Journal of Tourism Management Research
2023 Vol. 10, No. 2, pp. 213-226
ISSN(e): 2313-4178
ISSN(p): 2408-9117
DOI: 10.18488/31.v10i2.3586

The role of tourism development in boosting export product diversification in China: A provincial perspective

Jabbar Ul-Haq[1]
Sana Khanum[2]
Salochina Oad[3]
Qazi Muhammad Adnan Hye[4+]
Zahid Ullah Khan[5]

[1,2,5]*Department of Economics, University of Sargodha, Sargodha, Pakistan.*
[1]*Email: jabbar.ulhaq@uos.edu.pk*
[2]*Email: sanakhanam261@gmail.com*
[3]*U.S. Xpress Inc. 4080 Jenkins Rd. Chattanooga, TN 37421, USA.*
[3]*Email: soad@usxpress.com*
[4]*Academic Research and Development Wing, Dubai, United Arab Emirates.*
[4]*Email: adnan.econ@gmail.com*
[5]*Department of Economics, Royal Holloway University of London, TW20 0EX, United Kingdom.*
[5]*Email: zahidullah.khan@uos.edu.pk*

(+ Corresponding author)

Article History
Received: 5 June 2023
Revised: 14 October 2023
Accepted: 19 December 2023
Published: 29 December 2023

Keywords
Economic growth
Export product diversification
Human capital
Industrial structure
Natural resource endowments
Tourism development.

ABSTRACT

Tourism has emerged as a major sector, and it is considered a significant contributor to the development of the host countries. Tourism development (TD) is believed, inter alia, to be a key promoter of export product diversification (EPD). This study explores the liaison between tourism development and export product diversification in China and across its regions (i.e., Eastern, Central, & Western) using the data for the period of 2011-2019. The Driscoll-Kraay standard errors (DKSEs) is adopted for empirical analysis along with feasible generalized least-squares (FGLS) and panel-corrected standard errors (PCSEs). The findings revealed an inverted U-shaped liaison between the TD and EPD. The estimates are robust and insensitive to econometric models, measures of tourism development, and the inclusion of other key covariates. The relationship between industrial structure, natural resource endowments, human capital, and economic growth is positive and statistically significant. The study revealed similar findings that were significant across regions. The policy insinuation is that the government should devise such policies to boost TD in order to promote EPD and sustainable development.

Contribution/Originality: The role of tourism development is highly overlooked in the case of China when it comes to the impact of tourism development on export product diversification. The goal of this research is to see the role of TD in boosting the foundations of new products or China's current export basket.

1. INTRODUCTION

The tourism industry, inter alia, has been the fastest-emerging sector across the globe over the last few decades (Visas et al., 2023). Tourism is becoming a source of economic expansion and diversification (Cattaneo, 2009). The tourism industry, being a service industry, manifests mobile features that are not only dependent on an organized system but also involve multiple departments such as hospitality, transportation, attractions, travel agencies, and tourism boards (Tang, 2017). Economic factors might be the cause of different tourism policies in various nations (Baum, 1994). Following the fuel and chemical industries, the tourism industry is taking a significant place as a top contributor to global exports (Haroon Rasool, Maqbool, & Tarique, 2021; Harmain Rasool, Ul-Haq, & Cheema, 2023). This industry also indirectly contributes to other sectors, such as helping domestic firms upgrade technology through import financing (Nowak, Sahli, & Cortés-Jiménez, 2007), promoting local products (Kastenholz, Eusébio,

& Carneiro, 2016), and refining the features of local commodities to meet global requirements (Armesto López & Martin, 2006). All these factors increase the competitiveness of local businesses in the global market. The travel industry accounts for a huge part of world exports, which is around 7% of the total global exports, and in 2019, it was reported by the United Nations World Tourism Organization (UNWTO) that the tourism industry contributed about 27% of world services.

Expanding the contributions of active and current products by developing innovative products in the export basket is known as export product diversification (EPD). Whereas the extensive margin relates to expanding a new variety of products, the intensive margin relates to the quantity of products (Ranjbar, Saboori, & Gholipour, 2023). Globally competitive advantages and participation in trade encourage countries to improve their exports. With the diversification of the product, those countries not only increase their share in the global market, but it also helps them prevent for unexpected shocks (Shi, Visas, Ul-Haq, Abbas, & Khanum, 2023). With the implementation of an EPD policy, not only will economies rely less on a limited list of supplies, which usually include raw materials and basic products, but it will also allow developing countries to become independent from the utilization and consumption of raw supplies. Moreover, previous literature has shown the positive impact of export diversification including heightened economic growth (Can, Ahmed, Ahmad, & Oluc, 2023; Canh & Thanh, 2022; Gözgör & Can, 2017; Sarin, Mahapatra, & Sood, 2022), environmental impacts (Can, Dogan, & Saboori, 2020; Dou, Ul-Haq, Visas, Aslam, & Khanum, 2023; Shi et al., 2023; Ul-Haq, Visas, Can, & Khanum, 2023), enhanced export quality (Can & Gozgor, 2018; Haini, Loon, & Li, 2023), increased earning with stability (Das & Pant, 1989; Lee & Zhang, 2022; Olaleye, Edun, & Taiwo, 2013), and attracting foreign direct investment (FDI) (Gnangnon, 2022), structural transformation (Hesse, 2009), and tackling income inequality (Le, Nguyen, Su, & Tran-Nam, 2020; Tchitchoua, Tsomb Tsomb, & Madomo, 2023).

China is now the world's third-most visited country (Campa, López-Lambas, & Guirao, 2016). As China's economy stabilizes, its tourism industry stands out and blooms (Xu, 2022). According to "The 2017 Travel & Tourism Competitiveness Report" of the World Economic Forum, China's ranking in global tourism competitiveness rose from 71st to 13th from 2007 to 2019 (Zhao & Liu, 2020). Hence, China is considered significant in the global tourism industry. Through its growth, China holds the records for the most international visitors worldwide (Costa, 2020). Inbound tourism remains at the forefront of the world (Le, Nguyen, et al., 2020; Ul-Haq, Mushtaq, Visas, Hye, & Rehan, 2023). Domestic tourism has been growing rapidly; in 2019, the number of domestic tourists increased by 8.4% from the past year, reaching 6.04 billion. 1535 million people from rural areas contributed to tourism, an 8.1% increase (Wen, Kozak, Yang, & Liu, 2021; Zhao & Liu, 2020). China has thrived through numerous changes throughout history (Campa et al., 2016; Sofield & Li, 2013). The historical evolution of China's tourism policies can be seen actively with the emergence of a new China in the year 1947. The importance and expansion further increased following China's reforms and opening reforms, referring to economic and political reforms. Between 1949 and 2013, there was a significant increase in tourism policies after 1979 with the "Sixth Five Year Plan," a threefold rise in the "Seventh Five Year Plan," highlighting guidelines for international tourists and travel agencies, and the emergence of domestic tourism policies with the "Eighth Five Year Plan," which was about 2.50% of total policies. With the "Eleventh Five Year Plan," focus shifted to mass tourism, including outbound travel regulations and standardized management, and in 2013, emphasis was placed on developing quality-based policies for entertainment tourism for Chinese people (Tang, 2017).

