

When Disaster Hits, Governance Splits: Different Effects on Domestic and Inbound Tourism

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Abstract

While natural disasters have the potential to disrupt tourism demand, evidence on their impacts is mixed. This study positions governance quality as a central factor in explaining these divergent outcomes, examining its moderating role in the relationship between natural disasters and inbound and domestic tourism. Using panel data from OECD countries, we show that governance quality reduces, and in many cases reverses, the negative effects of disasters on inbound tourism, with effects persisting into the following year. In contrast, domestic tourism increases upon disasters in countries with low-governance quality. This moderating effect for domestic tourism is evident only for geological disasters, suggesting that governance matters for sudden-onset events. Overall, our results indicate that governance quality reshapes the tourism-disaster relationship, sustaining inbound tourism when strong and resulting in increased domestic travel when weak, underlining the differential effects of governance quality across inbound and domestic tourism.

Keywords

governance quality, institutions, domestic tourism, inbound tourism, natural disasters

Introduction

In recent years, the occurrence and severity of natural disasters have both increased, sparking concern about their impacts on communities, ecosystems, and economic stability (Botzen et al., 2019). In 2023 alone, the Emergency Events Database (EM-DAT, 2024) documented 399 natural hazard-related disasters, which caused 86,473 deaths, impacted 93.1 million individuals, and led to an estimated \$202.7 billion in economic damages. The earthquake in Turkey caused 50,783 deaths and \$34 billion in losses, the drought in Indonesia had an effect on 18.8 million people, and Tropical Storm Doksuri in China led to \$25 billion in economic damage, highlighting the escalating human and financial toll of such disasters.

Concerns about natural disasters are especially salient in vulnerable sectors such as tourism, impacting both the supply of tourism services and international tourism demand, as emphasized by Ritchie and Jiang (2019). The tourism industry is highly susceptible to external shocks, including political instability, economic downturns, and natural disasters. Among these, natural disasters such as floods, wildfires, volcanic activity, and earthquakes harm the infrastructure embedded in the tourism sector, damage tourism attractions and heritage sites, and affect potential visitors' decision-making through media and perceptions of security, thereby impacting tourism supply and destination appeal. Yet, the

outcomes in tourism due to the disasters remain inconsistent. While disasters mostly harm tourism demand, findings so far suggest they may also increase the number of tourism arrivals (Rosselló et al., 2020). For example, Rosselló et al. (2020) note that arrivals can rise because humanitarian travel and visits to friends and relatives are included in international tourist counts. Moreover, media-driven fascination and disaster-related tourism can increase tourist arrivals, as illustrated by the Eyjafjallajökull volcanic eruption in Iceland. Despite the flood, the Katherine region recorded a 15% increase in guest nights in 1998 compared to the previous year, which Faulkner and Vikulov (2001) attribute to effective destination marketing and increased media exposure. While the findings are noteworthy, the underlying mechanisms driving variation in tourism demand remain underexplored, and the existing theoretical frameworks are limited.

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These conflicting findings underscore the need to explore factors that moderate the relationship between natural disasters and tourism demand. Several studies have examined effective disaster recovery strategies and resilience mechanisms to mitigate the adverse effects of natural disasters on tourism (Ghaderi et al., 2026; Hystad & Keller, 2008; Jiang et al., 2019; Ritchie & Jiang, 2019). For example, these approaches include destination image recovery (Baalbaki & Zizka, 2024), cause-related marketing approaches (Aliperti et al., 2018), emotional solidarity (Wang & Zhai, 2023), recovery message themes (Walters & Mair, 2012), volunteer tourism (Wearing et al., 2020), Visiting Friends and Relatives (VFR) travel (Backer & Ritchie, 2017), social media (Ogie et al., 2022), post-disaster communication (Huang et al., 2024), and stakeholder engagement (Granville et al., 2016). As noted by Yang et al. (2022), although these studies offer valuable insights, they largely neglect the influence of macro-level factors on how natural disasters affect inbound tourism. One such factor is governance quality, which plays a fundamental role in disaster preparedness, response, and recovery.

The role of governance in tourism has been well studied in the literature. For example, Mushtaq et al. (2021) find that institutional quality, proxied by World Governance Indicators, positively influences India's international tourism demand, with long-term effects being more pronounced. Their results indicate that while the rule of law, voice and accountability, regulatory quality, and control of corruption boost tourism inflows, government effectiveness has a negative impact. Similarly, Detotto et al. (2021) demonstrate that the Worldwide Governance Indicators Index and the Voice and Accountability and Rule of Law dimensions have a positive and significant impact on tourism expenditures. More recently, Topcu et al. (2023) examine the impact of governance on U.S. tourism demand from 13 major tourism markets. Only political stability and the absence of violence/terrorism, as well as government effectiveness, significantly increase international tourist arrivals to the United States. Kocak & Cobanoglu (2025) further highlight that while global uncertainty negatively affects tourism, good governance not only promotes tourism development but also mitigates the adverse effects of uncertainty. Finally, Uzar et al. (2024) find that stronger institutional quality promotes increased tourist arrivals, reinforcing the broader link between governance and tourism growth.

The role of governance quality in shaping tourism outcomes (Detotto et al., 2021; Mushtaq et al., 2021; Topcu et al., 2023; Uzar et al., 2024) and the impacts of natural disasters on tourism demand (Biardeau et al., 2026; Biardeau & Sahli, 2024; Lan et al., 2021; Nguyen, 2023; Rosselló et al., 2020) have largely been examined as separate strands of research. As a result, evidence on whether governance quality systematically moderates the impact of natural disasters on tourism demand remains limited, particularly when jointly distinguishing between inbound and domestic tourism and accounting for multiple dimensions of governance

quality. Addressing this gap and building on Ritchie and Jiang's (2019) call, Yang et al. (2022) provide evidence that government effectiveness reduces the negative effects of natural disasters on inbound tourism, suggesting that institutional capacity can serve as a pull factor even in the presence of disaster-related shocks.

We contribute to this stream of research in three key dimensions. First, we examine all six dimensions of governance quality, providing a comprehensive assessment of how each dimension mitigates the impact of natural disasters on tourism demand. In contrast, Yang et al. (2022) focus primarily on government effectiveness in their main analysis, considering regulatory quality only as a robustness check. Second, we extend the analysis beyond inbound tourism by incorporating domestic tourism, allowing for a comparative assessment of how governance quality shapes different forms of tourism demand, an extension explicitly suggested by Yang et al. (2022) as a direction for future research. We find that natural disasters are associated with lower inbound tourism in countries with low governance quality but higher inbound tourism in countries with high governance quality, whereas domestic tourism exhibits an opposite pattern. Third, we disaggregate natural disasters into geological and climatological categories, showing that governance moderates especially the effects geological disasters. Together, these contributions provide a comprehensive institutional perspective on how governance reshapes tourism responses to natural disasters.

The rest of the paper is organized as follows. Literature Review and Hypothesis Development section presents an overview of the pertinent literature and develops our hypotheses regarding the moderating role of governance in the relationship between natural disasters and tourism demand. Data and Empirical Methodology section details the data sources, variable definitions, and empirical methods. Results section presents the main findings for both inbound and domestic tourism, including robustness checks and analyses by disaster types. Discussion and Implications section discusses the theoretical contribution and implications. Finally, Conclusions and Limitations and Future Research sections present the study's conclusions and discuss limitations and avenues for future research.

Literature Review and Hypotheses Development

Moderating Role of Governance on Natural Disasters and Inbound Tourism

Natural disasters are widely documented as disruptive shocks to inbound tourism, though their effects vary considerably across contexts. Empirical evidence shows that disaster impacts depend on event characteristics such as severity, frequency, and type. For example, Lan et al. (2021) show that disaster severity, measured by deaths and economic damage, reduces international tourist arrivals, while disaster

frequency may exert a different influence. Rosselló et al. (2020), using a global sample, find that although some disaster types may generate short-term increases in arrivals, the overall effect of natural disasters on inbound tourism is predominantly negative. More recently, Biardeau et al. (2026) demonstrate that disaster impacts on international tourism are driven primarily by event intensity rather than frequency.

The adverse effects of natural disasters on inbound tourism operate through both demand- and supply-side channels. On the demand side, tourism is highly sensitive to safety and health concerns (Blake & Sinclair, 2003). Hazard-induced damage, fatalities, and uncertainty elevate perceived risk, leading international tourists to postpone or cancel travel plans in line with protection motivation theory (Lan et al., 2021). These effects are often reinforced by negative media coverage and the deterioration of the destination image, which intensifies psychological pressure and discourages travel to affected areas (Khazai et al., 2018; Rosselló et al., 2020). On the supply side, natural disasters disrupt tourism activity by damaging cultural heritage sites, landscapes, and key attractions, as well as critical infrastructure such as airports, transport networks, and communication systems, thereby constraining tourism services and capacity. Severe events can render accommodations and attractions temporarily inoperable and reduce service quality by disrupting labor markets (Leoni & Boto-García, 2023). Moreover, slow-onset disasters, including droughts, may undermine a destination's ability to sustain tourism over extended periods.

While disasters typically deter tourists due to perceived risks and disruptions, their severity depends on a destination's governance quality. Enhanced governance can play a moderating role by influencing how well a country or region prepares for, responds to, and recovers from disasters. High-quality governance fosters resilience by enabling faster post-disaster recovery, ensuring transparent communication with potential visitors, and implementing robust policy frameworks that sustain inbound tourism demand. Moreover, effective tourism governance can reduce the negative impacts of disasters by promoting stakeholder collaboration, optimizing resource allocation, and implementing data-driven strategies for industry recovery (Zhang et al., 2024). An illustrative example is the 2016 Kumamoto Earthquake in Japan, where targeted initiatives such as Fukkou Wari Program and another subsidy scheme are introduced to stimulate tourist arrivals (Chan et al., 2020), showing how strong governance mitigates disaster-related declines in inbound tourism through coordinated policy action and credible communication. A contrasting example can be seen in the case of the 2015 Nepal earthquakes, where limited institutional preparedness and fragmented coordination coincide with a decrease in inbound tourism. Sharma and Tham (2021) document that government response capacity is constrained by unclear authority allocation, slow coordination across agencies, and the absence of established

recovery procedures. International media coverage further amplifies negative perceptions, contributing to widespread booking cancellations and a near-complete halt in tourist arrivals in the immediate aftermath of the disaster. These cases illustrate how differences in governance quality and its specific dimensions translate into divergent tourism outcomes following disasters.

