.687	0.326	2.892	4.015
LSSE	100	1.794	0.502	0	2.041
MOB	100	85.334	50.017	0.608	165.661

Source: own study.

The average economic growth in BRICS economies was approximately to be 3.68 percentage points. The level of the mobile application was relatively high and the level of economic transformation proxied by economic complexity is relatively stable. The inflation rate was minimal which is on average 5.9%. Table 3 shows the correlation between the variables.

Table 3. Pairwise correlation

Variable	LATENT	ECOCI	LTA	FDI	INF	LGDPPC	LSSE	MOB
LATENT	1.000	–	–	–	–	–	–	–
ECOCI	-0.168	1.000	–	–	–	–	–	–
LTA	-0.108	0.336*	1.000	–	–	–	–	–
FDI	0.368	0.250*	0.210*	1.000	–	–	–	–
INF	-0.227*	0.145	-0.258*	-0.022	1.000	–	–	–
LGDPPC	-0.393*	0.635*	-0.265*	0.177	0.033	1.000	–	–
LSSE	-0.093	0.103	-0.012	-0.086	0.131	0.065	1.000	–
MOB	-0.441*	0.281*	0.117	-0.029	-0.029	0.602*	0.038	1.000

Note: ,***, **, * imply significant at 5%.
Source: own study.

As demonstrated in Table 3, it is very clear that there was no higher level of correlation among the variables. This was further buttressed by the variance inflation factor of each variable as presented in Table. The toleration rate was below 1 point. Therefore, it can be concluded that there was no evidence of multicollinearity. I also conducted a model specification test using linktest (Table 5). The null hypothesis was that the model was specified correctly. The coefficient of _hatsq was not statistically significant. The Wald test of the overall significance of the model was 40.64 (P-value =0.000). This further suggests that the model is correctly specified when the regressors explain up to 46% of the outcome variance. In Table 6, I present the panel unit root test of each variable. No variable was stationary at level, however, they were stationary after the first difference. This implies that there is a need to confirm whether there is co-integration among the variables or not.

Table 4. Multicollinearity test (variance inflation factor; VIF)

Variable	VIF	1/VIF
LTA	1.30	0.770
ECOCI	1.90	0.526
FDI	1.17	0.852
INF	1.17	0.852
LGDPPC	2.52	0.397
LSSE	1.04	0.958
MOB	1.71	0.584
Mean VIF	1.54	–

Source: own study.

Table 5. Model specification test (Linktest results)

LATENT	Coef.	Std. Err.	t-Statistic	P-value	[95% Conf. Interval]	
_hat	0.625	0.396	1.58	0.118	-0.161	1.413
_hatsq	0.010	0.010	0.98	0.328	-0.010	0.031
_cons	2.584	3.488	0.74	0.461	-4.341	9.510
F(2, 94)	40.64					
Prob > F	0.000					
R-squared	0.463					
Adj R-squared	0.452					

Source: own study.

We also conducted a panel co-integration via Pedroni test. Table 7 shows Phillips-Perron, Modified Phillips-Perron, and Augmented Dickey-Fuller indicators of Pedroni test reject the null hypothesis of no co-integration. This implied that there occurred a long-run co-integration among the variables. On this note, I proceeded to estimate the model using the Panel dynamic ordinary least square.

Table 8 shows the estimated coefficients of the panel dynamic ordinary least square based on pooled panel with trend specification. The co-variance was calculated by bandwidth estimation. The coefficient of tourism development was positive and significant; implying that tourism promotes latent entrepreneurship in BRICS economies. My results were not consistent with the study of Tleuberdinova *et al.* (2021) who confirmed that wages in the tourism sector reduced entrepreneurial development in Kazakhstan in the long run. However, my results supported the findings of Subramaniam and Masron (2021) who estimated the model using the generalized method of moment (GMM) on data spanning 2010 to 2017. The results suggest that tourism opens opportunities for self-employment and other entrepreneurial activities in emerging economies. The tourism sector does this by interacting with other sectors for productivity, economic progress, and entrepreneurial development.

