# Does Local Environmental Governance Improve Tourism Companies' Performance? Evidence from Vietnam

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# Bach Nguyen<sup>1</sup>

### Abstract

Institutions (rules of law) are important to tourism activities. However, national institutions cannot become effective when the execution of rules of law is inconsistent at the local levels. This study thus examines the role of local governance arrangements on the performance of tourism companies, focusing on environmental governance quality. Utilizing institutional theory, we propose a U-shaped relationship between tourism performance and environmental governance. When environmental governance arrangements are initially implemented, the performance of local tourism companies may be negatively affected due to institutional conflicts. However, as new environmentally responsible values are gradually institutionalized, the performance of the local tourism sector will improve. Analyzing more than three thousand tourism companies in Vietnam in 2018 using instrumental variable technique to control for endogeneity, we find some evidence to support the U-shaped function. Also, it is found that the U-shaped effect is stronger on foreign inbound tourists than on domestic tourists.

### Keywords

tourism firm performance, environmental governance, institutional theory, tourism development, Vietnam

# Introduction

Environment-friendly and sustainable tourism have increasingly become a popular topic in tourism research. A large body of literature approaches this topic from the theoretical lens of individual tourist attitudes and behaviors. For example, Cui et al. (2020) find out that when one's moral selfregard is heightened by the virtue of physical cleansing, it can motivate consumers to engage in pro-environmental travel choices. Also, Dolnicar, Knezevic Cvelbar, and Grün (2019), using a set of quasi-experimental field studies, suggest that sharing monetary savings with guests leads to a 42% change in one specific tourist behavior with negative environmental consequences. In their review papers, Chan Eric and Hsu Cathy (2016) and Kim, Lee, and Fairhurst (2017) document that most research in the domain of "going green" practices focuses on the "supply" side, that is, the self-motived changes in attitudes and behaviors of tourists and tourism organizations toward environment-friendliness and sustainability. Meanwhile, the "demand" side, that is, the institutional forces from the external environments that also affects "going green" practices remain underexplored. While we cannot completely rely on market ethics to achieve sustainable tourism (Holden 2009), the interventions (demands) of governments become necessary and efficient. This study thus fills the extant literature gap by examining the influence of environment-related institutional forces on the performance of tourism firms.

To do so, we employ institutional theory, which is deemed as a powerful but under-exploited theory in the field of tourism research (Ghalia et al. 2019; Mzembe et al. 2019). Specifically, institutions (rules and norms) shape the behaviors (e.g., strategies) of tourism firms and thereby their performance subsequently (Roxas and Chadee 2013; Stumpf and Swanger 2017). A strand of literature has focused on examining the effects of *informal* institutions (including the national culture, press freedom, economic freedom, civic liberty, and corruption) on the performance of the tourism industries in a number of countries. Recently, Gozgor et al. (2019) have criticized the lack of investigation of tourism research into *formal* institutions and propose a framework that links national legal systems to the development of the tourism sector. Their study, together with other cross-country studies of formal institutions such as those of Ghalia et al. (2019), Wu and Wu (2019), Detotto, Giannoni, and Goavec (2021) and Bojanic and Warnick (2020) are based on a (strong) assumption that a country's legal systems are homogeneously effective across every region. In other words, they assume that national formal institutions (such as laws and

<sup>1</sup>Aston Business School, Aston University, Birmingham, United Kingdom

#### **Corresponding Author:**

Bach Nguyen, Aston Business School, Aston University, Aston Triangle, Birmingham, B47ET, United Kingdom. Email: nguyenb1@aston.ac.uk regulations) are equivalently effective across all regions within a country. This assumption, unfortunately, does not hold in reality.

Local authorities do play a role. Williamson (2000) proposes that formal institutions cannot become effective without a functioning set of institutions of governance. The institutions of governance are even more essential in developing countries, where formal institutions are underdeveloped and incomplete, giving local authorities substantial room to interpret and implement the rules of law deviated from the pathway of the national legal systems (Nguyen 2020).

This study thus goes one step further by examining the institutions of governance, which are defined as the governance quality of local governments (Nguyen and Canh 2020). We are particularly interested in the governance quality related to the environment, being the execution and implementation of environmental policies and institutional arrangements to improve local air and water quality. This governance force represents the seriousness of a local authority's intent to protect its local environment. We believe that environmental governance is more relevant than other institutional dimensions to the operations and performance of local tourism companies as well as to tourists' perceptions of (and consequent behaviors to) the destinations located in the local regions (Zhang et al. 2019; Campos-Soria, García-Pozo, and Marchante-Mera 2018).

We are aware of the existence of a strand of research investigating the role played by local governments in facilitating/inhibiting the development of local tourism. For example, Deng, Hu, and Ma (2019), in the context of China, find that the Western Development Strategy of local governments in 285 Chinese cities has caused a significantly positive effect on local tourism development. Also, Badola et al. (2018), in the context of Himalayan protected areas in India, find that weak local institutions and governance systems lead to mass tourism controlled by powerful stakeholders. They thus suggest that a set of strong institutions of governance assisted by local governments are best suited to achieve sustainable tourism. Interestingly, Ruhanen (2013) examines five local government areas in Queensland, Australia, and suggests that local government authority in local governance structures is found to be an inhibitor to sustainable tourism development. These studies point out the significance of local governments to tourism industries. Nonetheless, none of the prior research examines environment-related governance quality exclusively and employ a quantitative method that could infer a causal effect. To our knowledge, this study is one of the first that uses quantitative approaches (with the aim of drawing a causal effect) to systematically analyze the impacts of local environmental governance quality on the performance of the tourism sector.

Specifically, we propose a nonlinear (U-shaped) relationship between environmental governance and local tourism performance. When local authorities execute environmental governance arrangements, they introduce a new set of rules

and regulations into local institutions. By breaking the legitimized image of the local environment (even when this is in a positive direction), local authorities create institutional conflicts in which the old values (i.e., environmentally irresponsible values) coexist with the new values (i.e., environmentally responsible values) (Fong, Wong, and Hong 2018). This transition process increases transaction costs (e.g., environment taxes, bureaucracy, inspections) for tourism companies and reduces their competitiveness (Ghalia et al. 2019). However, when environmental governance is consistently executed, local tourism markets gradually take the environmental governance arrangements and policies for granted, and accept them as one of many underlying factors in the marketplace (Falaster, Zanin, and Guerrazzi 2017). Tourism companies subsequently adjust their operations and strategies to accommodate the new rules, and they improve their performance accordingly.

This study makes three important contributions to the tourism literature. First, it approaches environment-friendly and sustainable tourism from the "demand" side, that is, the institutional forces stemming from external environments. On the one hand, this is to strike a balance with the rich body of literature focused on the self-motivated "going green" practices of tourists and tourism organizations. On the other hand, this study expands the research on formal institutional forces. Institutions are multidimensional, and each dimension of institutions may exert disparate impacts on tourism. As such, this study is sharply different from previous ones in its exclusive focus on environment-related institutions instead of the general institutional quality, such as those of Gozgor et al. (2019), Poprawe (2015b), and (Airey and Chong 2010).

Second, this study investigates environmental institutions from the governance perspective. While previous studies explore what rules and laws are important to tourism, our study examines the *execution* and *implementation* of the rules and laws on tourism. Institutions cannot be properly executed without a set of effective governance settings (Nguyen 2020). For this reason, we aim to examine the impacts of the localized governance arrangements on tourism and expand the strand of research that appreciates the role played by local governments in shaping local tourism industries.

Third, on top of the general tourism performance, this study explores the heterogeneity between domestic tourists and foreign inbound tourists in terms of their sensitivity to changes in local environmental governance quality. The relative sensitivity of domestic tourist versus international tourist in terms of their responses to environmental policies is important to understand local tourism performance (Gozgor et al. 2019; Detotto, Giannoni, and Goavec 2021) but has not been investigated systematically in the extant literature.

Using a representative data set of more than three thousand tourism companies in Vietnam in 2018 with appropriate econometric approaches to deal with potential endogeneity and heterogeneity, we find some evidence to support the U-shaped function of environmental governance quality on the performance of local tourism sector. Interestingly, we also discover that this U-shaped effect is stronger on foreign inbound tourists, with domestic tourists appearing to be less responsive to the implementation of environmental governance arrangements.