Government effectiveness reflects the quality of public services, the independence of the civil service, the formulation and implementation of policies, and the government's credibility in upholding those policies. Higher government effectiveness can ensure that post-disaster recovery efforts are well coordinated, that infrastructure is quickly restored, and that emergency measures are effectively implemented, reducing long-term disruptions to the tourism sector. Countries with high government effectiveness can rapidly mobilize resources, implement disaster recovery programs, and maintain public services, making them more resilient to disasters. Yang et al. (2022) demonstrate that government effectiveness can mitigate the adverse effects of disasters, making it a crucial pull factor for inbound tourism. Given tourism's reliance on supply chains and labor-intensive nature, government support is crucial to minimizing further disruptions and aiding recovery (World Bank Group, 2020).

The rule of law describes the enforcement of contracts, protection of property rights, the functioning of law enforcement and courts, and the control of crime. A strong legal framework ensures that disaster management policies are enforced, protecting tourism infrastructure, ensuring business continuity, and helping maintain law and order in the aftermath of a disaster. Boudreaux et al. (2023) document that natural disasters decrease new business start-up activity in countries with low-quality governance but increase it in countries with high-quality governance. For example, using the rule of law as one of six governance indicators, the negative effect of natural disasters on start-up activity becomes smaller or turns positive as governance quality increases.

Political stability is related to the political stability and absence of violence/terrorism. A stable political environment fosters confidence among people and tourists, ensuring disaster response measures are not disrupted by political conflicts or instability. Governments with weak institutions and political instability are less capable of effective disaster response (Oh & Oetzel, 2011). Power struggles hinder relief efforts, and political instability can amplify the impact of disasters on tourism. Political stability reduces uncertainties that might discourage international visitors.

Regulatory quality captures the government's capacity to design and implement policies that foster private sector development. High regulatory quality ensures that tourism businesses, the government, and other stakeholders operate under clear, transparent, and effective policies, facilitating recovery. Tourism businesses in countries with strong regulatory frameworks can more easily access recovery subsidies and navigate crisis responses efficiently. Conversely, poor

regulatory quality results in bureaucratic inefficiencies, delaying recovery. Yang et al. (2022) show that regulatory quality moderates the adverse effects of natural disasters on inbound tourism.

Corruption can worsen disaster impacts by weakening infrastructure resilience, misallocating disaster recovery funds, and delaying effective response efforts. Research suggests that post-disaster recovery efforts and natural disasters can create opportunities for corruption (Wenzel, 2021), which causes resource misallocation. This delays recovery, as disaster relief efforts create opportunities for misappropriation, reflected in increased corruption-related convictions following natural disasters (Leeson & Sobel, 2008). Conversely, countries with lower corruption tend to allocate resources efficiently, ensuring the quick restoration of tourism infrastructure and reducing long-term disruptions to sectors like tourism.

Voice and accountability represent the extent to which citizens can take part in selecting their government and enjoy freedoms of expression, association, and the press. Governments that engage with stakeholders, including local communities and businesses, in decision-making processes tend to recover faster. Ensuring travelers receive timely, accurate information about safety, infrastructure, and recovery progress helps rebuild tourism confidence. Providing accurate, up-to-date information on infrastructure, attractions, and safety conditions helps rebuild destination confidence and encourages visitors to return. In this regard, good governance plays a crucial role. Reliable information counters media sensationalism and enables tourists to make informed decisions, mitigating the long-term impact of disasters on tourism flows (Khazai et al., 2018). Negative media can delay recovery by increasing cancellations. Governments and firms can restore confidence through positive messaging, effective marketing, and clear communication of safety protocols to support post-disaster recovery (World Bank Group, 2020).

Based on those arguments, we develop the following hypothesis.

H1: Enhanced governance mitigates the adverse effects of natural disasters on inbound tourism.

Moderating Role of Governance on Natural Disasters and Domestic Tourism

While some studies examine the relationship between natural disasters and domestic tourism, the evidence remains limited, and the findings are inconclusive. Most research focuses on case-specific analyses at the city or regional level following natural disasters such as earthquakes or volcanic eruptions. Natural disasters typically have a greater negative impact on inbound tourism than on domestic tourism, as domestic travel tends to be more resilient and adaptable to such shocks (Zhang et al., 2021). Domestic tourists are more

likely to understand the severity and location of a disaster due to local knowledge, helping them distinguish between affected and unaffected areas. In contrast, international tourists often depend on sensationalized media coverage and lack contextual understanding, which may lead to an exaggerated perception of risk.

Athanasopoulos and Hyndman (2008) examine the effects of the Sydney 2000 Olympics and the Bali bombings on domestic tourism in Australia. They find that the Olympics stimulate an immediate increase in business travel, whereas the Bali bombings lead to a rise in visits to friends and relatives. Barbhuiya and Chatterjee (2020), using panel data from 22 Indian states and random effects models, investigate how natural disasters and political conflict affect domestic and international tourism. Their findings suggest that domestic tourism declines in response to severe conflict but remains largely unaffected by natural disasters. In contrast, international tourism is negatively impacted by natural disasters, while political conflict shows minimal influence. Recovery from such shocks is also slower for international tourist arrivals.

Zhang et al. (2021) analyze the 2017 Jiuzhaigou Earthquake and report substantial declines in tourism. Tourist arrivals in Jiuzhaigou dropped by over 90% in 2018 and 2019. In Aba Prefecture, domestic tourism fell by up to 49% and international tourism by as much as 68%. However, Sichuan province as a whole experienced no significant adverse effects, suggesting localized impacts. Boto-García and Leoni (2025) study the effect of Cumbre Vieja volcanic eruption using a difference-in-differences approach, with other Canary Islands as a control group. They find a substantial decline in domestic tourism to La Palma Island: arrivals dropped by 41 percentage points during the eruption (Sept–Dec 2021) and by 55 percentage points in the post-eruption period (Jan–Apr 2022), affecting both mainland and local tourists similarly. Nguyen (2023) highlights that prior research often overlooks the dynamics of domestic and outbound tourism consumption in the context of natural hazards. The study finds an inverted U-shaped relationship between hazard exposure and tourism expenditure. According to their findings, moderate exposure increases total and domestic spending, while high exposure reduces it.

While previous research emphasizes the protective role of strong governance in mitigating the adverse impacts of natural disasters on inbound tourism, its moderating effect on domestic tourism is likely to differ. In countries with lower governance quality, post-disaster responses are often hindered by limited public service capacity, inefficient disaster management, and weak institutional infrastructure. These deficiencies are likely to stimulate domestic tourism flows through several distinct mechanisms. We interpret these channels as plausible mechanisms, as our data capture aggregate domestic tourism outcomes rather than travel motivations. The first potential channel is support-oriented voluntary mobility (solidarity and VFR). Weak governance often leads

to inadequate or delayed post-disaster assistance, prompting individuals to engage in voluntary mobility to support affected friends, family members, or communities. Such solidarity travel may lead to short-term increases in domestic tourism, particularly in or near the affected areas. Solidarity tourism allows travelers to support those affected by crises by sharing resources and fostering a sense of community (Johnson & Buhalis, 2022). The emotional solidarity theory suggests that individuals develop a sense of solidarity with others through mutual interactions based on shared beliefs and behaviors. Tourists' emotional solidarity positively affects their willingness to support disaster recovery efforts (Wang & Zhai, 2023). For example, Thai tourists visit Phuket after the tsunami mainly to help local people recover and to see the changes and improvements following the disaster (Rittichainuwat, 2008). Walters et al. (2015) find that among tourists willing to travel to Queensland despite the floods, the dominant motive is to support the destination's recovery. They also show that post-disaster visitation is strongly linked to destination familiarity and pre-existing ties, with connected visitors far more likely to travel than those without such links. VFR travel is conceptually distinct from solidarity tourism, as it is primarily driven by personal ties and obligations, though it may also involve support for those affected. Natural disasters typically reduce tourist arrivals, as affected areas become less appealing due to infrastructure damage, displacement, and health concerns. Locals who are grieving and experiencing loss may also view tourists as intrusive. In contrast, VFR travelers maintain personal ties to the region and can offer emotional support to those impacted. VFR travelers are closely connected to the affected community through their hosts and can therefore be a more acceptable segment during recovery (Backer & Ritchie, 2017). Second, in the absence of effective governance and timely recovery initiatives, individuals from disaster-affected areas may be compelled to relocate temporarily or permanently to other parts of the country, often staying with relatives or in hotels in other cities. In disaster areas, governments can provide temporary housing in tents or shelters; however, the shift from shelters to temporary and permanent homes can be delayed (Lindell & Prater, 2003). Importantly, such displacement-related stays may increase measured domestic tourism without indicating growth in discretionary leisure demand.

Third factor can be the substitution effects. Limited governance capacity may also suppress outbound international tourism due to logistical, administrative, or economic constraints. In the aftermath of disasters, weak institutional capacity can increase the transaction costs and uncertainty associated with traveling abroad. In such contexts, some travel demand may be reallocated toward domestic destinations, consistent with the substitution relationship between outbound and domestic tourism under natural threats (Nguyen, 2023). Domestic travelers can more accurately assess the disaster's magnitude and spatial extent and avoid severely affected areas. This substitution mechanism may

partially offset disaster-related declines in discretionary travel and therefore does not imply that domestic tourism must increase in all cases. Fourth potential channel is the affordability channel. Following a disaster, domestic providers may temporarily adjust prices or offer promotions, which can stimulate domestic tourism on financial grounds. This effect may be particularly relevant for short-distance domestic trips, where travelers can respond quickly to price incentives.

These factors lead to the formulation of the following hypothesis:

H2: The positive effect of natural disasters on domestic tourism is stronger in countries with low governance quality.

