



# Employee empowerment and tourism sector employment around the world

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## Abstract:

**Purpose:** This paper hopes to examine the effect of staff empowerment on jobs that fall inside the travel and tourism industry across eighty-four nations from the years 2000 to 2021 using yearly cross-country information gathered by the World Tourism Organization (WTO).

**Methods:** The purpose of this study is to provide an approximation of the level of employee empowerment according to the limit to which companies that are active in the economic reality provide employees with training opportunities. The analysis accounts for the effect of economic situations, the development of infrastructure, and policy frameworks by controlling for the impact of several social, economic, and institutional variables. This allows the analysis to take into account the influence held by economic circumstances, growth in infrastructure, and policies and frameworks.

**Results:** Our research shows that there is a substantial beneficial correlation involving employee training and employment in tourism-related industries across the board in every country. The robustness of these results is demonstrated by the fact that they are not affected by a variety of tests for sensitivity and endogeneity analyses. According to the findings of our research, modifications to employee training could not have a quick or solely linear effect on employment rates in the tourism sector. It has been observed that nonlinear effects can occur, in addition to the possibility of delays in the impact that training programs have on employment. In addition, a wide variety of social, economic, environmental, and geopolitical factors all have the potential to have an impact on the link between employee training and job placement in this sector.

**Implications:** Employee training programs in the economy appear to be important tools in enhancing employee skills and therefore empower them to seek employment in the tourism sector.

**Keywords:** employee empowerment; training programs; tourism sector; employment; global.

**JEL Classification:** L8, M53, E24

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## 1 INTRODUCTION

The global tourism sector has experienced consistent growth in employment as more people travel for various purposes, such as leisure and business (WTTC, 2022). This increased demand for tourism-related services can be attributed to factors such as higher incomes, improved transportation infrastructure, easier access to travel information, and enhanced connectivity (Aynalem et al., 2016; Fang et al.,

2016; Baum and Hai, 2019). This industry at the moment consists of a wide range of sectors, including accommodation, and the food industry services, transportation, travel agencies, tour operators, attractions, and related services. It has been responsible for the creation of thousands of direct and indirect employment opportunities, and it continued to support over 330 million jobs globally in 2019, accounting for 10.3% of the total employment worldwide (WTTC, 2020).



While traditional roles in the tourism sector like hotel staff, tour guides, and travel agents remain significant, new job profiles have emerged due to evolving trends (Crick et al., 2018; Asonitou and Kottara, 2019; Dogru et al., 2020; Sharma et al., 2021). These include positions in digital marketing, social media management, data analytics, sustainable tourism management, experiential tourism design, and technological innovations for the sector. The industry has adapted to the changing preferences and demands of travelers.

According to Baum (1999; Jolliffe and Farnsworth (2003); Robinson et al. 2019), one notable aspect of employment in this particular sector has been its seasonal character. Efforts have been made to reduce seasonality by diversifying tourism products and promoting year-round attractions (Chhetri et al., 2019). Additionally, the sector has seen increased flexibility in employment arrangements, offering part-time, contract, and freelance opportunities. This flexibility appeals to individuals seeking work-life balance or exploring alternative career paths. Nevertheless, concurrent with this, the tourism sector's susceptibility to fluctuations and adaptability in operational and labor circumstances can lead to substantial shifts in workforce attrition, particularly in regions that are more susceptible (Michael and Fotiadis, 2022; Michael et al., 2023).

Technological advancements produced a noteworthy effect on tourism sector employment (Hong, 2009; Kömürçü et al., 2021). Online booking platforms, mobile applications, and digital marketing have transformed the way tourists plan and book their trips. Automation resulting from technology has led to changes in employment needs and required skill sets. Professionals with expertise in digital marketing, data analysis, website development, and online customer service are now in higher demand (Balsmeier et al., 2019; Carlisle et al., 2023).

The pandemic produced a significant and harsh impact on employment in this sector, resulting in job losses and furloughs due to travel restrictions, lockdowns, and reduced tourism flows (Mertzanis and Papastathopoulos, 2021; Fotiadis et al., 2021). Hospitality and travel businesses faced significant challenges. However, with the easing of travel restrictions and progress in vaccinations, there is hope for recovery and a gradual return to pre-pandemic employment levels.

The number of jobs available in the tourism industry is directly proportional to the amount of demand from customers (Martins et al., 2017). Factors influencing tourist demand include income levels, consumer preferences, travel costs, destination attractiveness, safety, and marketing efforts. Government policies and regulations also significantly influence employment in the tourism sector (Wang et al., 2010; Dwyer, 2022; Michael, Fotiadis, and Michael, 2023). Visa regulations, taxation, infrastructure development, investment incentives, and labor laws can impact the ease of doing business and, consequently, employment levels (Michael and Fotiadis, 2022). Adequate infrastructure and accessibility are essential for employment in the tourism sector, with well-developed transportation networks enabling tourists to reach destinations easily (Ribeiro et al., 2018). Furthermore, both public and private sector investments in tourism development have a significant

impact on employment opportunities (Davidson and Sahli, 2015; ). Lastly, the availability of skilled human resources is vital for the sector's growth and sustainability (Baum, 2007; Asonitou and Kottara, 2019). A skilled workforce with expertise in hospitality management, tour guiding, customer service, marketing, digital technologies, and sustainability practices enhances the quality of tourism services and overall sector competitiveness. Training and education programs developed against the specific requirements of the tourism sector play a crucial role in developing a skilled workforce. However, there is limited evidence regarding the contribution of a skilled workforce and employee empowerment to tourism sector employment. While some individual country studies exist (Cukier et al., 1996; Zwane et al., 2014; Carlisle et al., 2023, among others), there is a lack of sufficient cross-country evidence to draw generalized conclusions. In this paper, we look to explain this imbalance by assessing the cross-country effect of employee training on tourism sector employment in eighty-four countries from 2000 to 2021. We account for variations in economic conditions, infrastructure development, policy frameworks, and tourism offerings by controlling a number of economic, social, and institutional factors. This allows us to take into consideration variations in economic conditions, infrastructural growth, policy structures, and tourism services. The findings herein demonstrate that there's an important beneficial connection between employee training and employment in the tourism sector. This finding holds up across a number of sensitivity tests and endogeneity analyses.

This study adds significantly to the existing literature in multiple ways. It first stresses the importance of learning from others and figuring out what works for empowering tourism industry workers (Alagarsamy et al., 2020). Sharing these insights with businesses and policymakers can help them implement similar practices to enhance efficiency and competitiveness. Secondly, it explores the link between employee empowerment and productivity within the tourism sector, highlighting the importance of increased motivation, engagement, and productivity levels among employees (Hanaysha, 2016). Thirdly, it demonstrates how employee empowerment positively affects service quality and customer satisfaction within this sector and its operations (Tsaur et al., 2004). Empowered employees are more likely to provide exceptional customer service, which in turn improves the general tourism experience as well as consumer happiness and engagement. Empowered employees have the authority to make decisions and feel that their contributions are valued. As a result, this leads to an increase in the competitive edge of tourism companies as well as locations. Lastly, our findings inform policy and managerial decisions in designing supportive frameworks that encourage employee empowerment practices within the tourism sector. Implementing effective empowerment strategies, training programs, and recognition mechanisms can lead to improved efficiency and competitiveness (Jolliffe and Farnsworth, 2003; Spyridou, Polyzos, and Samitas, 2023).