By showing that the relationship between environmental governance and tourism is U-shaped, we demonstrate that even though environmental governance is good for tourism, the transition process is not always smooth. Specifically, we show that there is an initial period of institutional conflicts and institutional inertia that cause a reduction in tourism development. As such, we suggest that because of the existence of the transition process, policymakers need to design appropriate strategies and resource preparations to cope with this period of alteration.

# Literature

### Institutional Theory

Institutions shape the context in which tourism companies operate and therefore affect both the opportunities and risks that they face (McLennan et al. 2014). Specifically, North (1990) argues that many of the incentives underlying productive behaviors are a function of institutional settings. He proposes a two-pillar framework of formal and informal institutions, in which formal institutions are the explicit rules (encompassing constitutional laws and national legal systems) while informal institutions are the implicit rules (such as customs, traditions, and social norms).

Delving more deeply into the structure of institutions, Williamson (2000) proposes a hierarchy framework, in which he places informal institutions—social embeddedness—at the most profound position of the institutional structure. The reason for this is that these unwritten institutional forces are the deepest rooted and slowest to change (Estrin, Korosteleva, and Mickiewicz 2013). Informal institutions, including national culture, geographical attributes, press freedom, economic freedom, civic liberty, and corruption have been widely investigated in the context of tourism (see Gozgor et al. 2019 for a review). These factors are posited to be important to tourism development.

Formal institutions are located at the second level and have started to attract increased interest from scholars in tourism research. Gozgor et al. (2019) evidently show that a nation's formal legal systems and property rights strongly affect the number of tourist arrivals and tourism receipts in 152 countries. Other studies in the same vein of arguments also demonstrate that national formal institutions play a significant role in shaping tourism and hospitality industries (Ghalia et al. 2019; Wu and Wu 2019; Detotto, Giannoni, and Goavec 2021). However, these studies strongly assume that national legal systems are homogeneously efficient across every region within a country. Unfortunately, this is not the case, especially in the developing countries because when formal institutions are underdeveloped and incomplete, local authorities may understand, interpret, and execute the rules in different ways (Nguyen 2020; Ruhanen 2013). The mismatch between the nature of the rules and the execution of the rules inevitably creates institutional conflicts and may affect local tourism development (Falaster, Zanin, and Guerrazzi 2017).

For this reason, in this study, we focus on Williamson's third level of institutions, which is the institutions of governance. At this level, more attention is paid to understanding how the rules of law are employed rather than to deciphering the rules. In other words, the institutions of governance are concerned with how the formal institutions are executed and implemented at the local level (Nguyen, Mickiewicz, and Du 2018; Badola et al. 2018). This institutional dimension is particularly important to tourism companies in developing countries, for two reasons. First, tourism companies in developing countries are typically small businesses and are bound in their local markets (Truong, Hall, and Garry 2014), which are strongly shaped by local governance quality rather than by the very broad general constitutional configurations (Nguyen 2020). Second, tourism activities, by their nature, are highly contextualized (Passafaro 2020) and are strongly concerned with local products, services, and the efficiency of local market mechanisms (Xue and Kerstetter 2018); these activities, in turn, are strongly shaped by local governance quality. Unfortunately, and despite their importance to understanding tourism development, the institutions of governance remain largely underexplored in the extant literature.

# Environmental Governance

We acknowledge that local governance is multidimensional and multifaceted (Nguyen, Mickiewicz, and Du 2018). As such, in this study, we pay particular research interest to one dimension of local governance: environmental governance. This governance force represents the efficiency of local authorities at implementing central policies intended to protect the local environment and improve air and water quality, or at designing their own initiatives to do so. Environmental governance is more relevant to tourism development than other governance forces such as vertical accountability and public administrative procedures (Le et al. 2019). Also, developing countries mostly rely on nature tourism (contrasted with the city tourism of developed countries) (Campos-Soria, García-Pozo, and Marchante-Mera 2018). As such, the quality of the environment surrounding local destinations appears to be an important underlying factor in determining the number of tourist arrivals (Goncalves, Robinot, and Michel 2016), thereby influencing the performance of local tourism companies.

The prior literature largely focuses on the "supply side" of environment protection, that is, the behaviors of consumers toward environmentally conscious products. For example, Martínez García de Leaniz, Herrero Crespo, and Gómez López (2018) suggest that customer perceptions of green practices have a direct positive impact on a hotel's green image. However, this effect is conditional on the consumer being environmentally aware. Further, Zhang et al. (2019) find that considerations of future consequences have a significant influence on tourists' environmentally responsible behaviors. However, this forward-thinking attitude may be dampened by the optimism bias seen in environmental quality assessment. Also, Sheldon and Sun-Young (2011) investigate the willingness of tourism companies to provide environment-friendly products in a framework of corporate social responsibility (CSR) and find that the main driver of environmental CRS activities is the enhancement of business reputation.

Previous findings lead to the conclusion that a complete reliance on market mechanisms/market ethics to protect the environment may fail because of the externality nature of environmental issues (Holden 2009). Meanwhile, Danish and Wang (2018) evidently show that while tourism encourages economic growth, its development significantly degrades the quality of the environment. Therefore, the role of government, especially the local environmental governance system, is essential to deal with negative externalities, market failures, and to protect the environment and achieve sustainable tourism development (Ruhanen 2013).

### Environmental Governance and Tourism

In this study, we propose that environmental governance may influence the performance of local tourism companies, in terms of both the number of tourist arrivals and their lengths of stay. However, the effect may be nonlinear. Specifically, it is expected that when environmental governance arrangements are first implemented and environmentfriendly policies are initially executed, the performance of local tourism companies may be negatively affected (García-Cabrera and Durán-Herrera 2014; Fong, Wong, and Hong 2018), because of a reduction in the number of tourist arrivals. However, once environmental governance has been consistently executed to a specific threshold, the number of tourist arrivals revives, implying a positive impact on the performance of local tourism companies.

This U-shaped function of environmental governance on tourism could be explained via the lens of institutional theory. One of the central concepts in institutional theory is legitimacy, defined as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed systems of norms, values, beliefs, and definitions" (Suchman 1995, p. 574). Legitimacy indicates the desire of social agents to follow the rules (whether these are formal or informal) to gain social acceptance and status (DiMaggio and Powell 1991).

When local authorities start to execute environment governance arrangements, they introduce a new set of regulations into local institutions. By breaking the legitimized image of the local environment (even in a positive direction), local authorities create institutional conflicts in which the old values (i.e., environment-unfriendly values) coexist with the new values (i.e., environmentally responsible values) (Fong, Wong, and Hong 2018). These conflicts are associated with two potentially negative effects on local tourism.

First, transaction costs increase, leading to the situation in which local tourism companies may lose their competitive advantages (Stumpf and Swanger 2017). For example, the local hospitality industry may be required to "go green," which significantly increases product and service prices (Sheldon and Sun-Young 2011). Also, to obtain the resources for improving the quality of air and water, the local authority may impose environmental levies on tourists, which can significantly dent their willingness to visit a destination (Hall 2019).

Second, institutional conflicts increase ambiguity (Ghalia et al. 2019), resulting in a mismatch between the perceived images of the destinations and their actual images. Even though the mismatch is positive (in that executing the environmental policies results in a destination reality that is better than the perceived image), tourism consumers may find that the costs of enjoying this potentially marginal positive experience (since environmental policies are newly implemented) is relatively high (Yanju and Jinyang 2008). Specifically, local environment protection may incur higher taxes for tourists, or require them to follow strict regulations, or impact on the convenience of tourism services/arrangements (Hall 2019).

In short, when environmental governance arrangements are initially implemented, we expect that increased transaction costs and institutional ambiguity may reduce the number of tourist arrivals and negatively affect the performance of local tourism companies.

However, when environmental governance is consistently executed to the extent that a certain threshold has been reached, its impact on local tourism may reverse and become positive. This transition is achieved as a result of the alignment of the perceived and the actual images of the destinations, and the institutionalization of the new values (Ambrosie 2015; Fong, Wong, and Hong 2018). Also, efficient enforcement of the environmental governance arrangements reduces the perceived uncertainty for all players in the sector (e.g., local tourism companies and tourists) since everyone believes that the other parties under the same institutional settings will have incentives to obey the rules for the sake of gaining isomorphism (i.e., to be socially accepted by following the new rules-environment-friendly governance arrangements) (Falaster, Zanin, and Guerrazzi 2017). Thus, the local tourism markets gradually take environmental governance arrangements and policies for granted and accept them as an underlying factor of the marketplace (García-Cabrera and Durán-Herrera 2014).