Data and Empirical Methodology

Since our scope of analysis focuses on the moderating role of governance in both inbound and domestic tourism demand, we incorporated two dependent variables. Firstly, we analyzed inbound tourism, representing the visitors arriving at a destination country from a different country of origin. Secondly, we considered the number of resident visitors who stay overnight within the country of reference as domestic tourism. Although the measurement of foreign tourist arrivals is standardized, the data on domestic tourism presents limitations, particularly in relation to the criteria used to record it. Six countries within the scope of the analysis, Belgium, Chile, Italy, Latvia, Netherlands, and United Kingdom, report estimated or provisional values or exhibit breaks in their time series in limited years due to changes in data sources or recording practices. To address concerns related to structural breaks in the data, we exclude provisional and estimated values and restrict the analysis to observations recorded before the methodological changes in domestic tourism reporting. This exclusion has resulted in a minimal loss of observations, given that most of the recording changes are recent.¹ In the study, we incorporated both inbound and domestic tourism measures in logarithmic form to estimate elasticity.

We estimated the intensity of natural disasters using data from the Emergency Events Database (EM-DAT) (Botzen et al., 2019). EM-DAT records disasters that fulfil at least one of the following criteria: (i) at least ten deaths, (ii) at least 100 affected, (iii) a call for international assistance, (iv) or an emergency declaration.² Our natural disaster measure comprises the logarithmic form of total number of people injured, died, made homeless, and affected by natural disasters per capita at the country-year level. Country-year observations with no recorded disaster events are coded as zero. We take the logarithm of the disaster measure after adding one to account for zero values. When multiple disaster events occur within a given country-year, we aggregate the impacts by summing across events to construct an annual disaster

intensity measure before the logarithmic transformation. The measure comprises droughts, wildfires, glacial lake outburst floods, earthquakes, tsunamis, avalanches, landslides, rock-falls, and volcanic activities. We limit our scope of the analysis to OECD countries, as EM-DAT coverage from many non-OECD countries, particularly those in Sub-Saharan Africa, is more prone to lower data quality due to uneven reporting standards.³

In line with our research question, we explored the role of governance in moderating the effects of natural disasters on tourism demand across six governance categories of the Worldwide Governance Indicators (Kaufmann et al., 2011; Kraay et al., 1999). The governance quality indicators employed in the study are Control of Corruption, Government Effectiveness, Political Stability and Absence of Violence, Rule of Law, Regulatory Quality, and Voice and Accountability. The measures range from -2.5 to 2.5 , with higher levels indicating better quality of governance. To evaluate the role of governance in moderating natural disasters on tourism demand, we developed the model in Equation 1.

$$\begin{aligned} \text{Tourism}_{it} = & \beta_0 + \beta_1 \text{Intensity}_{it} + \beta_2 \text{Governance}_{it} \\ & + \beta_3 (\text{Intensity}_{it} * \text{Governance}_{it}) + \beta_4 * Z_{it} + \gamma_i \quad (1) \\ & + \delta_t + \epsilon_{it} \end{aligned}$$

where *Tourism* is inbound or domestic tourism, and *Intensity* is the natural disaster intensity in a country *i* at time *t*. *Governance* is one of the six-country governance indicators, while the *Intensity*Governance* is the interaction to analyze the moderating role of governance. The error term is denoted as ϵ in the model.

We also controlled for several determinants of tourism demand traditionally adopted in the literature, denoted as *Z* in the model. We included the annual growth in the gross domestic product (GDP) to proxy for growth in income in a country (Dogru et al., 2017). Another variable in the model is the exchange rate, which we use to account for price and cost differences across countries (Adedoyin et al., 2023). We expect a positive (negative) relationship between international (domestic) tourism demand and depreciation of the local currency unit, driven by lower price effects. We further controlled for a country's trade openness to measure how integrated countries are into the world economy (Gozgor et al., 2022). We also applied the quadratic form of the trade ratio following the recent findings of Okafor et al. (2023), which demonstrated that the impact of trade openness on tourism may exhibit a nonlinear pattern. In our analysis, we also included changes in the number of sites listed in a country's United Nations Educational, Scientific, and Cultural Organization (UNESCO) listings to measure the effect of increased attractions in a country (Er et al., 2025). We further incorporated country- and year-fixed effects to account for the influence of unchanged country-specific characteristics over time and for common effects arising from global shocks,

such as the global financial crisis and the COVID-19 pandemic (Goswami et al., 2024).

Following the integration of these measures, our dataset spans the period from 1996 to 2021. The starting year reflects the first available observation in the Worldwide Governance Indicators, while 2021 is the most recent year for which tourism data were available at the time of analysis. Our analysis covers OECD countries, except Luxembourg. The final dataset comprises 850 country-year observations for inbound tourism and 406 country-year observations for domestic tourism. The set of countries analyzed represents a group of countries that accounted for more than 60% of global travel receipts and 50% of global travel expenditures before the pandemic in 2018 (OECD, 2020), with high variation across governance indicators. Detailed definitions, sources, and descriptive statistics of the variables can be found in Table 1.

Results

In this section, we present our findings. The first subsection investigates the moderating role of governance on the relationship between natural disasters and inbound tourism. The second subsection focuses on the moderating effect of governance on the relationship between natural disasters and domestic tourism.

Inbound Tourism

Natural Disasters, Governance, and Inbound Tourism. Table 2 reports the estimation results from Equation 1, which includes interaction terms between natural disaster intensity and governance indicators. These models test our first hypothesis (H1) concerning the moderating role of governance in the relationship between natural disasters and inbound tourism. We estimate six specifications (Columns 1–6), each featuring a unique governance variable to capture its moderating effect. Our findings suggest that governance quality has a significant role in shaping the effect of disasters on inbound tourism. More precisely, governance indicators, as indicated by measures for control of corruption, government effectiveness, political stability, rule of law, regulatory quality, and accountability, consistently moderate the relationship, with results statistically significant at the 5% level or lower.

We illustrate our findings in Figure 1 to further the discussion. Figure 1 plots the marginal effect of natural disaster intensity on inbound tourism, with the six governance indicators as moderators. Since our explanatory variable, natural disaster intensity, and outcome variable, inbound tourism, are in logarithmic form, the models adopted in the analysis present elasticity estimates. The results suggest that governance quality moderates the relationship between natural disasters and inbound tourism. Furthermore, governance not only mitigates the adverse impacts of natural disasters but

Table I. Descriptive Statistics.

Variable	Obs.	Mean	Std. Dev.	Min.	Max.	Source
Inbound Tourism <i>The (log) of the number of tourists visiting a country other than their country of residence.</i>	850	16.192	1.422	12.315	19.199	World Bank
Domestic Tourism <i>The (log) number of resident visitors that stay overnight within the country of reference.</i>	406	17.003	1.465	13.374	19.710	UNWTO
Natural Disaster Intensity <i>The number of people affected, becoming homeless, injured, or dying due to natural disasters divided by the total population of a country in logarithmic form.</i>	850	0.001	0.007	0	0.148	EM-DAT – The International Disaster Database
Geological Disaster Intensity <i>The number of people affected, becoming homeless, injured, or dying due to geological disasters divided by the total population of a country in logarithmic form.</i>	850	0.001	0.007	0	0.148	EM-DAT – The International Disaster Database
Climatological Disaster Intensity <i>The number of people affected, becoming homeless, injured, or dying due to climatological disasters divided by the total population of a country in logarithmic form.</i>	850	0	0.001	0	0.022	EM-DAT – The International Disaster Database
Corruption Control <i>Estimate on control of corruption, including the use of public power for private gain and other corrupt practices.</i>	850	1.178	0.821	-0.933	2.459	World Governance Indicators
Government Effectiveness <i>Estimate on government effectiveness related to the quality of public services and the extent of their independence from political pressures.</i>	850	1.205	0.633	-0.488	2.346	World Governance Indicators
Political Stability <i>Estimate on the political stability and absence of violence and terrorism.</i>	850	0.659	0.753	-2.376	1.759	World Governance Indicators
Rule of Law <i>Estimate on the rule of law in a country.</i>	850	1.176	0.688	-0.925	2.125	World Governance Indicators
Regulatory Quality <i>The capacity of the government to design and enforce effective policies and regulations.</i>	850	1.195	0.498	-0.168	2.087	World Governance Indicators
Accountability <i>Measure of voice and accountability, capturing participation in government selection and freedom of expression.</i>	850	1.097	0.478	-0.860	1.801	World Governance Indicators
Growth <i>Annual gross domestic product growth in a country.</i>	850	2.489	3.272	-14.839	24.37	World Bank
Exchange Rate <i>Local currency units relative to the U.S. dollar.</i>	850	14799.62	45142.236	8.14	369327.58	World Bank
Trade <i>The (log) total exports and imports of goods and services as a share of gross domestic product.</i>	850	4.327	0.474	2.951	5.534	World Bank
ΔHeritage <i>Year-to-year changes in the number of UNESCO World Heritage Sites.</i>	850	0.401	0.761	0	10	UNESCO