The following outline constitutes the paper's format: In the following section (Section 2), we conduct a literature review on the subject of the influence that empowered employees have on the growth of the tourism industry. In Section 3, you will find comprehensive details on the data and empirical approach that were utilized in our analysis. The results of the

baseline analysis are laid out in Section 4. Tests of sensitivity and an investigation into endogeneity are included in Section 5. Further resilience checks are carried out in Section 6 of this document. In the last part of the paper, Section 7, a summary of the most important findings and their implications is presented.

## 2 LITERATURE

### 2.1 Employee empowerment, training, and tourism sector employment

Higher employee empowerment within a country can have positive effects on employment in the domestic tourism sector in the following ways: Firstly, when employees feel empowered, they exhibit higher levels of motivation and engagement in their work (Hanaysha, 2016; Alagarsamy et al., 2020). They take ownership of their roles and responsibilities, resulting in improved customer service and overall service quality within the tourism sector. Positive word-of-mouth and customer satisfaction contribute to attracting more domestic tourists, thereby increasing the demand for tourism services, and creating employment opportunities.

Secondly, empowered employees are more likely to contribute innovative ideas and solutions to enhance the tourism experience (Eraqi, 2006). They feel encouraged to think creatively and propose improvements in processes, customer interactions, and service offerings. This culture of innovation has the potential to lead to the development of one-of-a-kind tourism products, experiences, and services that appeal to domestic tourists, which in turn will drive growth and employment opportunities within the sector.

Moreover, empowered employees demonstrate a sense of ownership and responsibility for their work, which motivates them to be proactive, efficient, and focused on delivering results (Gençer and Gençer, 2020; Spyridou, 2019). This increased productivity translates into improved operational efficiency within tourism businesses. Higher productivity levels enable businesses to expand their operations, cater to a larger customer base, and create more employment opportunities.

Additionally, empowered employees who have decision-making authority and can provide personalized service greatly enhance customer satisfaction (Bello and Bello, 2017). Satisfied customers are more likely to become loyal patrons, repeat visitors, and advocates for a destination or tourism business. Positive customer experiences drive domestic tourism demand, supporting sector growth and creating employment opportunities in various tourism-related businesses.

Furthermore, employee empowerment can foster an entrepreneurial spirit within the workforce (Wihuda et al., 2017). Empowered employees are more likely to take the initiative, identify business opportunities, and contribute to the growth of small businesses within the tourism sector. This can lead to the creation of new enterprises that can be labelled tourism-related ventures. Entrepreneurship results in the production of employment opportunities and contributes to the expansion and diversifying of the local tourism industry as a whole.

Lastly, employee empowerment often aligns with training and skill development initiatives (Tsaour et al., 2004). When employees are empowered, organizations are more inclined to invest in their professional growth and provide training opportunities. This, in turn, improves the skills and competencies of the workforce within the tourism sector. Skilled employees can deliver higher-quality services, contribute to sector growth, and attract more domestic tourists, thereby creating increased employment opportunities.

Training initiatives provide employees with novel skills, knowledge, and expertise tailored to their respective roles. Through the acquisition of these proficiencies, employees cultivate a heightened sense of competence and self-assurance, thereby fostering a greater degree of empowerment (Turkmenoglu, 2019). Training provides workers with the fundamental instruments and resources necessary for self-directed tasks and overcoming obstacles. As employees progressively amass the capability to make decisions and embrace accountability for their tasks, a natural elevation in their empowerment ensues (Yin et al., 2019). Integral to training is the establishment of lucid expectations concerning job responsibilities. This ensures that employees know what they're supposed to do and how to do it, which makes them more likely to take the initiative to make contributions (Marta et al., 2021). Communication aptitude improvements often arise from training programs, facilitating employees to articulate their notions, concerns, and requisites more effectively. This enhancement underscores the empowerment sentiment, as their voices attain recognition and significance (Taghipour et al., 2011). An investment by organizations in training echoes an acknowledgment of employees' developmental progress, sending forth a message that their growth is esteemed. This affirmation engenders trust and a constructive rapport between employees and management, thereby amplifying the sentiment of empowerment.

Training for employees is an essential component in providing professionals in the tourism industry with the abilities, knowledge, and experience required to provide exceptional customer service (Turkmenoglu, 2019). Well-trained employees are better equipped to meet the needs and expectations of domestic tourists, resulting in improved service quality. Positive customer experiences contribute to higher visitor satisfaction, repeat visits, and positive word-of-mouth recommendations, thereby stimulating domestic tourism demand and generating employment opportunities. Additionally, training programs can focus on developing specialized skills and expertise within the tourism sector (Johnson et al., 2019). This includes areas such as tour guiding, hospitality management, culinary arts, event planning, sustainable tourism practices, cultural heritage preservation, and customer service. The improvement of these employees' skills makes them stronger contenders in the job market, which in turn leads to a rise in the number of employment opportunities available in the local tourism industry.

Employee training also facilitates the introduction of new tourism products and experiences (Zaitseva et al., 2016). For instance, training programs can focus on adventure tourism, ecotourism, wellness tourism, cultural tourism, or niche market segments. By equipping employees with the

necessary knowledge and skills, organizations can expand their offerings and attract domestic tourists seeking unique and specialized experiences. The introduction of novel tourism products results in the production of new job openings for people who possess the requisite level of competence.

Furthermore, the tourism industry is subject to constant change, with emerging trends and technologies (Crick et al., 2018; Asonitou and Kottara, 2019). Employee training ensures that individuals working in the sector remain up to date with these changes. Training programs can cover areas such as digital marketing, online booking systems, sustainability practices, data analytics, and emerging tourism markets. By equipping employees with adaptable skills, organizations can maintain competitiveness, attract domestic tourists, and foster employment growth.

Overall, fostering increased employee training within the tourism sector necessitates collaboration among governments, industry associations, educational institutions, and tourism businesses. Such collaboration can lead to the development of relevant training programs, apprenticeships, internships, and initiatives that support lifelong learning and professional development for individuals working in the domestic tourism sector.

## **2.2 Economic and institutional determinants of tourism sector employment**

Economic and institutional factors within the economy can also have an influence on this sector's job market. One of the most important aspects to consider is the overall number of tourists who visit the country each year. This figure takes into account both domestic and international travelers who travel for pleasure or business (Swarbrooke and Horner, 2001). Business and professional networks often prefer less popular destinations that possess significant tourism potential. These travelers establish partnerships with local businesses, and actively organize events or conferences to bring attention to these lesser-known locations. This, in turn, stimulates interest and investment in these areas. Effective marketing strategies could lead to increased tourist arrivals and demand for tourism services, driving job growth. Likewise, the development of technology and online platforms could enhance marketing, booking, and customer experiences, leading to increased demand for technology-related jobs in tourism. We expect a positive correlation between the volume of domestic and foreign arrivals for business and professional reasons and the degree to which employment exists in the local sector.