The existing studies explored the various influencing factors of EPD, such as trade openness, population, innovation, GDP, R&D expenditure, human capital, and foreign direct investment (FDI) (Handoyo & Ibrahim, 2021); exports geographic concentration, FDI, real effective exchange rate, and real income (Mubeen & Ahmad, 2016), infrastructure, aid for trade, FDI, trade openness (Fosu, 2021; Gnangnon, 2022; Tadesse & Shukralla, 2013), financial development (Harighi, Daei Karimzadeh, & Sharifi Renani, 2023), TD (Ranjbar et al., 2023), and institutional quality, trade openness, economic growth, financial development, natural resource abundance, and

foreign direct investment (Agosin, Alvarez, & Bravo-Ortega, 2012; Parteka & Tamberi, 2013; Zarach & Parteka, 2023; Zhang, Lai, Chang, Ranjbar, & Saboori, 2023). In the existing literature, the studies examined the impact of tourism on the ecological footprint (Ali, Yaseen, Anwar, Makhdum, & Khan, 2021; Kongbuamai, Bui, Yousaf, & Liu, 2020), CO_2 emissions (Ahmad & Ma, 2022; Eyuboglu & Uzar, 2020; Katircioglu, Feridun, & Kilinc, 2014), the quality of life (Sarpong, Bein, Gyamfi, & Sarkodie, 2020), load capacity factors (Pata & Balsalobre-Lorente, 2022), economic growth (Fayissa, Nsiah, & Tadasse, 2008; Ivanov & Webster, 2007; Tang & Abosedra, 2014), and energy consumption (Irfan, Ullah, Razzaq, Cai, & Adebayo, 2023; Khanal, Rahman, Khanam, & Velayutham, 2021; Visas et al., 2023). Tourism and its forms of cultural attraction have great power over the export diversification and productive capabilities of the host nations. Nonetheless, the tourism industry is highly overlooked in the case of China when it comes to the impact of TD on EPD. The goal of this research is to see the role of TD in boosting the foundations of new products or China's current export basket.

This study contributes to the stream of TD and EPD nexus literature in the case of China in the following ways: firstly, it examines the liaison between TD and EPD in China and across its regions using province-level panel data for the period of 2011-2019. Secondly, we use two indicators of TD for empirical analysis. Thirdly, this study employs a more disaggregated measure of EPD (at the province-level) as compared to previously-used aggregated measures (i.e., country-level) of EPD in existing literature (Can & Gozgor, 2018; Gözgör & Can, 2017; Ranjbar et al., 2023). The use of disaggregated data will help policy makers to understand the key (neglected) role of TD in boosting EPD in the case of China and devise better policies regarding TD in China's export basket.

The remaining part of the study is arranged as follows: the second section will explain theoretical foundations and review existing studies. The third section will elaborate on the empirical framework used for empirical analysis. The fourth section represents the findings and results discussion. The concluding part sums up the study.

2. THEORETICAL BACKGROUND AND LITERATURE REVIEW

2.1. Theoretical Background

Changes in both the intensive and extensive margins lead to diversification in the export product basket, which reshapes the overall structure of export buckets. To enhance the intensive margin, the export of active goods must be expanded. If this growth occurs by increasing the export of less significant active products, diversification occurs in the export baskets. Similarly, the augmentation of the extensive margin occurs when new domestic firms are introduced to the global market and novel goods, whether related or unrelated to existing ones, are exported. This broadening of the extensive margin diversifies the export baskets by increasing the variety of active commodities. A successful diversification of export baskets, encompassing both intensive and extensive margins, hinges on the country's existing productive capabilities. These capabilities are education, natural resources, human and physical capital stocks, and infrastructure (Hidalgo & Hausmann, 2009). Successfully diversified countries can diversify their export baskets at both extensive and intensive margins. Otherwise, if not properly diversified, then those countries can transform their export baskets through the intensive margin. However, there is a high chance of failure if there is a reliance on extensive margins to enter new industries.

Tourism and its forms of cultural attraction have great power over export diversification and productive capabilities. Firstly, an increase in visitors leads to an increase in demand for commodities and services; some can be produced locally, and the remaining can be imported. Through this strategy, the industry can better prepare businesses and firms to learn more about the demands of tourists. Therefore, these firms will improve their services and commodities to support an international market that can attract foreigners (Lejárraga & Walkenhorst, 2009). Furthermore, a greater demand for domestic goods leads to greater development and ambition for businesses selling those products. This can be achieved through the encouragement of expansion of the scale of the business, greater investment, greater technology, and the quantity/quality of their products (Cattaneo, 2009). If any of these

changes occur, the destination, the country experiencing this tourism, will be deemed more "competitive" in the world market, improving the export basket (Lejárraga & Walkenhorst, 2009).

Secondly, with forward and backward linkages, the tourism industry typically leads to a "spillover" effect in other local industries (e.g., Chien, Hong, & Li, 2014; Kadiyali & Kosová, 2013; Zhou, Yanagida, Chakravorty, & Leung, 1997). Greater tourism demands more from the upstream sector: higher demand for agriculture, construction, and food. This demand then creates jobs, increases productivity, and redefines product quality. Therefore, an increase in tourism has a net positive effect on other industries involved, greatly increasing product diversification (Lejárraga & Walkenhorst, 2009).

Thirdly, quality infrastructure such as transport, accommodation, and communication is a crucial prerequisite for the quality development of a country's tourism industry (e.g., Kanwal, Rasheed, Pitafi, Pitafi, & Ren, 2020; Seetanah et al., 2011). Hence, development in this quality infrastructure leads to greater foreign attraction and structural transformation (Acar & Berk, 2022; Nkemgha, Nchofoung, & Sundjo, 2023), influencing export product complexities, upgrades, and quality management (Kamguia, Ndjakwa, & Tadadjeu, 2023; Lapatinas, 2019; Zhang, Wang, Li, & Xiao, 2022). These changes then facilitate exports through the manufacturing of high-quality products. Additionally, greater investment and development of infrastructure then encourage firms to produce a higher variety or quality of products, whether they're updated or existing ones.

