

THE EFFECT OF FINANCIAL AND ECONOMIC GROWTH ON TOURISM DEVELOPMENT IN EMERGING ECONOMIES: A STUDY OF VIETNAM FOR THE INTERVAL 1990-2020.

Original scientific paper

Received 19 September 2021

Revised 17 November 2021

27 April 2022, 2 July 2022

Accepted 28 July 2022

<https://doi.org/10.20867/thm.28.3.9>

 **Thi Phuong Thao Hoang**

Abstracts

Purpose - The primary study objective is to determine the interaction between economic, financial, and tourism development in Vietnam for the 1990-2020 intervals.

Design - This study is conducted through a combination of qualitative and quantitative methods using secondary data from WorldBank, Ourworldindata, and the Vietnam Bureau of Statistics.

Methodology: The ARDL model is a statistically more robust approach for cointegration testing; then the ECM model was used to test for short-term effects and finally the Granger test for causality between the observed variables.

Findings - Investigating the vital internal force that promotes tourism development reveals that finance and economic growth are crucially crucial during the 31-year study period. To illustrate, the economic and financial contribution to the positive change of tourism is up to 30.4% and 18.1%, respectively. Excitedly, the Granger test demonstrates a one-way causal relationship between economic growth and tourism development, tourism development, and finance development, and finance development and economic growth. In other words, it is a circle that demonstrates a consistently positive impact from tourism development to finance development, from finance development to economic growth, and finally, from economic growth to tourism development.

The originality of the research - This paper highlights the role and impact level of the economic and financial sector on the tourism industry of a new Asian tiger and can be considered as the first study on Vietnam. The findings investigate how the economy functioned in the past and support policymakers in establishing future development policies, particularly in post-pandemic recovery.

Keywords ARDL, Finance, Tourism, The growth, Variance decomposition, Vietnam

INTRODUCTION

More recently, the number of tourists and tourism revenue increase continuously have positively changed the economic environment of both emerging and advanced economies (Hartwell et al. 2018; Kay Smith and Diekmann 2017; Khan et al. 2021a,c). Specifically, in this seventh consecutive year, trade deficits in countries have fallen sharply because tourism exports have grown faster than commodity exports (Chen and Petrick 2014; Terblanche and Taljaard 2018).

Previous studies have been conducted to determine the extent to which tourism influences or contributes to a country's gross national income or overall economic

development (Naidoo and Sharpley 2016; Khan et al. 2020b). Many research findings based on time series have shown that tourism is the most critical component in a country's economic growth, namely, Vietnam, Malaysia, Thailand in Asia, and Malta, Spain, and Hungary in Europe; the 20 most prosperous countries in travel economy WTR-20 (Katircioglu 2009; Tang and Tan 2014; Yalçinkaya, Daştan and Karabulut 2018). Research on tourism's influence on the economy has found that most tourist development benefits economic growth; however, the opposite direction is not famous (Pablo-Romero and Molina 2013).

Nations grow faster and more stable in the long run if they have better financial systems. The financial sector's prosperity opens up great opportunities for economic expansion and boosts other industries (Hassan et al. 2011, Eryigit and Eryigit 2015; Song and Lin 2010). Ding and Ma (2018) revealed that tourism and finance have a long-term positive relationship in both the long and short term in Srilanka from 1970 to 2018. Over the interval 1975-2016, Shahbaz et al. (2019) discovered a two-way causal association between tourism and financial development in Malaysia. From 1960 to 2014, domestic tourism played a critical role in boosting India's long and short-term economic growth (Ohlan 2017). Finance is one of the profound impacts of internal forces to form professional tourism quality (Šimková 2007; Jange 2013; Barbu 2015). In times of disaster risk and spreading disease, flexible financial tools can keep tourism operations resilient (Sigala 2020).

The Đổi Mới policy 1986 put Vietnam into a free-market economic transition from a centrally planned economy. Vietnam achieved an impressive yearly average GDP growth, attracted significant foreign direct investment, and became an outstanding tourist destination (Baum 2020; Thanh 2014). The robustness of the financial structure opens up investment opportunities, increasing savings rates and expansion of capital, increasing production in all fields, especially in the era when the global economy thrives. Tourism is currently recognized as a critical economic sector, engaging in investment and supporting links for other sectors, namely, agriculture, industry, education, health, and other services to develop together.

Notwithstanding, to date, there has not been an insight study applying econometric models with time series to assert the vital role of finance and economy in Vietnam's tourism development. Studying this relationship aims to address the research gap in a tourism emerging country also well known as an economic phenomenon of the Asia region– Vietnam. Based on these arguments, using the ARDL model with data from 1990 to 2020 will be the first study of Vietnam to investigate the correlation between tourism, finance, and economic development. This research is conducted to clarify the two main goals: (1) to figure out the influence of economic and financial growth on tourism development in both the short and long term for the study interval; (2) to examine the causal relationship between observed variables. This study will provide a holistic view of Vietnam's tourism development over the past 31 years on the energy of economy and finance. Thus, the result of this study could support the economists in building future development strategies, strengthening the efficiency of the financial sector, and orienting sustainable tourism development.

This paper will describe in order: Section 2 expresses the theoretical foundation to illustrate the correlation between tourism, finance, and economic development and the role of tourism in Vietnam's economy. Section 3 shows the main results and in-depth analysis. Section 4 includes conclusions, policy recommendations, some limitations, and future research direction.

1. THEORETICAL FOUNDATION

This part includes a brief review of the correlation between the development of tourism, economic growth, and financial development. From the basement theories, purpose, and research direction are conducted.

How does the development of tourism and economic growth influence each other?

The tourism industry has asserted its crucial role in global economic progress. Studying to clarify how the development of tourism and economic growth stimulate each other is quite popular, not only in individual countries but also in multi-country regions. Especially, "the tourism-led growth hypothesis" was first formulated and researched in 2002, attracting numerous researchers with a diverse selection of econometric functions, sophisticated in-depth analyses, and accurate and valuable research results.

The development of tourism and the growth of the economy have different causality in research countries, and it is decided by the methodology and the research interval. The systematic literature review of Brida, Lanzilotta and Pizzolon (2016), and Gwenthure and Odhiambo (2017) demonstrate the interaction between the economy and the tourism sector. For more detail, there was causality from Tourism development to Economy growth: in Spain (1975-1997); in Taiwan, South Korea, Mauritius (1952-1999); in Kenya, Turkey, South Africa, and Bahrain (1990-2014); in Malaysia (1975-2011); in India, and Pakistan (1971-2011); in Chile (1986-2007); in 35 countries in East Asia-South Asia-Oceania; in OECD and non-OECD countries (1990-2002); in Pacific Island Countries (1985-2010). There was a causality flow from Economic growth to Tourism development: in South Korea (1975-2001), in Croatia, Cyprus, Tanzania, and Sri Lanka (1977-2012). A bidirectional relationship between Tourism development and Economic growth: in Taiwan (1959-2003); in Italia, Spain, and Greece (1960-2000); in Turkey (1980-2004), in the Mediterranean region (1988-2011), in 19 Island economies (1990-2007). Lastly, there was no causal relationship between Tourism development and Economic growth: in Latin America (1980-1997), in Brazil (1965-2006), in Turkey (1960-2006), in Greece (1960-2010). To sum up, "The tourism-led growth hypothesis" was proved in the bulk of studies.