The foreign exchange rate also plays a role (Webber, 2001). A favorable exchange rate can make a destination more affordable for international tourists. When the local currency strengthens against other currencies, it becomes more expensive for foreign visitors to travel to that destination. Similarly, an appreciated currency may discourage domestic tourists from traveling within their own country. We anticipate a negative correlation between the exchange rate and the degree to which employment exists in the local sector. The rate of economic growth in the domestic economy is another important factor (Isik et al., 2018). Economic growth often leads to increased incomes and enhanced purchasing power for individuals. With higher disposable income, people are more likely to spend on leisure activities,

including domestic tourism. Economic growth also provides the necessary resources and investments to develop and improve tourism infrastructure, such as hotels, resorts, theme parks, transportation networks, and other facilities that support tourism. Public and private investment in tourism infrastructure can lead to job creation during construction and operation phases. We anticipate a positive correlation between domestic economic growth and the degree to which employment exists in the local sector.

The presence of domestic tourist sites officially designated by UNESCO is also significant. A nation's cultural heritage can be quantified by counting the variety of UNESCO World Heritage Sites located within its borders (Bottazzi et al., 2006). UNESCO sites are globally recognized for their universal value and cultural significance. As the number of UNESCO sites increases within a country, it attracts domestic and international tourism. The formation and preservation of heritage sites often requires the development of supporting infrastructure, including visitor centers, interpretation facilities, transportation networks, accommodations, and amenities. The creation of these facilities generates job opportunities for construction workers, hospitality staff, tour guides, transportation providers, and other related service providers. We anticipate a positive correlation when it comes to the quantity of domestic tourist sites and the degree to which employment exists in the local sector.

Lastly, the overall domestic innovativeness performance of a country also influences employment in the tourism sector (Omerzel, 2015). Innovativeness drives the creation of new and unique tourism products and experiences. This includes innovative attractions, theme parks, adventure tourism offerings, eco-tourism initiatives, cultural festivals, and immersive experiences. Technological advancements significantly enhance the visitor experience and operational efficiency within the tourism sector. Innovations in areas such as virtual reality, augmented reality, mobile applications, online booking systems, and destination management systems can revolutionize how tourists engage with destinations and services. We anticipate that there will be a positive correlation connecting the rate of local invention and the degree of job creation within the travel and tourism industry in the home country.

Additional factors might exert their influence on employment indirectly. For instance, adept marketing strategies have the potential to yield a heightened tourist influx and a surge in demand for tourism amenities, thereby propelling employment expansion. In the same way, advances in technology and digital platforms can help with advertising, make booking easier, and improve the customer experience. As a result, there is a greater need for technology-driven jobs in the tourism sector. Additionally, making it easier to get visas could increase the number of visitors, and good rules and incentives could encourage investments in tourism and create a lot of jobs. Likewise, the allure of special events and festivals can magnetize tourists, engendering transient employment prospects associated with event coordination, hospitality, and entertainment provisioning. It is also important to note that political stability and security lead to an environment that is good for tourism, which brings in both local and foreign visitors and creates jobs. Notably, although these factors wield significance in shaping the overall tourism

landscape, their influence operates indirectly on the volume of tourist arrivals and economic expansion. Consequently, these factors are not explicitly addressed within the confines of this concise paper.

### 2.3 Research hypothesis

Based on the literature we looked at above, our main research hypothesis is that more employee empowerment, which can be roughly measured by how many companies offer training programs for their workers, is linked to positive changes in employment in the tourism sector. Employee training can serve as a relevant and valuable proxy for employee empowerment in certain contexts, but it may not fully capture all dimensions of empowerment. Whether employee training is a good proxy for employee empowerment depends on the specific goals of the analysis, the industry, the organization's culture, and the broader factors that contribute to empowerment. We acknowledge that, while it can provide insights into certain aspects of employee empowerment, employee training might not capture the entirety of this multidimensional concept. Further, to account for the potential mitigating influence of external factors, we also include economic and institutional controls.

## 3 DATA AND IDENTIFICATION STRATEGY

### 3.1 Data and variables

Using data collected in cross-sectional surveys from a number of different years, the primary objective of our research is to determine whether or not there is a causal connection between training and job placement in this sector. Our analysis utilizes a panel dataset consisting of annual data on tourism sector employment and employee training from 84 countries spanning the period 2000-2021. The World Tourism Organization (WTO) delivers data on this sector's employment, while the World Development Indicators (WDI) offers data on employee training. We supplement the basic data with additional information on various control variables sourced from the World Development Indicators. After merging all the datasets, our final baseline dataset comprises 1,848 observations.

The outcome variable of our empirical analysis is the volume of employment (measured in thousands) in the tourism sector, represented by the logarithm of the variable EMPLTR. This variable, obtained from the WTO database, reflects the total number of employees in the tourism sector for each country and year. The key independent variable in our analysis is the extent of employee training offered by private firms in each country and year, denoted as TRAIN. The WDI database provides the data as an index, measuring the level of formal training provided by firms across the economy.

Table 1 presents an overview of the average absolute values of tourism sector employment and employee training across all countries in our sample. India leads the pack in terms of tourism sector employment with 31,118.4 thousand employees, followed by the Philippines (4,255.5 thousand) and Thailand (4,146.2 thousand). In the middle range, we observe countries such as Serbia (130.1 thousand), Panama (126.2 thousand), and Cote d'Ivoire (125.7 thousand). On the lower end, we find countries like Paraguay (8.27 thousand),

Moldova (3.01 thousand), and Djibouti (1.65 thousand). Regarding employee training, Thailand ranks the lowest with a score of 125.9, followed by South Korea (111.5) and Costa Rica (109.9). In the middle range, we observe countries such as Djibouti (46.7), India (46.5), and Serbia (46.0). On the lower end, we find countries like Egypt (17.4), Austria (17.0), and Indonesia (6.74). These values indicate significant variation across countries in terms of both tourism sector employment and employee training levels.

Table 1. Trends in employee training and tourism sector employment (average country values).