The replacement of the old environment-unfriendly values by the new responsible ones may take time due to the inertia (i.e., the reluctance to change) of both the tourism companies and tourism consumers (García-Cabrera and Durán-Herrera 2014; Ambrosie 2015). However, once successfully implemented, environmental governance may exert two positive impacts on local tourism development.

First, local tourism companies now find it reasonable to accept the additional transaction costs that the execution of environmental governance will generally incur. They may adjust their operations and strategies to fit into the new rules, whether through the design of marketing schemes that highlight the local environment-friendly practices (Ngo, Lohmann, and Hales 2018; García-Cabrera and Durán-Herrera 2014) or by adjusting their costings to absorb the additional expenses and taxes related to the new arrangements (Fong, Wong, and Hong 2018). Second, tourism consumers, thanks to the consistent information being transmitted about the institutional changes in the destinations, now align their destination perceptions with the actuality. By accepting the new regulations, consumers may become less averse to the higher prices or potential inconveniences associated with environmental protection practices (Bojanic and Warnick 2020).

In sum, we propose that:

*Hypothesis 1*: In Vietnam, local environmental governance quality exerts a nonlinear (U-shaped) effect on the performance of local tourism companies.

### Domestic and Foreign Consumers

In the light of previous studies (Diekmann and Axel 1999; Juvan and Dolnicar 2014), there is a possibility that the U-shaped effect of local environmental governance on tourism performance may differ for domestic consumers and foreign consumers. Following Campos-Soria, García-Pozo, and Marchante-Mera (2018), we propose two mutually exclusive hypotheses to explore the potential heterogeneity.

The affluence hypothesis postulates that people from wealthy countries or from nations with relatively strong economic power are more willing to incur the increased costs of environmental quality than people from less wealthy nations (Diekmann and Axel 1999). This hypothesis is built on two arguments. First, people in rich countries have more resources available for the support of environmental protection costs. Second, they are more willing to incur these higher costs because of their raised environmental consciousness, which is a product of post-materialism. Several studies have evidently confirmed the validity of the affluence hypothesis (Franzen 2003; Franzen and Meyer 2010; Gelissen 2007).

However, there is a counterargument that states that people from a wealthy industrialized country are less likely to protect the environment because they believe that they have both paid their taxes and contributed to their country's economic growth, which entitles them to use or abuse the earth's resources without restraint (Campos-Soria, García-Pozo, and Marchante-Mera 2018). For this reason, we also propose an alternative hypothesis, that is, the attribution hypothesis. The attribution hypothesis states that the environmental concerns of tourists traveling internationally differ to those of domestic travelers. Specifically, people traveling domestically have greater levels of environmental concerns, and this is for two reasons. First, traveling out of own's home country gives tourists feelings of carefreeness and irrelevance. These attitudes might reduce their environmental consciousness and raise their demands for resources (Juvan and Dolnicar 2014). Second, environmental protection is higher when people are confronted with environmental problems in their own country that arise from poor air or water quality. As such, domestic tourists are more incentivized to be concerned with their home-country environmental problems than are foreign tourists (Brechin 1999).

Therefore, we propose two mutually exclusive hypotheses:

*Hypothesis 2a*: In Vietnam, the U-shaped effect of environmental governance quality is stronger on inbound foreign tourists than on domestic tourists.

*Hypothesis 2b*: In Vietnam, the U-shaped effect of environmental governance quality is stronger on domestic tourists than on inbound foreign tourists.

# Data and Methodology

# Data

The empirical context of this study is Vietnam, where tourism development and environmental protections appear to have been devolved to local authorities (Truong, Hall, and Garry 2014). To test the proposed hypotheses, we employ the Annual Enterprise Survey data set provided by the Vietnam General Statistics Office (GSO). The survey was first conducted in 2000, and the data set has been updated annually. By regulation, all businesses having more than 10 employees are required to participate in the survey, whereas a random sample is selected from the businesses with fewer than 10 employees. The data set provides comprehensive information about firm financial characteristics, employment, investment, and performance. The scope of the survey comprises both the manufacturing and service industries and includes all types of ownership. The panel data obtained from GSO is 19 years, from 2000 to 2018. It is by far the most comprehensive and representative data set of the business community in Vietnam.

The period of analysis in this study is scaled down to the year 2018 to tally with the second data set, the provincial governance and public administration performance index (PAPI), a joint product of the Vietnam Centre for Community Support Development Studies (CECODES) and the United Nations Development Programme (UNDP). This data set is a panel of provincial governance quality. The quality is scored from 0 to 10, with higher scores reflecting better governance quality. The PAPI index is calculated based on an annual survey of more than 14,000 citizens across provinces in Vietnam. In 2011, the PAPI index became available for all provinces

Variable	Definition	Mean	SD	Min	Max
Tourist arrivals	The number of tourist arrivals that a tourism company served in 2018 (in thousand arrivals)	1.407	4.638	0	34.603
Domestic tourist arrivals	The number of domestic tourist arrivals that a tourism company served in 2018 (in thousand arrivals)	0.098	0.635	0	5.402
Foreign tourist arrivals	The number of foreign inbound tourist arrivals that a tourism company served in 2018 (in thousand arrivals)	1.309	3.829	0	29.576
Length of stay (in days)	The number of staying days of tourists that a tourism company served in 2018 (in thousand days)	3.853	14.375	0	113.079
Domestic tourist length of stay (in days)	The number of staying days of domestic tourists that a tourism company served in 2018 (in thousand days)	0.248	1.642	0	14.304
Foreign tourist length of stay (in days)	The number of staying days of foreign inbound tourists that a tourism company served in 2018 (in thousand days)	3.605	10.630	0	82.749
Local environmental governance quality	The value of the Environmental Governance obtained from the PAPI data set, representing the policies and institutional arrangements that aim to improve local quality of air, quality of water, and the seriousness of authorities' intent to improve environmental protection.	3.996	0.604	3.540	6.740
Firm size	Natural log of the number of employees in a firm (reported here as the number of employees)	13.129	71.015	Ι	3021
State-owned firms	Takes value 1 if state-owned firms, 0 otherwise	0.016	0.125	0	I
Private firms	Takes value 1 if private firms, 0 otherwise	0.977	0.149	0	I
Foreign-owned firms	Takes value 1 if foreign-owned firms, 0 otherwise	0.007	0.082	0	I
Lagged revenue incomes	Log of the value of net revenue incomes a tourism company made in 2017 (reported here as the value of revenue incomes, in billion VND)	11.784	42.182	0	316.071
Instrumental variables					
Forest wood consumed	The volume of forestry chopped down for consumption per province, in thousand m <sup>3</sup>	128.998	249.955	2	1313.200
Processed waste	The ratio of solid waste collected and processed in accordance with the national technical standards over the total volume of solid waste per province	0.903	0.188	0.075	I
Libraries	The number of public libraries per province	21.447	9.323	4	31
Books	The average number of books in a public library per province	1662	1428	118	3648

 Table I. Variable Definition and Summary Statistics.

Note: The number of observations is 3,165 tourism companies in Vietnam in 2018. All values are deflated to 2010 prices using official GDP deflator. The governance quality variable is obtained from the PAPI data set. The firm-level variables are obtained from the Annual Enterprise Survey data set of Vietnam General Statistics Office (GSO). The provincial-level variables are obtained from the Annual Statistics Books of Vietnam.

and has been updated annually. The data were collected by field-trip surveys and face-to-face interviews. It comprises 8 governance dimensions: participation at local levels, transparency in local decision making, vertical accountability, control of corruption in the public sector, public administrative procedures, public service delivery, environmental governance (from 2018), and e-governance (also from 2018). In this study, we are particularly interested in the environmental governance dimension.

We combine the firm-level GSO data with the provinciallevel PAPI data to create a multilevel data set. Since environmental governance is available only for 2018, this study is thus a cross-sectional analysis. However, we will make use of the panel nature of the GSO and PAPI data sets to reduce issues related to endogeneity. This will be explained in detail in the next section. Our population of interest in this study is tourism companies of every size (micro-firms, small and medium-sized enterprises, and large corporations) and every type of ownership (private, state-owned, and foreign-owned). The data set is unbalanced and requires cleaning before using. As such, we drop all observations that have meaningless accounting reports. We control the outliers by censoring the top and bottom 1% of observations in each variable. The final sample in our study thus includes 3,165 tourism companies operating in Vietnam.