Hampton et al. (2018) indicated Vietnam's tourism industry promoted growth, creating jobs, and increased income and spending for the local community. The shortcoming is this research uses data from a single year and does not offer enough evidence to confirm the "tourism-led growth hypothesis". Duc Toan et al. (2019) revealed that the tourism industry had a significant contribution to economic growth in Vietnam in the 1990-2017 interval. Based on this evidence and outcomes, this study extends the observed variable to examine the interaction between tourism, economy, and finance from 1990 to 2020.

How do tourism expansion and financial development influence each other?

An ARDL model analysis indicated that domestic and international tourism were positively impacted by economic and financial crises in 2007 Song and Lin (2010) and can be used to figure out the influence level of the financial crisis on tourism from Asia countries. Investigating the period from 1960 to 2014, Ohlan (2017) showed that India's tourism, economic, and financial development was not independent. In a multinational study (Italy, France, Spain, Turkey, and Greece), covering the interval 1995-2010, Basarir and Cakir (2015) found that an increase in tourist arrivals positively influenced financial development. Ngoasong and Kimbu (2016) confirmed the vital role of financial institutions in creating development opportunities and investing in tourism projects contributes to the outstanding achievement of small and medium tourist enterprises.

Looking back at the context of Vietnam, the research of Kumar (2014) is the sole study to date that reveals the development of finances affected the tourism sector and the economy in Viet Nam for the 1980–2010 period. More in-depth and updated studies are needed to continue exploring the interaction between finance and tourism to cover the research gap in this country at this moment.

The magnificent achievement of tourism in Vietnam's economic development process

Vietnam is the world's sixth-fastest-growing tourism destination (UNWTO-2019). It has grown 85 times after 30 years of restoration and opening. In 1990, there were just 350 tourist accommodation establishments; by the end of 2019, there were 30,000. Between 1990 and 2020, the number of international tourists climbed by 72, from 250,000 to over 18 million. The annual growth rate was over 20%. According to a report by the Vietnamese Statistical Office of the year 2019, the tourist industry contributed 9.2 percent to GDP, with 2.9 million jobs. The rapid increase in tourism revenue contributed to citizens' economic and spiritual well-being (Duc Toan et al. 2019; Trang et al. 2014). Vietnam's tourist achievement has recently received regional and international recognition, winning prestigious awards (Asia's leading cultural destination, Asia's Top Destination, The World's Leading Destination for Heritage, etc.).

On the whole, between 1990 and 2020, the size of the economy increased 12 times, GDP per capita increased 8.3 times, imports and export increased 29.5 times, and foreign exchange reserves reached a record 47.6 times. In 2020, the scale of Vietnam's economy reached about 343 billion USD, ranking in the top 40 largest economies in the world and fourth in ASEAN; GDP per capita is 3,521 USD, ranking 6th in ASEAN.

The size of the financial market is constantly increasing, meeting the economy's capital supply demand. This financial market growth can be seen as supporting financial resources for businesses to stabilize and develop production. As an illustration, domestic credit to the private sector has increased significantly over the years. A holistic view of tourism, finance, and economic progress can be seen in Table 1:

Table 1: Basic information on Vietnam's tourism, economy, and finances sectors from 1990 to 2020

	1990	1995	2000	2005	2010	2015	2019	2020
Domestic tourist (Milion USD)	0.9	6.9	11.2	16.1	28	57	85	31
International tourist (Million USD)	0.25	1.3	2.1	3.5	5.1	7.9	18	3.6
Revenue from tourism sector (Million USD)	58	396	760	1304	4173	15652	32827	13460
GDP (Billion USD)	6.5	20.7	31.2	58.7	115.6	193.2	261.2	271.2
Domestic credit to the private sector (% of GDP)	-	18.5	35.3	60.5	114.7	111.9	137.9	147.7
Broad money growth (annual %)	-	-	34.4	30.9	29.7	14.9	13.62	13.63

Source: Annual report of Vietnam statistical office – 1997, 2000, 2010, 2020

2. METHODOLOGY

Data description

We use GDP as a representative of the economy's size and tourism revenue as a proxy for the size of the tourism industry and broad money-M3 as a representative of the level of financial development.

"The M3 classification is the broadest measure of an economy's money supply. Economists traditionally used M3 to estimate the entire money supply within an economy and by central banks to direct monetary policy to control inflation, consumption, growth, and liquidity overmedium and long-term periods" (OECD). "The oldest and most widely used indicator of financial development is the ratio of M3 to GDP or the ratio of domestic money banks' assets to GDP" (King and Levine 1993). This Vietnam study uses broad money - M3 to represent financial development. Agbloyor (2014), Eryigit and Dulgeroglu (2015), and Kutan, Samargandi and Sohag (2017) also used broad money as an observed variable to measure financial development.

Table 2 shows that all three observed variables increased steadily during the study period. Each variable has a median more minor than the mean. In this case, it confirms that each data set is positively skewed.

Table 2: **Descriptive statistics**

Statistic	TR (million USD)	GDP (million USD)	FD (%)
Mean	6.68	94838.61	79.61
Median	1.36	75633	70.96
Maximum	34.3	271.20	179.7
Minimum	0.6	6472	18.57
Observations	31	31	31

Source: *Processed data by Eview 12*

Annual time series data on tourism development (tourism revenue – TR), economic growth (GDP), and financial development (FD - M3) are sourced from the World Bank and Our World in Data (Database). All observed variables are taken in natural logarithm excluding FD, which is in percentage growth rate; this form is helpful in avoiding heteroscedasticity and makes the results more reliable and evident.

The model and methodology

This empirical research model is inherited and developed based on many earlier investigations. With its flexibility and efficiency, the ARDL model has been chosen for numerous economic problems of tourism and regional development (Pesaran, Shin and Smith 2001). To illustrate, Basarir and Cakir (2015), and Eryigit and Eryigit, (2015) revealed the relationship between tourism and other sectors: agriculture, finance, health service, urbanization, energy consumption, and the ability to attract investment. Khan et al. (2020b), and Pedrana (2013) accomplished research on formulating regional economic and tourism development policies. Khan et al. (2020a) and Bibi et al. (2021) figured out the positive relationship between tourism and human well-being. Other notable studies on the correlation between economy, tourism, and foreign investment in Saudi Arabia were conducted by Dkhili and Dhiab (2018); Ohlan (2017) investigated the interaction between tourism, finance, and economic growth in India. In Vietnam's context, Dinh (2019) discovered the impact of tourism and investment from abroad on long-term economic development. Furthermore, Kumar (2014) and Duc Toan et al. (2019) demonstrated "the tourism led growth hypothesis" for the interval 1990-2017 in Vietnam.