Country	Employment	Training	Country	Employment	Training
Albania	27.82	35.03	Lebanon	325.70	63.40
Algeria	285.60	45.28	Lithuania	44.15	53.30
Angola	180.02	38.21	Madagascar	32.81	21.23
Argentina	1123.72	70.45	Malaysia	3006.20	47.70
Austria	223.52	17.00	Mali	30.49	42.85
Azerbaijan	34.19	22.55	Mauritius	29.27	43.14
Belarus	135.46	58.94	Mexico	2070.17	59.56
Belgium	138.48	19.15	Moldova	3.01	42.41
Belize	17.97	23.42	Mongolia	12.76	75.28
Bosnia & Herz.	33.01	63.64	Montenegro	13.90	23.98
Brazil	1987.29	60.84	Morocco	487.00	33.71
Cameroon	25.50	33.93	Mozambique	41.23	37.37
Chile	378.25	87.62	Namibia	39.45	53.55
Congo	19.81	70.60	Netherlands	676.70	48.69
Costa Rica	152.51	109.85	Nicaragua	46.87	67.19
Cote D'Ivoire	125.68	45.65	Nigeria	1078.11	43.89
Croatia	64.88	47.10	Panama	126.21	28.74
Cyprus	42.28	17.02	Paraguay	8.27	63.86
Czech Rep.	234.45	72.02	Philippines	4255.45	47.67
Denmark	171.63	22.94	Poland	498.85	66.67
Djibouti	1.65	46.73	Portugal	387.33	61.09
Dominican Rep.	196.55	48.85	Romania	370.58	39.73
Ecuador	101.03	77.58	Russia	609.96	54.42
Egypt	1741.60	17.35	Senegal	100.00	22.68
El Salvador	47.91	71.09	Serbia	130.09	45.95
Estonia	22.91	61.57	Sierra Leone	17.01	24.30
Eswatini	13.15	65.26	Slovakia	111.60	62.64
Finland	138.15	30.88	Slovenia	52.50	67.50
France	1264.71	32.35	South Africa	613.53	64.36
Georgia	54.86	30.85	Spain	2330.66	101.23
Germany	2233.52	92.36	Sri Lanka	118.63	27.56
Ghana	335.60	49.53	Palestine	26.21	22.16
Greece	283.82	31.97	Sweden	230.31	86.01
Honduras	217.05	49.92	Tajikistan	21.03	41.20
Hungary	307.31	28.38	Thailand	4146.18	125.93
India	31118.44	46.45	Trinidad & Tobago	32.15	54.00
Indonesia	657.74	6.74	Türkiye	1401.90	36.58
Israel	147.79	20.47	Uganda	622.75	47.41
Jordan	43.80	19.44	Uruguay	117.63	58.31
Kazakhstan	117.35	37.83	Uzbekistan	46.82	21.96
Korea, South	240.38	111.52	Zambia	60.03	41.65
Kyrgyzstan	11.89	58.59			
Latvia	71.79	44.32	Total/average	705.69	48.11

Notes: Data of training (% of firms) from the World Development Indicators and on employment (ml) from the World Tourism Organization.

Our goal is to investigate the relationship between shifting attitudes toward employee empowerment and varying employment levels in the tourism industry. However, situations that actually occur frequently involve additional factors that have an effect on employment in the tourism industry. These factors can potentially distort or fragment one's understanding of the primary cause-and-effect relationship. In order to address this issue, we have implemented a number of control variables, which have enabled us to analyze and comprehend the complex dynamic at play between employee empowerment and tourism employment, all the while taking into account the influence of relevant external factors. We include pertinent control variables to measure the impact of financial and institutional influences on jobs in the sector by relying on previous study findings and incorporating applicable variables for control (Ben Aissa and Goaied, 2016; Radlińska and Gardziejewska, 2022; Mazzola et al., 2022). These variables are outlined as follows: The first control variable, denoted as BUSTRAVA, represents the total number of tourist arrivals in the country,

encompassing both domestic and foreign visitors who engage in business and professional activities (Sharma and Mitra, 2021). This data is sourced from the WTO database. Business and professional networks often favor less popular destinations with significant tourism potential. These travelers establish partnerships with local businesses, such as hotels, restaurants, and tour operators, and actively participate in events and conferences, thereby drawing attention to these lesser-known locations. This, in turn, stimulates interest and investment in these areas. We anticipate a positive correlation between the volume of domestic and foreign arrivals for business and professional purposes and the level of employment within the domestic tourism sector.

The second control variable, referred to as FOREX, measures the foreign exchange rate, specifically the value of the domestic currency relative to the US dollar. Data for this variable can be obtained from the WDI database. A favorable exchange rate can enhance the affordability of a destination for international tourists (Webber, 2001; Tung, 2019; Mertzanis and Papastathopoulos, 2021). When the local currency strengthens against other currencies, it becomes relatively more expensive for foreign visitors to travel to that destination. Likewise, an appreciating currency may discourage domestic tourists from engaging in domestic travel. We expect a negative correlation between the exchange rate and the degree to which employment exists in the local sector.

The third control variable, denoted as GDPG, represents the annual growth rate of the domestic economy expressed as a percentage. This information is available in the WDI database. Economic growth typically results in increased incomes and enhanced purchasing power for individuals (Lee, 2021; Isik et al., 2018; Mertzanis and Papastathopoulos, 2021). With higher disposable income, people are more inclined to spend on leisure activities, including domestic tourism. Economic growth also facilitates the allocation of resources and investments towards developing and improving tourism infrastructure, such as hotels, resorts, theme parks, transportation networks, and other facilities that support tourism. We anticipate a positive correlation between domestic economic growth and the level of employment within the domestic tourism sector.

The fourth control variable, labeled SITE, signifies the number of domestic tourist sites officially designated by UNESCO. Data for this variable can be obtained from the UNESCO heritage database. UNESCO sites are renowned for their universal value, cultural significance, and unique heritage (Bottazzi et al., 2006). As the number of UNESCO sites increases within a country, the appeal for both domestic and international tourists grow. Establishing and maintaining UNESCO sites often necessitates the development of supporting infrastructure, including visitor centers, interpretation facilities, transportation networks, accommodations, and amenities. The creation of these facilities generates employment opportunities for construction workers, hospitality staff, tour guides, transportation providers, and other related service providers. We anticipate a positive link when it comes to employment levels or jobs in the local or domestic tourism sector and the number of such sites that are present.

The fifth control variable, known as INNOV, captures the overall domestic innovativeness performance of the country as measured by an index. Data for this variable can be found in the World Economic Forum's Global Competitiveness report. Innovativeness drives the creation of new and unique tourism products and experiences. This may involve the development of innovative attractions, theme parks, adventure tourism offerings, eco-tourism initiatives, cultural festivals, and immersive experiences (Omerzel, 2015). Technological advancements significantly enhance the visitor experience and operational efficiency within the tourism sector. Innovations in areas such as virtual reality, augmented reality, mobile applications, online booking systems, and destination management systems have the potential to revolutionize how tourists engage with destinations and services. We anticipate that there will be a positive correlation between the rate of local invention and the degree of job creation within the travel and tourism industry in the home country.

In conclusion, it is essential to highlight the fact that both the G20 and the OECD have worked to promote hospitality standards with the intention of encouraging the expansion of the tourism sector. The G20 is comprised of 19 nations and the European Union, which together are responsible for eighty percent of the GDP on a global scale. We have included dummy variables that indicate whether or not a particular nation is part of these bodies so that we can take into consideration the impact that these groups have.

