

Determinants of the Inbound Tourism: The Role of Effectiveness of Legal System and Protection of Property Rights

Abstract

This paper investigates the effects of the effectiveness of the legal system and protection of the property rights on the tourism development in the panel data of 152 countries over the period 1995–2015. The paper considers fixed-effects, Hausman–Taylor (HT), and system generalized method of moments (GMM) estimations and the results demonstrate that a higher level of legal system quality and a better protection of property rights promote inbound tourism. The results also show that a higher judicial independence and a better enforcement of contracts enhance the development of tourism. A lower level of regulation on restrictions on the sale of a real property increases the inbound tourism. In addition, a lower cost of crime and military interference in the rule of law and politics, as well as a higher reliability of police, are positively associated with tourism indicators. The benchmark results are robust to focus on the different groups of countries and measures for tourism development as well as to exclude the outlier observations.

Key Words: development of tourism sector; inbound tourism; legal systems; property rights; panel data estimators

1. Introduction

The tourism sector has a key role in economic performance and its growth rate is higher than international trade growth in the world over the period 2010–2017. Tourist arrivals at the international level have raised from 680 million in 2000 to 1,322 million in 2017. At this

stage, the market share in developing countries is 36.7% in 2000, and it is observed as 45.1% in 2017. The growth rate of tourist arrivals in developing countries is 7.9% and it is greater than the developed countries (5.7%) in 2017. Furthermore, international tourism receipts have been calculated as \$1,220B in 2017 (The United Nations World Tourism Organization (UNWTO), 2018).

Taking into consideration the data presented above, tourism has been considered as the key determinant of the economic development, particularly in emerging economies. For instance, Balaguer and Cantavella-Jorda (2002), Can and Gozgor (2018), Chen and Chiou-Wei (2009), Kim et al. (2006), Oh (2005), Shahzad et al. (2017), and Tang and Tan (2015) obtain the evidence in favour of the “tourism-led growth hypothesis” both in developing- and developed countries. Brida et al. (2016) have recently reviewed more than 100 papers and have demonstrated that international tourist arrivals are positively related to the economic development in general. It is also noteworthy to note that the tourism sector opens up new employment opportunities and increases the capital stocks (Blake et al., 2006; Inchausti-Sintes, 2015). The tourism receipts are also the significant source of foreign currency with regards to funding the external deficits (Dwyer and Forsyth, 1993). Furthermore, tourism sector improves the terms of trade and helps to adjust the external imbalances (Seetanah, 2011). Overall, potential determinants of the development of the tourism sector are crucial in both developing- and developed economies in terms of various issues. In this backdrop, we aim to examine the determinants of the inbound tourism and pay special attention to the efficiency of the legal system and property rights.

The legal system is important because legal institutions must protect the civil rights and property of all individuals from the aggressive manners. Legal institutions must also enforce contracts correctly, effectively, and quickly. At this stage, the effectiveness of the legal system and the protection of the property rights can affect the tourism sector through

many channels. The main channel is the effect of being the institutional quality that is the effectiveness of the legal system and the protection of property rights are one of the most prominent elements of democratic governance with the freedom of the press as well as fair and transparent election system. Accordingly, the index of the legal system of protection of property rights captures various issues, such as the business costs of crime, enforcement of contracts, impartial courts, the integrity of the legal system, judicial independence, military interference in the rule of law and politics, protection of property rights, regulatory restrictions on the sale of real property, and reliability of the police; therefore, it is an important indicator of the quality of the institutions.

Secondly, the fact that the enforcement of contracts can be important for tourists, tourism agencies, and tourism companies. In countries, where the enforcement of contracts is higher, damages are more likely to be compensated. The enforcement of contracts should be a determinant of the development of the tourism sector, especially in the case of tourists who avoid the ritual. Similarly, it is important to provide impartial courts and judicial independence in the solution of potential conflicts. When tourists and tourism companies face the legal problems, they look for impartial courts and judicial independence in the solution of conflicts. Especially, developing countries have not yet completed their infrastructure problems and infrastructure investments are important in terms of economic performance in general and the development of tourism in particular. Infrastructure investments, which necessary for the development of tourism, are generally expensive and long-term investments. Therefore, private companies, which perform these investments, may want to solve potential problems with an effective and integrated judicial system, instead of resolving potential problems with a constantly changing political power. In short, impartial courts, the integrity of the legal system, and judicial independence will be important in terms of decisions to be taken by tourists as well as business and tourism companies to invest in long-term. An

integrated tourism law to the legal system is also important for the sustainable development and management. It is also noteworthy to note that all of these parameters of the effectiveness of the legal system will promote the transparency of public procurement and provide a decline in the level of corruption; therefore, the effectiveness of the legal system enhances the development of tourism sector by reducing corruption. In particular, foreign investors can take the effectiveness of the legal system and the level of corruption into consideration when they decide to invest in which country's tourism industry.