From the limitations and future research direction of the above authors, this study is formed to evaluate the level of economic and financial impacts on tourism development in Vietnam for the 1990-2020 interval. The Eview software (version 12) is used to process the data in this investigation. To determine the interaction and reciprocal dynamics between variables, we use a Cobb-Douglass production function as follows:

$$TR = f(GDP, FD), \text{ where:}$$

- TR = tourism revenue (in billion USD)
- GDP = GDP (in billion USD)
- FD = M3 (%)

The result includes testing both the long and short-term correlation between these observed variables. The linear logarithm form is posed:

$$\ln TR_{it} = \alpha_i + \beta_i \ln TR_{it} + \gamma_i \ln GDP_{it} + \delta_i \ln FD_{it} + u_{it}$$

Pesaran and Shin (1995) stated the ARDL method has many conveniences and advantages over another cointegration approach. First, the ARDL model is a statistically more robust approach to cointegration testing for a small sample size of the study (Nkoro and Uko 2016). Second, the ARDL method only estimates a single equation to figure out the long-run relationships, while other methods need multiple systems of equations. Third, other cointegration approaches expect the same lagging regressors to be incorporated, while in the ARDL model, the regression variables can allow different optimal lags. Lastly, if the author does not guarantee the unit root attribute or stationarity of the data system at I (1) or I (0), then the ARDL procedure is most suitable for Analysis.

The sample size for the ARDL model is a minimum of 30 and a maximum of 80 (Agresti and Min 2002; Udoh, Afangideh and Udejaja 2015; Nkoro and Uko 2016; Menegaki 2019). In Vietnam's case, the study period is from 1990 to 2020, which means the sample size is 31. Furthermore, the optimal lag is 1. This result fits the ARDL technique's requirements and ensures accurate outcomes (Pesaran, Shin and Smith 2001; Agresti and Min 2002 ; Udoh, Afangideh and Udejaja 2015).

Unit root test

This test determines whether the variables are stationary before performing the causality test (Shrestha and Bhatta 2018), and non-stationary variables can invalidate standard experimental results. In this study, the Augmented Dickey-Fuller (ADF) test is chosen to test for the presence of unit roots and the Schwarz information criterion (SC), and the Akaike information criterion (AIC). The ADF will determine the optimal lag for the Cobb-Douglas production function by selecting values for the lag (n) and obtaining the value of n at which the SC or AIC reaches the minimum (Menegaki 2019).

ARDL test

The dynamic between the development of tourism, economic development, and financial development in the long-term is described by the standard log-linear function below:

$$\Delta \ln TR_{it} = \alpha_0 + \sum_{i=1}^n \omega_1 \Delta \ln GDP_{it-i} + \sum_{i=0}^n \omega_2 \Delta \ln FD_{it-i} + \phi_1 \ln GDP_{it-i} + \phi_2 \ln FD_{it-i} + \partial_{it} \quad (1)$$

Where:

- Δ is the first difference operator;
- α_0 is a constant;
- t is the time element;
- ω_1 and ω_2 are the short-term coefficients;
- ϕ_1 and ϕ_2 are the long-term coefficients;

∂_{it} is the white noise error term;
 it represents a particular period.

The result of the ARDL approach is based on the significance of the F-statistic and the X^2 statistic of the Wald test. The hypothesis of cointegration between the variables is accepted or not through the significance of the F-statistic of ω_1 and ω_2 .

Next, using an error correction model (ECM) to test the short-run influence of these variables:

$$\Delta \ln TR_{it} = \gamma_1 + \sum_{i=1}^n \beta_1 \Delta \ln TR_{it-i} + \sum_{i=0}^n \beta_2 \Delta \ln GDP_{it-i} + \sum_{i=0}^n \beta_3 \Delta \ln FD_{it-i} + \phi_1 ECT_{it-1} + \mu_{it1} \quad (2)$$

Where ECT is the error correction term, γ ($i = 0, \dots, 3$) are the constants of the model; β ($i = 1, \dots, 9$); μ ($it = 1, \dots, 3$) are the error terms; and ϕ is its coefficient which shows the speed to come back the equilibrium of the variables if there is any deviation in the short term. The speed of error correction consists of a stable relationship among these variables in the long term (Songling et al. 2019).

Causal test

The ARDL approach does reveal the degree of cointegration in the long run, but it does not indicate causal relationships among the variables. Hence, a Granger test was performed to examine the causal relationship between tourism development, economic development, and financial development. The Granger test used in this research is based on the models of Chandio et al. (2019); Croes et al. (2021); and Nepal et al. (2019). Naturally, there will be Granger causality in at least one direction if a long-term correlation between these variables exists. Estimate the following error correction models:

$$\Delta \ln TR_{it} = \alpha_0 + \sum \beta_1 \Delta \ln TR_{it-i} + \sum \beta_2 \Delta \ln GDP_{it-i} + \sum \beta_3 \Delta \ln FD_{it-i} + \varepsilon_{it1} \quad (3)$$

$$\Delta \ln GDP_{it} = \alpha_1 + \sum \beta_4 \Delta \ln GDP_{it-i} + \sum \beta_5 \Delta \ln TR_{it-i} + \sum \beta_6 \Delta \ln FD_{it-i} + \varepsilon_{it2} \quad (4)$$

$$\Delta \ln FD_{it} = \alpha_2 + \sum \beta_7 \Delta \ln FD_{it-i} + \sum \beta_8 \Delta \ln GDP_{it-i} + \sum \beta_9 \Delta \ln TR_{it-i} + \varepsilon_{it3} \quad (5)$$

Where α ($i = 0, \dots, 2$) (represent) / are the constants of the model; β ($i = 1, \dots, 9$) and ε ($it = 1, \dots, 3$) are the error term.

3. EMPIRICAL RESULT AND MAIN DISCUSSION

Correlation statistics between variables

Table 3 describes the correlation between these observed variables. The value of r has statistical significance if the sig value is less than 0.05. The closer to 1 of r is, the stronger the linear correlation is. The correlation results show that all variables are highly positively correlated with each other, when one variable changes, the other variables also change in the same direction.