The variables' descriptive statistics can be seen within Table 2, which shows that there is a significant amount of variation between countries. The average (log) volume of employment in the tourism sector is 4.74, with a notable standard deviation of 1.94 and a maximum value of 10.41, indicating that there are significant differences between countries in this regard. The employee training measure has a mean of 50.8, a significant standard deviation of 33.4, and a maximum value of 214.3. This indicates that there is a large amount of variation not only within countries but also between countries. In addition, all of the other control variables display a significant amount of variation from country to country.

Table 2. Summary statistics

	Count	Mean	SD	Min	P25	P50	P75	Max
TOR39	1848	4.74	1.94	-1.20	3.45	4.85	5.81	10.41
TRAIN	1848	50.79	33.41	7.36	26.85	42.66	64.63	214.29
BUSTRAVA	1848	4.61	2.16	-3.91	3.11	4.67	6.05	9.61
FOREX	1848	99.62	12.52	64.24	94.80	99.58	104.38	153.61
GDPG	1848	2.43	4.01	-20.60	1.08	3.00	4.68	20.72
SITE	1848	11.28	13.83	0.00	2.00	6.00	11.00	46.00
INNOV	1848	3.44	0.84	2.06	2.94	3.32	3.61	5.80
N	1848							

Note. The table reports the summary statistics of the variables.

### 3.2 Estimation model

Establishing a causal relationship between a country's employee empowerment policies and tourism sector employment is a complex task due to potential unobservable factors that are correlated with both employee training and the decision of tourism firms to hire more workers. We make use of a variety of model specifications so that we can overcome this obstacle. At first, we run our estimates through a pooled ordinary least squares (OLS) model that takes into account fixed effects for both countries and years. These fixed effects are responsible for the heterogeneity that is both

time-invariant and time-varying, respectively. Nevertheless, it is essential to recognize that the OLS linear estimation method has a number of inherent limitations. It is possible that it will not capture nonlinear relationships very well, that it will have limited extrapolation properties, that it will be sensitive to outliers, and that it will lead to attenuation bias, which will result in values for the outcome variable that are underestimated. OLS estimation is preferred in our context over nonlinear estimation to avoid incidental parameter bias (Angrist and Pischke, 2009). This is despite the fact that OLS estimation has some limitations. Incorporating fixed effects into the analysis helps to reduce the amount of bias that is caused by using an OLS estimation model. Additional sensitivity and endogeneity analyses are carried out by us so that we can be confident in the validity of our findings. We only include observations for the variables that aren't missing, and we make use of robust standard errors that are adjusted for heteroskedasticity with the Huber-White sandwich estimator. Our goal is to strengthen the validity and reliability of our analysis by employing these approaches, which will allow us to overcome the challenges posed by unobservable factors, nonlinearity, potential bias, and heteroskedasticity. In doing so, we will be able to better examine the relationship between employee empowerment policies and employment in the tourism sector. The following estimation model was deployed:

$$\text{EMPLTR}_{jt} = \alpha + \text{TRAIN}_{jt} \beta_1 + \text{X1}_{jt} \beta_2 + \mu_{jt} \quad (1)$$

The variables in equation (1) are as follows:  $\text{EMPLTR}_{jt}$  represents the (log) value of tourism sector employment in country  $j$  in year  $t$ ;  $\text{TRAIN}_{jt}$  represents the degree of training offered by firms to employees in country  $j$  in year  $t$ ; and  $\text{X1}_{jt}$  is a vector of economic and other controls for country  $j$  in year  $t$ . The composite error term  $\mu_{jt}$  is comprised of three components:  $\gamma_j$  accounts for country effects,  $\delta_t$  accounts for year effects, and  $\epsilon_{jt}$  represents the error parameter, assumed to be normally distributed and to vary across countries and years. Due to the challenges associated with determining causal effects based on observed correlations, we approach our findings as indicators of association rather than causation..

Table 3. Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TOR39 (1)	1.00						
TRAIN (2)	0.06*	1.00					
BUSTRAV (3)	0.23***	-0.01	1.00				
FOREX (4)	-0.07**	0.16***	-0.01	1.00			
GDPG (5)	0.02	-0.09***	-0.03	-0.12***	1.00		
SITE (6)	0.42***	0.09***	0.74***	-0.04*	-0.03*	1.00	
INNOV (7)	0.17***	0.10***	0.45***	-0.04*	-0.11***	0.39***	1.00
VIF	1.76						
N	1848						

Notes. The table reports the pairwise correlations between all the variables. It also provides the VIF mean value. VIF values above 4 indicate collinearity. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

For simplicity, we use the term predict to describe relationships. Table 3 presents the pairwise correlations among the variables utilized in our main regression analysis. The table reveals that the value of tourism sector employment is positively and significantly associated with the degree of employee training, which provides initial evidence of a potential causal relationship. Furthermore, the table demonstrates minimal correlations among the other predictors, indicating a low likelihood of collinearity

## 4 BASELINE RESULTS

Regression analysis was employed to look at the impact of employee training variations on tourism sector employment while considering economic and institutional factors. The results presented in Table 4 demonstrate that across all models, the coefficient of TRAIN is positive and statistically significant. This signifies that increased employee training by firms is associated with higher levels of tourism sector employment in countries. These findings suggest that the private sector's commitment to empowering employees through training programs can contribute to the growth of the economy, particularly within the tourism sector. Furthermore, our analysis revealed that higher levels of domestic economic growth, increased numbers of business and professional travelers, a greater presence of UNESCO-designated domestic tourist sites, and stronger innovation support policies in a country are all linked to higher levels of tourism sector employment. Conversely, higher domestic exchange rates are associated with lower levels of employment in the tourism sector. The substantial size of the F statistic indicates the significance of the fixed effects employed in the analysis. Overall, the regression analysis provides evidence supporting the positive relationship between employee training, economic factors, and institutional factors and employment in the tourism sector. These results show how employee training programs can help create jobs in the tourism sector. They also show how important it is for the economy to grow at home, for tourism-related activities to thrive, for new ideas to be developed, and for the exchange rate to stay stable.