Thirdly, the protection of the property rights and regulatory restrictions on the sale of real property can directly affect the inbound tourism. Specifically, a higher level of property rights for the firms in the tourism sector can promote the sustainability of tourism development. At this stage, providing a clear definition of property rights leads to efficient market conditions in tourism demand and tourism supply. In addition, lower regulatory restrictions on the sale of real property can increase the number of real property sales to foreigners. As more foreigners start to buy real estates, the number of relatives and friends from their country can be expected to increase. In a similar way, tourism-oriented real estates can be demanded by foreigners to establish hotels and tourism facilities. For this reason, it may be expected that reducing the restrictions on the sale of real property will be a positive impact on the tourism sector.

Fourthly, military interference in the rule of law and politics can affect the inbound tourism. Specifically, the increase in the weight of the military in social life can create ambiguity and uneasiness in terms of tourists, and tourists can dismantle their travels to these countries (Gozgor et al., 2017). In addition, countries with strong military interventions can channel resources from tourism investments to finance military activities that will lead to a reduction in tourism investments and infrastructure spending in tourism (Weaver, 2011). These issues can also negatively affect the inbound tourism.

Finally, business costs of crime and the reliability of police can also affect the inbound tourism. Specifically, a higher crime rate decreases the number of international tourists since crime is one of the indicators of “image” of the country. A higher crime rate is also the indicator perception of security in destinations. Finally, a higher crime leads to an increase in the costs since firms in tourism sector can demand a higher insurance premium to cover the cost of possible crime incidents (Moyo and Ziramba, 2013). Similarly, a lower reliability of police can increase the visible and invisible costs of tourists; for instance, police can be intolerant to the actions of foreign people or they may claim a bribe to make general transactions. In short, a lower reliability of police should be negatively related to the inbound tourism (Tyagi et al., 2016).

At this juncture, there are several papers to analyse the impacts of indicators for quality of institutions on inbound tourism indicators. However; to the best of our knowledge, there is no paper in the literature that analyses the impact of the measures of the legal system and property rights in tourism development. Our paper also enhances the previous findings on the effects of indicators of institutional quality on tourism development in many different ways. Firstly, we utilize several panel data estimation techniques. Specifically, we implement fixed-effects, the HT, and system GMM estimators by considering several time-variant and time-invariant control variables. Secondly, our paper investigates the effects of the index of the legal system and the protection of property rights (including its various measures) on the number of tourist arrivals and the tourism receipts in the panes dataset of 152 countries for the period from 1996 to 2015. In other words, our study provides the dataset by considering a greater period and higher cross-sections (countries). Thirdly, the paper implements various robustness checks by focusing on countries at the different development stage, by using several indicators of the legal system and the protection of property rights, by excluding the outlier observations, and by excluding the observations in different continents. The empirical

results indicate that a higher quality of the legal system and a better protection of property rights enhance the inbound tourism. Furthermore, the effects of the legal system and protection of property rights on the inbound tourism are higher in low-income and lower middle economies than upper-middle and high-income economies.

The remainder of the study is organised as follows. Section 2 provides the literature review. Section 3 clarifies data, econometric estimation procedure, and empirical model. Section 4 represents empirical findings. Section 5 implements robustness analysis of the baseline findings. Section 6 argues the potential implications of findings. The last section provides the conclusion.

2. Previous Literature

As we have discussed in the introduction, there is the significant share of the tourism sector in terms of employment and output. Therefore, both developing and developed economies aim to enhance the development of tourism by raising the number of international tourists and tourism receipts. At this stage, understanding the determinants of the tourism indicators is a noteworthy research task. For this purpose, various cultural variables, geographical variables, macroeconomic indicators, risk and uncertainty indicators (e.g., climate change, natural disasters, and outbreaks of epidemic diseases) are used as possible drivers of the inbound tourism indicators (Crouch, 1994; Kubickova, 2018; Peng et al., 2014; Song et al., 2009 and 2012; Wang, 2009).