Table 3: Correlations matrix

Correlation	LGDP	LTR	FD
LGDP	1		
LTR	.885** (0.000)	1	
FD	.966** (0.000)	.813** (0.000)	1

** . Correlation is significant at the 5% level.

Unit root test

All the observed variables are stationary at (I), which is shown in detail in Table 4. Therefore, we can continue with the test for co-integration between observed variables.

Table 4: Results of Unit root test

Variable with Intercept	ADF Test				Decision
	Level 1		First difference		
	t-statistic	p-value	t-statistic	p-value	
TR	2.517	0.996	-2.307	0.022	(I)
GDP	-1.022	0.743	-10.284	0.000	(I)
FD	4.190	1.000	-3.622	0.000	(I)

As the result from Table 5, following the Akaike information criterion (AIC), the optimal lag of the observed variables is at (1).

Table 5: Results of optimal lags

Lag	LogL	LR	FPE	AIC	SC	HQ
1	42.53234	1317.223*	0.000120*	-0.517417*	-0.235733*	-0.403093*

ARDL – cointegration testing

The tests show the bounds test for co-integration (Table 6) and the result for the series model (Table 6). In the model, $TR = f(GDP, FD)$, at a 5% significance level, the F-

statistic is 5.77 and is higher than the upper bound critical value. These results show that the variables share a relationship in the long term. From this base, we can proceed with the next estimation.

Table 6: Results of ARDL – cointegration testing

Equation model	F-statistic	SC lag-length criteria	Bound critical values (at 10% significance level)		Decision
			I(0)	I(1)	
TR = f(GDP, FD)	5.77	(1,1,2)	3.79	4.48	Co-intergrated

In the long term (Table 7), economic development is positively and strongly associated with tourism development: a 100% improvement in economic development can be linked to a 72.6% increase in tourism development. Similarly, a 100% increase in financial development will link to a 1.84 % enlarge in tourism development. The function for the long run is:

$$EC = LTR - (0.7267*LGDP + 0.0184*FD)$$

Table 7: Long-run estimate from the ARDL model

Variable	Coefficient	Std. error	t-statistic	Prob
Economic development	0.726723	0.336183	2.161690	0.0408
Finance development	0.018432	0.007062	2.610122	0.0153

ECM – short-term relationship

Then, to acquire the assessments of the short-run correlation between economic development and financial development in the tourism industry in Vietnam, the error correction approach was utilized. The details are shown in Table 8 below:

Table 8: Results of ECM

Variable	Coefficient	Std. error	t-Statistic	Prob.
Economic development	0.951949	0.156008	6.101917	0.0000
Finance development	0.004027	0.001595	2.525554	0.0129
<i>ECT(-1)</i>	<i>-0.079443</i>	<i>0.021984</i>	<i>-3.613724</i>	<i>0.0005</i>
<i>Adjusted R-squared</i>	<i>37.8%</i>			

In the short term, a 100% increase in economic development is associated with a 95.2% increase in tourism development. Meanwhile, a 100% increase in financial development results in only a 0.4 percent increase in tourism development. Thus, in comparison to the effect of financial development, economic growth has a more positive and significant impact on tourism development in the long and short term. Lastly, the speed of the variable's return to equilibrium in the long term is 7.9%.

Granger causality test

Hypothesis H0 is rejected when the probability of variables is less than 0.05. The details are presented in Table 9. It can be imagined as a circle that demonstrates a consistently positive impact from tourism development to finance development, from finance development to economic growth, and finally from economic growth to tourism development. The result of causality from the tourism sector to finance development is opposite to the finding of Kumar (2014) for Vietnam from 1980 to 2010. The impact direction of the observed variables has changed over time and economic policy in those different periods. According to preliminary research, few studies have discovered a positive influence of the economy on tourism development. Tourism demonstrates its attractiveness, potential, and critical role in Vietnam's economic development. Notwithstanding, this empirical research on Vietnam has demonstrated that the economy is the primary driver of tourism development during the research phase. Specially, tourism contributes to increased financial development. Policymakers should pay closer attention to these findings in order to improve economic policies in Vietnam.

Table 9: Granger causality outcomes

Null hypothesis	F-statistic	Prob.	Result
<i>Tourism development does not Granger cause Financial development</i>	5.58671	0.0256	Reject H0
Financial development does not Granger cause Tourism development	1.73316	0.1991	Accept H0
Economic development does not Granger cause Financial development	4.00322	0.0566	Accept H0
<i>Financial development does not Granger cause Economic development</i>	6.73179	0.0151	Reject H0
<i>Economic development does not Granger cause Tourism development</i>	4.66802	0.0398	Reject H0
Tourism development does not Granger cause Economic development	0.20293	0.6560	Accept H0

The variance decomposition analysis

The variance decomposition test analyzes the variability of a variable as a result of the shock of the variable itself and the shocks of other endogenous variables (Lütkepohl 2010). In other words, this test figures out the degree of influence of the independent variable on the change of the dependent variable.

Table 10: **The variance decomposition analysis of Tourism development**

The economic and financial contributions to tourism development
 Variance Decomposition of LTR:

Period	S.E.	LTR	LGDP	FD
27	0.572019	54.47857	28.96973	16.55170
28	0.576675	53.66587	29.36763	16.96650
29	0.581268	52.88269	29.75104	17.36627
30	0.585804	52.12750	30.12098	17.75152
31	0.590284	51.39897	30.47811	18.12292

In some countries, the economy did not play a pivotal role in promoting tourism (Mukherjee and Chakraborty 2010; Reyes and Useche 2019). Notwithstanding, in this study of Vietnam, where the economic contribution to tourism development is 30.4%, and finance's contribution is 18.1% (Table 10). Strongly, it calls for more effective policies in increasing the effective intensity of economic activities and expanding the financial system, thence impulsing tourism activities.

Diagnostic tests for the model

The regression model undergoes rigorous and complete tests to ensure the correct results:

- Wald test to check the right function with null hypothesis $C(2) = C(3) = 0$;
- Ramsey RESET to check if a function is missing a variable with the null hypothesis is this is a proper function with no missing variable;
- Serial correlation LM test with the null hypothesis is a regression function that does not occur autocorrelation;
- Heteroskedasticity with the null hypothesis is a model without variance change.