Lastly, social infrastructure with political stability and control of political/economic corruption greatly affects tourism (e.g., Ghalia, Fidrmuc, Samargandi, & Sohag, 2019; Mushtaq, Thoker, & Bhat, 2021; Ranjbar et al., 2023). Through the economic complexity theory, these social infrastructures are key to creating connections and relatedness in a community. These infrastructures connect firms and people, as greater relatedness correlates to greater quality and sophistication of products present in the export basket (Hidalgo, 2021; Ranjbar & Rassekh, 2022).

Hence, an increase in tourism could encourage the destination to transform its export baskets by advancing its social infrastructure. Though tourism plays a large role in the diversification of export baskets, key factors remain: the development level of the destination, the linkage between tourism and other upstream and downstream industries (Lejárraga & Walkenhorst, 2013), the types of tourists, and the cultural similarities between the tourists' identities and the destination's cultural presence (McLaren & Pera, 2002). Hence, it is theorized that tourism plays a significant role in determining the export basket; they are directly proportional. A great increase in the tourism industry leads to greater diversification in the export basket. The influence of TD on EPD in Figure 1.

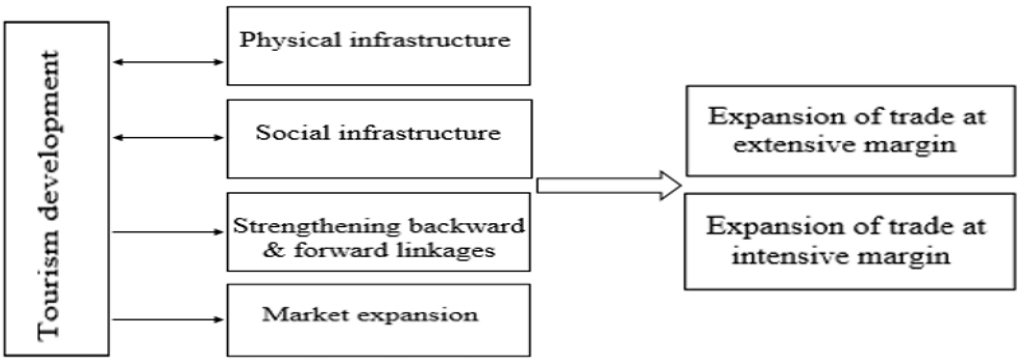

Figure 1. Influence of tourism development on export product diversification.

2.2. Literature Review

Primarily, initial studies focused on exploring the impact of TD on trade volume and its openness in general (Fernandes, Pacheco, & Fernandes, 2019; Madaleno, Eusébio, & Varum, 2017). Over time, more literature shifts have been observed from tourism's overall effect to product diversification. Lejárraga and Walkenhorst (2013), Lejarraja and Walkenhorst (2007), and Lejárraga and Walkenhorst (2009) stressed the exploration of tourism

theoretically and how it impacts product diversification. A study by Lejárraga and Walkenhorst (2009) revealed a positive correlation between EPD and tourism receipts. The fixed effects model was operationalized across 63 developing nations from 1993 to 2003. According to Cattaneo (2009) investigation of tourism's role in Mauritius as a strategy for product diversification, portfolio tourism promotes product diversification. The government also has a key role in stabilizing this process by improving social infrastructure, ensuring stability, and fostering backward linkages. Few researchers have also explored the relationship of TD with the product diversification process in a limited number of countries, for example, the United Arab Emirates (Hilal, 2020; Sharpley, 2002), Oman (Hilal, 2020), Nepal (Reis & Varela, 2015), Qatar (Morakabati, Beavis, & Fletcher, 2014; Weber, 2017), and Ethiopia (Robinson & Jonker, 2016). A study conducted in Nepal found a positive relationship between TD and export products related to the tourism industry (Reis & Varela, 2015). According to Hilal (2020), in two countries (Oman and the United Arab Emirates), exports and economic growth are influenced by the advancement of the tourism industry. This can be obtained by building its brand image internationally and, therefore, escalating its legitimacy. Morakabati et al. (2014) have revealed that the connection between tourism and economic diversification cannot be observed in a similar way in Qatar. Regional Challenges such as political stability, personal safety, and civil liberty in the Middle East and North Africa (MENA) can be considered obstacles. However, Weber recommends diversification as a solution for the advancement of Qatar's economy. Innovating industries could introduce tourism to achieve this. The findings of Sharpley (2002) suggested cost as a main contributor to the tourism industry and economic diversification in Abu Dhabi. More costs and accessibility in that region make it harder and more applicable.

3. EMPIRICAL FRAMEWORK

3.1. Data

This paper uses the sample of 2011-2019 to empirically evaluate the relationship between TD, industrial structure, natural resource endowments, economic growth, human capital, and EPD. In this research, the dependent variable is the EPD. Following Shi et al. (2023) and Dou et al. (2023) the variable of EPD is measured by using the proxy of log of exports' sales income of new product of industrial enterprises (ten thousand yuan). TD is the key independent variable of this paper. Following Ranjbar et al. (2023), TD is computed using the revenues received from tourists as a percentage of provincial GDP for the core model. Moreover, the number of arrival of international tourists (in million person-times) as a percentage of the total regional population is also taken into account for robustness checks. Following Cheng, Li, and Liu (2018), the variable of industrial structure is calculated by using the ratio of manufacturing's value added to GDP. Following Sun, Sun, Geng, Yang, and Edziah (2019), the natural resource endowments (NRE) are computed by using the natural gas consumption (100 million cubic meters), kerosene, gasoline, fuel oil, diesel, crude oil, coke, and coal consumption in 10,000 tons, and converted into a British thermal unit (BTU) unit as suggested by Wang and Chen (2020) and Visas, Ul-Haq, and Khanum (2021). Following Hye, Ul-Haq, Visas, and Rehan (2023) and Farooq, Ul-Haq, and Cheema (2023), economic growth is proxied by the log of GDP per capita in 1000 yuan. Finally, the log of education spending serves as a measure of human capital. The data source is CNBS (2022). The descriptive statistics for China are in Table 1.

Table 1. Descriptive statistics of China.