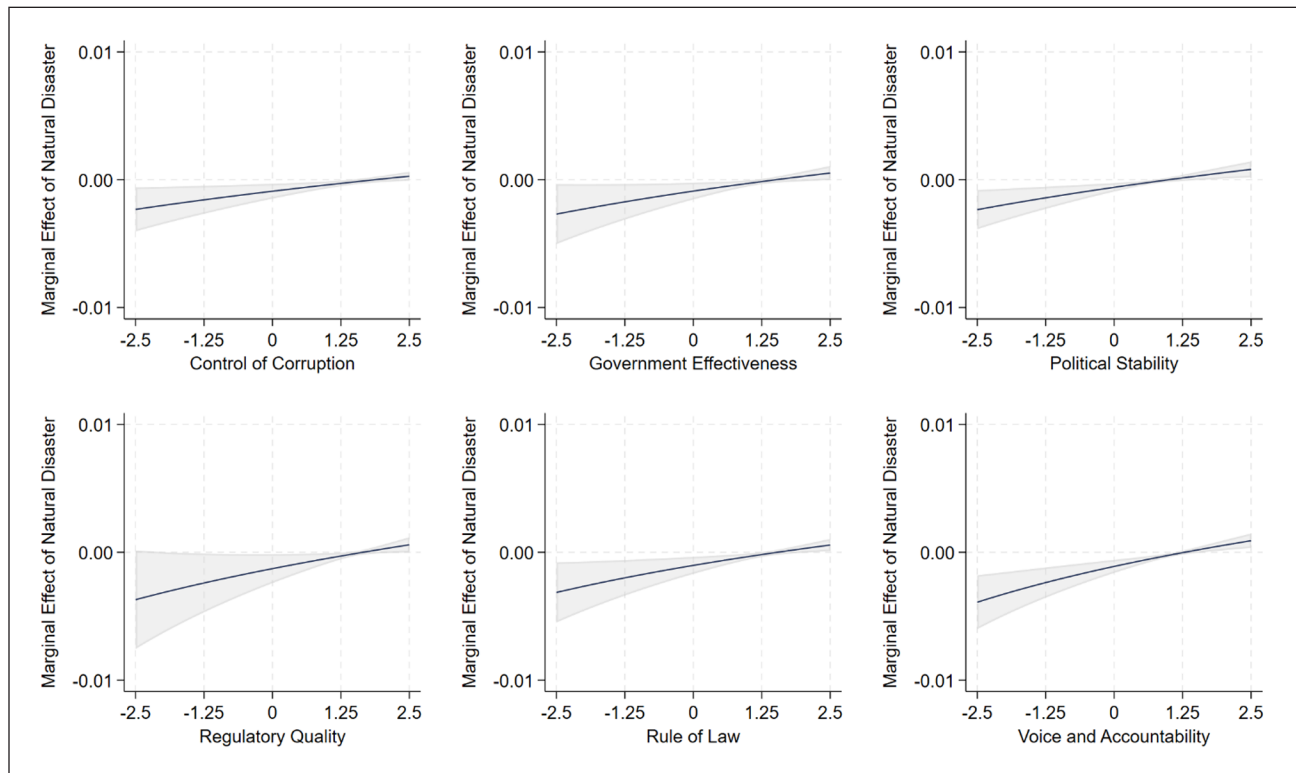
Note. The table presents summary statistics of the main outcome and main variables of interest. It also includes the descriptive statistics of control variables. The main dependent variables are inbound and domestic tourism, whereas natural disasters and varying forms of governance quality obtained from World Governance Indicators are the main variables of interest. The remaining variables are covariates. All logarithmic transformations use the natural logarithm. The table lists the sources and definitions of variables.

Table 2. Moderating Role of Governance on Natural Disasters and Inbound Tourism.

Variables	(1) Corr. Cont.	(2) Gov. Eff.	(3) Pol. Stab.	(4) Rule of Law	(5) Reg. Quality	(6) Accountability
Intensity	-9.929*** (3.106)	-9.763*** (3.478)	-6.688*** (1.851)	-11.102*** (3.515)	-13.869** (5.890)	-13.559*** (3.374)
Governance	0.208* (0.111)	0.291* (0.145)	0.231** (0.109)	0.345* (0.175)	0.184 (0.136)	0.347 (0.241)
Intensity#Governance	5.303*** (1.878)	6.458** (2.633)	6.693*** (2.206)	7.239*** (2.478)	8.404** (3.751)	11.317*** (3.151)
Growth	0.005 (0.005)	0.004 (0.005)	0.003 (0.005)	0.006 (0.004)	0.005 (0.005)	0.004 (0.004)
Exc. Rate	0.000*** (0.000)	0.000** (0.000)	0.000* (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000* (0.000)
Trade	2.902** (1.135)	2.573** (1.112)	2.838** (1.284)	3.235*** (1.122)	2.720** (1.218)	3.045** (1.242)
Trade#Trade	-0.318** (0.132)	-0.287** (0.128)	-0.309** (0.146)	-0.355*** (0.130)	-0.296** (0.140)	-0.323** (0.142)
Δ Heritage	0.012 (0.016)	0.005 (0.016)	0.016 (0.017)	0.008 (0.018)	0.015 (0.017)	0.019 (0.016)
Constant	8.719*** (2.551)	9.456*** (2.487)	8.925*** (2.951)	7.836*** (2.590)	9.111*** (2.785)	8.077*** (2.886)
Observations	850	850	850	850	850	850
R-squared Within	0.638	0.647	0.647	0.646	0.636	0.639
#Countries	37	37	37	37	37	37
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

Note. The dependent variable is the logarithmic form of the inbound tourism. The main variables of interest are the interaction of logarithmic form of natural disaster intensity and different forms of governance quality indicators. Control variables are economic growth rate, local exchange rate, trade percentage of GDP and its squared term in logarithmic form, and year to year changes in the number of UNESCO world heritage sites. The model additionally controls for country- and year-fixed effects to account for unchanged country-specific characteristics and yearly shocks that affect all countries. Each of columns 1–6 corresponds to a different governance quality indicator. Standard errors are clustered at the country level.

*** $p < .01$. ** $p < .05$. * $p < .1$.

**Figure 1.** The marginal effect of natural disasters on inbound tourism.

Note. The figure displays the impact of disasters on inbound tourism, with governance indicators as moderators [95% confidence intervals].

also fosters an increase in international tourist arrivals, particularly in countries characterized by high quality of governance. This aligns with Yang et al. (2022). For instance, as government effectiveness increases, the negative effect of

natural disasters diminishes and becomes positive at higher levels of government effectiveness. The moderating role of other quality indicators, except for control of corruption, is similar to that of government effectiveness. Nonetheless,

higher levels of control of corruption in a country nullify the adverse effects stemming from natural disasters.

Excluding control of corruption, all governance indicators mitigate the harm caused by natural disasters and reverse the effect of natural disasters into a positive one with a high level of governance quality, even though the marginal positive effects remain relatively small. For instance, at the level of political stability observed in Colombia, the country with the lowest governance score on this dimension among the countries included in the analysis, a 10% increase in natural disaster intensity is associated with approximately a 0.012% decrease in inbound tourism arrivals. We observe similar outcomes when we consider the marginal effect of natural disasters with the moderating role of other governance measures. Specifically, when each governance indicator is set to the lowest value observed within the scope of the analysis, the estimated loss in tourist arrivals is up to 0.064% for control of corruption, 0.06% for government effectiveness, 0.087% for rule of law, 0.065% for regulatory quality, and 0.097% for accountability. That said, high-quality governance yields increased inbound tourism, although the marginal effects are modest. When governance quality is at its highest level observed in our dataset, the positive marginal effect of natural disasters is associated with increases in inbound tourism of up to 0.022% for government effectiveness, 0.021% for political stability, 0.017% for rule of law, 0.015% for regulatory quality, and 0.02% for accountability. Overall, the results demonstrate that governance quality can mitigate, nullify, and in most cases, reverse the direction of the marginal effect of natural disasters.

In terms of control variables, there is a positive association between exchange rates and international tourist arrivals, underscoring the significance of pricing dynamics and cost considerations in shaping international tourism demand (Adedoyin et al., 2023). Moreover, trade openness shows a nonlinear relationship with tourism demand. This finding highlights the differential effect of trade openness on tourism demand. As trade openness increases, inbound tourism initially increases, but beyond a certain threshold, further increases in trade openness lead to a reduction in international tourism arrivals. Furthermore, the analysis reveals that the other control variables, such as economic growth and changes in the number of heritages, exhibit a positive relationship with international tourism arrivals. However, these findings do not show a statistically significant association. With regards to economic growth, our findings support Pérez-Rodríguez et al. (2022), whose results suggest a weak link between economic growth and tourism demand. Regarding the heritage sites, we interpret our nonsignificant statistical relationship within the frame of the OECD countries. Although internationally recognized tourism attractions are among the main drivers of tourism demand globally (Er et al., 2025), our analysis shows that changes in the number of heritage sites are not associated with inbound tourism demand in OECD countries.

Our findings suggest that the quality of governance moderates the effect of natural disasters on inbound tourism. However, one may argue that natural disasters can also harm a country's governance quality, potentially biasing our estimated effects. To alleviate concerns about the validity of our findings, we also run sensitivity analyses by substituting contemporary governance quality measures with their one-year-lagged versions. The results are presented in Table A2 in the Supplemental Appendix.

The findings remain similar when we introduce the governance indicators with a one-year lag instead of the contemporaneous measures. Based on the lowest and highest values observed across the countries examined, except for the control of corruption, each governance indicator nullifies and reverses the marginal effect of natural disasters from negative to positive with enhanced governance quality. The control of corruption, on the other hand, succeeds in nullifying the adverse marginal effects but does not turn the marginal effect into a positive one. The findings are illustrated in Figure A1 in the Supplemental Appendix.

Persistent Moderating Effects on Inbound Tourism. Although this study investigates the contemporaneous relationship between the nexus of governance, natural disasters, and tourism demand, previous literature has shown that natural disasters have long-lasting effects. Thus, it is imperative to examine whether the moderating role of governance quality persists in the following year. To examine the persisting effects, we include 1-year lagged values of both natural disaster intensity and governance quality indicators in our model. By doing so, we analyze whether the governance and natural disasters from the previous year have any impact on inbound tourism in the following year. Supplemental Table A3 documents our results, showing the moderating effect of each governance indicator in Columns 1–6.

These results are consistent with our analysis of the contemporaneous relationship, showing that governance positively moderates the effect of natural disasters on foreign tourism demand in the subsequent year. Importantly, all governance indicators are capable of fully offsetting the negative effects of natural disasters when governance quality reaches higher levels observed in our dataset, with results statistically significant at the 5% level or lower. Notably, political stability and accountability not only nullify the negative effects but also generate positive effects on inbound tourism in the year following a natural disaster. Similar to our baseline analysis, we illustrate our findings on the marginal effects of natural disasters on inbound tourism across our governance measures in Figure A2 in the Supplemental Appendix.

Moderating Role of Governance Across Disaster Types. We extend our analysis to examine whether the moderating role of governance differs across disaster types. While prior research acknowledges that different types of natural disasters can have

varying effects on tourism, limited attention has been given to how governance interacts with these disaster types. Rosselló et al. (2020) argue that not all disasters have uniform impacts on international tourism. Accordingly, the moderating role of governance may vary across types of disaster. Specifically, the capacity of institutions to mitigate the negative effects of disasters on tourism may differ between geological and climatological events due to the distinct challenges each type presents. Geological disasters are typically sudden-onset, spatially concentrated, highly salient, and visible events, whereas climatological disasters are often slow-onset, longer-lasting, and geographically widespread, with their effects accumulating gradually over time.