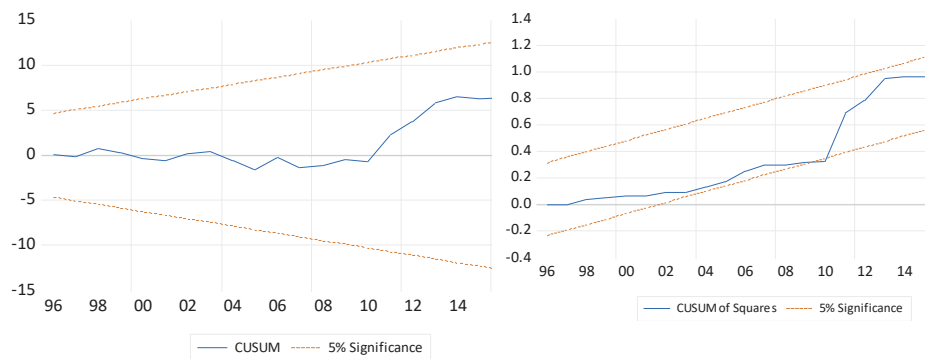
The outcomes are illustrated in Table 11:

Table 11: **Diagnostic test for the model**

Test	Statistic	Value	Probability
Wald	F-statistic	3.079393	0.0650
Ramset RESET	F-statistic	1.600711	0.2179
Serial Correlation LM	F-statistic	0.033671	0.8560
Heteroskedasticity (White)	F-statistic	1.821812	0.1369

Figure 1 confirms the stability of the TR model through the stability of all the parameters, and the values of the coefficients are within the critical bound values.

Figure 1: The plot of CUSUM and CUSUM of square test for the TR model



4. CONCLUSIONS AND RECOMMENDATIONS

The principal outcomes

This research is conducted to answer the question, "How close is the influence of economic and financial development on tourism development in Vietnam for the interval 1990-2020?". In the short term and long term, the economy and financial development have a beneficial connection with tourism development.

Significantly, economic growth plays a crucial role in tourism development. In other words, the increase in economy has a more positive and significant impact on tourism development in comparison to the effect of financial development. To illustrate, in the long run, a 100% increase in GDP can be linked to a 72.6% increase in tourism revenue. In contrast, a 100% increase in financial development resulted in only a 1.8% increase in tourism revenue. The Granger test demonstrates a one-way causal relationship between economic growth and tourism development, tourism development, and finance development, and finance development and economic growth.

Policy recommendations

Research to better understand the key factors that influence and promote tourism is crucial and necessary, especially in light of the impact of global change on an industry with economic benefits such as tourism. Policy, forecasting, and risk management systems for tourism are developed based on these outcomes.

Based on the findings of this study's relationship between tourism, finance, and economic development, policymakers should focus more on strengthening and improving those positive causes in order to achieve a sustainable development economy. The tourism industry is the area of lubricating financial investment activities (Ohlan 2017; Al-Mulali et al. 2021). This paper strongly supports these authors. The benefits of the finance sector, in turn, are the source of motivation for economic development. Consequently,

accompanying economic growth, tourism activities express impressive performance. This study confirms that designating the tourism industry as a spearhead economic sector in Vietnam is a reasonable decision that requires more flexible strategies to promote vigorous growth in the future. An economy is considered to be sustainable when there is an ecosystem, showing a sustainable connection between sectors, namely, finance, energy, services (tourism), agriculture, industry (Khan et al. 2021b). As a result of boosting the strength of the positive causal relationship between the triangle: economy-finance-tourism, it becomes the core energy, as well as the positive impact, spread to other economic sectors, namely, agriculture, forestry, and industry.

It is necessary to have a more favorable environment to increase the outstanding achievements of the tourism industry. To do this, Vietnam needs to promote the role of regional and territorial administrators in determining the type of tourism suitable for each locality. Universities offer advanced training in tourism to upgrade the quality of human resources. And the most important is building vital ecosystems and linkages, diversifying, and improving the quality of tourism activities to ensure stable and sustainable growth.

The context of post-Covid recovery takes countries that are more cautious with the implementation of development strategies (Quang et al. 2022; Sigala 2020; Altuntas and Gok 2021; Škare et al. 2021). So far, Covid's variants still have been complicated. In contrast, countries have taken advantage of financial tools to recover quickly, resulting in increased inflationary pressures and the international currency and financial market risks. In the short and long term, policymakers must have sustainable economic development orientations. The maximum utility of financial tools for resilience is essential, but maintaining a reasonable balance between growth and inflation is critical to ensuring residents and businesses adapt to the changes and challenges created by the pandemic.

Strengthening and perfecting the mechanism of the economic ecosystem becomes of primary importance for recovery and getting back on the development path of countries, especially in this health crisis-hitting era. A robust economic ecosystem is reflected in the quality of human resources (Khan et al. 2020a). Furthermore, financial education is a tool for economic development and improving resident living standards Batsaikhan and Demertzis (2018). In the context of Vietnam, productivity is mainly created by the knowledge-based economy. To firmly consolidate, one of the ground knowledge that must be added is finance, which is the shortcoming in Vietnam's education system. Thus, as numerous countries are doing, early financial education should be added to the curriculum flexibly and practically.

To stimulate investment and production activities, as well as to ease the flow and power of M3, policies to attract corporate and individual financial investment need to be completed. In addition, it is crucial to aim for convenient access and high liquidity to create a positive driving force for the economy and tourism (Ohlan 2017). Interest rate policies must also be more flexible, especially in the post-pandemic. This creates openness and convenience in finance activities. Furthermore, as Pedrana's recommendation (2013), the government should forward to green financial investment opportunities for development and the sustainability of the financial and economic system.

In terms of committing to sustainable development, the long-term economic development strategy needs to transition to green models. This model advocates the efficient and economical use of natural resources and energy. In addition, the advancement of science and technology, the application of digital technology, and digital transformation are prioritized to take advantage. The green revolution in tourism and finance is now a pilot propensity in Vietnam. To strengthen Vietnam's competitiveness in attracting foreign investment. Vigorously, its positive influence is spreading to other economic sectors. Policymakers must make additional efforts to promote these advantages of Vietnam further.

Limitations and future research direction

Some limitations can be noticed. Firstly, using M3 as the sole factor to represent financial development, other additional observations such as domestic credit, stock market capitalization, and bank credit have a high rate of missing value, and inclusion will cause biased research results. Secondly, due to the crisis of the pandemic, the data has not been fully updated. The covid -19 pandemic and border closure began in 2020, and Vietnam's tourism industry suffered a 40% loss. This precipitous drop may skew the overall result. However 2020 data is still used to observe the crises that appear in economic operations initially.

Other studies extend this proxy to more fully measure the properties of this observable variable, for instance, by including domestic credit, stock market capitalization, stock market turnover of domestic shares, and bank credit. Moreover, it is possible to expand exogenous variables such as urbanization and agricultural development to see better the correlation between financial industries, which is especially important for emerging countries such as Vietnam. Another proposed research direction is to use "the green finance" variable to observe its spillover to the economic and tourism development processes in the current trend of a net-zero carbon economy. Furthermore, we can expand research data for the ASEAN region for regional vision and strategy.