In addition to the above-mentioned controls, the impact of institutional quality indicators of development of the tourism sector has also been investigated. At this stage, corruption has been a strong indicator that can significantly affect the indicators of inbound tourism (Das and DiRienzo, 2010; Demir and Gozgor, 2017; Lv and Xu, 2017; Propawe, 2015; Saha and Yap, 2015). Press freedom is another representative indicator for quality of

institutions that can significantly affect tourism indicators (Demir and Gozgor, 2018; Das and Dirienzo, 2009).¹ On the other hand, democracy and political instability (including terrorism) are also measures of institutional quality and they are important in the absence of violence. At this point, our measures (indices of the legal system and the protection of property rights) not only capture the absence of violence, but also consider a wider range of governance quality. Specifically, we consider the measures of indicators of the efficiency of the legal system, such as the enforcement of contracts, judicial independence, impartial courts, and integrity of the legal system. Our measures also capture the protection of property rights and regulatory restrictions on the sale of real property. In addition, business costs of crime and reliability of the police are also used by our baseline index. Finally, we consider the military interference in the rule of law and politics, which is also a leading indicator of the institutional quality and it is used by previous papers in the tourism literature.

At this stage, there are several papers in the literature to analyse democracy, political instability, and other similar variables on tourism development. For example, Saha and Yap (2014) examine the impact of political instability and terrorism on inbound tourism for the period from 1999 to 2009 in the panel dataset of 139 countries. The authors find that political instability and terrorism negatively affect the tourism development. Balli et al. (2016) also observe that the institutional quality, which is measured by a dummy variable for the economic freedom and index of civil liberty, is the significant variable in choosing the destination country in the panel dataset of 34 OECD countries and the panel dataset of 52 low income and lower middle-income economies for the period from 1995 to 2010. However, the perception of corruption does not significantly affect the inbound tourism. Similarly, Saha et al. (2017) investigate the effects of the indices of the civil liberties on the inbound tourism in the panel dataset of 110 countries for the period from 1995 to 2012. According to the

¹ There are also papers to examine the effects of terrorism on the inbound tourism (e.g., Samitas et al., 2018).

findings, the index of the civil liberties promotes the inbound tourism. Using the panel dataset for the period from 1984 to 2014, Gozgor et al. (2017) analyse the impact of the military interference in the rule of law and politics on tourist inflows from 71 countries in Turkey. Their findings demonstrate that military in politics is negatively associated with the inbound tourism.

There are also papers in the literature that finds the significant impact of the crime on the inbound tourism. For example, Ryan (1993) provides the theoretical background on how crime can affect the tourism. Considering fixed-effects and dynamic GMM estimations, Neumayer (2004) observes that conflict, human rights violations and political violence are negatively related to the tourism development in more than 100 countries. Using the time-series analysis and the monthly dataset, Moyo and Ziramba (2013) show that measures of crime negatively affect inbound tourism in South Africa for the period from March 2003 to April 2011. Altindag (2014) finds the negative impact of crime on the international tourism revenue and the number of tourist arrivals in the panel dataset of 35 European countries for the period from 1996 to 2003. Mehmood et al. (2016) also observe that there is a dynamic and a negative relation between the crime and inbound tourism in the United States (U.S.) for the period from 1984 to 2013. Finally, Santana-Gallego et al. (2017) demonstrate that both crime and terrorism are negatively associated with the international tourist arrivals in the panel dataset of 171 countries for the period from 1995 to 2013. However, corruption does not significantly affect the inbound tourism.

Overall, we observe that there are the positive and the significant effects of the indicators of institutional quality upon international tourist arrivals in general. Crime also negatively related to the inbound tourism. At this stage, we focus on the effects of the legal system and protection of property rights on the inbound tourism since there is no evidence for the impact of the legal system and the protection of property rights on the inbound tourism

indicators. In addition, previous papers have generally applied the fixed-effects estimations; however, we use various panel data estimators.² Furthermore, there is a lack in the previous paper in the implementing robustness checks; such as, considering both time-invariant and time-variant controls, analysing the economies at different developmental level, considering the different indicators of institutional quality and tourism development, and excluding the outlier observations. In this backdrop, we aim to fill those gaps in the literature by using the impact of the efficiency of the legal system and protection of property rights on the inbound tourism and by utilizing several econometric methods.