Table 1 presents variable definitions and summary statistics. The pairwise correlation matrix is presented in Supplementary Material S1. In general, foreign inbound tourists are the dominant tourism consumers both in terms of the number of tourist arrivals and the length of stay. Specifically, the number of foreign tourist arrivals accounts for 82.6% of total tourist arrivals, and they stay for 73.94% of the total days. The tourism companies are relatively small, with an average of around 13 employees. They are mostly privately owned firms. The average score of the environmental governance index was 3.99 in 2018, which was the first year this governance dimension was reported. The lowest score achieved is 3.54, while the highest is 6.74.

# Variables and Summary Statistics

The dependent variable of interest in this study is tourism firm performance. This is measured by two variables: *Tourist arrivals*, which is the number of tourism consumers a company serves in one year; and *Length of stay (in days)*, which is the total number of days traveled by the tourism consumers served by a company. These two variables have been widely used in the literature to indicate the equilibrium of local tourism markets and to reflect the performance of local tourism companies (Liu et al. 2019; Aguilar and Díaz 2019). To examine the heterogeneity between domestic and foreign tourists, we construct four additional variables: *Domestic tourist arrivals, Foreign tourist arrivals, Domestic tourist length of stay (in days)*, and *Foreign tourist length of stay (in days)*.

The independent variable is the local *Environmental governance quality*, which is measured by the Environmental Governance index in the PAPI data set. This local governance force indicates the policies and administrative arrangements of local authorities toward improving local quality of air, quality of water, and the seriousness of the local government's intent to protect the environment. The higher the value, the better the quality of local environmental governance. The index is created by evaluating a series of aspects related to local policies in improving environment quality as well as the perceptions of local residents about the efficiency of these policies.<sup>1</sup>

Following the extant literature, we include a set of covariates that may influence the performance of tourism companies. Specifically, we control for firm size and firm ownership. These variables represent firm-specific characteristics, including access to resources and social capital that significantly determine their performance (Nguyen, Mickiewicz, and Du 2018; Du and Mickiewicz 2016). Because of the limitation of the data set, we cannot directly control for other firm-level and manager-/entrepreneurlevel characteristics. As such, we make use of the panel structure of the Annual Enterprise Survey data set to indirectly account for these unobservables. Specifically, we include the one-year lagged values of firm net revenue incomes in all specifications. This variable reflects (the outcome of) all other unobservable firm-level characteristics as well as the management experience and efficiency of the managers/entrepreneurs. Also, to control for unobservable regional characteristics and conditions that may influence a local tourism company, we include a set of 63 provincial dummies in all specifications.

# Specification and Estimation

Based on the conventional tourism firm performance model, we propose the following expanded reduced-form equation. This is our baseline specification:

Tourist arrivals or  
Length of 
$$stay_{ig} = \beta_0 + \beta_1 \begin{pmatrix} Environmental \\ governance quality_g \end{pmatrix}$$
  
 $+\beta_2 (Firm size_{ig}) + \beta_3 (Firm ownership_{ig})$   
 $+\beta_4 (Lagged revenue incomes_{ig}) + v_g + \mu_i$ 

where *i* denotes an individual firm, and *g* is the province. Therefore, the term *Tourist arrivals or Length of stay*<sub>ig</sub> is the performance that firm *i* in province *g* achieved in 2018. The term *Environmental governance quality*<sub>g</sub> is the environmental governance index from the PAPI data set. *Firm size*<sub>ig</sub> is the natural log of the number of full-time employees. *Firm ownership*<sub>ig</sub> is a vector of three dummy variables: private-owned, state-owned, and foreign-owned (state-owned firms serve as the benchmark). Finally, the term *Lagged revenue incomes*<sub>ig</sub> is the natural log of the value of the net revenue incomes of tourism companies in 2017, adjusted for inflation.

In addition, the equation includes a component  $v_g$  —timeinvariant provincial characteristics that are controlled by corresponding dummies. Finally,  $\mu_{it}$  is the idiosyncratic error.

Even though we have tried to control for unobservables at several levels, our specifications may nevertheless suffer from endogeneity related to missing variables. As such, we employ the two-step IV-GMM (instrumental variable–generalized method of moments) technique to estimate regression coefficients. The use of two-step GMM in IV estimation is to generate efficient estimates of the coefficients as well as consistent estimates of the standard errors. This method is more advanced to the traditional two-step least squared in IV estimation since the optimal weighting matrix in IV-GMM is the inverse of an estimate of the covariance matrix of orthogonality conditions. Also, IV-GMM gains efficiency by making use of the overidentifying restrictions of the model, and the relaxation of the i.i.d. assumption.

In the selection of instrumental variables (IVs), we acknowledge that valid IVs should correlate with environmental governance while being redundant in the firm performance equation. The first IV we employ is the volume of forestry chopped down for consumption per province a year. Forestry serves as a foundation of environmental protection. A reduction in forestry signals worsening local environmental conditions, which may prompt local authorities to improve their environmental governance quality (Gustafsson and Scurrah 2019). As such, it is expected that the number of the volume of forestry chopped down is negatively associated with the quality of local environmental governance. For example, in regions

	(I) Total Tourist Arrivals	(2) Domestic Tourist Arrivals	(3) Foreign Tourist Arrivals	(4)	(5)	(6) Foreign Length of Stay	
				Total Length of Stay	Domestic Length of Stay		
Local environmental governance quality	-0.459***	-0.034***	-0.431***	-1.580***	-0.081***	-1.312***	
	(0.163)	(0.005)	(0.151)	(0.438)	(0.021)	(0.384)	
Firm size	1.273***	0.209***	0.685***	4.238***	0.547***	2.011***	
	(0.262)	(0.022)	(0.223)	(0.911)	(0.052)	(0.684)	
Private firm	0.487	0.118	0.067	1.958	0.159	0.408	
	(0.951)	(0.073)	(0.789)	(2.294)	(0.235)	(1.803)	
Foreign-owned firm	4.074***	I.857 <sup>****</sup>	-2.879 <sup>*</sup>	17.125***	5.446 <sup>****</sup>	-8.153**	
	(1.260)	(0.308)	(1.471)	(5.911)	(1.128)	(3.728)	
Lagged revenue incomes	0.391***	0.022***	0.335***	1.186***	0.053***	0.962***	
	(0.039)	(0.004)	(0.034)	(0.192)	(0.011)	(0.157)	
Constant	-2.496***	-0.453***	-0.857	-7.501***	-1.033***	-1.955	
	(0.953)	(0.093)	(0.760)	(2.517)	(0.300)	(1.904)	
VIF	4.531	4.425	4.457	4.585	4.453	4.512	
Hansen (/) p_value	0.148	0.160	0.379	0.371	0.086	0.599	
SW F-test p_value	0.000	0.000	0.000	0.000	0.000	0.000	
Observations	3,165	3,165	3,165	3,165	3,165	3,165	
R-squared	0.191	0.177	0.130	0.187	0.191	0.127	
RMSE	4.971	0.551	3.912	0.159	1.456	1.262	

### Table 2. Regression Results (Direct Effect).

Note: The dependent variable in columns (1)-(3) is tourist arrivals; the dependent variable in columns (4)-(6) is length of stay (in days). All estimations include full sets of 63 provincial dummies. Standard errors and test statistics are asymptotically robust to heteroscedasticity and are clustered to the provincial level. Endogenous variable is local environmental governance variable. The estimator is IV-GMM (instrumental variable–generalized method of moments) technique. The IVs are forest wood consumed, processed waste, library, and books. VIF is variance inflation factor test for multicollinearity. Hansen (J) is the overidentification test, under the null that the overidentifying restrictions are valid, the statistic is asymptotically distributed as a chi-squared variable. SW *F*-test is the Sanderson-Windmeijer first-stage chi-squared and *F* statistics, under the null that the local environmental governance variable is unidentified. RMSE = root mean square error. \*\*\*Significant at 1%, \*\*significant at 5%, \*significant at 10%.

where local authorities execute environmental policies effectively, it could be expected that the volume of forestry chopped down is relatively small. This variable is, however, not directly relevant to tourism company performance. Therefore, it is a suitable instrumental variable.

The second IV is the ratio of solid waste that is collected and handled in accordance with national technical standards to the total volume of solid waste per province over a year. This variable indicates the efficiency of local waste treatment systems, which has a strong association with local environmental governance quality. Specifically, regions whose local authorities invest more in the waste recycle and waste treatment systems are more likely to have a better set of environmental policies. On the contrary, the low ratio of processed wastes indicates that local authorities are not active in promoting environment-related policies, which is an indicator of inefficient environmental governance. This variable is also not directly relevant to tourism company performance. Therefore, it is a suitable instrumental variable.