REFERENCE

- Agbloyor, E. K., Abor, J. Y., Delali Adjasi C. K. and Yawson, A. (2014), "Private capital flows and economic growth in Africa: The role of domestic financial markets", *Journal of International Financial Markets, Institutions and Money*, Vol. 30, pp. 137–152. <https://doi.org/10.1016/j.intfin.2014.02.003>
- Agresti, A. and Min, Y. (2002), "On Sample Size Guidelines for Teaching Inference about the Binomial Parameter in Introductory Statistics", *Unpublished Master's Thesis, University of Florida*, pp. 1–10.
- Al-Mulali, U., Solarin, S. A. and Gholipour, H. F. (2021), "Relationship between financial development and inbound tourism: A revisit", *Journal of Public Affairs*, Vol. 21, No. 3. <https://doi.org/10.1002/pa.2233>
- Altuntas, F. and Gok, M. S. (2021), "The effect of COVID-19 pandemic on domestic tourism: A DEMATEL method analysis on quarantine decisions", *International Journal of Hospitality Management*, Vol. 92. <https://doi.org/10.1016/j.ijhm.2020.102719>

- Barbu, I. (2013), "The factors appearance and development of rural tourism", *The Annals of the University of Oradea. Economic Sciences*, Vol. 1, No. 1, pp. 750-758.
https://www.researchgate.net/publication/286029300_THE_FACTORS_APPEARANCE_AND_DEVELOPMENT_OF_RURAL_TOURISM
- Basarir, C. and Çakir, Y. N. (2015), "Causal Interactions Between Co2 Emissions, Financial Development, Energy and Tourism", *Asian Economic and Financial Review*, Vol. 5, No. 11, pp. 1227–1238.
<https://doi.org/10.18488/journal.aefr/2015.5.11/102.11.1227.1238>
- Batsaikhan, U. and Demertzis, M. (2018), "Financial literacy and inclusive growth in the European Union", *Bruegel Policy Contribution*, No. 8, pp. 1–18. <https://www.bruegel.org/2018/05/financial-literacy-and-inclusive-growth-in-the-european-union/>
- Baum, A. (2020), "Vietnam's Development Success Story and the Unfinished SDG Agenda", *IMF Working Papers*, Vol. 20, No. 31. <https://doi.org/10.5089/9781513527024.001>
- Basarir, C. and Cakir, Y. N. (2015), "Causal Interactions Between Co2 Emissions, Financial Development, Energy and Tourism", *Asian Economic and Financial Review*, 5(11), pp. 1227–1238.
<https://doi.org/10.18488/journal.aefr/2015.5.11/102.11.1227.1238>
- Batsaikhan, U. and Demertzis, M. (2018), "Financial literacy and inclusive growth in the European Union", *Bruegel Policy Contribution*, No. 8, pp. 1–18. <https://www.bruegel.org/2018/05/financial-literacy-and-inclusive-growth-in-the-european-union/>
- Bibi, S., Khan, A., Hayat, H., Pannnniello, U., Alam, M. and Farid, T. (2022), "Do hotel employees really care for corporate social responsibility (CSR): a happiness approach to employee innovativeness", *Current Issues in Tourism*, Vol. 25, No. 4, pp. 541-558.
<https://doi.org/10.1080/13683500.2021.1889482>
- Brida, J. G., Lanzilotta, B. and Pizzolon, F. (2016), "Dynamic relationship between tourism and economic growth in MERCOSUR countries: A nonlinear approach based on asymmetric time series models", *Economics Bulletin*, Vol. 36, No. 2, pp. 879–894.
- Chandio, A. A., Jiang, Y. and Rehman, A. (2019), "Using the ARDL-ECM approach to investigate the nexus between support price and wheat production: An empirical evidence from Pakistan", *Journal of Asian Business and Economic Studies*, Vol. 26, No. 1, pp. 139-152.
<https://doi.org/10.1108/JABES-10-2018-0084>
- Chen, C.-C. and Petrick, J. F. (2016), "The Roles of Perceived Travel Benefits, Importance, and Constraints in Predicting Travel Behavior", *Journal of Travel Research*, Vol. 55, No. 4, pp. 509–522.
<https://doi.org/10.1177%2F0047287514563986>
- Croes, R., Ridderstaat, J., Bağ, M. and Zientara, P. (2021), "Tourism specialization, economic growth, human development and transition economies: The case of Poland", *Tourism Management*, Vol. 82.
<https://doi.org/10.1016/j.tourman.2020.104181>
- Chandio, A. A., Jiang, Y. and Rehman, A. (2019), "Using the ARDL-ECM approach to investigate the nexus between support price and wheat production", *Journal of Asian Business and Economic Studies*, Vol. 26, No. 1, pp. 139–152. <https://doi.org/10.1108/JABES-10-2018-0084>
- Ding, F. and Ma, T. (2018), "Dynamic Relationship between Tourism and Homogeneity of Tourist Destinations", *IEEE Access*, Vol. 6, pp. 51470–51476.
<https://doi.org/10.1109/access.2018.2841966>
- Dinh, T. T.-H., Vo, D. H., Vo, A. T. and Nguyen, T. C. (2019), "Foreign Direct Investment and Economic Growth in the Short Run and Long Run: Empirical Evidence from Developing Countries", *Journal of Risk and Financial Management*, Vol. 12, No. 4.
<https://doi.org/10.3390/jrfm12040176>
- Dkhili, H. and Dhiab, L. B. (2018), "The Relationship between Economic Freedom and FDI versus Economic Growth: Evidence from the GCC Countries", *Journal of Risk and Financial Management*, Vol. 11, No. 4. <https://doi.org/10.3390/jrfm11040081>
- Duc Toan, L., Thanh Hai, P., Xuan Son, P. and Quang Man L. (2019), "Testing the Tourism- led growth hypothesis for Vietnam", *Communications on Stochastic Analysis*, Vol. 13, No. 6, pp. 189-203.
http://kketoan.duytan.edu.vn/uploads/6dd3528c-97f7-4703-8469-3072d1659251_68.scopusdrtoan.pdf
- Eryigit, K. Y. and Eryigit, S. B. (2015), "Foreign direct investment, financial development and economic growth: The case of Turkey", in Olgu, Ö., Dinçer, H. and Hacıoğlu, Ü. (Eds), *Handbook of Research on Strategic Developments and Regulatory Practice in Global Finance*, IGI Global, pp. 331–348.
- Eryigit, S. B. and Dulgeroglu, E. (2015), "How to measure the level of financial development", in Olgu, Ö., Dinçer, H and Hacıoğlu, Ü. (Eds), *Handbook of Research on Strategic Developments and Regulatory Practice in Global Finance*, pp. 260–286.