3. Data, Empirical Model, and Econometric Estimations Procedure

3.1. Data

The paper includes an unbalanced panel dataset over the period 1995–2015 in 152 countries.³ We also consider 88 high-income economies and 64 low-income economies following the income classification of the World Bank in 2018. The list of countries are reported in Appendix A.

The data for the index of the legal system and protection of property rights are collected from the Economic Freedom dataset of Fraser Institute provided by Gwartney et al. (2017). According to Gwartney et al. (2017), the legal system and the security of the property rights is the most important function of government and the protection of the rights of individuals and property is the key element of economic freedom. Specifically, an efficient legal system should provide not only the rule of law and the protection of property rights but also an independent and unbiased judicial system as well as an impartial and effective enforcement of the contracts (Voigt et al., 2015). At this stage, the index of legal system and

² Refer to Gallego et al. (2018), for a detailed review of the previous tourism papers, which have implemented the dynamic panel data estimation techniques.

³ Since the frequency of the economic freedom dataset is the five-year for the period from 1970 to 2000, we have only data in 1995 in the 1990s. Note that the frequency of the data is annual for the period from 2000 to 2015.

the security of property the average of nine indicators: “i) judicial independence, ii) impartial courts, iii) protection of property rights, iv) military interference in rule of law and politics, v) integrity of the legal system, vi) legal enforcement of contracts, vii) regulatory costs of the sale of real property, viii) reliability of police, ix) business costs of crime.”⁴ The scores from those variables, which measure the efficiency of the legal system and security of property rights, are also adjusted to reflect inequalities in the legal treatment of women. In short, the index of the legal system and the security of property rights in the Economic Freedom dataset provides the comprehensive and comparable measures for quality of legal institutions in various countries. In the related dataset, 10 and 0 are the maximum and the minimum scores and higher scores indicate the higher efficiency of the legal system and the security of property rights. According to our data, some countries have increased the efficiency (score) of the legal system and the security of property rights. For instance, the value of the legal system and the security of property rights is 3.06 in 1995 and the value is observed at 5.76 in 2015 in South Africa. However, some countries have decreased the efficiency (score) of the legal system and the security of property rights. For instance, the value of the legal system and the security of property rights is 5.76 in 1995, but the value is observed at 4.45 in 2015 in Brazil.

Dependent variable of the empirical model is the number of tourist arrivals (i.e. inbound tourism), and the related data are obtained from the World Development Indicators (WDI) database of the World Bank. We also use another indicator of inbound tourism that is the tourism receipts from international inbound visitors (current U.S. Dollars), including payments to national carriers for international transport. Following the previous literature, various controls are also considered. Specifically, we consider macroeconomic indicators, such as the GDP per capita (current U.S. Dollars), nominal exchange rate (official exchange

⁴ Refer to Gwartney et al. (2017, pp. 265–267), for details of the data sources and the methodology on how the indices of the legal system and the security of property rights of the economic freedom dataset are constructed.

rate domestic currency per U.S. Dollars), and (nominal) trade openness.⁵ Those data are collected from the WDI database. We also consider geographical control variables, such as the coastline (km), the coastline per total land area, landlocked countries (dummy variable if a country is landlocked, it is equal to one, otherwise it is zero), total land area (km²), and total surface area (km²). These data are obtained from the World Fact Book database of the Central Intelligence Agency (CIA). All of these variables are considered in the natural logarithm form in the estimations. Finally, we consider the number of heritage since inclusion in the World Heritage List can attract more tourists, and thus it can also be a significant driver of the inbound tourism (Huang et al., 2012). The related data for the World Heritage List are collected from the United Nations Educational, Scientific and Cultural Organization. In addition, the descriptive statistics are reported in Table 1.

[Insert Table 1 around here]

Furthermore, the correlation matrix is provided in Table 2. As expected, the correlation between the legal system and property rights in logarithmic form and the tourist arrivals in logarithmic form is 0.55.

[Insert Table 2 around here]

The scatter plot that showing the relation between the log of the number of tourist arrivals and index of the legal system and property rights is reported in Figure 1. It is observed that there is the positive relationship between the related variables. In short, the findings from the preliminary data analysis demonstrate that a higher level of efficiency of the legal system and a protection of the property rights is positively associated with the inbound tourism..