The next two IVs are the number of libraries and the number of books available in the libraries per province per year. These two variables serve as a proxy for both local intellectual levels and the investment that local governments make in spreading knowledge to citizens, which indicate the likelihood and willingness of local citizens to participate in solving local problems, including boosting local authorities to enforce environmental governance. Hakhverdian and Mayne (2012) find that the educated are more likely to force local authorities to actively address environmental issues in their home regions. As such, it is expected that regions that have more libraries/books available in the libraries may possess a better set of environmental governance settings. On the contrary, where the intellectual levels are relatively low (represented by a small number of libraries and books), citizens may not care much about the environment, leading to inefficient enforcement of environmental governance.

We employ these IVs to estimate the regression coefficients adjusted for potential endogeneity. To account for the multilevel nature of the data set, we cluster standard errors to the provincial level. Also, we conduct a set of variance inflation factor (VIF) tests for the existence of multicollinearity in our specifications.

# Results

# Main Results

Regression results are reported in Table 2 and Table 3. The test statistics confirm the validity of the IVs and find no

#### Table 3. Regression Results (Nonlinear Effect).

	(I) Total Tourist Arrivals	(2) Domestic Tourist Arrivals	(3) Foreign Tourist Arrivals	(4)	(5)	(6) Foreign Length of Stay	
				Total Staying Days	Domestic Length of Stay		
Local environmental governance quality	-5.066***	-0.259	-4.457***	-20.829***	-1.308*	-17.961***	
	(1.942)	(0.262)	(1.609)	(6.154)	(0.680)	(4.426)	
Local environmental governance quality squared	0.475**	0.022	0.423**	2.014***	0.126*	1.753***	
	(0.207)	(0.028)	(0.172)	(0.656)	(0.072)	(0.473)	
Firm size	1.044***	0.155***	0.613***	3.307***	0.411***	1.621***	
	(0.152)	(0.024)	(0.120)	(0.491)	(0.062)	(0.327)	
Private firm	0.465	0.151	0.347	1.308	0.328	0.807	
	(0.908)	(0.152)	(0.703)	(2.431)	(0.393)	(1.796)	
Foreign-owned firm	2.405	1.788***	-2.790**	10.453	4.877***	-8.153**	
-	(2.218)	(0.429)	(1.197)	(7.046)	(1.166)	(3.249)	
Lagged revenue incomes	0.389***	0.021***	0.331***	1.192***	0.051***	0.965***	
	(0.036)	(0.004)	(0.032)	(0.109)	(0.009)	(0.090)	
Constant	8.491*	0.154	8.089**	38.353***	1.893	35.742***	
	(4.503)	(0.617)	(3.756)	(14.150)	(1.592)	(10.223)	
VIF	6.781	6.255	6.244	6.233	6.457	6.214	
Hansen (J) p_value	0.020	0.030	0.012	0.016	0.013	0.028	
SW F-test p_value	0.000	0.000	0.000	0.000	0.000	0.000	
Observations	3,165	3,165	3,165	3,165	3,165	3,165	
R-squared	0.182	0.171	0.124	0.180	0.183	0.122	
RMSE	5.004	0.554	3.929	1.550	1.464	1.269	

Note: The dependent variable in columns (1)-(3) is tourist arrivals; the dependent variable in columns (4)-(6) is length of stay (in days). All estimations include full sets of 63 provincial dummies. Standard errors and test statistics are asymptotically robust to heteroscedasticity and are clustered to the provincial level. Endogenous variable is local environmental governance variable. The estimator is IV-GMM (instrumental variable–generalized method of moments) technique. The IVs are forest wood consumed, processed waste, libraries, and books. VIF is variance inflation factor test for multicollinearity. Hansen (J) is the overidentification test, under the null that the overidentifying restrictions are valid, the statistic is asymptotically distributed as a chi-squared variable. SW *F*-test is the Sanderson-Windmeijer first-stage chi-squared and *F* statistics, under the null that the local environmental governance variable is unidentified. RMSE = root mean square error. \*\*\*Significant at 1%, \*\*significant at 5%, \*significant at 10%.

serious concerns with multicollinearity in our specifications. In Table 2, the coefficients associated with local environmental governance quality are negative and statistically significant. However, when the squared term of the variable is included in Table 3, its associated coefficients are positive and statistically significant in most specifications. This finding indicates that environmental governance exerts a U-shaped effect on the performance of tourism companies. As such, hypothesis 1 is supported.

Turning to the heterogeneity between domestic and foreign tourists, we take a close look at the coefficients associated with the environmental governance variable and its squared term in columns 2, 3, 5, and 6 in Table 3. Results in columns 3 and 6 reveal that the U-shaped effect persists for foreign tourists; that is, the numbers of foreign tourist arrivals and their length of stay (in days) are a U-shaped function of local environmental governance quality. However, results in columns 2 and 5 show that environmental governance does not influence the number of domestic tourist arrivals and only marginally affects their lengths of stay (both in terms of statistical and economic effects). These findings thus evidently support the affluence hypothesis 2a and invalidate the attribution hypothesis 2b.

In Figure 1, we graphically illustrate the U-shaped effect using predictive margin graphs. The figure shows that the transition thresholds in specifications of the number of tourist arrivals and the length of stay are at approximately point 5 of the environmental governance index. Given that the index varies from 3.54 to 6.74 with a mean of 3.99 in 2018, the transition point of 5 indicates that local authorities must exceed the average governance quality if they wish to reverse the negative impacts of environmental protection policies on local tourism development.

In terms of the control variables, firm size is positively associated with firm performance. There is no significant difference in the performance of state-owned tourism companies and private tourism companies in the context of Vietnam. However, foreign-owned companies appear to perform better in domestic tourism markets; interestingly, the results show that they perform worse in international markets. Finally, firms with higher net revenue incomes in the previous year will perform better in the next year.



#### Figure 1. Marginal effects.

Note: This figure illustrates the predictive margins of by different numbers of tourist arrivals (the left figure) and length of stay (the right figure). The confidence interval is 95%.

# **Robustness Checks**

*Ordinary least squares estimation.* We also conduct a set of robustness checks. First, we employ the ordinary least squares (OLS) technique to reestimate all specifications. IV technique has the potential to resolve problems related to endogeneity but may produce biased results if the selected IVs are weak or irrelevant (Wooldridge 2010). The results of OLS are presented in Supplementary Table S2.1 and are consistent with the main findings using IVs.

*Multilevel estimation.* We also acknowledge that the data structure is multilevel in which environmental governance is a regional-level variable, while tourism company performance is a firm-level variable. To account for this characteristic of the data, we employ multilevel technique to estimate regression coefficients. The multilevel estimator takes into account the fact that some individual firms may share similar (unobservable) characteristics since they are located in the same regions. Thus, for the hierarchical structure of the data, individual firms are set on level one, and provinces are set on level two. This setting allows us to control for clustering the observations by province. The results are presented in Supplementary Table S2.2 and are consistent with the results obtained from the IV technique, indicating the robustness of our findings.

Remove large cities in estimation. We also test the robustness of our findings by removing firms located in Hanoi (the capital and the second-largest business city) and Hochiminh (the largest business city) out of the sample. Tourism companies in these cities account for 35% of the total sample observations. However, these cities are more likely than the other regions to attract business trip visitors for whom local environmental concerns are less likely to strongly affect their travel decisions and arrangements. The regression results using IV technique is presented in Supplementary Table S2.3 and are consistent with our main findings.

Hotel sample. We also test the U-shaped effect of environmental governance using an alternative data set of hotels' performance since hotels are more likely to serve smallgroup, backpacker, and independent travelers and visitors than are the tourism companies (Martínez García de Leaniz, Herrero Crespo, and Gómez López 2018). These tourism consumers may encounter higher levels of informational asymmetries since they do not obtain local information through tourist agents. It is thus important to investigate their sensitivity to the changes in the destinations' environmental governance policies. The results of the hotel sample are presented in Supplementary Table S2.4 and are consistent with the main findings.

*Mediators.* We argue that at the initial stage when environmental governance settings are introduced, it will be negatively associated with tourist firm performance because of two mechanisms: (1) increased institutional conflicts and (2) increased transaction costs.