Table 6. Panel Unit root test

Variables	ADF(Fisher-type)	Im-Pesaran-Shin unit-root	Conclusion
LATENT	-0.346	-1.841	
Δ(LATENT)	-2.464	-5.051***	I(1)
ECOCI	1.968	-0.781	
Δ(ECOCI)	-7.120	-4.207***	I(1)
LTA	1.359	-1.040	
Δ(LTA)	-2.093**	-2.324**	I(1)
FDI	-0.287	-1.181	
Δ(FDI)	-3.672***	-6.039***	I(1)
INF	-1.488	-1.620	
Δ(INF)	-8.050***	-4.787***	I(1)
LGDPPC	-1.170	-1.900	
Δ(LGDPPC)	-3.633***	-2.485***	I(1)
LSSE	-2.236	-1.682	
Δ(LSSE)	-8.711***	-3.441***	I(1)
MOB	-0.424	-1.693	
Δ(MOB)	-2.328**	-2.274**	I(1)

Note: ***, **, * imply significant at 1%, 5% and 10% respectively.
Source: own study.

Table 7. Pedroni test for Panel Cointegration (H_0: No cointegration)

Pedroni test	Statistic	P-value
Modified Phillips-Perron t	2.3529***	0.0093
Phillips-Perron t	-1.869***	0.00308
Augmented Dickey-Fuller t	-1.9693**	0.0245

Note.: augmented lags=1,***, **, * imply significant at 1%, 5% and 10% respectively.
Source: own study.

Table 8. Panel dynamic ordinary least square

Variable	Tourism Arrivals	Tourism Arrivals	Tourism Arrivals	Tourism Arrivals	Tourism Arrivals	Tourism Arrivals	Tourism Receipts
LTA	28.627*** (0.000)	30.971*** (0.000)	35.971*** (0.000)	30.236*** (0.000)	30.158*** (0.000)	37.229*** (0.000)	–
TR	–	–	–	–	–	–	35.724*** (0.000)
FDI	–	3.878*** (0.000)	3.027*** (0.000)	1.429** (0.028)	0.615 (0.370)	8.243*** (0.000)	6.419*** (0.000)
ECOCI	–	-18.166*** (0.000)	-20.54*** (0.000)	-12.570** (0.065)	-5.558 (0.450)	7.645 (0.315)	-34.576*** (0.000)
INF	–	–	0.703*** (0.000)	0.509** (0.034)	0.817** (0.002)	-1.290*** (0.000)	1.042*** (0.000)
LGDPPC	–	–	–	-25.147** (0.040)	-47.48*** (0.000)	-129.76*** (0.000)	46.261** (0.014)
LSSE	–	–	–	–	0.253 (0.823)	15.702*** (0.000)	5.508*** (0.000)
MOB	–	–	–	–	–	-0.046 (0.264)	-0.064 (0.127)
R-squared	0.115	0.719	0.784	0.838	0.864	0.955	0.919
Wald Chi2 test	23.840*** (0.000)	207.49*** (0.000)	254.80*** (0.000)	211.69*** (0.000)	237.72*** (0.000)	1254.90*** (0.000)	447.11*** (0.000)
No. of group	5	5	5	5	5	5	5

Note: ***, **, * imply significant at 1%, 5% and 10% respectively. Dependent variable: LATENT.
Source: own study.

Furthermore, tourism drives citizens to have entrepreneurial intentions because it brings new ideas through regular visits by tourists including catering services, hospitality, and transportation system. It also helps small business owners such as handicraft, food, and beverage shops to expand activities. The fact that there is demand among tourists for local products, culture, and traditional events may also serve as inspiration for latent entrepreneurs to actualize their dreams. Tourism would enhance innovation and technological transfer and bring new ideas and open new opportunities for entrepreneurial inspiration.