Table 4. Baseline effects

	(1)	(2)	(3)	(4)
TRAIN	2.803** (1.288)	2.996*** (1.128)	3.778*** (0.690)	1.379*** (0.510)
BUSTRAV	-0.134*** (0.012)	-0.124*** (0.014)	0.076** (0.030)	0.060** (0.028)
FOREX	-6.840** (2.818)	-6.798** (3.053)	4.748** (2.059)	5.128*** (1.871)
GDPG	25.060 (16.783)	36.426* (19.381)	3.399 (3.053)	7.178** (3.633)
SITE	59.209*** (2.521)	57.729*** (3.543)	53.145*** (7.566)	43.815*** (6.688)
INNOV	-186.808*** (29.952)	-175.143*** (30.888)	288.945*** (81.358)	200.798*** (73.557)
adj. $R^2$	0.308	0.281	0.966	0.969
F-test	257.995	53.303	462.757	300.732
Country FE	No	No	Yes	Yes
Year FE	No	Yes	No	Yes
Dummies	Yes	Yes	Yes	Yes
N	1848	1848	1848	1848

Notes. The table reports the baseline effects of firms' training on tourism sector employment. Additional control variables include macroeconomic and institutional factors. The pool sample period is 2000-2021. We use an OLS model with random and fixed effects and policy dummies. We cluster standard errors at the country level. Model (1) includes random effects only. Model (2) includes year effects only. Model (3) includes country effects only. Model (4) includes country-year effects. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## 5 SENSITIVITY AND ENDOGENEITY ANALYSIS

### 5.1 Sensitivity testing

This helps evaluate the durability and dependability of the baseline statistical findings by looking at the influence that alterations in supposition data or techniques employed in the analysis have on the inferences that were drawn from them. Sensitivity analysis checks how sensitive the results are to changes in key assumptions, like whether certain variables are included or not. It also checks how the results change



when different model specifications or estimation methods are used.

To account for delayed effects, we use a value of the main predictor variable (TRAIN-1) that is one year behind in the first test for sensitivity. The training of employees may influence employment in the tourism sector, but there can be a time lag involved. It takes time for employees to assimilate new skills, knowledge, and competencies after undergoing training programs (Dhar, 2015). Applying these newly acquired skills in their day-to-day work requires adjustment and adaptation, which can delay the full benefits of the training from being realized. Moreover, the implementation of training outcomes within an organization often necessitates adjustments in processes, procedures, and systems. This could involve redefining job roles, modifying work routines, or integrating new technologies. Like other industries, the tourism sector may exhibit a time lag in responding to such changes. The sector comprises various stakeholders, including tourism businesses, service providers, and government entities, each with their own decision-making processes and timelines. It may take time for these stakeholders to recognize the advantages of employee training, make strategic decisions, allocate resources, and implement operational changes. The findings of the study, which are expressly laid out in Column (1) of Table 5, indicate that introducing a one-year lag for employee training results in beneficial and statistically substantial effects on jobs in this particular sector. The time-dependent characteristics of the impact that the training policy has are further illuminated by these revised projections, which provide further insight. On the other hand, the qualitative outcomes of the baseline data do not change in any way, both in regard to their importance and their general trajectory.

In order to look for possible nonlinear effects, the squared value of the main predictor variable is used in the second sensitivity test (TRAIN2). Policies aimed at empowering employees may impact employment in the tourism sector in a nonlinear manner (Chiou and Droge, 2006). Initially, as employees engage in training programs and acquire new skills, there may be a gradual increase in their productivity and performance. The initial impact of training on employment might be relatively modest as the newly acquired skills are still being developed and applied. However, as employees become more proficient and efficient in their roles, the influence on employment can become more pronounced, leading to a nonlinear relationship between training and employment. Additionally, employee training programs often incorporate feedback mechanisms that enable organizations to assess the effectiveness of the training and make necessary adjustments. This feedback loop has the potential to have a nonlinear effect on the labor market. The findings that are given in Column (2) of Table 5 demonstrate both direct and indirect effects, respectively. According to the most recent estimates, the linear effect as well as the quadratic effect are both significant from a statistical point of view. The direct effect continues to point in the positive direction, indicating that there is a beneficial connection between empowerment of workers policies and employment in the tourism industry. However, the quadratic effect has a negative sign, indicating a retardation effect. This implies that successive training is associated with progressively diminishing effects on employment in the tourism sector.

These findings provide valuable insights into the non-linear dynamics between employee empowerment policies and employment in the tourism sector. They highlight the time-dependent nature of these effects. Despite this, the qualitative outcomes of the baseline results are unaffected by these insights when it comes to their importance and the direction in which they point.

As part of the third sensitivity assessment, we investigate the possibility of large-scale bias by eliminating India from the pool of potential employers. India is the most important contributor to our sample's tourism industry. Because of this exclusion, we are able to examine if the existence of an influencing point or an outlier has an effect on the outcomes (Bollen and Stine, 1990). Outliers can have a substantial impact on central tendency measures, violate the assumption of normality, and affect the validity of statistical tests. The results presented in Column (5) of Table 5 present the analysis results. We address concerns about potential bias resulting from the size of India's employment in the tourism sector by excluding the outlier that it represents. According to the most recent estimates, employee training maintains a positive effect that is statistically significant, despite the fact that the magnitude of this effect has become slightly less significant. It's important to note that these new estimates haven't significantly altered the previously obtained baseline results. By looking at how consistent the link is between training and jobs in the tourism industry in a number of made-up situations, these sensitivity tests help to make sure that our results are accurate and useful.

Table 5. Sensitivity tests

	(1)	(2)	(3)
TRAIN-1	1.617*** (0.510)		
TRAIN		5.113*** (1.700)	1.379*** (0.510)
TRAIN <sup>2</sup>		-0.020** (0.008)	
BUSTRAV	0.068** (0.027)	0.048 (0.031)	0.060** (0.028)
FOREX	4.490** (1.883)	5.046** (1.821)	5.128** (1.871)
GDPG	6.977** (3.448)	7.534** (3.704)	7.178** (3.633)
SITE	45.553*** (6.398)	41.203*** (6.538)	43.815*** (6.688)
INNOV	193.731*** (71.452)	180.128*** (68.296)	200.798*** (73.557)
adj. R <sup>2</sup>	0.971	0.970	0.969
F-test	363.227	304.218	300.732
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Dummies	Yes	Yes	Yes
N	1832	1848	1824

Notes. The table reports the baseline effects after applying alternative variable measures and sample structures. The pool sample period is 2000-2021. We use an OLS model with fixed effects and policy dummies. We cluster standard errors at the country level. Model (1) uses a one-year lag value of the key regressor (TRAIN<sub>-1</sub>) to capture lagged effects. Model (2) uses a squared value of the key regressor (TRAIN<sup>2</sup>) to capture nonlinear effects. Model (3) uses an alternative sample that excludes India (largest employer). \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## 5.2 Instrumental variable estimation

We assess the robustness of our estimates using methods based on instrumental variables (IV), in accordance with Greene's (2012) methodology. This helps us to address any concerns regarding the possibility of endogeneity. As an external instrument for the IV analysis, we make use of EDUQUAL, which measures the overall quality of the nation's higher education system. The World Economic Forum's report ([www.weforum.org](http://www.weforum.org)) contains the information. EDUQUAL is a measurement that determines how high the quality of a nation's higher education system is.



We found that the instrument has a weak link to our outcome variable EMPLTR (6.55%), but a strong link to the potentially endogenous regressor TRAIN (24.06%). As a result, we make the assumption that there is no correlation between the measurement error introduced by the instrument and the measurement error introduced by the regression. The instrument also has a rationale from an economic standpoint. A higher education system that is of high quality is capable of producing a pool of graduates who are well educated and skilled, as well as armed with the expertise and skills necessary for the field of tourism (Okolie et al., 2019). These graduates serve as a valuable resource for employee training programs, as they bring a solid educational foundation and subject expertise to the training process. Further, a high-quality education system understands the needs and demands of the tourism sector and tailors its curriculum to align with industry requirements (Gu et al., 2007). This ensures that graduates are equipped with relevant and up-to-date knowledge and skills that directly apply to the tourism industry.