Variables	N	Mean	Std. dev.	Mini.	Maxi.
EPD	270	14.406	2.319	3.496	18.590
TD	270	0.614	1.050	0.00914	15.951
IS	270	44.302	20.644	3.331	344.00
NRE	270	4.487	3.073	0.542	15.802
EG	270	10.812	0.433	9.705	12.008
HC	270	6.519	0.649	4.634	8.074

Note: EPD=Export product diversification, TD= Tourism development, IS= Industrial structure, NRE= Natural resource endowment, EG= Economic growth, HC= Human capital.

3.2. Methodology

Following Zhang et al. (2023), this research developed a panel model to empirically evaluate the influence of TD on EPD in China and across regions (i.e., Eastern, Central, and Western). The panel models (i.e., core and full) are as follows:

$$EPD_{zt} = \beta_0 + \beta_1 TD_{zt} + \beta_2 TD^{\wedge 2}{}_{zt} + \varepsilon_{zt} \quad (1)$$

$$EPD_{zt} = \beta_0 + \beta_1 TD_{zt} + \beta_2 TD^{\wedge 2}{}_{zt} + \beta_3 IS_{zt} + \beta_4 NRE_{zt} + \beta_5 EG_{zt} + \beta_6 HC_{zt} + \varepsilon_{zt} \quad (2)$$

In models 1 and 2, the subscript z and t show the province and time period, respectively. EPD is the dependent variable that indicates the EPD. TD is the core independent variable of this research, which reflects TD. TD^2 is the square term of the TD. Is the industrial structure, NRE is the natural resource endowment, EG is the economic growth, and HC is the human capital. ε is the random error term. The study focuses on China, as the tourism industry is becoming a growing industry (Zhou, 2019). Moreover, in China, the tourism market has developed into one of the most-visited inbound as well as outbound tourist destinations in the world. This TD causes the diversification of products; therefore, it is expected to have a positive impact on EPD.

To begin empirical analysis, it is imperative to primarily check the diagnostic tests. Therefore, to explore whether the problem of cross-sectional dependence exists in our case or not, this study employs the cross-sectional dependence (CD) test. Further, if the existence of serial correlation confirms it, it is problematic for the study's empirical results. Therefore, it is also necessary to check before making empirical estimates. For this purpose, the Wooldridge test is used in this research. Furthermore, we cannot trust empirical analysis without testing the issue of heteroscedasticity. For this, the modified Wald test is used to confirm whether the problem of heteroscedasticity prevails or not, and to check multicollinearity, VIF is used. Finally, based on the study diagnostics, following Le, Le, and Taghizadeh-Hesary (2020), the Driscoll-Kraay standard errors (DKSEs) method is used to investigate the liaison between EPD, industrial structure, natural resource endowments, economic growth, human capital, and TD. DKSEs is a better choice to use in cases where N> T as in this study.

4. RESULTS AND DISCUSSION

To capture the true picture of empirical estimates, this study first explores the problem of cross-sectional dependence (CSD) by adopting the Pesaran (2004) CD test, whose result is shown in Table 2. The outcome illustrates the existence of CSD in the dataset, as shown by its statistics. Further, in Table 3, the variance inflation factor (VIF) test results for multicollinearity. The VIF test discloses the absence of multicollinearity in the dataset, as the mean value is under 3.

Table 2. Pesaran (2004) CD statistics.

Variable	CD-test statistic	p-value
EPD	17.63***	0.000
TD	7.41***	0.000
IS	46.63***	0.000
NRE	11.56***	0.000
EG	51.22***	0.000
HC	56.16***	0.000

Note: Under the null hypothesis of cross-section independence CD ~ N (0, 1). *** shows the null hypothesis rejection at a 1% significance level.

Table 3. VIF.

Variable	VIF	1/VIF
TD	3.38	0.296
IS	2.91	0.344
NRE	1.68	0.596
HC	1.57	0.635
EG	1.51	0.663
Mean	2.21	

In Table 4, we cannot begin to directly evaluate the empirical model without testing the diagnostics. Therefore, the Modified Wald test and Wooldridge test are used to detect heteroscedasticity. The results validate the presence of heteroscedasticity and serial correlation in the study dataset. Furthermore, BPLM test results also indicate the issue of CSD.

Table 4. Diagnostics tests.

Test	Test statistic
Heteroscedasticity modified Wald test	24074.00***
Serial correlation Wooldridge test	24.268***
cross-sectional dependence BPLM test	699.52***

Note: ***shows significance at 0.01 level.

Table 5 discloses the impact of tourism development on export product diversification in the case of China. Tourism development (TD) shows a positive impact on export product diversification, meaning that an increase in tourism development promotes export product diversification. The square of tourism development (TD^2) unfolds the negative impact on export product diversification, indicating that TD^2 causes a reduction in export product diversification. Tourism development and export product diversification are associated and statistically significant in all models by employing the DKSEs, Feasible Generalized Least Square (FGLS), and Panel Corrected standard errors (PCSEs). All models demonstrate the inverted U-shaped link between tourism development and export product diversification. The study findings are in line with those of Ranjbar et al. (2023). The study by Seaton et al. (1994) revealed that tourism development plays a role in attracting tourists and has become a source of the increased number of tourist arrivals to various touristic destinations.

Table 5. Tourism development and EPD in China.

Variables	DKSEs	FGLS	PCSEs
TD	1.744***	1.811***	1.744***
	(0.326)	(0.108)	(0.189)
TD^2	-0.098 ***	-0.102***	-0.098***
	(0.019)	(0.006)	(0.011)
Constant	13.479***	13.545***	13.479***
	(0.318)	(0.091)	(0.151)
Wald/F-statistics	509.36	301.88	159.12
P-values	0.0000	0.0000	0.0000
Observations	270	270	270

Note: EPD is the dependent variable in all the estimated models. Standard errors are in parentheses. *** p<0.01.

Table 6 reveals the association between industrial structure, natural resource endowments, economic growth, human capital, and export product diversification. The variables of industrial structure and export product diversification are positively associated. The 1% increase in industrial structure led to a 0.033% increase in export product diversification. The empirical estimate illustrates that industrial structure plays a central role in boosting export product diversification. Therefore, the study findings are a guide for the Chinese government to make policies that promote the industrial structure. Regarding natural resource endowments, the correlation between the endowment of natural resources and the diversification of export products is positive and statistically significant. The increase in natural resource endowments helps diversify the export basket. The 1% rise in the endowment of natural resources boosted the diversification process by 0.372%. The empirical results are consistent with Alemu (2016). Economic growth also demonstrates the direct link between the developments of export product diversification. The results illustrate that the enhancement of country growth will also play an important role in stimulating product diversification. The 1% increase in economic growth led to a 1.966% increase in export product diversification. The management organization also focuses on the country's development, encouraging

diversification and, in turn, achieving sustainable economic development. Last but not least, the variable of human capital shows a positive influence on export product diversification. It means that export product diversification increases with the increase in human capital. The development of human capital is the key to the development of diversification, as the diversification of any product is not possible without human capital. However, this research finding is consistent with Handoyo and Ibrahim (2021) and Agosin et al. (2012).