In this part of the analysis, we follow the EM-DAT classification to separate the disasters into geological and climatological categories. Geological disasters are earthquakes, tsunamis, avalanches, landslides, rockfalls, and volcanic activities. Climatological disasters include droughts, wildfires, and glacial lake outburst floods. The results are available in Panels A (geological disasters) and B (climatological disasters) in Supplemental Table A4.

The results demonstrate that the moderating effect of governance in the context of geological disasters aligns with our earlier findings, with each governance indicator significantly and positively moderating the marginal effect of natural disasters on inbound tourism at the 5% significance level. According to our findings, governance quality mitigates and nullifies the negative effects of such disasters and, in some cases, transforms these impacts into increased inbound tourism demand. Notably, government effectiveness, political stability, rule of law, and accountability are all associated with a reversal of the negative marginal effects, resulting in a net positive impact on tourism inflows.

We document mixed outcomes in the context of climatological disasters. Although improvements in governance quality can reverse the negative marginal effect of such disasters on inbound tourism, not all governance indicators are statistically significant moderators. Our analysis shows that only political stability, rule of law, and accountability significantly moderate this relationship and are effective in nullifying the negative effects at the 10% significance level. Moreover, political stability and accountability go further by reversing the negative effects into a net increase in international tourism demand. While the marginal effects of corruption control, government effectiveness, and regulatory quality become positive as governance improves, these indicators do not exhibit statistically significant moderating effects. We illustrate our findings in Panels A and B in Supplemental Figure A3.

Domestic Tourism

Natural Disasters, Governance, and Domestic Tourism. We extend our analysis to examine whether governance quality moderates the relationship between natural disasters and

domestic tourism. Following the same empirical strategy used for inbound tourism, we test the moderating effect of each governance indicator. These models test our second hypothesis (H2) concerning the moderating role of governance in the relationship between natural disasters and domestic tourism. The results in Table 3 indicate that among the six dimensions of governance, only control of corruption significantly moderates the effect of natural disasters on domestic tourism demand. Specifically, in countries with low levels of corruption control, a 10% increase in natural disaster intensity is associated with a 0.057% increase in tourists. Conversely, in countries with high corruption control, such as Denmark, the country with the highest score in our study, the same increase in disaster intensity results in a modest decline of approximately 0.006% in domestic tourist numbers. This shift in direction is visually depicted in Figure 2, which also shows that while the moderating patterns are directionally similar across all governance indicators, only control of corruption exhibits a statistically significant moderating effect.

Regarding the control variables, domestic tourism mobility increases as exchange rates decrease, potentially reflecting increased purchasing power associated with currency appreciation. This effect appears to operate independently of economic growth, as GDP growth is not significantly associated with domestic tourism demand in our analysis. This finding highlights the importance of currency-related price effects in shaping domestic tourism behavior, even in the absence of broader macroeconomic expansion. Additionally, in contrast to international tourism, domestic tourism decreases with an increase in trade openness, but only up to a certain threshold, beyond which the effect is reversed. Finally, changes in world heritage sites are positively associated with domestic tourism demand, although the relationship is not statistically significant. The direction, coefficient sizes, and statistical significance of the covariates remain unchanged across all models.

Similar to our analysis of inbound tourism demand, we conduct a sensitivity analysis by replacing the contemporaneous governance indicators with their one-year lagged values. The results are presented in Supplemental Table A5 and remain consistent as the control of corruption continues to shift the marginal effect of natural disasters from negative to positive as it decreases. As in our baseline findings, the moderating effects of the remaining governance indicators are not statistically significant, although their directional patterns are similar to that of control of corruption. These results are illustrated in Figure A4 in the Supplemental Appendix.

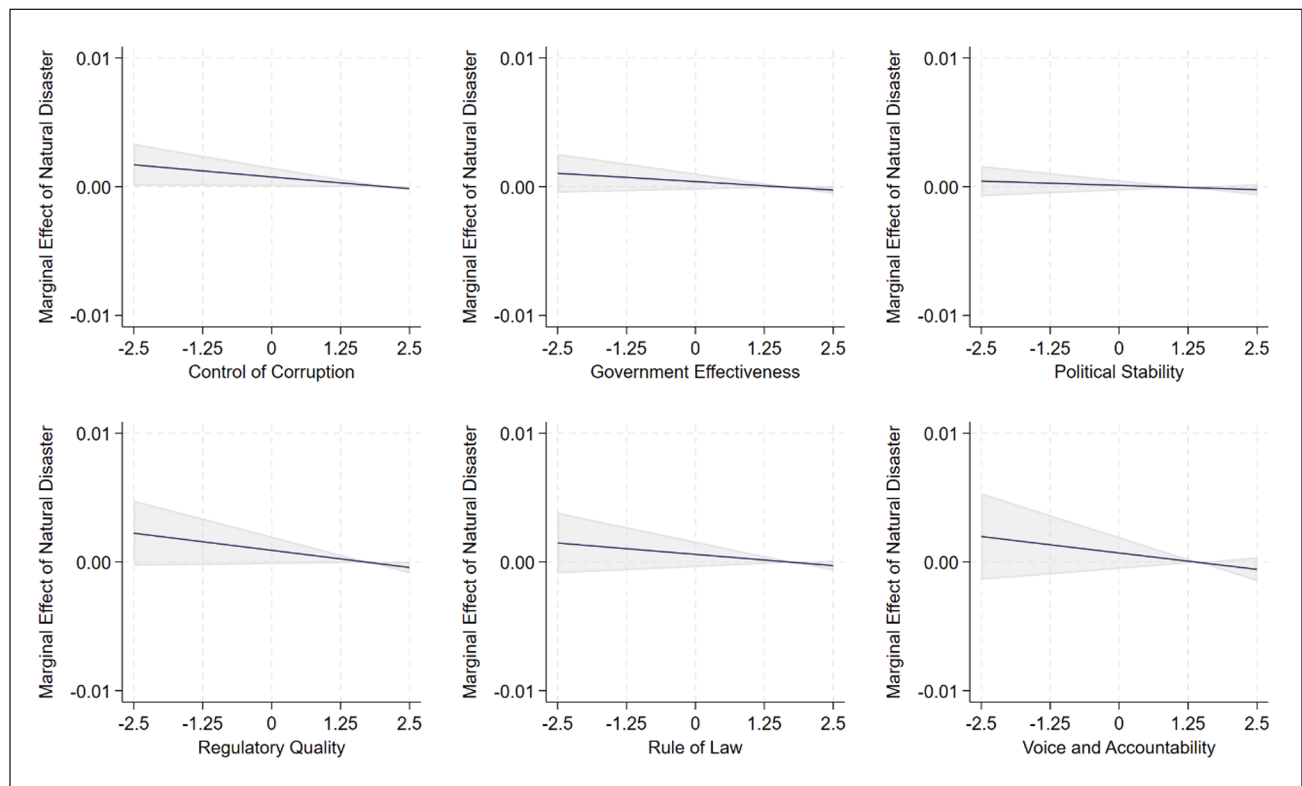
Persistent Moderating Effects on Domestic Tourism. Considering the persistent effect of natural disasters, we further examine the moderating role of governance in natural disasters and domestic tourism into the subsequent year. In Supplemental Table A6, we include natural disaster intensity and governance quality indicators, both with a one-year lag, in

Table 3. Moderating Role of Governance on Natural Disasters and Domestic Tourism.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Corruption Cont.	Gov. Eff.	Pol. Stab.	Rule of Law	Reg. Quality	Accountability
Intensity	11.055* (5.511)	5.853 (4.767)	1.561 (2.996)	8.583 (7.469)	13.214 (8.160)	10.134 (9.250)
Governance	0.371* (0.210)	0.104 (0.081)	0.034 (0.083)	0.272 (0.187)	0.354* (0.185)	0.365 (0.269)
Intensity#Governance	-5.319** (2.568)	-3.829 (2.767)	-1.937 (2.405)	-5.075 (4.138)	-7.764 (4.603)	-7.372 (6.434)
Growth	0.006 (0.005)	0.007 (0.005)	0.007 (0.005)	0.008 (0.006)	0.006 (0.005)	0.006 (0.005)
Exc. Rate	-0.000** (0.000)	-0.000* (0.000)	-0.000* (0.000)	-0.000* (0.000)	-0.000* (0.000)	-0.000** (0.000)
Trade	-1.853** (0.906)	-2.255** (0.851)	-2.504*** (0.907)	-2.061* (1.019)	-2.178** (0.917)	-1.781** (0.865)
Trade#Trade	0.184* (0.101)	0.228** (0.093)	0.257** (0.094)	0.215* (0.112)	0.239** (0.098)	0.187* (0.095)
Δ Heritage	0.006 (0.016)	0.011 (0.016)	0.014 (0.017)	0.010 (0.016)	0.009 (0.017)	0.012 (0.016)
Constant	21.014*** (2.058)	22.229*** (2.065)	22.864*** (2.218)	21.404*** (2.462)	21.332*** (2.237)	20.655*** (2.120)
Observations	406	406	406	406	406	406
R-squared Within	0.204	0.155	0.152	0.167	0.189	0.173
#Countries	31	31	31	31	31	31
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithmic form of domestic tourism. The main variable of interest is the interaction of the logarithmic form of natural disaster intensity and different forms of governance quality indicators. Control variables are economic growth rate, local exchange rate, trade percentage of GDP and its squared term in logarithmic form, and year-to-year changes in the number of UNESCO world heritage sites. The model additionally controls for country- and year-fixed effects to account for unchanged country-specific characteristics and yearly shocks that affect all countries. Each of columns 1–6 corresponds to a different governance quality indicator. Standard errors are clustered at the country level.

*** $p < .01$. ** $p < .05$. * $p < .1$.

**Figure 2.** The marginal effect of natural disasters on domestic tourism.

Note. The figure displays the impact of disasters on domestic tourism, with governance indicators as moderators [95% confidence intervals].

our model. We also plot our findings in Figure A5 in the Supplemental Appendix.