[Insert Figure 1 around here]

⁵ It is calculated as the sum of exports and imports of goods and services relative to GDP.

3.2. Empirical Model

Following the previous papers (e.g. Balli et al., 2013 and 2016; Gholipour et al., 2016), we estimate the following model specifications to determine the inbound tourism:

$$\text{LogINBTO}_{it} = \alpha_0 + \alpha_1 \text{LogLSPR}_{it} + \alpha_2 X_{it} + \varepsilon_{1it}$$

(1)

$$\text{LogINBTO}_{it} = \beta_0 + \beta_1 \text{LogINBTO}_{it-1} + \beta_2 \text{LogLSPR}_{it} + \beta_3 X_{it} + \varepsilon_{2it}$$

(2)

In Equations (1) and (2), i denotes the countries and t denotes the period under concern. LogINBTO_{it} is log international tourist arrivals. LogINBTO_{it-1} is lagged log tourist arrivals and captures the "persistence effect", that is tourists have gone to a place and they may have a desire to visit the same place once again. LogLSPR_{it} is the log of the legal system and the property rights index. In addition, we consider the index of the legal system and property rights in the panel data estimation. Finally, X_{it} denotes "vector of controls". ε_{it} represents an error-term.

3.3. Estimation Procedures

Mainly, we estimate the equations in above by implementing the fixed-effects estimators and their consistency has been checked by Hausman test. Given that the robust standard-errors (clustered at country level) are used, implementing a traditional Hausman test will create the size distortions. Therefore, we run the "robust Hausman test" in order to avoid potential size distortions.

In some cases, fixed-effects estimators can be weak since they ignore time-invariant tourism variables. At this point, the paper implements the estimator of Hausman and Taylor (1981), aka HT estimations, which also captures the time-invariant variables. In short, we implement both the fixed-effects and the HT econometric methods to handle potential "omitted variable bias" in estimations.

Furthermore, the fixed-effects estimations assume a “strict exogeneity” that is valid when we do not have any lagged dependent variables in the fixed-effect estimations. Specifically, there could be endogeneity issues, which terminate the strict exogeneity assumption. Using the system generalized method of moments (GMM) estimations proposed by Arellano and Bover (1995) and Blundell and Bond (1998), we address potential endogeneity issues. Specifically, there could be an endogeneity bias (also known as the omitted variable bias) which is caused by the exclusion of lagged tourist arrivals as the right-side variable. Indeed, past tourist arrivals can significantly affect the current tourist arrivals, the issue known as the persistence effect. To put it differently, inbound tourism can be persistent over the period under concern.

The empirical model in Eq. (2) is estimated by the system GMM estimation technique since it is able to eliminate the potential problems of the autocorrelation and the presence of different orders of integration in the panel datasets. We also run the two-stage estimation procedure with the consistent estimators to avoid potential multicollinearity between controls. The instruments are collapsed, as this is recommended by Roodman (2009).⁶ At this stage, two assumptions must be fulfilled to yield the efficient results in the estimations. The first assumption is that instruments have to be unrelated to the error-term. Secondly, instruments have to be correlated with instrumented variables. In this regard, we need to find an evidence in favour of first-order autocorrelation in the residuals; however, second-order autocorrelation must be rejected. Furthermore, the Sargan test statistic must not reject the null-hypothesis in order to avoid potential over-identification problem. We include time fixed-effects when we run the system GMM estimators and address the potential unobservable heterogeneity since there could be other heterogeneities across the countries during the coverage period that can drive tourism indicators.

⁶ Specifically, we use two-step system-GMM estimations by running the `xtabond2` Stata package proposed by Roodman (2009).

4. Empirical Findings

Findings from baseline (fixed-effects) regressions for the impact of the legal system and property rights on the number of tourist arrivals are reported in Table 3.

[Insert Table 3 around here]

The findings of the robust Hausman test show that findings from the fixed-effects estimators are consistent. Specifically, Column I reports findings of a direct impact of the legal system and property rights (in the log) on the number of tourist arrivals (in the log) without considering controls. The direction of the relationship is positive and significant (0.54) and a high level of the legal system and property rights yield to a higher level of tourist arrivals.