Table 6. Tourism development and EPD in China (DKSEs).

Variables	1	2	3	4
TD	2.021***	2.271***	1.416***	0.799*
	(0.285)	(0.210)	(0.361)	(0.374)
TD^2	-0.154***	-0.140***	-0.117***	-0.086***
	(0.014)	(0.012)	(0.006)	(0.021)
IS	0.033***	0.010	0.027*	0.031**
	(0.008)	(0.012)	(0.014)	(0.010)
NRE		0.371***	0.287***	0.052*
		(0.044)	(0.049)	(0.023)
EG			1.965***	1.554***
			(0.468)	(0.301)
HC				2.037***
				(0.137)
Constant	11.910 ***	11.092***	-10.061***	-17.690***
	(0.272)	(0.244)	(5.235)	(3.723)
F-statistics	1274.11	2762.45	1832.73	3782.77
P-values	0.0000	0.0000	0.0000	0.0000
Observations	270	270	270	270

Note: EPD is the dependent variable in all the estimated models. Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 7 displays the impact of tourism development, industrial structure, natural resource endowments, economic growth, human capital, and export product diversification across regions. Instead of consistent estimates, the trading patterns change among regions. There is a big difference in the influence of tourism development on export product diversification between regions, as demonstrated by the study estimates. In column (1), the results are for the overall case of China, whereas columns 2–4 indicate the findings for regions eastern, central, and western, respectively. The empirical results uncover the inverted U-shaped relationship between tourism development and export product diversification in all cases. Moreover, industrial structure, natural resource endowments, economic growth, and human capital have a positive impact on export product diversification across regions.

Table 7. Tourism development and EPD across regions (DKSEs).

Variables	China	Eastern	Central	Western
TD	0.799*	0.831***	-5.099***	3.4232***
	(0.374)	(0.166)	(1.364)	(0.631)
TD^2	-0.086***	-0.136***	7.035***	-2.661***
	(0.021)	(0.012)	(1.405)	(0.360)
IS	0.031**	0.071***	0.039***	-0.030*
	(0.010)	(0.010)	(0.005)	(0.013)
NRE	0.052*	-0.030	0.045**	0.005
	(0.023)	(0.020)	(0.013)	(0.058)
EG	1.554***	1.195***	0.096	0.261
	(0.301)	(0.265)	(0.294)	(0.458)
HC	2.037***	1.660***	2.534***	1.609***
	(0.137)	(0.127)	(0.291)	(0.145)
Constant	-17.690***	-11.875***	-4.415	0.562
	(3.723)	(2.841)	(2.872)	(5.691)
F-statistics	3782.77	3482.92	114.84	1737.64
P-values	0.0000	0.0000	0.0000	0.0000
Observations	270	99	72	99

Note: EPD is the dependent variable in all the estimated models. Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Further, for sake of consistency and robustness, this study employed the DKSEs, FGLS, and PCSEs and revealed that our main findings are robust to various methods. The robustness check results are in Table 8. TD and EPD again show an inverted U-shaped correlation and statistical significance in all models. In addition, industrial structure, natural resource endowments, economic growth, and human capital are the important determinants of EPD, as these coefficients signify the increasing trend of EPD in China as well as across regions. Moreover, this research takes the number of arrivals of international tourists as a proxy for export product diversification. Our study discloses the same results and statistical significance by using the second proxy of EPD. Which are available upon request. However, the study findings provide a guide for policymakers, as all of the variables used in the study are crucial determinants of EPD. Thus, government and management organization should make efforts to boost policies related to tourism development, industrial structure, natural resource endowments, human capital, and economic growth, and in turn, these factors help to stimulate EPD. Further, fiscal decentralization and energy sustainability are the key promoters of TD. Therefore, the government should also focus on promoting fiscal decentralization and energy sustainability, which boost TD and, in turn, improve the EPD (Ul-Haq, Mushtaq, et al., 2023).

Table 8. Tourism development and EPD (Robustness).

Variables	DKSEs	FGLS	PCSEs
TD	0.799*	1.173***	0.799***
	(0.374)	(0.130)	(0.206)
TD^2	-0.086***	-0.130***	-0.086***
	(0.021)	(0.010)	(0.014)
IS	0.031**	0.050***	0.031***
	(0.010)	(0.005)	(0.008)
NRE	0.052*	0.068***	0.051**
	(0.023)	(0.018)	(0.022)
EG	1.554***	1.391***	1.554***
	(0.301)	(0.157)	(0.241)
HC	2.037***	1.615***	2.037***
	(0.137)	(0.113)	(0.132)
Constant	-17.690***	-14.014***	-17.690***
	(3.723)	(1.699)	(3.132)
F-statistics	3782.77	1076.64	2931.83
P-values	0.000	0.000	0.000
Observations	270	270	270

Note: EPD is the dependent variable in all the estimated models. Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

5. CONCLUSION

In just a few decades, tourism has grown to become a major sector in many economies throughout the world, and it now plays a critical role in the development of destination countries. Diversification of products is essential for the development of tourism, and this TD will in turn boost the diversification process. Employing the DKSEs, FGLS, and PCSEs methods, this paper examined the effect of TD, industrial structure, natural resource endowments, economic growth, and human capital on EPD in China and across regions (i.e., eastern, western, and central). Utilizing the data from 2011–2019, the empirical outcomes indicate that the link between TD and EPD is inverted U-shaped. TD and EPD are associated and statistically significant. Moreover, industrial structure, natural resource endowments, economic growth, and human capital all contribute to promoting EPD. Further, our study found the same results for Chinese regions. Regarding robustness checks, our main estimates remain robust and statistically significant. Based on empirical findings, the policy recommendation is that governments and tourism sector management organizations should make and promote policies that boost the TD, which in turn will improve the diversification process. Because the TD diversification of products is a key element that enhances tourism sector income and further promotes diversification strategies. However, this paper used the sample period 2011–2019,

which is considered a limitation and will be covered in future research by considering the long spanning as well as the effects of these factors on product diversification.