Because most tourist locations are usually found in rural or suburban areas, tourism serves as a tool for accelerating well-being and quality of life by encouraging indigenous entrepreneurial development (Irvine & Anderson, 2004; Fuller-Love *et al*., 2006). The demand for tourism services and the desire for outdoor' leisure encourage entrepreneurs to render varieties of businesses (Skuras *et al*., 2003). Tourism activities contribute to the turnover of businesses, entrepreneurial profits, and revenue to the government through taxes and fees. The activities in the tourism sector also encourage transport entrepreneurship and retail businesses.

The FDI coefficient was positive and significant, implying that the presence of multinational firms in BRICS economies promotes latent entrepreneurship. This is consistent with the previous findings (Apostolov, 2017). The recent study of Rani *et al*. (2022) showed that foreign direct investments' impact on BRICS national entrepreneurship was positive and significant after assessing inward and outward versions of the FDI. The study used panel fixed and random effect model on data spanning over a period between 2002 and 2019. Outward FDI was negative while inward FDI was positive and significant, implying that inward FDI encourages entrepreneurial development in BRICS economies. It provides innovations and additional markets for young entrepreneurs. The coefficient of economic complexity suggests that it reduces latent entrepreneurship. This confirms the submission of the existing studies (Nguyen *et al.,* 2021). They suggest that after a certain threshold, economic complexity may reduce entrepreneurship, possibly due to the saturation of the entrepreneurs in the system, which lead to highly competitive forces. This action creates a potential threat to latent entrepreneurs and suppresses the inflow of new business creation (Ajide, 2022). The coefficient of economic growth was negative and significant. One possible reason could be the non-inclusive nature of the BRICS economies. This result was similar to the submission of previous authors (Munemo, 2018; Ajide, 2022). Moreover, the Wald test suggested that my model was significant in explaining the determinant of latent entrepreneurship in BRICS economies. The R-square further showed the explanatory power of the model. Overall, the estimations suggested that tourism promotes latent entrepreneurs in BRICS countries.

CONCLUSIONS

This article is the first to examine the impact of tourism development on latent entrepreneurship in the group of BRICS countries. It contributes to the literature by providing a piece of fresh evidence on how the tourism sector may influence entrepreneurial aspirations. Based on the estimated results from the panel dynamic ordinary least square approach, I found that tourism development increases latent entrepreneurship in leading emerging economies. However, economic complexity does not spur latent entrepreneurship. Foreign direct investment promotes latent entrepreneurship in BRICS countries. The study concludes that the tourism sector contributes significantly to the development of entrepreneurship in BRICS nations. The findings of the study have theoretical and policy implications.

On theoretical implications, this study is one of the few studies that shed light on the nexus between tourism and entrepreneurship. The empirical evidence was timely, considering the current unprecedented growth of theoretical literature on entrepreneurship in emerging economies. Although the role of tourism on latent entrepreneurship was partially discussed, empirical studies of this nature are lacking. The novelty of this study focuses on the role of tourism activities within entrepreneurial ecosystems. It supports entrepreneurship analysis based on interdisciplinary approach.

In terms of policy implications, the study suggests that policymakers should concentrate efforts on improving the tourism sector to accelerate the pace of entrepreneurship development. The policy should include the provision of entrepreneurship education for the youth. Productive knowledge should be im-

proved and workshops for latent entrepreneurs may also help in accelerating entrepreneurship in BRICS economies. Bureaucratic procedures in getting a business registered and other bottlenecks should be simplified to create a conducive business environment. Enforcement of appropriate regulation tools, promotion of international best practices, and mechanism for proper implementation of the institutional framework will do well for the tourism sector and strengthen the entrepreneurial environment in BRICS economies. Mechanisms for tourism development should be properly implemented including efficient and friendly travelling policies, accommodation systems, and tour operations. This study showed that international tourism arrivals increase economic activities including production, consumption, and marketing entrepreneurial activities. Therefore, BRICS nations should take advantage of this development and accelerate the empowerment of youths. Tourism and trade policies such as inducement of special investment, tourism funding and provision of special grants for skills acquisition should be promoted.