Column II provides the findings of the impact of the legal system and property rights on the number of tourist arrivals by adding macroeconomic controls. Findings in Columns (III) to (V) control not only for macroeconomic control variables but also geographical indicators and the number of heritage. Finally, as an alternative, the findings in Column (VI) use the level form of the legal system and the property rights index rather than the legal system and the property rights index in the logarithmic form. We find the positive and the statistically significant impact of the legal system and the property rights index on the tourist arrivals is valid when we use different controls and specifications of the legal system and property rights index. Put it differently, the main evidence is also statistically robust as we include several control variables. Specifically, the baseline finding in Column (III) indicates that a 1% rise in the legal system and property rights index yields to a 0.18% higher inbound tourism.

When we look at the control variables, the per capita income, nominal exchange rate, and trade openness are positively associated with the tourist arrivals, as expected. If income per capita rises, a country can attract a higher number of tourists. The positive impact of nominal exchange rate means that as a domestic currency gets cheaper, a country attracts a higher number of tourists. The positive impact of trade openness indicates that the greater economic relationships with foreign countries are positively associated with the number of tourists. These results are in parallel with the previous results for the inbound tourism (Balli et al., 2013 and 2016; Gholipour et al., 2016). In addition, that number of heritage in the World Heritage List is positively related to inbound tourism, but its coefficient is not significant. This evidence indicates that the number of heritage has the trivial impact on tourists' decisions when they choose the visiting destinations. This evidence is in line with the previous results of Huang et al. (2012).

Furthermore, the findings of the impact of the legal system and property rights index on the tourist arrivals in low-income and lower-middle-income economies as well as in the upper middle income and high-income economies are reported in Table 4. In addition, the findings from the impact of the legal system and property rights index on the tourist arrivals in the non-OECD countries and the OECD countries are provided in Table 4.

[Insert Table 4 around here]

Columns (I) and (II) provide the findings in the low-income and lower-middle-income economies and Columns (III) and (IV) provide the findings in the upper middle income and high-income economies. Columns (V) and (VI) provide findings from the non-OECD countries and Columns (VII) and (VIII) provide findings from the OECD countries. Findings from the robust Hausman test show that the findings from fixed-effects estimators are consistent. All of these findings are in line with the baseline evidence that is the legal system and the property rights index is positively associated with the number of tourist arrivals, not

only in the low-income and lower-middle-income economies and the upper middle income and high-income economies but also the non-OECD and OECD countries. The evidence is robust to consider different indicators of the legal system and the property rights index, but the level form of coefficient in the legal system and the property rights index is statistically significant at the 10% level in all groups of countries.

In addition, we observe that the impact of the legal system and property rights index is higher in the low-income and lower-middle-income economies than the upper middle income and the high-income economies. Similarly, the impact of the legal system and property rights index is greater in non-OECD countries than in OECD economies. This evidence implies that achieving a higher level of legal system and property rights is especially a significant tool for the policymakers of the poor economies in order to attract a higher number of tourists.

The findings of the baseline findings of the impact of the sub-indicators of the legal system and property rights measure on the number of tourist arrivals are reported in Table 5.

[Insert Table 5 around here]

The findings from the robust Hausman test show that the findings of the fixed-effects estimations are consistent. The findings in Table 5 show that all aspects of the index of the legal system and property rights are positively associated with the number of tourist arrivals. To put it differently, the higher values for the sub-indexes of the legal system and property rights enhance the inbound tourism. The marginal impact of regulatory restrictions on the sale of real property (0.153) is at the highest level, and the marginal impact on the integrity of the legal system is at the lowest level (0.026). In addition, most of the sub-index of the legal system and property rights are statistically significant with the exceptions of indices of the impartial courts and the integrity of the legal system. In the next section, we consider the various robustness analysis to check the validity of the baseline findings.

5. Robustness Analysis

5.1. Considering Different Estimation Procedures

Table 6 provides findings from system GMM estimators (Columns I and II) and HT estimators (Columns III and IV) to analyse the robustness of the baseline findings to the different estimators and the model specifications. To include a potential persistence of the inbound tourism, we consider the lagged international tourist arrivals. Doing so, we also address a possible endogeneity problem by running a system GMM estimator of Arellano and Bover (1995) and Blundell and Bond (1998). According to the findings of the Sargan test, a possible over-identification problem is rejected. Furthermore, the findings of autocorrelation test indicate that there a first-order autocorrelation; however, a second-order autocorrelation is not rejected. In short, it is found that the necessary assumptions have been satisfied. The coefficient of the lagged inbound tourism is 0.71, and it is statistically significant. This evidence indicates the high-level persistency in the international tourist arrivals.