To test the mediating effects of these two variables, we employ two indices of the Provincial competitiveness index (PCI). This is a joint product of the Vietnam Chamber of Commerce (VCCI) and the US Agency for International Development (USAID). This data set, similar to the PAPI data set, is a panel of provincial governance quality. The difference between the two is that while PAPI is a measure of citizen-oriented and living-related governance forces, PCI is a measure of business-related governance arrangements. The PCI index is scored from 0 to 10, the higher the score, the better the governance quality. The PCI index is calculated based on a survey of more than 17,000 domestic firms and 1,700 foreign firms across provinces in Vietnam. This data set is composed of 10 indices evaluating the quality of different dimensions of local business-related governance.

For the purpose of testing the mediating effects, we use the index *Time cost* as a proxy of transaction costs and the index *Informal charges* (corruption) as a proxy of institutional conflicts. The definition and summary statistics of the two indices are presented in Supplementary Table S2.5a.

The rationales of selecting these two indices are as follows: when environmental policies are introduced, transaction costs are expected to increase. This could be in the form of intensified bureaucratic compliance requirements and inspections from local authorities (time cost) (Nguyen, Mickiewicz, and Du 2018). The result, therefore, is worsened performance of tourism companies. Also, when environmental policies are introduced, institutional conflicts are expected to increase. This may lead to intensified corrupt activities (informal charges) since firms may try to avoid following the new set of institutions (i.e., environmental governance) for the sake of saving costs and deciding to bribe government officials to be out of their screening radar (Du and Mickiewicz 2016).

Employing the structural equation modeling technique, we find that there are significant indirect effects of local environmental governance on tourism firm performance through transaction costs and institutional conflicts. The estimation results are presented in Supplementary Table S2.5b. It is also found that institutional conflicts (that lead to increased corruption) are the stronger mediator compared to transaction costs. As such, it could be concluded that institutional conflicts and institutional inertia are the main drivers of the (temporarily) negative impacts of environmental governance on local tourism.

Standardized coefficients. Given the VIF values in our regressions are relatively high, in this section we present the results with standardized regression coefficients. The technique of standardizing variables (i.e., centering variables) involves calculating the mean for each continuous independent variable and then subtracting the mean from all observed values of that variable. Then, we use these centered variables in our regression model to reduce concerns related to heterogeneity. The regression results are presented in Supplementary Table S2.6. In general, the results are consistent with the main findings, indicating that heterogeneity is not a serious issue in our specifications.

# **Discussion and Conclusion**

This study investigates the impacts of local environmental governance quality on the tourism sector, which is represented by the performance of tourism companies. Specifically, it aims to answer the question of whether environmental policies executed by local governments improve or worsen the performance of tourism firms. Utilizing the institutional theory, this study proposes that local environmental governance exerts a nonlinear (U-shaped) effect on the performance of local tourism companies.

The U-shaped effect is due to two mechanisms. First, when environmental policies and arrangements are initially executed, transaction costs increase, leading to a situation where local tourism companies may lose their competitive advantages (Stumpf and Swanger 2017). Second, institutional conflicts (between the old and new values) induce ambiguity (Ghalia et al. 2019), resulting in a mismatch between the perceived images of the destinations and the actual images of the destinations. These effects may temporarily worsen the performance of local tourism companies. However, with additional improvements to environmental governance quality, local tourism may revive as a result of the alignment of the perceived and actual images of the destinations, and the institutionalization (i.e., social acceptance) of the new values (i.e., environmental protection) (Ambrosie 2015; García-Cabrera and Durán-Herrera 2014), leading to improvements in performance.

In terms of tourists' heterogeneity, this study proposes that the U-shaped effect of environmental governance quality is stronger on foreign inbound tourists than on domestic tourists. Following the affluence hypothesis, we argue that people from wealthy countries or nations with relatively strong economic power are more willing to incur higher costs for environmental quality than are people from less wealthy nations (Diekmann and Axel 1999).

Testing our hypotheses in the context of Vietnam using a large and representative data set of more than 3,000 tourism companies and 7,000 hotels in 2018, we find some initial evidence that supports the U-shaped function of local environmental governance on tourism firm performance. In addition, empirical findings reveal that foreign inbound tourists are more sensitive to the governance force than are domestic tourists.

This study makes three important contributions to tourism research. First, it responds to the call in the extant literature for research into the importance of understanding the influence of institutions on tourism development (Mzembe et al. 2019; Roxas and Chadee 2013; Gozgor et al. 2019; Poprawe 2015a; Falaster, Zanin, and Guerrazzi 2017). Institutions, through formal and informal forces, determine the nature of tourism activities and influence tourists' behaviors (Badola et al. 2018). However, institutional theory has rarely been employed to investigate tourism development. Gozgor et al. (2019) show that a large body of the literature focuses on the association between informal institutional quality and tourism, and they propose a framework to examine the effects of national formal legal institutional quality on tourism industries.

In this study, we go one step further by arguing that national institutions are not homogeneously executed across regions within a country, especially a developing country. Well-designed formal legal institutions cannot be automatically efficient without a functioning set of institutions of governance at local levels (Williamson 2000). For this reason, we propose a study of local governance quality instead of the broad and general constitutional framework. The role of local governance arrangements in facilitating local business performance have been increasingly examined in regional studies and entrepreneurship literature (Nguyen, Mickiewicz, and Du 2018; Su and Bui 2017). However, in tourism literature, local governance has not been linked to the performance of tourism firms via the lens of institutional theory.

This study is thus one of the first that explains tourism firm performance with a focus on institutions of governance, that is, the execution of the rules of laws at the local level instead of the rules of laws per se. By doing this, this article echoes a strand of research that examining the role played by local governments in influencing tourism development. Specifically, findings in this study support the argument of Trousdale (1999) that better governance should clearly delineate local, regional, and national roles and incorporate community inputs to mitigate against the adverse effects of tourism development while maximizing benefits. Findings in this study, however, stand in sharp contrast to those of Ruhanen (2013) who find evidence to show that, in the context of Queensland, Australia, power struggles, tokenistic public participation, and the strong influence of the local government authority in local governance structures is found to be an inhibitor to sustainable tourism development. By providing an evidence of the significance of local governance, this study supports the literature arguing for the positive effects of local government on tourism.

Second, this study examines environmental governance quality, an institutional dimension that is highly relevant to tourism but largely ignored in the literature. To our knowledge, this study is one of the first that investigates the nonlinear effect of environmental governance quality on the performance of local tourism companies. Prior studies approaches environment-friendly and sustainable tourism mostly via the theoretical lens of tourism attitudes and behaviors (Aise KyoungJin, Airey, and Szivas 2011; Buckley 2019). While the "supply" of such attitudes and behaviors is essential in creating the new norms, that is, environmentfriendly standards and values, we cannot completely rely on market mechanisms/market ethics to achieve sustainable tourism. This study thus approaches sustainability from the "demand" side, that is, the forces stemmed from external institutions (i.e., the environmental governance arrangements of local governments, in particular).

Environmental governance represents the efficiency of local authorities in implementing central policy or in designing their own initiatives to protect the local environment and improve air and water quality. The execution of this and the corresponding policies and arrangements may significantly affect the operations of tourism companies and tourists' perceptions of the destinations' images. As such, together with the conventional dimensions of institutions such as press freedom, civic liberty, and corruption, we suggest that environmental governance is essential to determining local tourism development. Our study confirms the institutional theory by showing that institutions are multidimensional (Ghalia et al. 2019), and each institutional force may exert dissimilar effects on tourism. For example, while Gozgor et al. (2019) show that a higher level of legal system quality and better protection of property rights promote inbound tourism, we demonstrate that environmental policies harm inbound tourism before boosting it to a higher level. Our findings, however, are consistent with those of Altin et al. (2020), who highlight the nonlinear effects of institutional forces on tourism performance. Specifically, they suggest that firm births and deaths in the hospitality industry are generally affected differently when it comes to the dimensions of formal institution intervention, the intensity, direction (positive or negative), and (non)persistence of the effects.

Third, this study explores the heterogeneity between domestic tourists and foreign inbound tourists in terms of their sensitivity to changes in local environmental governance quality. The prior literature investigating formal national institutions is restricted to foreign inbound tourists only (Gozgor et al. 2019; Ghalia et al. 2019; Detotto, Giannoni, and Goavec 2021). Meanwhile, the strand of literature investigating informal institutions mostly relies on qualitative research design and has not yet been able to distinguish the heterogeneity between domestic tourists and foreign inbound tourists (Badola et al. 2018). In this study, we evidently show that institutions of governance exert dissimilar effects on domestic and foreign inbound tourists. Our finding that the effect of improvements in local environmental governance quality may be stronger on foreign tourists indicates that geographical proximity to the changes in environmental governance is not an indicator of environmental consciousness.