Funding: This study received no specific financial support.
Institutional Review Board Statement: Not applicable.
Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: The conceptualization, J.H. and S.K.; data was collected, J.H. and S.O.; arranged and transformed into stata formed, J.H., Q.M.A.H. and S.O.; finalized the methodology for analysis and analysis, J.H., S.O. and Z.U.K.; wrote the original draft, S.K. and S.O.; improved the draft, Z.U.K. and Q.M.A.H.; reviewed, edited and supervised the whole study J.H. and Q.M.A.H. All authors have read and agreed to the published version of the manuscript.

REFERENCES

Acar, P., & Berk, I. (2022). Power infrastructure quality and industrial performance: A panel data analysis on OECD manufacturing sectors. *Energy*, *239*, 122277. https://doi.org/10.1016/j.energy.2021.122277

Agosin, M. R., Alvarez, R., & Bravo-Ortega, C. (2012). Determinants of export diversification around the world: 1962–2000. *The World Economy*, *35*(3), 295-315.

Ahmad, N., & Ma, X. (2022). How does tourism development affect environmental pollution? *Tourism Economics*, *28*(6), 1453-1479.

Alemu, A. M. (2016). The impacts of natural resource abundance on export diversification and structural change in African economies. *Journal of Economic Development, Management, IT, Finance, and Marketing*, *8*(2), 1.

Ali, Q., Yaseen, M. R., Anwar, S., Makhdum, M. S. A., & Khan, M. T. I. (2021). The impact of tourism, renewable energy, and economic growth on ecological footprint and natural resources: A panel data analysis. *Resources Policy*, *74*, 102365.

Armesto López, X. A., & Martin, B. G. (2006). Tourism and quality agro-food products: An opportunity for the Spanish countryside. *Tijdschrift Voor Economische en Sociale Geografie*, *97*(2), 166-177.

Baum, T. (1994). The development and implementation of national tourism policies. *Tourism Management*, *15*(3), 185-192.

Campa, J. L., López-Lambas, M. E., & Guirao, B. (2016). High speed rail effects on tourism: Spanish empirical evidence derived from China's modelling experience. *Journal of Transport Geography*, *57*, 44-54.

Can, M., Ahmed, Z., Ahmad, M., & Oluc, I. (2023). Economic progress in emerging countries: the roles of diversification of import and export products and energy consumption. *Environment, Development and Sustainability*, 1-23. https://doi.org/10.1007/s10668-023-03386-8

Can, M., Dogan, B., & Saboori, B. (2020). Does trade matter for environmental degradation in developing countries? New evidence in the context of export product diversification. *Environmental Science and Pollution Research*, *27*, 14702-14710.

Can, M., & Gozgor, G. (2018). Effects of export product diversification on quality upgrading: an empirical study. *The Journal of International Trade & Economic Development*, *27*(3), 293-313.

Canh, N. P., & Thanh, S. D. (2022). The dynamics of export diversification, economic complexity and economic growth cycles: Global evidence. *Foreign Trade Review*, *57*(3), 234-260.

Cattaneo, O. (2009). Tourism as a strategy to diversify exports: lessons from mauritius. In P. Brenton, R. Newfarmer, W. Shaw, & P. Walkenhorst (Eds.), *Breaking into New Markets: overview* (pp. 183-195). Washington, DC 20433: The World Bank.

Cheng, Z., Li, L., & Liu, J. (2018). Industrial structure, technical progress and carbon intensity in China's provinces. *Renewable and Sustainable Energy Reviews*, *81*, 2935-2946.

Chien, C.-M., Hong, C.-Y., & Li, J.-F. (2014). Spillover effects of tourism policy changes on hospitality industries. *Global Journal of Business Research*, *8*(2), 111-124.

CNBS. (2022). China national bureau of statistics. Retrieved from: https://www.stats.gov.cn/english/. [Accessed Feb 25, 2022].

Costa, C. (2020). Tourism planning: A perspective paper. *Tourism Review*, *75*(1), 198-202.

Das, S. K., & Pant, M. (1989). On export diversification and earnings instability theory and evidence. *Indian Economic Journal*, *36*(3), 65.

Dou, S., Ul-Haq, J., Visas, H., Aslam, B., & Khanum, S. (2023). Does export product diversification reduce sulfur dioxide emissions in China? A regional analysis. *International Journal of Environmental Science and Technology*, *20*(6), 6247-6258. https://doi.org/10.1007/s13762-022-04353-y

Eyuboglu, K., & Uzar, U. (2020). The impact of tourism on CO2 emission in Turkey. *Current Issues in Tourism*, *23*(13), 1631-1645.

Farooq, U., Ul-Haq, J., & Cheema, A. R. (2023). Is there an EKC between economic growth and air pollutant emissions in SAARC countries? Evidence from disaggregated analysis. *Environmental Science and Pollution Research*, *30*(44), 99979-99991. https://doi.org/10.1007/s11356-023-29363-2

Fayissa, B., Nsiah, C., & Tadasse, B. (2008). Impact of tourism on economic growth and development in Africa. *Tourism Economics*, *14*(4), 807-818.

Fernandes, E., Pacheco, R. R., & Fernandes, V. A. (2019). Tourism openness, trade openness, and currency-purchasing power in Brazil: A causality analysis. *International Journal of Tourism Research*, *21*(2), 197-205.

Fosu, A. K. (2021). Infrastructure and the impact of foreign direct investment (FDI) on export diversification: Evidence from Africa. *Journal of African Development*, *22*(1), 102-123.

Ghalia, T., Fidrmuc, J., Samargandi, N., & Sohag, K. (2019). Institutional quality, political risk and tourism. *Tourism Management Perspectives*, *32*, 100576.

Gnangnon, S. K. (2022). Aid for Trade, export product diversification, and foreign direct investment. *Review of Development Economics*, *26*(1), 534-561.

Gözgör, G., & Can, M. (2017). Causal linkages among the product diversification of exports, economic globalization and economic growth. *Review of Development Economics*, *21*(3), 888-908.

Haini, H., Loon, P. W., & Li, P. L. (2023). Can export diversification promote export upgrading? Evidence from an oil-dependent economy. *Resources Policy*, *80*, 103292.

Handoyo, R. D., & Ibrahim, K. H. (2021). Determinants of export diversification in developing countries. *Industrial Engineering & Management Systems*, *20*(4), 720-731.