According to our findings, the effects are consistent with those reported in Table 3, where the direction of the marginal effect of natural disasters shifts from positive to negative as governance quality improves. However, we observe that only regulatory quality moderates the effect of natural disasters in the subsequent year, with statistical significance at 5%. Other dimensions of governance, including control of corruption, which was significant in contemporaneous analysis, do not show statistically significant effects over the longer term. These results suggest that while corruption control may be critical for short-term responses in domestic mobility, sound regulatory frameworks and policies are more influential in shaping longer-term domestic tourist mobility.

Moderating Role of Governance Across Disaster Types. In this part of the analysis, we explore the moderating role of governance across different disaster types. Similar to our analysis with inbound tourism, we follow the EM-DAT classification to separate the disasters into geological and climatological disaster categories. We present the results in Panels A (geological disasters) and B (climatological disasters) in Supplemental Table A7 and Figure A6.

Our findings indicate that the moderating influence of governance varies depending on the type of disaster. Notably, except for the political stability and accountability dimensions, each governance indicator significantly moderates the relationship in the case of geological disasters. Accordingly, the control of corruption, government effectiveness, rule of law, and regulatory quality nullify the positive marginal effects of disaster intensity with increases in governance quality. Furthermore, at the maximum values in our analysis, government effectiveness, regulatory quality, and rule of law reverse the direction of the marginal effects to negative in the case of a geological disaster.

According to our findings in Panel B, we find no moderating effect of governance indicators. Across models 1 to 6, none of the governance indicators emerge as moderators on the relationship between the climatological disaster and domestic tourism. These results suggest that governance quality does not play a substantial role in shaping domestic tourism responses to climatological disasters. We further interpret these findings in the discussion section.

Robustness Checks: Alternative Indicators

Our baseline results suggest that governance positively moderates the impact of natural disasters on inbound tourism, but negatively on domestic tourism. We evaluate the sensitivity of these baseline results using two sets of robustness checks. The first set concerns the governance indicators. Although governance indicators are entered separately in our specifications, it is well known that the WGI measures are highly correlated and may not be fully distinct. These indicators

may capture broader underlying dimensions of governance, making it difficult to treat each WGI component as representing an entirely separate construct (Langbein & Knack, 2010). To address this concern, we substitute the Worldwide Governance Indicators with indices capturing similar governance dimensions from alternative sources and test the robustness of our baseline results where such measures are available.

More specifically, we replace the “Control of Corruption” dimension of the WGI with the Bayesian Corruption Index (BCI), which aggregates information from 17 different surveys and over 110 survey questions to estimate corruption with greater precision and improved temporal stability (Standaert, 2015). We reverse the variable so that higher values correspond to lower levels of corruption, consistent with the “Control of Corruption” measure. We also substitute the “Regulatory Quality” variable with the “Regulatory Efficiency” dimension from the Index of Economic Freedom from Heritage Foundation (2025). Similar to the WGI’s “Regulatory Quality” indicator, this measure captures the extent to which a country’s regulatory and infrastructure environment supports business operations, reflects the legal and regulatory framework of the labor market, and is associated with price stability in markets. Additionally, we replace the WGI’s “Rule of Law” indicator with the variable Rule of Law Index (v2x_rule) from Varieties of Democracy dataset, which captures the extent to which laws are enforced in a transparent, impartial, and predictable manner, and the degree to which government officials act in accordance with legal rules (Coppedge et al., 2025). Finally, we replace WGI’s “Voice and Accountability” indicator with the “Political Civil Liberties” Index (v2x_clpol) from the Varieties of Democracy dataset, which reflects the extent to which political liberties, such as freedom of association and expression and media freedom, are respected and upheld in a country. The Bayesian Corruption Index and the Regulatory Efficiency Index are divided by 100 so that the indicators take values in the [0,1] range.

Our findings remain similar when we employ alternative governance indicators. As shown in Supplemental Table A8, for inbound tourism, the governance measures positively moderate the impact of natural disasters, offsetting their negative effects, with the exception of regulatory efficiency. For domestic tourism, consistent with the baseline specifications, control of corruption (and regulatory efficiency) exhibits a negative moderating effect in Supplemental Table A9, indicating that domestic tourism increases with lower governance quality.

The second set of robustness checks concerns the disaster measure. We replace the natural disaster intensity measure based on population exposure with a measure based on total economic damage. Specifically, we use inflation-adjusted direct and indirect losses in U.S. dollars from EM-DAT, standardized on a per-capita basis. All governance indicators positively moderate the impact of natural disasters on

inbound tourism. For domestic tourism, while the baseline specification identifies control of corruption as the statistically significant moderating factor, the alternative disaster specification shows that government effectiveness emerges as the only governance dimension with a statistically significant and negative moderating effect. However, the coefficients on the remaining governance indicators, with the exception of political stability, remain negative, indicating a consistent pattern whereby weaker governance is associated with stronger domestic tourism responses following natural disasters.⁴

Discussion and Implications

Theoretical Contributions

This research makes several theoretical contributions. First, building on Yang et al. (2022), who highlighted the importance of government efficiency as a macro-level determinant of tourism recovery, our study provides a more comprehensive institutional perspective. We go beyond inbound tourism to include domestic tourism, revealing that governance moderates both international demand and domestic mobility patterns. Moreover, we analyze all six dimensions of governance quality, providing a more comprehensive institutional perspective than Yang et al. (2022), who focused solely on government effectiveness and regulatory quality. This multi-dimensional approach reveals which aspects of governance are most influential for tourism resilience, offering a more granular understanding of institutional determinants of tourism flows.

We show that governance quality affects not only inbound tourism but also domestic tourism responses. The fact that governance quality is associated with contrasting effects on inbound and domestic tourism carries distinct implications for each type of tourism demand. For inbound tourism, our findings support the view that strong governance signals safety, order, and reliability, all of which are central to destination image theory (Chew & Jahari, 2014; Tasci & Gartner, 2007). Empirically, we find that disasters are associated with larger declines in international arrivals in countries with weak governance, whereas these effects are mitigated or even reversed in countries with strong governance. This suggests that inbound tourism resilience depends not only on the physical restoration of infrastructure but also on the capacity of institutions to ensure stability and manage recovery effectively. Hence, our findings extend destination image theory by suggesting that strong governance likely fosters institutional trust in the destination country, which should be treated as a key determinant alongside other traditional predictors of tourism demand.

Second, by distinguishing geological and climatological disasters, we refine the understanding of when governance matters most for domestic tourism. The moderating role of governance is limited to geological disasters, suggesting that

governance capacity is more effective at shaping domestic tourism responses to sudden-onset, localized events, such as earthquakes and tsunamis, than to slow-onset or widespread events, such as droughts and wildfires. Geological disasters tend to cause concentrated damage, whereby governance quality may shape the recovery speed in the locality, patterns of displacement, and the communication of safety. In contrast, climatological disasters often affect broader regions simultaneously, leaving less room for governance to channel domestic mobility in the same way.

Finally, we contribute to the tourism resilience literature by showing that increases in domestic tourism following natural disasters under weak governance do not necessarily reflect leisure-driven recovery. Instead, such rebounds are more consistent with a combination of different mechanisms, including displacement-related mobility, visits to friends and relatives, solidarity-oriented travel, substitution away from outbound tourism, and affordability. We further show that this moderating effect persists in the subsequent year, suggesting that domestic tourism responses under weak governance are not merely short-term reactions. The increase in domestic tourism under weak governance likely reflects coping mechanisms and substitution effects driven by limited recovery efforts and constrained outbound mobility. Domestic tourism may function as a social safety net in the absence of an effective state-led disaster response. Hence, the increase in domestic tourism driven by weak governance may be due to different mechanisms rather than genuine leisure demand (Rittichainuwat, 2008). This challenges resilience frameworks that interpret post-disaster tourism growth as inherently positive. In strong governance contexts, lower domestic mobility after disasters may indicate successful in-place recovery and disaster management. This adds nuance to the “decline in demand” narrative, showing that reduced mobility can be a positive indicator of resilience. This extends perspectives on domestic tourism demand by framing tourism not just as a market activity but as part of a broader social response to governance failures.

Practical Implications

Our results provide actionable guidance for policymakers and industry partners. Governments in disaster-prone regions should invest not only in physical infrastructure but also in institutional capacity-building, particularly in regulatory quality, transparency, and anti-corruption efforts, as these foster international trust and accelerate recovery. These measures not only foster international trust and investor confidence but also accelerate tourism recovery and create reputational spillovers that enhance the destination’s long-term attractiveness, even outside disaster contexts.

Communication strategies should emphasize transparency and deliver timely information to international markets to rebuild confidence. Authorities should actively share recovery progress, demonstrate visible disaster management

capacity, and highlight preventive measures to reassure international markets. Given that governance moderates disasters differently by type, recovery strategies should be hazard-specific: rapid physical reconstruction and communication campaigns are crucial for geological disasters, whereas long-term adaptation and diversification strategies may be more effective for climatological events.

Inbound tourism can be conceptualized as a “trust-sensitive” issue, highly responsive to governance quality, linking governance and political economy perspectives with tourism demand theory. Consequently, policymakers should view tourism as part of the political economy of trust and prioritize visible, credible governance reforms. Nevertheless, any attempts to sustain tourism inflow should be approached with caution, especially after disasters, as these attempts may overload the affected regions, exacerbate local burdens, and heighten the severity of future disasters (Ma & Kirilenko, 2020). Moreover, the persistence of the moderating effects into the year following a disaster underscores that it is not just the immediate shock that matters, but also the perceived capability of governmental bodies to address future disasters. This reinforces tourism resilience frameworks by highlighting that governance should be treated as an active moderating factor in recovery models, rather than merely as a background condition. The smaller reversal effect also aligns with evidence that travelers may be more responsive to negative information than to positive signals of institutional quality, echoing findings from negative word-of-mouth research.

Finally, governments and industry partners should interpret domestic tourism surges cautiously, as such surges may reflect a range of underlying mechanisms rather than sustained or recovery-driven leisure demand. These mechanisms include necessity-driven displacement, solidarity- and VFR-related travel, and substitution away from international travel, and affordability effects arising from price adjustments. While necessity-based mobility may be particularly salient in contexts of weaker governance, the different channels can coexist, and shape observed domestic tourism responses in distinct ways. Therefore, policymakers should interpret such increases with caution, as they may mask deeper structural vulnerabilities. Close collaboration between tourism stakeholders and emergency management agencies can help ensure that recovery initiatives are effectively coordinated and aligned with local response capacities and resilience objectives (Morakabati et al., 2017).