In general, this study subscribes to Falaster, Zanin, and Guerrazzi (2017), who propose that institutional theory has several components that can be employed to better understand the logics behind tourism using an alternative view. Also, it could be combined with the neoclassical economic theories to provide a more comprehensive picture of the operation and performance of the tourism industry. In this study, we show that not only transaction costs (a concept of neoclassical economics) but also institutional conflicts matter to tourism firm performance. In such a situation, firms may decouple their formal structure from their activities (such as bribe local authorities) to be exempted from the new "rules"-the governance of environment. Given that tourism is a field wherein several institutional logics act simultaneously, affecting various stakeholders (Falaster, Zanin, and Guerrazzi 2017), future studies may further explore other pillars/dimensions of institutions such as the regulative, normative, and cultural-cognitive forces (Scott 2014).

The findings in this study are most relevant to policy makers concerned with the trade-offs between environmental protection and tourism development. We suggest that there will be an inevitable reduction in the number of tourist arrivals and their length of stay when environmental policies and practices are initially executed. However, this negative effect will reverse, and tourist levels will revive if local authorities continue to improve their environmental governance quality. The transition threshold, however, is relatively high and requires local authorities to be consistent and determined in their execution. Given that environmental protection and tourism development are not mutually exclusive in the long run (Moeller, Dolnicar, and Leisch 2011), we recommend local authorities to persistently boost their environmental governance quality to achieve a sustainable equilibrium between these two apparently contradictory objectives of environment protection and tourism development. Also, local authorities should pay attention to the heterogeneity between domestic and foreign tourists. Given that domestic tourists are less responsive to environmental governance forces, local governments should design appropriate communication approaches to raise their environmental consciousness.

This study is not without limitations that should be acknowledged but also provide potential avenues for future research. First, because of the availability of the information on local governance quality, the data set employed in this study is cross-sectional (even though we did employ the panel structure of the data to reduce concerns related to endogeneity) and country-specific. One of the main weaknesses of a country-specific research design is that we only observe within-country effects, which may be influenced by social embeddedness. For this reason, the generalizability of this study may be limited. Future research should, therefore, retest the validity of our findings using a multicountry data set with longer survey periods. Also, because of data limitations, we only examine two dimensions of the performance of tourism companies (the numbers of tourist arrivals and length of stay). Future studies might extend the investigation by examining other dimensions of tourism development, such as the types of tourism services and the loyalty of tourism consumers.

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# ORCID iD

Bach Nguyen (D) https://orcid.org/0000-0003-1527-7443

### **Supplemental Material**

Supplemental material for this article is available online.

## Note

1. Details of the sampling and the construction of the index is available at http://papi.org.vn/eng/chi-so/.

#### References

- Aguilar, M. Isabel, and Bárbara Díaz. 2019. "Length of Stay of International Tourists in Spain: A Parametric Survival Analysis." *Annals of Tourism Research* 79 (11): 102768.
- Airey, David, and King Chong. 2010. "National Policy-Makers for Tourism in China." *Annals of Tourism Research* 37 (2): 295–314.
- Aise KyoungJin, Kim, David Airey, and Edith Szivas. 2011. "The Multiple Assessment of Interpretation Effectiveness: Promoting Visitors' Environmental Attitudes and Behavior." *Journal of Travel Research* 50 (3): 321–34.
- Altin, Mehmet, Jorge Ridderstaat, Gabriela Lelo de Larrea, and Mehmet Ali Köseoglu. 2020. "Influence of Institutional Economics on Firm Birth and Death: A Comparative Analysis of Hospitality and other Industries." *International Journal of Hospitality Management* 86 (April): 102442.
- Ambrosie, Linda M. 2015. "Myths of Tourism Institutionalization and Cancún." Annals of Tourism Research 54 (September):65–83.
- Badola, Ruchi, Syed Ainul Hussain, Pariva Dobriyal, Upma Manral, Shivani Barthwal, Archi Rastogi, and Amanat Kaur Gill. 2018.
  "Institutional Arrangements for Managing Tourism in the Indian Himalayan Protected Areas." *Tourism Management* 66 (6): 1–12.
- Bojanic, David C., and Rodney B. Warnick. 2020. "The Relationship between a Country's Level of Tourism and Environmental Performance." *Journal of Travel Research* 59 (2): 220–30.
- Brechin, Steven R. 1999. "Objective Problems, Subjective Values, and Global Environmentalism: Evaluating the Postmaterialist Argument and Challenging a New Explanation." *Social Science Quarterly* 80 (4): 793–809.
- Buckley, Ralf. 2019. "Measuring Sustainability of Individual Tourist Behavior." *Journal of Travel Research* 58 (4): 709– 710.
- Campos-Soria, Juan A., Alejandro García-Pozo, and Andrés J. Marchante-Mera. 2018. "Explaining Tourists' Attitudes to Environmental Support: A Multilevel Approach." *Journal of Sustainable Tourism* 26 (6): 987–1006.
- Chan Eric, S. W., and H. C. Hsu Cathy. 2016. "Environmental Management Research in Hospitality." *International Journal* of Contemporary Hospitality Management 28 (5): 886–923.
- Cui, Yuanyuan, Amy Errmann, Jungkeun Kim, Yuri Seo, Yingzi Xu, and Fang Zhao. 2020. "Moral Effects of Physical Cleansing and Pro-environmental Hotel Choices." *Journal of Travel Research* 59 (6): 1105–18.
- Danish, , and Zhaohua Wang. 2018. "Dynamic Relationship between Tourism, Economic Growth, and Environmental Quality." *Journal of Sustainable Tourism* 26 (11): 1928–43.
- Deng, Taotao, Yukun Hu, and Mulan Ma. 2019. "Regional Policy and Tourism: A Quasi-natural Experiment." *Annals of Tourism Research* 74 (January): 1–16.

- Detotto, Claudio, Sauveur Giannoni, and Claire Goavec. 2021. "Does Good Governance Attract Tourists?" *Tourism Management* 82 (February): 104155.
- Diekmann, Andreas, and Franzen Axel. 1999. "The Wealth of Nations and Environmental Concern." *Environment & Behaviour* 31 (4): 540–49.
- DiMaggio, Paul J., and Walter W. Powell. 1991. *The New Institutionalism in Organizational Analysis*. London: University of Chicago Press.
- Dolnicar, Sara, Ljubica Knezevic Cvelbar, and Bettina Grün. 2019. "A Sharing-Based Approach to Enticing Tourists to Behave More Environmentally Friendly." *Journal of Travel Research* 58 (2): 241–52.
- Du, Jun, and Tomasz Mickiewicz. 2016. "Subsidies, Rent Seeking and Performance: Being Young, Small or Private in China." *Journal of Business Venturing* 31 (1): 22–38.
- Estrin, S., J. Korosteleva, and T. Mickiewicz. 2013. "Which Institutions Encourage Entrepreneurial Growth Aspirations?" *Journal of Business Venturing* 28 (4): 564–80.
- Falaster, Christian, Luis Miguel Zanin, and Luiz Antonio Guerrazzi. 2017. "Institutional theory in tourism research: new opportunities from an evolving theory." *Revista Brasileira de Pesquisa em Turismo* 11 (2): 270–93.
- Fong, Veronica Hoi In, IpKin Anthony Wong, and Jacky Fok Loi Hong. 2018. "Developing Institutional Logics in the Tourism Industry through Coopetition." *Tourism Management* 66 (6): 244–62.
- Franzen, A., and R. Meyer. 2010. "Environmental Attitudes in Cross-National Perspective: A Multilevel Analysis of the ISSP 1993 and 2000." European Sociological Review European Sociological Review 26 (2): 219–34.
- Franzen, Axel. 2003. "Environmental Attitudes in International Comparison: An Analysis of the ISSP Surveys 1993 and 2000." Social Science Quarterly 84 (2): 297–308.
- García-Cabrera, Antonia M., and Juan J. Durán-Herrera. 2014. "Does the Tourism Industry Co-evolve?" Annals of Tourism Research 47 (July): 81–83.
- Gelissen, John. 2007. "Explaining Popular Support for Environmental Protection: A Multilevel Analysis of 50 Nations." *Environment and Behavior* 39 (3): 392–415.
- Ghalia, Thaana, Jan Fidrmuc, Nahla Samargandi, and Kazi Sohag. 2019. "Institutional Quality, Political Risk and Tourism." *Tourism Management Perspectives* 32 (10): 100576.
- Goncalves, Olga, Elisabeth Robinot, and Hélène Michel. 2016. "Does It Pay to Be Green? The Case of French Ski Resorts." *Journal of Travel Research* 55 (7): 889–903.
- Gozgor, Giray, Chi Keung Marco Lau, Yan Zeng, and Zhibin Lin. 2019. "The Effectiveness of the Legal System and Inbound Tourism." *Annals of Tourism Research* 76 (5): 24–35.
- Gustafsson, Maria-Therese, and Martin Scurrah. 2019. "Strengthening Subnational Institutions for Sustainable Development in Resource-Rich States: Decentralized Land-Use Planning in Peru." World Development 119 (7): 133–44.
- Hakhverdian, Armen, and Quinton Mayne. 2012. "Institutional Trust, Education, and Corruption: A Micro-Macro Interactive Approach." *Journal of Politics* 74 (3): 739–50.
- Hall, C. Michael. 2019. "Constructing Sustainable Tourism Development: The 2030 Agenda and the Managerial Ecology of Sustainable Tourism." *Journal of Sustainable Tourism* 27 (7): 1044–60.