Harighi, M. F., Daei Karimzadeh, S., & Sharifi Renani, H. (2023). Impact of financial development on export diversification in developing selected countries. *Journal of Development and Capital*, *8*(1), 45-62.

Hesse, H. (2009). Export diversification and economic growth. In P. Brenton, R. Newfarmer, W. Shaw, & P. Walkenhorst (Eds.), *Breaking into new markets: emerging lessons for export diversification* (Vol. 2009, pp. 55-80). Washington, DC: The World Bank.

Hidalgo, C. A. (2021). Economic complexity theory and applications. *Nature Reviews Physics*, *3*(2), 92-113.

Hidalgo, C. A., & Hausmann, R. (2009). The building blocks of economic complexity. *Proceedings of the National Academy of Sciences*, *106*(26), 10570-10575.

Hilal, N. (2020). Tourism in the gulf cooperation council countries as a priority for economic prospects and diversification. *Journal of Tourism and Hospitality*, *9*(451), 2167-2269.

Hye, Q. M. A., Ul-Haq, J., Visas, H., & Rehan, R. (2023). The role of eco-innovation, renewable energy consumption, economic risks, globalization, and economic growth in achieving sustainable environment in emerging market economies. *Environmental Science and Pollution Research*, *30*(40), 92469-92481. https://doi.org/10.1007/s11356-023-28945-4

Irfan, M., Ullah, S., Razzaq, A., Cai, J., & Adebayo, T. S. (2023). Unleashing the dynamic impact of tourism industry on energy consumption, economic output, and environmental quality in China: A way forward towards environmental sustainability. *Journal of Cleaner Production*, *387*, 135778.

Ivanov, S., & Webster, C. (2007). Measuring the impact of tourism on economic growth. *Tourism Economics*, *13*(3), 379-388.

Kadiyali, V., & Kosová, R. (2013). Inter-industry employment spillovers from tourism inflows. *Regional Science and Urban Economics*, *43*(2), 272-281.

Kamguia, B., Ndjakwa, M., & Tadadjeu, S. (2023). Does infrastructural development foster export upgrading in Africa? *African Development Review*, *35*(1), 79-94.

Kanwal, S., Rasheed, M. I., Pitafi, A. H., Pitafi, A., & Ren, M. (2020). Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. *Tourism Management*, *77*, 104014.

Kastenholz, E., Eusébio, C., & Carneiro, M. J. (2016). Purchase of local products within the rural tourist experience context. *Tourism Economics*, *22*(4), 729-748.

Katircioglu, S. T., Feridun, M., & Kilinc, C. (2014). Estimating tourism-induced energy consumption and CO2 emissions: The case of Cyprus. *Renewable and Sustainable Energy Reviews*, *29*, 634-640.

Khanal, A., Rahman, M. M., Khanam, R., & Velayutham, E. (2021). Are tourism and energy consumption linked? Evidence from Australia. *Sustainability*, *13*(19), 10800.

Kongbuamai, N., Bui, Q., Yousaf, H. M. A. U., & Liu, Y. (2020). The impact of tourism and natural resources on the ecological footprint: A case study of ASEAN countries. *Environmental Science and Pollution Research*, *27*, 19251-19264.

Lapatinas, A. (2019). The effect of the internet on economic sophistication: An empirical analysis. *Economics Letters*, *174*, 35-38.

Le, T.-H., Le, H.-C., & Taghizadeh-Hesary, F. (2020). Does financial inclusion impact CO2 emissions? Evidence from Asia. *Finance Research Letters*, *34*, 101451.

Le, T.-H., Nguyen, C. P., Su, T. D., & Tran-Nam, B. (2020). The Kuznets Curve for export diversification and income inequality: Evidence from a global sample. *Economic Analysis and Policy*, *65*, 21-39.

Lee, D., & Zhang, H. (2022). Export diversification in low-income countries and small states: Do country size and income level matter? *Structural Change and Economic Dynamics*, *60*, 250-265.

Lejárraga, I., & Walkenhorst, P. (2009). Fostering productive diversification through tourism. *Breaking into New Markets: Emerging Lessons for Export Diversification*, 197-210.

Lejárraga, I., & Walkenhorst, P. (2013). Economic policy, tourism trade and productive diversification. *International Economics*, *135*, 1-12.

Lejarraja, I., & Walkenhorst, P. (2007). Diversification by deepening linkages with tourism. *Washington, DC, Banco Mundial, inédito*.

Madaleno, A., Eusébio, C., & Varum, C. (2017). Exports and tourism: Testing the causality. *International Journal of Hospitality & Tourism Administration*, *18*(4), 444-458.

McLaren, D., & Pera, L. (2002). Globalization, indigenous peoples, and tourism. *Biodiversity*, *3*(3), 16-17.

Morakabati, Y., Beavis, J., & Fletcher, J. (2014). Planning for a Qatar without oil: Tourism and economic diversification, a battle of perceptions. *Tourism Planning & Development*, *11*(4), 415-434.

Mubeen, N., & Ahmad, N. (2016). Towards measurement and determinants of export diversification: An empirical analysis of Pakistan. *Pakistan Journal of Commerce and Social Sciences*, *10*(3), 588-605.

Mushtaq, R., Thoker, A. A., & Bhat, A. A. (2021). Does institutional quality affect tourism demand? Evidence from India. *Journal of Hospitality and Tourism Insights*, *4*(5), 622-638.

Nkemgha, G. Z., Nchofoung, T. N., & Sundjo, F. (2023). Financial development and human capital thresholds for the infrastructure development-industrialization nexus in Africa. *Cities*, *132*, 104108.

Nowak, J.-J., Sahli, M., & Cortés-Jiménez, I. (2007). Tourism, capital good imports and economic growth: theory and evidence for Spain. *Tourism Economics*, *13*(4), 515-536.

Olaleye, S. O., Edun, F., & Taiwo, S. B. (2013). Export diversification and economic growth in Nigeria: An empirical test of relationship using a granger casualty test. *Journal of Emerging Trends in Economics and Management Sciences*, *5*(1), 70-79.

Parteka, A., & Tamberi, M. (2013). What determines export diversification in the development process? Empirical assessment. *The World Economy*, *36*(6), 807-826.

Pata, U. K., & Balsalobre-Lorente, D. (2022). Exploring the impact of tourism and energy consumption on the load capacity factor in Turkey: A novel dynamic ARDL approach. *Environmental Science and Pollution Research*, *29*(9), 13491-13503.

Pesaran, M. H. (2004). General diagnostic tests for cross section dependence in panels. *Available at SSRN 572504*.