- General statistics office (1997), "Annual report of Vietnam statistical yearbook of 1997", viewed 30 June 2022, <https://www.gso.gov.vn/en/data-and-statistics/2020/02/statistical-yearbook-1997/>
- General statistics office (2000), "Annual report of Vietnam statistical yearbook of 2000", viewed 30 June 2022, <https://www.gso.gov.vn/en/data-and-statistics/2020/02/statistical-yearbook-2000/>
- General statistics office (2010), "Annual report of Vietnam statistical yearbook of 2010", viewed 30 June 2022, <https://www.gso.gov.vn/en/data-and-statistics/2019/10/statistical-yearbook-of-vietnam-2010/>
- General statistics office (2020), "Annual report of Vietnam statistical yearbook of 2020", viewed 30 June 2022, <https://www.gso.gov.vn/en/data-and-statistics/2021/07/statistical-yearbook-of-2020/>
- Gwenhure, Y. and Odhiambo, N. (2017), "Tourism and economic growth: A review of international literature", *Tourism*, Vol. 65, No. 1, pp. 33-44.
- Hampton, M. P., Jeyacheya, J. and Long, P. H. (2018), "Can Tourism Promote Inclusive Growth? Supply Chains, Ownership and Employment in Ha Long Bay, Vietnam", *Journal of Development Studies*, Vol. 54, No. 2, pp. 359-376. <https://doi.org/10.1080/00220388.2017.1296572>
- Hartwell, H., Fyall, A., Willis, C. and Page, S. (2018), "Progress in Tourism and Destination Wellbeing Research", *Current Issues in Tourism*, Vol. 21, No. 16, pp. 1830-1892. <https://doi.org/10.1080/13683500.2016.1223609>
- Hassan, M. K., Sanchez, B. and YU, J.-S. (2011), "Financial Development and Economic Growth in The Organization of Islamic Conference Countries", *Journal of King Abdulaziz University: Islamic Economics*, Vol. 24, No.1, pp. 1-34. <https://ssrn.com/abstract=3069010>
- Jange, G. (2013), "Sustainable tourism and management: a rapid change and review", *Global journal of commerce & management perspective*, Vol. 2, No. 4, pp. 115-120. <https://www.longdom.org/articles-pdfs/sustainable-tourism-and-management-a-rapid-change-and-review.pdf>
- Katircioglu, S. (2009), "Testing the tourism-led growth hypothesis: The case of malta", *Acta Oeconomica*, Vol. 59, No. 3, pp. 331-343. <https://doi.org/10.1556/aoecon.59.2009.3.4>
- Kay Smith, M. and Diekmann, A. (2017), "Tourism and wellbeing", *Annals of Tourism Research*, Vol. 66, pp. 1-13. <https://doi.org/10.1016/j.annals.2017.05.006>
- Khan, A., Bibi, S., Ardito, L., Lyu, J., Hayat, H. and Arif A. M. (2020a), "Revisiting the dynamics of tourism, economic growth, and environmental pollutants in the emerging economies-sustainable tourism policy implications", *Sustainability*, Vol. 12, No. 6. <https://doi.org/10.3390/su12062533>
- Khan, A., Bibi, S., Lorenzo, A., Lyu, J. and Babar, Z. U. (2020b), "Tourism and development in developing economies: A policy implication perspective", *Sustainability*, Vol. 12, No. 4, pp. 1-19. <https://doi.org/10.3390/su12041618>
- Khan, A., Bibi, S., Lyu, J., Latif, A. and Lorenzo, A. (2021a), "COVID-19 and sectoral employment trends: assessing resilience in the US leisure and hospitality industry", *Current Issues in Tourism*, Vol. 24, No. 7, pp. 952-969. <https://doi.org/10.1080/13683500.2020.1850653>
- Khan, A., Bibi, S., Lyu, J., Alam, M., Khan, M. M. and Nurunnabi, M. (2021b), "The quest of tourism and overall well-being: the developing economy of Pakistan", *PSU Research Review*, Vol. 5, No. 2, pp. 120-140. <https://doi.org/10.1108/PRR-07-2019-0022>
- Khan, A., Bibi, S., Lyu, J., Babar, Z. U., Alam, M. R. and Hayat, H. (2021c), "Tourism Development and Well-Being: The Role of Population and Political Stability", *Fudan Journal of the Humanities and Social Sciences*, Vol. 15, pp. 89-115. <https://doi.org/10.1007/s40647-021-00316-8>
- King, R. G. and Levine, R. (1993), "Finance and growth: schumpeter might be right", *Quarterly Journal of Economics*, Vol. 108, No. 3, pp. 717-737. <https://doi.org/10.2307/2118406>
- Kumar, R. R. (2014), "Exploring the role of technology, tourism and financial development: An empirical study of Vietnam", *Quality and Quantity*, Vol. 48, No. 5, pp. 2881-2898. <https://doi.org/10.1007/s11135-013-9930-5>
- Kutan, A. M., Samargandi, N. and Sohag, K. (2017), "Does Institutional Quality Matter for Financial Development and Growth? Further Evidence from MENA Countries", *Australian Economic Papers*, Vol. 56, No. 3, pp. 228-248. <https://doi.org/10.1111/1467-8454.12097>
- Lütkepohl, H. (2010), "Variance Decomposition", in Durlauf, S. N. and Blume, L. E. (Eds), *Macroeconometrics and Time Series Analysis*, Palgrave Macmillan, London, pp. 369-371.
- Menegaki, A.N. (2019), "The ARDL method in the energy-growth nexus field: best implementation strategies", *Economics*, Vol. 7, No. 4, pp. 1-16. <https://doi.org/10.3390/economics7040105>
- Mukherjee, S. and Chakraborty, D. (2012), "Is There any Relationship Between Economic Growth and Human Development? Evidence from Indian States", *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1624465>
- Nepal, R., Indra al Irsyad, M. and Nepal, S. K. (2019), "Tourist arrivals, energy consumption and pollutant emissions in a developing economy-implications for sustainable tourism", *Tourism Management*, Vol. 72, pp. 145-154. <https://doi.org/10.1016/j.tourman.2018.08.025>