Conclusions

This study examines the moderating role of governance quality (six dimensions) in the relationship between natural disasters and both inbound and domestic tourism, using panel data from 37 OECD countries. Our findings reveal that governance plays a crucial role in shaping tourism responses to natural disasters. Specifically, strong governance can mitigate and even reverse the adverse effects of natural disasters

on inbound tourism in the context of both geological and climatological disasters. More specifically, except for control of corruption, all governance indicators mitigate the harm caused by natural disasters and turn their effects into a positive one, with a high level of governance quality, even though the marginal positive effects remain relatively small. In contrast, domestic tourism exhibits an inverse pattern. Countries with weaker governance experience increased domestic mobility following disasters, while those with stronger governance experience declines. These results are robust to the use of alternative governance proxies and to alternative measures of disaster intensity.

Limitations and Future Research

Overall, our study suggests directions for future research. First, our study highlights the need to move beyond single-location case studies in (experimental) survey research, such as those examining disasters in a single destination, where institutional quality is constant. Instead, future research on inbound tourism and natural disasters should adopt a comparative approach and capture (prospective) traveler perspectives across a range of countries with varying levels of institutional quality. This will help to understand how differences in governance quality shape perceptions of safety, destination image, and travel intentions in the aftermath of disasters. Moreover, by using a cross-country sample of individuals, we may gain a better understanding of whether institutional quality in the origin country influences these perceptions in the destination country as well.

Second, our research cautions against placing all disasters under a single umbrella, as their causes, dynamics, and effects on tourism can differ substantially. Therefore, a more nuanced understanding of disaster typology is needed, with categorization based not solely on disaster type but on their distinct characteristics, such as onset speed, geographic scope, and duration. Recognizing these distinctions will enable future research to better assess how governance quality, or broader disaster resilience efforts, may shape tourism outcomes in relation to specific disaster characteristics.

The third and fourth future research directions come from the limitations of our study. In this paper, we use annual country-level data to explore the role of governance in shaping tourism demand in the face of natural disasters. Our analysis at the country level may mask regional differences in disaster exposure, tourism responses, and the role of governance. Future research could benefit from disaggregated regional data to more precisely examine how different types of governance influence the relationship between natural disasters and both domestic and international tourism. The persisting role of governance suggests that a new equilibrium may emerge after disasters (Zenker & Kock, 2020). Hence, it is important to examine the new normal not only at the country level but also in disaster-affected and

non-affected regions, as the effect may be heterogeneous depending on the motivations of potential travelers.

Finally, our analysis covers OECD countries to ensure greater comparability across tourism, disaster, and governance measures, given cross-country differences in the measurement of disaster impacts. Although this choice improves internal validity and comparability across OECD countries, which exhibit substantial heterogeneity along these dimensions, the external scope of our findings should be interpreted with caution. Accordingly, our findings document patterns observed within OECD countries and should be interpreted in light of these conditions when considering broader global contexts. Future research should focus on integrating more reliable measures related to the consequences of natural disasters to enhance the generalizability of our findings. Addressing these measurement challenges would not only broaden the geographical scope of inquiry but also strengthen the validity of conclusions about how governance shapes tourism demand in the aftermath of disasters.

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Available upon request.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work, the authors used GPT-4o in order to improve the readability and language of the manuscript. After using this tool/service, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

Supplemental Material

Supplemental material for this article is available online.

Notes

1. For a list of country-year pairs, see Table A1 in the Supplemental Appendix.
2. Available at: <https://doc.emdat.be/docs/protocols/entry-criteria/> (Accessed on 22 January 2026).
3. Available at: <https://doc.emdat.be/docs/known-issues-and-limitations/specific-biases/> (Accessed on 22 January 2026).
4. The results are available upon request.

References

- Adedoyin, F. F., Seetaram, N., Disegna, M., & Filis, G. (2023). The effect of tourism taxation on international arrivals to a small tourism-dependent economy. *Journal of Travel Research*, 62(1), 135–153. <https://doi.org/10.1177/00472875211053658>
- Aliperti, G., Rizzi, F., & Frey, M. (2018). Cause-related marketing for disaster risk reduction in the tourism industry: A comparative analysis of prevention- and recovery-related campaigns. *Journal of Hospitality and Tourism Management*, 37, 1–10. <https://doi.org/10.1016/j.jhtm.2018.08.003>
- Athanasopoulos, G., & Hyndman, R. J. (2008). Modelling and forecasting Australian domestic tourism. *Tourism Management*, 29(1), 19–31. <https://doi.org/10.1016/j.tourman.2007.04.009>
- Baalbaki, J., & Zizka, L. (2024). Egyptian crises and destination brand image: The resurrection of the mummy. *Current Issues in Tourism*, 27(6), 887–905. <https://doi.org/10.1080/13683500.2023.2187280>
- Backer, E., & Ritchie, B. W. (2017). VFR Travel: A viable market for tourism crisis and disaster recovery? *International Journal of Tourism Research*, 19(4), 400–411. <https://doi.org/10.1002/jtr.2102>
- Barbhuiya, M. R., & Chatterjee, D. (2020). Vulnerability and resilience of the tourism sector in India: Effects of natural disasters and internal conflict. *Tourism Management Perspectives*, 33, Article 100616. <https://doi.org/10.1016/j.tmp.2019.100616>
- Biardeau, L., Rosselló, J., Sahli, M., & Santana-Gallego, M. (2026). Natural disasters and global tourism flows: Intensity, vulnerability and moderating factors. *Tourism Management*, 114, 105390. <https://doi.org/10.1016/j.tourman.2025.105390>
- Biardeau, L. T., & Sahli, M. (2024). Investigating the non-linear impacts of seven types of natural disasters on inbound tourism: Insights from the EM-DAT database. *Tourism Economics*, 30(4), 900–923. <https://doi.org/10.1177/13548166241229319>
- Blake, A., & Sinclair, M. T. (2003). Tourism crisis management: US response to September 11. *Annals of Tourism Research*, 30(4), 813–832. [https://doi.org/10.1016/S0160-7383\(03\)00056-2](https://doi.org/10.1016/S0160-7383(03)00056-2)
- Boto-García, D., & Leoni, V. (2025). Estimating the dynamic effects of volcano eruptions on domestic tourism evidence based on mobile-phone geo-positioning records. *Scienze Regionali*, 24, 331–361. <https://doi.org/10.14650/108356>
- Botzen, W. J. W., Deschenes, O., & Sanders, M. (2019). The economic impacts of natural disasters: A review of models and empirical studies. *Review of Environmental Economics and Policy*, 13(2), 167–188. <https://doi.org/10.1093/reep/rez004>
- Boudreaux, C. J., Jha, A., & Escaleras, M. (2023). Natural disasters, entrepreneurship activity, and the moderating role of country