One of the main limitations of this study relates to the issue of Covid-19 which might have changed the business models of most firms in BRICS's tourism sector. Moreover, the Ukraine-Russian crisis impacted the tourism industry negatively. It reduced the volume of tourism arrivals, increased fuel and food crises, and affected tourists' confidence. The author is unable to take this scenario into consideration due to the non-availability of data. Future studies are encouraged to overcome this shortcoming. More research should be conducted to examine the role of Covid-19 and the Russian invasion on Ukraine in the nexus between tourism and entrepreneurship.

REFERENCES

Abbasi, K.R., Lv, K., Radulescu, M., & Shaikh, A.P. (2021). Economic complexity, tourism, energy prices, and environmental degradation in the top economic complexity countries: fresh panel evidence. *Environmental Science and Pollution Research*, ahead of print, https://doi.org/10.1007/s11356-021-15312-4

Ahmad, S.Z., Jabeen, F., & Khan, M. (2014). Entrepreneurs' choice in business venture: motivations for choosing home-stay accommodation businesses in Peninsular Malaysia. *International Journal of Hospitality & Management.* 36, 31-40.

Ajide, F.M. (2022). Economic complexity and entrepreneurship: insights from Africa. *International Journal of Development Issues, 21*(3), 367-388. https://doi.org/10.1108/IJDI-03-2022-0047

Ajide, F.M., & Soyemi, K.A. (2022). Oil rent, entrepreneurial start-ups, and institutional quality: Insights from African oil-rich countries. *Entrepreneurial Business and Economics Review, 10*(1), 35-49. https://doi.org/10.15678/EBER.2022.100103

Ajide, F.M., Osinubi, T.T., & Dada, T.J. (2021). Economic globalization, entrepreneurship, and inclusive growth in Africa. *Journal of Economic Integration, 36*(4), 689-717, https://doi.org/10.11130/jei.2021.36.4.689

Ajzen, I., & Fishbein, M. (1975). *Belief, Attitude, Intention and Behavior. An Introduction to Theory and Research*. Boston: Addison Wesley.

Apostolov, M. (2017). The impact of FDI on the performance and entrepreneurship of domestic firms. *Journal of International Entrepreneurship 15,* 390-415 (2017). https://doi.org/10.1007/s10843-017-0205-4

Asongu, S.A., Nwachukwu, J.C., & Orim, S-M.I. (2018). Mobile phones, institutional quality and entrepreneurship in Sub-Saharan Africa. *Technol Forecast Soc Change, 131*(1),*183*-203. https://doi.org/10.1016/j.techfore.2017.08.007

Barraza, C. (2018). The entrepreneurial process. Retrieved from https://barrazacarlos.com/entrepreneurial-process-stages on May 22, 2019.

Chambers, D., & Munemo, J. (2019). Regulations, institutional quality and entrepreneurship. *Journal of Regulatory Economics, 55*(1), 46-66. https://doi.org/10.1007/s11149-019-09377-w

Coulibaly, S.K., Erbao, C., & Mekongcho, T.M. (2018). Economic globalization, entrepreneurship, and development. *Technological Forecasting and Social Change*, *127*, 271-280. https://doi.org/10.1016/j.techfore.2017.09.028

Cristache, N., Soare, I., Nastase, M., & Antohi, V.M. (2021). Integrated approach of the entrepreneurial behaviour in the tourist sector from disadvantaged mountain areas from Romania. *Environment, Development and Sustainability, 24,* 5514-5530, https://doi.org/10.1007/s10668-021-01669-6

Dias, A., Patuleia, M., Silva, R., Estêvão, J., & González-Rodríguez, R.M. (2021). Post-pandemic recovery strategies: revitalizing lifestyle entrepreneurship. *Journal of Policy Research in Tourism, Leisure and Events*, ahead-of-print, https://doi.org/10.1080/19407963.2021.1892124

Doing Business (2020). *Doing Buisness Report 2020.* World Bank Group.