Ranjbar, O., & Rassekh, F. (2022). Does economic complexity influence the efficacy of foreign direct investment? An empirical inquiry. *The Journal of International Trade & Economic Development*, *31*(6), 894-910.

Ranjbar, O., Saboori, B., & Gholipour, H. F. (2023). Does tourism development spur export product diversification? *Current Issues in Tourism*, 1-15.

Rasool, H., Maqbool, S., & Tarique, M. (2021). The relationship between tourism and economic growth among BRICS countries: a panel cointegration analysis. *Future Business Journal*, *7*(1), 1-11.

Rasool, H., Ul-Haq, J., & Cheema, A. R. (2023). Are tourism and energy consumption linked? Evidence from tourism dependent countries. *Energy Economics Letters*, *10*(2), 122-132. 10.55493/5049.v10i2.4915

Reis, J. G., & Varela, G. (2015). Travel channel meets discovery channel or how tourism can encourage better export performance and diversification in Nepal. *South Asia Economic Journal*, *16*(2), 183-208.

Robinson, B., & Jonker, J. (2016). Tourism in Ethiopia: An urgent opportunity for economic diversification. *African Journal of Hospitality, Tourism and Leisure*, *5*(3), 1-21.

Sarin, V., Mahapatra, S. K., & Sood, N. (2022). Export diversification and economic growth: A review and future research agenda. *Journal of Public Affairs*, *22*(3), e2524.

Sarpong, S. Y., Bein, M. A., Gyamfi, B. A., & Sarkodie, S. A. (2020). The impact of tourism arrivals, tourism receipts and renewable energy consumption on quality of life: A panel study of Southern African region. *Heliyon*, *6*(11).

Seaton, A. V., Jenkins, L., Wood, R., Picke, P., Bennett, M., & MacLellan, L. (1994). *Tourism: The state of the art*. England: John Wiley & Sons Chichester.

Seetanah, B., Juwaheer, T. D., Lamport, M. J., Rojid, S., Sannassee, R. V., & Subadar, A. U. (2011). Does infrastructure matter in tourism development? *University of Mauritius Research Journal*, *17*, 89-108.

Sharpley, R. (2002). The challenges of economic diversification through tourism: The case of Abu Dhabi. *International Journal of Tourism Research*, *4*(3), 221-235. https://doi.org/10.1002/jtr.378

Shi, J., Visas, H., Ul-Haq, J., Abbas, S., & Khanum, S. (2023). Investigating the impact of export product diversification on environmental degradation: Evidence from Chinese Provinces. *Environment, Development and Sustainability*, *25*(10), 11455-11486.

Sofield, T., & Li, S. (2013). Tourism governance and sustainable national development in China: A macro-level synthesis. In *Tourism Governance* (pp. 91-124): Routledge.

Sun, H.-p., Sun, W.-f., Geng, Y., Yang, X., & Edziah, B. K. (2019). How does natural resource dependence affect public education spending? *Environmental Science and Pollution Research*, *26*, 3666-3674.

Tadesse, B., & Shukralla, E. K. (2013). The impact of foreign direct investment on horizontal export diversification: Empirical evidence. *Applied Economics*, *45*(2), 141-159.

Tang, C. F., & Abosedra, S. (2014). The impacts of tourism, energy consumption and political instability on economic growth in the MENA countries. *Energy Policy*, *68*, 458-464.

Tang, X. (2017). The historical evolution of China's tourism development policies (1949–2013)–A quantitative research approach. *Tourism Management*, *58*, 259-269.

Tchitchoua, J., Tsomb Tsomb, E. I. B., & Madomo, J. (2023). Export diversification and income inequality in Central Africa: An analysis of the employment channel. *The Journal of International Trade & Economic Development*, 1-26.

Ul-Haq, J., Mushtaq, S., Visas, H., Hye, Q. M. A., & Rehan, R. (2023). Fiscal decentralization, energy security, economic growth, and tourism nexus: Evidence from big six economies. *Journal of Tourism Management Research*, *10*(2). https://doi.org/10.18488/31.v10i2.3572

Ul-Haq, J., Visas, H., Can, M., & Khanum, S. (2023). How diversification of products impact emissions in China: A provincial perspective. *Environmental Science and Pollution Research*, *30*(59), 124215-124231. 10.1007/s11356-023-31078-3

Visas, H., Rehan, R., Ul-Haq, J., Cheema, A. R., Khanum, S., & Hye, Q. M. A. (2023). Does tourism increase energy consumption in BRICS countries? *Journal of Tourism Management Research*, *10*(1), 94-106. https://doi.org/10.18488/31.v10i1.3402

Visas, H., Ul-Haq, J., & Khanum, S. (2021). Natural resource dependence and life expectancy Nexus: The role of education.

Wang, Y., & Chen, X. (2020). Natural resource endowment and ecological efficiency in China: Revisiting resource curse in the context of ecological efficiency. *Resources Policy*, *66*, 101610. https://doi.org/10.1016/j.resourpol.2020.101610

Weber, A. S. (2017). Creative industries tourism in Qatar: Economy diversification through arts and heritage development. *Tourism in Southern and Eastern Europe*, *4*, 645-655.

Wen, J., Kozak, M., Yang, S., & Liu, F. (2021). COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tourism Review*, *76*(1), 74-87.

Xu, Z. (2022). Promoting the integration of China's tourism industry into the new development pattern with dual circulation. *China Finance and Economic Review*, *10*(4), 115-129.

Zarach, Z. H., & Parteka, A. (2023). Export diversification and dependence on natural resources. *Economic Modelling*, *126*, 106436.

Zhang, L.-X., Lai, M.-T., Chang, T., Ranjbar, O., & Saboori, B. (2023). Measuring the export diversification of creative products' basket and identifying its drivers: Cross-country evidence. *Applied Economics Letters*, 1-5.

Zhang, P., Wang, J., Li, M., & Xiao, F. (2022). Research on the mechanism of information infrastructure affecting industrial structure upgrading. *Scientific Reports*, *12*(1), 19962.

Zhao, Y., & Liu, B. (2020). The evolution and new trends of China's tourism industry. *National Accounting Review*, *2*(4), 337-353.

Zhou, D., Yanagida, J. F., Chakravorty, U., & Leung, P. (1997). Estimating economic impacts from tourism. *Annals of Tourism Research*, *24*(1), 76-89.

Zhou, P. (2019). *Tourism development in China*. Retrieved from: *https://www.thoughtco.com/tourism-development-in-china-1434412*.