- governance. *Small Business Economics*, 60(4), 1483–1508. <https://doi.org/10.1007/s11187-022-00657-y>
- Chan, C.-S., Nozu, K., & Cheung, T. O. L. (2020). Tourism and natural disaster management process: Perception of tourism stakeholders in the case of Kumamoto earthquake in Japan. *Current Issues in Tourism*, 23(15), 1864–1885. <https://doi.org/10.1080/13683500.2019.1666809>
- Chew, E. Y. T., & Jahari, S. A. (2014). Destination image as a mediator between perceived risks and revisit intention: A case of post-disaster Japan. *Tourism Management*, 40, 382–393. <https://doi.org/10.1016/j.tourman.2013.07.008>
- Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Altman, D., Angiolillo, F., Bernhard, M., Cornell, A., Fish, M. S., Fox, L., Gastaldi, L., Gjerløw, H., Glynn, A., Good God, A., Grahn, S., Hicken, A., Kinzelbach, K., Marquardt, K. L., McMann, K., Mechkova, V., Neundorf, A., Paxton, P., Pemstein, D., von Römer, J., Seim, B., Sigman, R., Skaaning, S.-E., Staton, J., Sundström, A., Tannenber, M., Tzelgov, E., Wang, Y., Wiebrecht, F., Wig, T., & Ziblatt, D. . . . Ziblatt, D. (2025). V-Dem codebook v15. *Varieties of Democracy (V-Dem) Project*.
- Detotto, C., Giannoni, S., & Goavec, C. (2021). Does good governance attract tourists? *Tourism Management*, 82, Article 104155. <https://doi.org/10.1016/j.tourman.2020.104155>
- Dogru, T., Sirakaya-Turk, E., & Crouch, G. I. (2017). Remodeling international tourism demand: Old theory and new evidence. *Tourism Management*, 60, 47–55. <https://doi.org/10.1016/j.tourman.2016.11.010>
- EM-DAT. (2024). *Disaster year in review 2023*. <https://files.emdat.be/2024/04/CredCrunch74.pdf>
- Er, S. T., Demir, E., & Garcia-Gomez, C. D. (2025). Climate vulnerability and capital investments in tourism. *Current Issues in Tourism*, 28(2), 176–181. <https://doi.org/10.1080/13683500.2024.2330681>
- Faulkner, B., & Vikulov, S. (2001). Katherine, washed out one day, back on track the next: A post-mortem of a tourism disaster. *Tourism Management*, 22(4), 331–344. [https://doi.org/10.1016/s0261-5177\(00\)00069-8](https://doi.org/10.1016/s0261-5177(00)00069-8)
- Ghaderi, Z., Almuhrzi, H. M., Beal, L., & Houanti, L. (2026). When disaster strikes a smart tourism city: Tourists narratives of Dubai's recent flooding. *Current Issues in Tourism*, 29(11), 1–18. <https://doi.org/10.1080/13683500.2025.2450245>
- Goswami, G. G., Sarwar, Md. R., & Rahman, Md. M. (2024). COVID-19 impact on tourism inflow in selected Asia-Pacific countries: a gravity model framework. *International Journal of Emerging Markets*, 19(12), 4459–4480. <https://doi.org/10.1108/ijem-07-2022-1196>
- Gozgor, G., Lau, M. C. K., Zeng, Y., Yan, C., & Lin, Z. (2022). The impact of geopolitical risks on tourism supply in developing economies: The moderating role of social globalization. *Journal of Travel Research*, 61(4), 872–886. <https://doi.org/10.1177/00472875211004760>
- Granville, F., Mehta, A., & Pike, S. (2016). Destinations, disasters and public relations: Stakeholder engagement in multi-phase disaster management. *Journal of Hospitality and Tourism Management*, 28, 73–79. <https://doi.org/10.1016/j.jhtm.2016.02.001>
- Heritage Foundation. (2025). 2025 Index of Economic Freedom (dataset). *The Heritage Foundation and The Wall Street Journal*. <https://www.heritage.org/index>
- Huang, M., Wang, K., Liu, Y., & Xu, S. (2024). The impact of post-disaster communication on destination visiting intention. *Journal of Hospitality and Tourism Insights*, 7(2), 783–799. <https://doi.org/10.1108/jhti-10-2022-0519>
- Hystad, P. W., & Keller, P. C. (2008). Towards a destination tourism disaster management framework: Long-term lessons from a forest fire disaster. *Tourism Management*, 29(1), 151–162. <https://doi.org/10.1016/j.tourman.2007.02.017>
- Jiang, Y., Ritchie, B. W., & Verreynne, M. (2019). Building tourism organizational resilience to crises and disasters: A dynamic capabilities view. *International Journal of Tourism Research*, 21(6), 882–900. <https://doi.org/10.1002/jtr.2312>
- Johnson, A.-G., & Buhalis, D. (2022). Solidarity during times of crisis through co-creation. *Annals of Tourism Research*, 97, Article 10350. <https://doi.org/10.1016/j.annals.2022.103503>
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The Worldwide governance indicators: Methodology and analytical issues. *Hague Journal on the Rule of Law*, 3(02), 220–246. <https://doi.org/10.1017/s1876404511200046>
- Khazai, B., Mahdavian, F., & Platt, S. (2018). Tourism Recovery Scorecard (TOURS) – Benchmarking and monitoring progress on disaster recovery in tourism destinations. *International Journal of Disaster Risk Reduction*, 27, 75–84. <https://doi.org/10.1016/j.ijdrr.2017.09.039>
- Kocak, E., & Cobanoglu, C. (2025). World uncertainty and international tourist arrivals: Does good governance make a difference? *Current Issues in Tourism*, 28(3), 341–345. <https://doi.org/10.1080/13683500.2024.2309151>
- Kraay, A., Zoido-Lobaton, P., & Kaufmann, D. (1999). In *Governance matters. Policy Research Working Papers*. The World Bank. Retrieved October 12, 2025, from <http://documents.worldbank.org/curated/en/665731468739470954>
- Lan, T., Yang, Y., Shao, Y., Luo, M., & Zhong, F. (2021). The synergistic effect of natural disaster frequency and severity on inbound tourist flows from the annual perspective. *Tourism Management Perspectives*, 39, Article 100832. <https://doi.org/10.1016/j.tmp.2021.100832>
- Langbein, L., & Knack, S. (2010). The Worldwide Governance indicators: Six, one, or none? *Journal of Development Studies*, 46(2), 350–370. <https://doi.org/10.1080/00220380902952399>
- Leeson, P. T., & Sobel, R. S. (2008). Weathering corruption. *The Journal of Law and Economics*, 51(4), 667–681. <https://doi.org/10.1086/590129>
- Leoni, V., & Boto-García, D. (2023). The effect of natural disasters on hotel demand, supply and labour markets: Evidence from the La Palma Volcano Eruption. *Environmental and Resource Economics*, 86(4), 755–780. <https://doi.org/10.1007/s10640-023-00811-4>
- Lindell, M. K., & Prater, C. S. (2003). Assessing community impacts of natural disasters. *Natural Hazards Review*, 4(4), 176–185. [https://doi.org/10.1061/\(asce\)1527-6988\(2003\)4:4\(176\)](https://doi.org/10.1061/(asce)1527-6988(2003)4:4(176))
- Ma, S. (David), & Kirilenko, A. P. (2020). Climate change and tourism in English-language newspaper publications. *Journal of Travel Research*, 59(2), 352–366. <https://doi.org/10.1177/0047287519839157>
- Morakabati, Y., Page, S. J., & Fletcher, J. (2017). Emergency management and tourism stakeholder responses to crises: A global survey. *Journal of Travel Research*, 56(3), 299–316. <https://doi.org/10.1177/0047287516641516>

- 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. <https://doi.org/10.1108/jhti-05-2020-0088>
- Nguyen, C. P. (2023). Last chance to travel or safety first? The influence of exposure to natural hazards and coping capacities on tourism consumption. *Tourism Economics*, 29(4), 952–985. <https://doi.org/10.1177/13548166221077648>
- OECD. (2020). *OECD tourism trends and policies 2020*. OECD. https://www.oecd.org/en/publications/2020/03/oecd-tourism-trends-and-policies-2020_7cfc4549.html
- Ogie, R. I., James, S., Moore, A., Dilworth, T., Amirghasemi, M., & Whittaker, J. (2022). Social media use in disaster recovery: A systematic literature review. *International Journal of Disaster Risk Reduction*, 70, Article 102783. <https://doi.org/10.1016/j.ijdr.2022.102783>
- Oh, C. H., & Oetzel, J. (2011). Multinationals' response to major disasters: how does subsidiary investment vary in response to the type of disaster and the quality of country governance? *Strategic Management Journal*, 32(6), 658–681. <https://doi.org/10.1002/smj.904>
- Okafor, L. E., Adeola, O., & Folarin, O. (2023). Natural disasters, trade openness and international tourism: the role of income levels across countries. *Tourism Recreation Research*, 48(1), 60–78. <https://doi.org/10.1080/02508281.2021.1891740>
- Pérez-Rodríguez, J. V., Rachinger, H., & Santana-Gallego, M. (2022). Does tourism promote economic growth? A fractionally integrated heterogeneous panel data analysis. *Tourism Economics*, 28(5), 1355–1376. <https://doi.org/10.1177/1354816620980665>
- Ritchie, B. W., & Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79, Article 102812. <https://doi.org/10.1016/j.annals.2019.102812>
- Rittichainuwat, N. (2008). Responding to disaster: Thai and Scandinavian tourists' motivation to visit Phuket, Thailand. *Journal of Travel Research*, 46(4), 422–432. <https://doi.org/10.1177/0047287507308323>
- Rosselló, J., Becken, S., & Santana-Gallego, M. (2020). The effects of natural disasters on international tourism: A global analysis. *Tourism Management*, 79, Article 104080. <https://doi.org/10.1016/j.tourman.2020.104080>
- Sharma, B., & Tham, A. (2021). Cultural influences on disaster recovery and impact on tourism: The case of Nepal earthquakes. *Journal of New Business Ideas and Trends*, 19(1), 1–18.
- Standaert, S. (2015). Divining the level of corruption: A Bayesian state-space approach. *Journal of Comparative Economics*, 43(3), 782–803. <https://doi.org/10.1016/j.jce.2014.05.007>
- Tasci, A. D. A., & Gartner, W. C. (2007). Destination image and its functional relationships. *Journal of Travel Research*, 45(4), 413–425. <https://doi.org/10.1177/0047287507299569>
- Topcu, M., Denaux, Z., & Crews, C. (2023). Good governance and the US tourism demand. *Annals of Tourism Research Empirical Insights*, 4(1), Article 100095. <https://doi.org/10.1016/j.annale.2023.100095>
- Uzar, U., Eyuboglu, K., & Alola, U. V. (2024). The role of institutional quality on tourist arrivals in leading emerging economies. *Journal of Social and Economic Development*. Advance online publication. <https://doi.org/10.1007/s40847-024-00371-3>
- Walters, G., & Mair, J. (2012). The effectiveness of post-disaster recovery marketing messages—The case of the 2009 Australian Bushfires. *Journal of Travel & Tourism Marketing*, 29(1), 87–103. <https://doi.org/10.1080/10548408.2012.638565>
- Walters, G., Mair, J., & Ritchie, B. (2015). Understanding the tourist's response to natural disasters: The case of the 2011 Queensland floods. *Journal of Vacation Marketing*, 21(1), 101–113. <https://doi.org/10.1177/1356766714528933>
- Wang, J., & Zhai, X. (2023). Leveraging emotional solidarity in disaster recovery. *Annals of Tourism Research*, 99, Article 100095. <https://doi.org/10.1016/j.annals.2023.103530>
- Wearing, S., Beirman, D., & Grabowski, S. (2020). Engaging volunteer tourism in post-disaster recovery in Nepal. *Annals of Tourism Research*, 80, Article 102802. <https://doi.org/10.1016/j.annals.2019.102802>
- Wenzel, D. (2021). Droughts and corruption. *Public Choice*, 189(1–2), 3–29. <https://doi.org/10.1007/s11127-020-00843-0>
- World Bank Group. (2020). Resilient tourism: Competitiveness in the face of disasters. <http://hdl.handle.net/10986/34766>
- Yang, Y., Huang, S., Li, W., Zhong, F., & Lan, T. (2022). Does government efficiency mitigate the effect of natural disasters on tourist arrivals? *Current Issues in Tourism*, 25(13), 2177–2191. <https://doi.org/10.1080/13683500.2021.1951181>
- Zenker, S., & Kock, F. (2020). The coronavirus pandemic – A critical discussion of a tourism research agenda. *Tourism Management*, 81, Article 104164. <https://doi.org/10.1016/j.tourman.2020.104164>
- Zhang, F., Lv, Y., & Sarker, M. N. I. (2024). Resilience and recovery: A systematic review of tourism governance strategies in disaster-affected regions. *International Journal of Disaster Risk Reduction*, 103, Article 104350. <https://doi.org/10.1016/j.ijdr.2024.104350>
- Zhang, M., Seyler, B. C., Di, B., Wang, Y., & Tang, Y. (2021). Impact of earthquakes on natural area-driven tourism: Case study of China's Jiuzhaigou National Scenic Spot. *International Journal of Disaster Risk Reduction*, 58, Article 104350. <https://doi.org/10.1016/j.ijdr.2021.102216>

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