- Naidoo, P. and Sharpley, R. (2016), "Local perceptions of the relative contributions of enclave tourism and agritourism to community well-being: The case of Mauritius", *Journal of Destination Marketing and Management*, Vol. 5, No. 1, pp. 16–25. <https://doi.org/10.1016/j.jdmm.2015.11.002>
- Nepal, R., Indra al Irsyad, M. and Nepal, S.K. (2019), "Tourist arrivals, energy consumption and pollutant emissions in a developing economy—implications for sustainable tourism", *Tourism Management*, Vol. 72, pp. 145–154. <https://doi.org/10.1016/j.tourman.2018.08.025>
- Ngoasong, M. Z. and Kimbu, A. N. (2016), "Informal microfinance institutions and development-led tourism entrepreneurship", *Tourism Management*, Vol. 52, pp. 430–439. <https://doi.org/10.1016/j.tourman.2015.07.012>
- Nkoro, E. and Uko, A. K. (2016), "Autoregressive Distributed Lag (ARDL) cointegration technique: application and interpretation", *Journal of Statistical and Econometric Methods*, Vol. 5, No. 4, pp. 63-91.
- Ohlan, R. (2017), "The relationship between tourism, financial development and economic growth in India", *Future Business Journal*, Vol. 3, No. 1, pp. 9–22. <https://doi.org/10.1016/j.fbj.2017.01.003>
- Ongo Nkoa, B.E. (2018), "Determinants of foreign direct investment in Africa: An analysis of the impact of financial development", Vol. 38, No. 1, pp. 221-233.
- Pablo-Romero, M.d.P. and Molina, J. A. (2013), "Tourism and economic growth: A review of empirical literature", *Tourism Management Perspectives*, Vol. 8, pp. 28–41. <https://doi.org/10.1016/j.tmp.2013.05.006>
- Pedrana, M. (2013), "Local economic development policies and tourism. An approach to sustainability and culture", *Regional Science Inquiry Journal*, Vol. 5, No. 1, pp. 91–99. http://www.rsijournal.eu/ARTICLES/June_2013/5.pdf
- Pesaran, M. H. and Shin, Y. (1995), "An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis", *Cambridge Working Papers in Economics*. <https://ideas.repec.org/p/cam/camdae/9514.html>
- Pesaran, M. H., Shin, Y. and Smith, R. J. (2001), "Bounds testing approaches to the analysis of level relationships", *Journal of Applied Econometrics*, Vol. 16, No. 3, pp. 289–326. <https://doi.org/10.1002/jae.616>
- Quang, T. D., Tran, T. C., Tran, V. H., Nguyen, T. T. and Nguyen, T. T. (2022), "Is Vietnam ready to welcome tourists back? Assessing COVID-19's economic impact and the Vietnamese tourism industry's response to the pandemic", *Current Issues in Tourism*, Vol. 25, No. 1, pp. 115-133. <https://doi.org/10.1080/13683500.2020.1860916>
- Reyes, G. E. and Useche, A. J. (2019), "Competitiveness, economic growth and human development in Latin American and Caribbean countries 2006-2015: A performance and correlation analysis", *Competitiveness Review*, Vol. 29, No. 2, pp. 139–159. <https://doi.org/10.1108/CR-11-2017-0085>
- Shahbaz, M., Benkraiem, R., Miloudi, A. and Tiwar, A. K. (2019), "Tourism-induced financial development in Malaysia: New evidence from the tourism development index", *Tourism Economics*, Vol. 25, No. 5, pp. 757–778. <https://doi.org/10.1177%2F1354816618806123>
- Shrestha, M. B. and Bhatta, G. R. (2018), "Selecting appropriate methodological framework for time series data analysis", *Journal of Finance and Data Science*, Vol. 4, No. 2, pp. 71–89. <https://doi.org/10.1016/j.jfds.2017.11.001>
- Sigala, M. (2020), "Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research", *Journal of Business Research*, Vol. 117, pp. 312–321. <https://doi.org/10.1016/j.jbusres.2020.06.015>
- Šimková, E. (2007), "The potential of rural tourism and the sustainable development of rural areas", *E a M: Ekonomie a Management*, Vol. 10, No. 4, pp. 57–62.
- Škare, M., Soriano, D. R. and Porada-Rochoń, M. (2021), "Impact of COVID-19 on the travel and tourism industry", *Technological Forecasting and Social Change*, Vol. 163. <https://doi.org/10.1016/j.techfore.2020.120469>
- Song, H. and Lin, S. (2010), "Impacts of the Financial and Economic Crisis on Tourism in Asia", *Journal of Travel Research*, Vol. 49, No. 1, pp. 16–30. <https://doi.org/10.1177%2F0047287509353190>
- Songling, Y., Shhtiaq, M. and Thanh, B. T. (2019), "Tourism industry and economic growth nexus in Beijing, China", *Economies*, Vol. 7, No. 1. <https://doi.org/10.3390/economies7010025>
- Tang, C. F. and Tan, B. W. (2014), "The linkages among energy consumption, economic growth, relative price, foreign direct investment, and financial development in Malaysia", *Quality and Quantity*, Vol. 48, No. 2, pp. 781-797. <https://link.springer.com/article/10.1007/s11135-012-9802-4>
- Terblanche, N. S. and Taljaard, A. (2018), "The perceived value and perceived benefits experienced by customers using travel agents", *South African Journal of Business Management*, Vol 49, No. 1. <https://doi.org/10.4102/sajbm.v49i1.7>

- Thanh, S. D. (2014), "Government Size and Economic Growth in Vietnam: A Panel Analysis", *Journal of Economics Development*, No. 222, pp. 17–39.
https://www.researchgate.net/publication/319126239_Government_Size_and_Economic_Growth_in_Vietnam_A_Panel_Analysis
- Trang, N. H. M., Duc, N. H. C. and Dung, N. T. (2014), "Research note: Empirical assessment of the tourism-led growth hypothesis - The case of Vietnam", *Tourism Economics*, Vol. 20, No. 4, pp. 885–892. <https://doi.org/10.5367/te.2013.0307>
- Udoh, E., Afangideh, U. and Udejaja, E. A. (2015), "Fiscal decentralization, economic growth and human resource development in Nigeria: Autoregressive Distributed Lag (ARDL) approach", *CBN Journal of Applied Statistics*, Vol. 6, No. 1, pp. 69–93.
- Yalçinkaya, Ö., Daştan, M. and Karabulut, K. (2018), "The effects of international tourism receipts on economic growth: Evidence from the first 20 highest income earning countries from tourism in the world (1996-2016)", *Montenegrin Journal of Economics*, Vol. 14, No. 3, pp. 55–71.
<https://doi.org/10.14254/1800-5845/2018.14-3.4>

Thi Phuong Thao Hoang

University of Pécs, Pécs, Hungary

Pécs, 48-as tér 1, 7622 Hungary

Ph.D. candidate in Faculty of Business and Economics

Phone: (+36) 3033 376 876

Email: gsr03k@pte.hu

Yersin University, Dalat, Vietnam

Tourism department

27 Ton That Tung, Dalat, Lam Dong, Vietnam

Phone: (+84) 0919911009

Email: hoangphuongthao16@gmail.com

Please cite this article as:

Hoang, T.P.T. (2022.) The Effect of Financial and Economic Growth on Tourism Development in Emerging Economies: A Study of Vietnam for the Interval 1990-2020. *Tourism and Hospitality Management*, Vol. 28, No. 3, pp. 641-659, <https://doi.org/10.20867/thm.28.3.9>



Creative Commons Attribution – Non Commercial – Share Alike 4.0 International