Eisenhauer, J.G. (1995). The entrepreneurial decision: Economic theory and empirical evidence. *Entrepreneurship Theory and Practice, 19*(4), 67-79.

Fatoki, O.O., & Chindoga, L. (2012) Triggers and Barriers to Latent Entrepreneurship in High Schools in South Africa. *Journal of Social Sciences, 31*(3), 307-318, https://doi.org/10.1080/09718923.2012.11893040

Filipiak, Z.B., Dylewski, M., & Kalinowskl, M. (2021). Economic development trends in the EU tourism industry. Towards the digitalization process and sustainability. *Quality & Quantity*, ahead of print, https://doi.org/10.1007/s11135-020-01056-9

Ferreira, B., Morais, D.B., & Brothers, G.L. (2019). Enhancing self-efficacy to enable tourism microentrepreneurship: A quasi-experiment. *Journal of Teaching in Travel & Tourism, 19*(4), 341-359.

Fuller-Love, N., Midmore, P., Thomas, D., & Henley, A. (2006). Entrepreneurship and rural economic development: a scenario analysis approach. *International Journal of Entrepreneurial Behavior & Research, 12*(5), 289-305. https://doi.org/10.1108/13552550610687655

Fu, H., Okumus, F., Wu, K., & Köseoglu, A.M. (2019). The entrepreneurship research in hospitality and tourism. *International Journal of Hospitality Management*, 78, 1-12.

Global Entrepreneurship Index (GEDI). (2020). Global Entrepreneurship Index. The Global Entrepreneurship and Development Institute. Retrieved from https://thegedi.org/global-entrepreneurshipand-development-index on May 22, 2019.

Global Entrepreneurship Monitor Report. (2019). Global Entrepreneurship Monitor (GEM), London, UK. Retrieved from https://www.gemconsortium.org/report on July 20, 2022.

Gomes, S., & Ferreira, P. (2022). Entrepreneurial activity and economic growth: A dynamic data panel analysis of European countries. *Entrepreneurial Business and Economics Review, 10*(2), 7-20. https://doi.org/10.15678/EBER.2022.100201

Irvine, W., & Anderson, A.R. (2004). Small tourist firms in rural areas: agility, vulnerability and survival in the face of crisis. *International Journal of Entrepreneurial Behavior & Research*, *10*(4), 229-246. https://doi.org/10.1108/13552550410544204

Linan, F., & Chen, Y. (2006). Testing Entrepreneurial Intention Model on a Two Country Sample. Retrieved from http://www.emeraldinsight.com/journal on February 15, 2012.

Le Trinh, T. (2019). Factors affecting startup performance of small and medium-sized enterprises in Danang city. *Entrepreneurial Business and Economics Review, 7*(3), 187-203. https://doi.org/10.15678/EBER.2019.070310

Mark, N.C., & Sul, D. (2003). Cointegration vector estimation by panel DOLS and long-run money demand.

Oxford Bulletin of Economics and Statistics, 65(5), 0305-9049.

Mishra, C.S., & Zachary, R.K. (2014). The Theory of Entrepreneurship. New York, NY: Palgrave Macmillan. https://doi.org/10.1057/9781137371461

Munemo, J. (2018). Entrepreneurial success in Africa: how relevant are foreign direct investment and financial development?. *African Development Review, 30*(4), 372-385.

Nguyen, C.P., Nguyen, B., Tung, B.D., & Su, T.D. (2021). Economic complexity and entrepreneurship density: a non-linear effect study. *Technological Forecasting and Social Change, 173,* 121107, ahead-of-print. https://doi.org/10.1016/j.techfore.2021.121107

Tleuberdinova, A., Shayekina, Z., Salauatova, D., & Pratt, S. (2021). Macro-economic Factors Influencing Tourism Entrepreneurship: The Case of Kazakhstan. *The Journal of Entrepreneurship, 30*(1), 179-209.

Pedroni, P. (1999). Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and Statistics*, *61*(s1), 653-670.