- Holden, Andrew. 2009. "The Environment-Tourism Nexus: Influence of Market Ethics." *Annals of Tourism Research* 36 (3): 373–89.
- Juvan, Emil, and Sara Dolnicar. 2014. "The Attitude–Behaviour Gap in Sustainable Tourism." Annals of Tourism Research 48 (9): 76–95.
- Kim, Sun-Hwa, Kiwon Lee, and Ann Fairhurst. 2017. "The Review of 'Green' Research in Hospitality, 2000-2014: Current Trends and Future Research Directions." *International Journal of Contemporary Hospitality Management* 29 (1): 226–47.
- Le, Dung, Noel Scott, Susanne Becken, and Rod M. Connolly. 2019. "Tourists' Aesthetic Assessment of Environmental Changes, Linking Conservation Planning to Sustainable Tourism Development." *Journal of Sustainable Tourism* 27 (10): 1477–94.
- Liu, Peixue, Honglei Zhang, Jie Zhang, Ye Sun, and Mengyuan Qiu. 2019. "Spatial-Temporal Response Patterns of Tourist Flow under Impulse Pre-trip Information Search: From Online to Arrival." *Tourism Management* 73 (8): 105–14.
- Martínez García de Leaniz, Patricia, Ángel Herrero Crespo, and Raquel Gómez López. 2018. "Customer Responses to Environmentally Certified Hotels: The Moderating Effect of Environmental Consciousness on the Formation of Behavioral Intentions." *Journal of Sustainable Tourism* 26 (7): 1160–77.
- McLennan, Char-lee J., Brent W. Ritchie, Lisa M. Ruhanen, and Brent D. Moyle. 2014. "An Institutional Assessment of Three Local Government-Level Tourism Destinations at Different Stages of the Transformation Process." *Tourism Management* 41 (4): 107–18.
- Moeller, Teresa, Sara Dolnicar, and Friedrich Leisch. 2011. "The Sustainability–Profitability Trade-Off in Tourism: Can It Be Overcome?" *Journal of Sustainable Tourism* 19 (2): 155–69.
- Mzembe, Andrew Ngawenja, Yvonne Novakovic, Frans Melissen, and Grace Kamanga. 2019. "Institutional Bricolage as an Antecedent of Social Value Creation in a Developing Country's Tourism and Hospitality Industry." *Corporate Social Responsibility and Environmental Management* 26 (4): 997–1008.
- Ngo, Tramy, Gui Lohmann, and Rob Hales. 2018. "Collaborative Marketing for the Sustainable Development of Community-Based Tourism Enterprises: Voices from the Field." *Journal of Sustainable Tourism* 26 (8): 1325–43.
- Nguyen, Bach. 2020. "Local Institutions on Small Firm Investments: Degrees of Institutional Persistence Matter." *International Journal of Entrepreneurship and Small Business* 41 (1): 33–57.
- Nguyen, Bach, and Nguyen Phuc Canh. 2020. "The Effects of Regional Governance, Education, and in-Migration on Business Performance." *Kyklos* 73 (2): 291–319.
- Nguyen, Bach, Tomasz Mickiewicz, and Jun Du. 2018. "Local Governance and Business Performance in Vietnam: The Transaction Costs Perspective." *Regional Studies* 52 (4): 542–57.
- North, Douglass C. 1990. Institutions, Institutional Change and Economic Performance, Political Economy of Institutions and Decisions. Cambridge: Cambridge University Press.
- Passafaro, Paola. 2020. "Attitudes and Tourists' Sustainable Behavior: An Overview of the Literature and Discussion of Some Theoretical and Methodological Issues." *Journal of Travel Research* 59 (4): 579–601.
- Poprawe, Marie. 2015a. "On the Relationship between Corruption and Migration: Empirical Evidence from a Gravity Model of Migration." *Public Choice* 163 (3/4): 337–54.

- Poprawe, Marie. 2015b. "A Panel Data Analysis of the Effect of Corruption on Tourism." *Applied Economics* 47 (22/24): 2399–412.
- Roxas, Banjo, and Doren Chadee. 2013. "Effects of Formal Institutions on the Performance of the Tourism Sector in the Philippines: The Mediating Role of Entrepreneurial Orientation." *Tourism Management* 37 (8): 1–12.
- Ruhanen, Lisa. 2013. "Local Government: Facilitator or Inhibitor of Sustainable Tourism Development?" *Journal of Sustainable Tourism* 21 (1): 80–98.
- Scott, W. Richard. 2014. Institutions and Organizations: Ideas, Interests and Identities. Los Angeles, CA: Sage.
- Sheldon, Pauline J., and Park Sun-Young. 2011. "An Exploratory Study of Corporate Social Responsibility in the U.S. Travel Industry." *Journal of Travel Research* 50 (4): 392–407.
- Stumpf, T. S., and Nancy Swanger. 2017. "Institutions and Transaction Costs in Foreign-Local Hotel Ventures: A Grounded Investigation in the Developing Pacific." *Tourism Management* 61 (August): 368–79.
- Su, Thanh Dinh, and Thi Mai Hoai Bui. 2017. "Government Size, Public Governance and Private Investment: The Case of Vietnamese Provinces." *Economic Systems* 41 (4): 651– 66.
- Suchman, Mark C. 1995. "Managing Legitimacy: Strategic and Institutional Approaches." *Academy of Management Review* 20 (3): 571–610.
- Trousdale, William J. 1999. "Governance in Context: Boracay Island, Philippines." Annals of Tourism Research 26 (4): 840–67.
- Truong, V. Dao, C. Michael Hall, and Tony Garry. 2014. "Tourism and Poverty Alleviation: Perceptions and Experiences of Poor

People in Sapa, Vietnam." *Journal of Sustainable Tourism* 22 (7): 1071–89.

- Williamson, Oliver E. 2000. "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature* 38 (3): 595–613.
- Wooldridge, Jeffrey M. 2010. Econometric Analysis of Cross Section and Panel Data. Cambridge, MA: MIT Press.
- Wu, Tsung-Pao, and Hung-Che Wu. 2019. "Causality between European Economic Policy Uncertainty and Tourism Using Wavelet-Based Approaches." *Journal of Travel Research* 58 (8): 1347–56.
- Xue, Lan, and Deborah Kerstetter. 2018. "Discourse and Power Relations in Community Tourism." *Journal of Travel Research* 57 (6): 757–68.
- Yanju, Luo, and Deng Jinyang. 2008. "The New Environmental Paradigm and Nature-Based Tourism Motivation." *Journal of Travel Research* 46 (4): 392–402.
- Zhang, Hongmei, Yechen Zhang, Zibing Song, and Alan A. Lew. 2019. "Assessment Bias of Environmental Quality (AEQ), Consideration of Future Consequences (CFC), and Environmentally Responsible Behavior (ERB) in Tourism." *Journal of Sustainable Tourism* 27 (5): 609–28.

# Author Biography

**Bach Nguyen** is a lecturer in the field of small business and entrepreneurship. His main research interest is understanding the economics and management of new ventures and small businesses. His research interest lies in several aspects of small businesses, including entrepreneurial financing, investment decisions, human resource management, and institutional settings on firm investment and performance.