We use a number of different estimation techniques in order to generate estimates that are as objective as possible. The two-stage least squares (2SLS) estimator, the two-step generalized method of moments (GMM) estimator, and the maximum likelihood conditional mixed process (CMP) estimator are some of these methods. We are able to generate accurate projections of the connection between education and employment in this particular industry thanks to these methods, which allow us to take endogeneity concerns into account. Table 6 shows the results of the estimates from the different IV regression models that were used to look into the link between training employees and jobs in the tourism industry. In the first column, labeled Column (1), you will find a presentation of the results obtained from the 2SLS estimator. This estimator starts by checking the validity of the instrument by putting employee training into the EDUQUAL, which is a measure of how good the higher education system is. There is evidence that both the IV instrument and the 2SLS estimator are reliable because the Kleibergen-Paap F statistic has a high value. Also, the fact that the Kleibergen-Paap LM statistic is not very small supports the idea that the IV variable is not very weak. The fact that the Stock-Wright statistic is quite large supports the idea that there is a connection between the instrument and the possibly endogenous variable. The results of the second stage of the 2SLS estimator show that TRAIN is still a useful and statistically significant indicator of job growth in the tourism sector. We talk about the results from the two-step GMM estimator in Column 2. This estimator uses the delayed initial variations of the dependent variable as the instrumental parameter (Arellano and Bover, 1995). Arellano and Bover were responsible for developing the two-step GMM estimator. The findings are consistent with the findings of the 2SLS estimator, and there is not any substantial proof of second-order autocorrelation found in the data. Additionally, TRAIN continues to display a constructive and significant relationship. The conditional mixed process (CMP) method, which utilizes distinct equations as a system for tackling possible problems associated with undetectable effects (Roodman, 2011), is presented in Column 3. This column presents the results that were obtained from using the CMP method. A high chi2 statistic means that the model was set up

correctly. On the other hand, an insignificant value for the Atanhrho correlation parameter means that there is a 10% chance that the staff training measure is endogenous. There is a positive and statistically significant link between staff education and jobs in the tourism industry, according to the results of the CMP estimator. Overall, the results from the different estimation methods all show that TRAIN continues to have a positive and significant value. This strengthens the link between training employees and jobs in this sector.

Table 6. Endogeneity analysis

	(1)	(2)	(3)
TRAIN	6.582* (3.696)	6.582* (3.696)	10.208* (8.110)
BUSTRAV	0.057 (0.040)	0.057 (0.040)	0.061** (0.024)
FOREX	4.823*** (1.850)	4.823*** (1.850)	5.031*** (1.161)
GDPG	7.124** (3.581)	7.124** (3.581)	7.736** (3.637)
SITE	43.230*** (8.380)	43.230*** (8.380)	34.719* (19.445)
INNOV	195.576*** (67.486)	195.576*** (67.486)	162.804** (81.477)
First stage			
EDUQUAL	5.322*** (0.766)		7.395*** (0.589)
Second stage			
Kleibergen-Paap LM_stat (p-v)	8.456 (0.004)	8.456 (0.004)	
Kleibergen-Paap F_stat	7.400	7.400	
Stock-Wright_stat (p-v)	8.770 (0.003)	8.770 (0.003)	
AR (2)		0.344	
Chi <sup>2</sup>			1507.815
Atanrho			-1.157
Fixed effects	Yes	Yes	Yes
Dummies	Yes	Yes	Yes
N	1812	1812	1812

Notes. The table reports the results of the endogeneity analysis. The outcome variable is tourism sector employment. The key independent variable is corporate worker training. Additional control variables include macroeconomic and institutional factors. The pool sample period is 2000-2021. Model (1) uses an IV model with the 2SLS estimator. Model (2) uses an IV model with the two-step GMM estimator. Model (3) uses an IV model with the CMP estimator. The external instrument used is the quality of higher education training (EDUQUAL). \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## 6 ADDITIONAL ROBUSTNESS CHECKS

The connection between policies that empower employees and employment in the tourism sector is not straightforward due to various factors which can influence the link between employee empowerment and their employment within the sector under discussion. For instance, seasonal variations in visitor numbers based on weather patterns can affect employment in tourism destinations (Gray et al., 2023). Warm and sunny seasons attract more tourists to beach destinations, while winter attracts visitors to mountainous regions for snow-related activities like skiing. Such fluctuations directly impact employment in the tourism sector.

Furthermore, social conditions also play a significant role. Social capital, which encompasses relationships, trust, and social connections within a community, can support employment in the tourism sector (Zhao et al., 2011). Strong social networks and collaboration among individuals, businesses, and community organizations facilitate the exchange of information, resources, and opportunities in the tourism industry. This leads to increased employment through referrals, partnerships, and the sharing of knowledge and expertise. In addition, economic informality, including informal economic activities and informal labor markets, can have both positive and negative effects on tourism sector employment (Lv, 2020). In many destinations, informal tourism activities like street vendors, informal tour guides, and small-scale accommodation providers contribute to

employment opportunities. These informal operators cater to specific niches, offer unique experiences, and provide flexible services that appeal to certain segments of tourists. Geopolitical conditions, particularly political stability and security are crucial factors influencing employment in the tourism sector (Lee et al., 2021). Destinations perceived as politically stable and safe are more likely to attract tourists and sustain tourism activities. Additionally, cultural characteristics and diversity impact communication and the exchange of experiences, positively influencing employment in the tourism sector (Koc, 2013). When destinations actively promote cultural interaction and understanding, they attract a diverse range of visitors seeking authentic experiences. This diversity creates demand for various tourism services and experiences, requiring a diverse workforce to cater to the needs and preferences of different cultural groups.

Relatedly, Terrorism is another factor that could exert significant and multifaceted effects on tourism and, consequently, on employment in the tourism sector (Samitas et al., 2018). The impact can vary depending on the severity of the terrorist incident, the location, the frequency of such incidents, and the response of both the government and the tourism industry. Finally, energy prices can have a significant impact on tourism employment, although the exact nature of the impact can vary based on a variety of factors, including the overall economy, the structure of the tourism industry in a particular destination, and the sensitivity of tourists to changes in energy costs (Poutakidou and Menegaki, 2023).