Pedroni, P. (1997). *Fully modified OLS for heterogeneous cointegrated panels and the case of purchasing power parity',* Department of Economics, Indiana University, mimeo

Polukhin, A., Marina S., Marina E., Oxana S., Oksana A., & Anton, A.O. (2021). The Concept of Sustainable Rural Tourism Development in the Face of COVID-19 Crisis: Evidence from Russia. *Journal of Risk and Financial Management, 14*(38). Ahead of print, https://doi.org/10.3390/jrfm14010038

Rani, R., & Kumar, N. (2021). The dynamics of link between entrepreneurship, government support and economic growth: Evidence from BRICS countries. *Journal of Public Affairs,* ahead-of-print, https://doi.org/10.1002/pa.2741

Rani, R., & Kumar, N. (2022). Does Foreign Direct Investment Facilitate Entrepreneurial Activities? Evidence from BRICS Countries. *FIIB Business Review,* ahead-of-print, https://doi.org/10.1177/23197145221078651

Ripsas, S. (1998). Towards an interdisciplinary theory of entrepreneurship. *Small Business Economics, 10*(2), 103-115.

Rodríguez-Aceves, L., Saiz-Alvarez, J.M., & Muñiz-Avila, E. (2019). Why latent entrepreneurs delay their launch to the market in Mexico?. *International Journal of Entrepreneurship and Small Business*, *38*(3), 339-358.

Rosser, J.B. (2010). Is a transdisciplinary perspective on economic complexity possible?. *Journal of Economic Behavior and Organization, 75*(1), 3-11.

Rubbo, P., Picinin, C.T., & Pilatti, L.A. (2021). Innovation and economic complexity in BRICS'. *International Journal of Knowledge Management Studies*, *12*(1), 66-79.

Schumpeter, J.A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. New York: McGraw-Hill.

Skuras, D., Caldas, J.C., Meccheri, N., Psaltopoulos, D., & Viladomiu, L. (2003). Institutional support to strategic business orientations: an empirical analysis of rural businesses in four countries of southern Europe. *European Business Review*, *15*(4), 235-244.

Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. *Encyclopedia of Entrepreneurship 4*(2), 72-90.

Stock, J., & Watson, M. (1993). A simple estimator of cointegrating vectors in higher order integrated systems*. Econometrica*, *61*(4), 783-820.

Subramaniam, Y., & Masron, T.A. (2021). The impact of tourism on entrepreneurship in developing countries. *Business Strategy & Development*, 1-12. Ahead of print. https://doi.org/10.1002/bsd2.187

Usmani, G., Akram, V., & Praveen, B. (2020). Tourist arrivals, international tourist expenditure, and economic growth in BRIC countries. *Journal of Public Affairs*. 2020;e2202. https://doi.org/10.1002/pa.2202

World Travel & Tourism Council. (2012; 2015). *Travel & Tourism Economic Impact*. World, London: World Travel & Tourism Council.

Author

Folorunsho M. Ajide
Lecturer in Economics, Faculty of Social Sciences, University of Ilorin, Ilorin, Nigeria. PhD in Economics from Obafemi Awolowo University, Ile-Ife, Nigeria. His research interest includes the economics of entrepreneurship, the economics of crime, industrial economics, and financial economics.
Correspondence to: Dr. Folorunsho M. Ajide, P.M.B. 1515, Ilorin, Kwara State, Nigeria; e-mail: ajide2010@gmail.com or/ and ajide2010@yahoo.com
ORCID http://orcid.org/0000-0003-3231-2423

Acknowledgements and Financial Disclosure

The author would like to thank the editors of this journal and the anonymous referees for their useful comments which have been used to increase the value of this article. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of Interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright and License

Published by Cracow University of Economics – Krakow, Poland

Ministry of Education and Science
Republic of Poland

The journal is co-financed in the years 2022-2024 by the Ministry of Education and Science of the Republic of Poland in the framework of the ministerial programme "Development of Scientific Journals" (RCN) on the basis of contract no. RCN/SP/0583/2021/1 concluded on 13 October 2022 and being in force until 13 October 2024.