To assess the importance of these factors, we introduce new controls separately to address potential biases from collinearity. Equation (1) is re-estimated by incorporating the following distinct influences: First, the impact of a country's temperature (TEMP) and rainfall (RAIN) conditions, using data from the World Development Indicators database. Second, the effect of a country's social capital level (LEGATUM) and the size of its informal economy (INFORML), using information from the World Development Indicators database for INFORML and the Legatum Prosperity Index for a country. Third, the impact of a country's power distance (PDI) and geopolitical risk (GPR), using data from Hofstede (2001) and Caldara and Iacoviello (2022), respectively. Fourth, the impact of terrorist activity (TERR) and energy process (ENERG), using data from the Global Terrorism Database (annualized number of incidents) and the BP Statistical Review of World Energy report (Brent, US\$ per barrel), respectively. Following the results shown in Table 7, we can see that adding these new variables about the environment, society, and geopolitics does not really change the strong and positive link that already exists between training employees and jobs in the tourism industry. Additionally, most of the added controls exhibit statistical significance. A higher average yearly rainfall is associated with a lower volume of employment in the tourism sector. Stronger social capital structures and lower levels of economic informality are linked to higher employment in the tourism sector. Moreover, geopolitical risk amplifies the positive effect of employee training on employment in the tourism sector, while stronger power distance moderates the effect. Finally, higher levels of terrorism activity and energy prices, as expected, exert a dampening effect on tourism employment. We observe that there is a complicated relationship between terrorism and tourism, but recovery is

possible over time with good marketing, security, and government support. Additionally, there is a complex relationship between energy prices and employment in the tourism industry that is susceptible to a variety of outside factors, including the adoption of energy-efficient practices, changing marketing tactics, providing incentives, and diversifying the tourism product to lessen the impact on employment within the industry. In all, the extra measures help to reduce the effect that employee training has on employment within the tourism sector, but they do not alter the fundamental relationship that exists between the two.

Table 7. Additional robustness checks

	(1)	(2)	(3)	(4)
TRAIN	1.236** (0.498)	1.781*** (0.512)	1.572*** (0.401)	1.113** (0.256)
BUSTRAV	0.062** (0.027)	0.049* (0.025)	0.060* (0.034)	0.054* (0.114)
FOREX	-5.212*** (1.883)	-0.899 (1.196)	-2.031*** (0.670)	-6.023*** (1.438)
GDPG	7.013* (3.593)	7.202** (3.428)	0.926 (1.619)	7.002* (3.136)
SITE	30.551** (13.773)	-46.773 (36.706)	0.272 (9.040)	32.788** (11.484)
INNOV	205.683*** (73.886)	113.979* (58.193)	-34.243 (38.462)	145.311*** (67.322)
TEMP	9.470 (24.821)			
RAIN	-1.059* (0.971)			
LEGATUM		43.278** (18.003)		
INFORML		-36.710** (16.536)		
PDI			-15.805*** (3.046)	
GPR			2.556*** (0.933)	
TERR				-5.321*** (2.983)
ENERG				-1.677*** (0.763)
adj. R <sup>2</sup>	0.969	0.980	0.983	0.972
F-test	291.507	302.455	322.877	303.547
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Dummies	Yes	Yes	Yes	Yes
N	1723	1753	1698	1702

Notes. The table reports the baseline effects of employee training on tourism employment. Additional control variables include macroeconomic and institutional variables. The pool sample period is 2000-2021. We use an OLS model with random and fixed effects and policy dummies. We cluster standard errors at the country level. Model (1) controls for the effect of additional environmental conditions. Model (2) controls for the effect of additional social conditions. Model (3) controls for the effect of additional cultural and geopolitical conditions. Model (4) controls for the effect of terrorism activity and energy prices.

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## 7 DISCUSSION AND CONCLUSIONS

This study investigates the connection between employee training and tourism sector employment across multiple countries. We examine the effect of staff training on the tourism industry's jobs in a sample of eighty-four countries over a period of time from 1995 to 2021 using data from two different countries. In addition to this, we take into consideration the impact of a wide range of financial and institutional variables.

Our research is the first of this sort to effectively investigate the impact that employee empowerment policies, and more specifically, employee training, have on employment in the tourism sector in different countries. According to the results of our study, nations with greater amounts of employee training are inclined to observe an increase in the average number of jobs available in the tourism industry. This suggests that government initiatives aimed at improving employee empowerment policies can contribute to the development of a more robust foundation for increasing employment in the tourism sector. Nevertheless, our findings

indicate that modifications in training for staff might not have a quick effect on employment in the hospitality industry, nor might the effect be entirely linear. It is possible for there to be delays in the effects that training programs have on jobs, as well as for those effects to be nonlinear. Furthermore, a wide range of external factors can have an impact on the relationship between employee training and employment in the tourism sector.

In a broader context, the practical implications of employee training programs extend to bolstering employee empowerment within a tourism organization, consequently elevating their employability. To illustrate, these programs can furnish employees within the tourism sector with the necessary skills and knowledge to proficiently execute their duties. This proficiency not only heightens their effectiveness in their existing roles but also augments their overall employability, rendering them more versatile and adaptable to the evolving demands of the dynamic and seasonal tourism industry.

Getting these new skills not only makes them better at their current jobs, but it also makes them more employable by making them more flexible and able to meet the changing needs of the seasonal and ever-changing tourism industry. Furthermore, the newly acquired proficiencies position employees as strong contenders for promotions and leadership roles. Moreover, as employees amass fresh skills and broaden their knowledge horizons, their self-assurance in their capabilities amplifies. This heightened confidence in turn fuels their willingness to tackle novel challenges and assume added responsibilities, fostering a continuous learning mindset. The commitment to ongoing learning facilitates sustained professional development, enabling employees to remain abreast of industry trends and advancements. This, in turn, enhances their appeal to present and prospective employers. Equally noteworthy, training endows employees in the tourism sector with the capacity to adeptly embrace evolving technologies and work methodologies. This adaptability renders them particularly attractive to employers in search of individuals adept at swiftly integrating novel tools and processes.

Despite the fact that our investigation has uncovered preliminary proof of a positive link between training and employment in the travel and tourism industry, it is important to note that there are a few restrictions that must be taken into account. One limitation pertains to the need for a more refined measure of employee training that better approximates the actual training efforts, particularly within the context of the tourism sector. Employee training can function as a pertinent and valuable surrogate for employee empowerment under specific circumstances, although it may not comprehensively encompass all facets of empowerment. Whether or not training employees is a good substitute for empowering them depends on the specific goals of the study, the industry, the company culture, and the overall factors that lead to empowerment. It is known that training employees alone might not be enough to fully understand this complex idea of empowering workers in some ways. In addition, despite the fact that we have taken into account the possibility of endogeneity impacts, we cannot completely rule out the possibility of bias caused by omitted variables. In conclusion, it is essential to take into account the roles that additional institutions play and to carefully investigate the ways in

which they interact with one another across countries and over time. These institutions are extremely important contributors to the formation of employee empowerment policies and have a significant impact on employment in the tourism industry. By analyzing their impact, one can gain useful insights into the larger political and socioeconomic variables that have an effect on the expansion of the tourism sector. Therefore, future research should aim to investigate the specific roles that each of these institutions plays, as well as the dynamics that govern their interactions, in order to further improve our understanding of the connection involving employee empowerment policies and jobs in the field of tourism.

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