[Insert Table 6 around here]

In addition, the results of the control variables are similar to the baseline findings of the fixed-effects estimations, and the coefficients of controls are significant. In Column (I), we obtain the coefficient of the legal system and property rights in the natural logarithmic form is positive and statistically significant (0.34). This evidence implies that a 1% rise in the legal system and property rights is associated with a 0.34% rise in international tourist arrivals. Similarly, in Column (II), we find the coefficient of the legal system and property rights in the level form is also positive and statistically significant (0.11).

We also attempt to solve a possible omitted variable bias and include the time-invariant variables (log coast in km, log coastline per total land area, and the dummy variable for the landlocked countries). Doing so, we implement the HT estimators to analyse the impact of the index of the legal system and property rights on the international tourist arrivals

and the results are reported in Columns (III) and (IV). Taking the other papers into consideration, the per capita income, nominal exchange rate, and trade openness are treated as endogenous variables in the HT estimators. The findings of the control variables are similar with the baseline regressions, and all main control variables are positively associated with the international tourist arrivals and the coefficients are significant. Analysing time-invariant controls, the coefficient of the coastline (km) in the natural logarithmic form is found as significant (at the 1% level) and it is positively associated with the international tourist arrivals. Although the log coastline per total land area and the dummy variable for landlocked countries are negatively related to the international tourist arrivals as expected, their coefficients are statistically insignificant. Specifically, Column (III) provides that the coefficient of the index of the legal system and property rights is positive and statistically significant (0.20). This evidence implies that a 1% rise in the index of the legal system and property rights press is related to a 0.2% rise in the international tourist arrivals. Similarly, in Column (IV), we observe the coefficient of the legal system and property rights in the level form is also positive and statistically significant (0.03). This evidence means that a higher level of legal system quality and a better protection of property rights promote inbound tourism. Overall, the effects of the legal system and property rights on the international tourist arrivals are positive and statistically significant as we tackle a possible endogeneity and the omitted variable problems in model specifications by implementing different estimators and adding time-invariant and time-varying control variables.

5.2. Robustness to Exclude the Outliers and the Countries at the Different Regions

Table 7 provides the next robustness analyses, which consider another indicator of the development of the tourism sector. We use the log of international tourism receipts rather than the log of the number of international tourist arrivals. The findings are similar to the baseline

results that is the index of the legal system and property rights is positively associated with the development of the tourism sector.

[Insert Table 7 around here]

We also implement the robustness analysis, which excludes the outlier observations for the inbound tourism and the index of the legal system and property rights. Following Gozgor and Ranjan (2017), we describe the outliers as observations, “which are more than two standard deviations away” from the average. Besides, effects of the legal system and property rights on international tourist arrivals can depend on the countries in different regions. At this stage, we count out the observations in Asia, Latin America, and Sub-Saharan Africa countries to check the sensitivity of the baseline findings. Doing so, we run the baseline regressions by excluding observations in each continent at one time. Baseline results remain robust when we exclude extreme observations and the observations in each continent. At this point, the baseline findings are not utilized by extreme observations and are not dominated by observations from related regions.

In short, the findings of the sensitivity analysis indicate that a greater legal system quality and a better protection of property rights promote inbound tourism and their coefficients are significant in each and every case.

6. Discussion and Policy Implications

In this paper, we observe that a higher level of legal system quality and a better protection of property rights lead to a higher level of the inbound tourism. The findings demonstrate that the indicators of legal system quality and protection of property rights may be considered in tourism demand model frameworks as a potential determinant of tourism indicators. We also observe that potential gains in the number of tourist arrivals from providing a higher level of legal system quality and a better protection of property rights are greater in the poor countries

than the rich countries. Our findings are similar to the evidence of Das and Dirienzo (2010) as they find that the positive effects of reducing the corruption on tourism development are higher in the developing economies than the developed economies. The findings also indicate that a higher judicial independence and a better enforcement of contracts enhance the inbound tourism. A lower level of regulation on the restrictions on the sale of real property promotes the inbound tourism. In addition, a lower cost of crime and military interference in the rule of law and politics, as well as a higher reliability of police, are positively associated with tourism development. The results for effects of crime and military intervention in politics on the development of tourism are in line with the previous findings of Moyo and Ziramba (2013) and Gozgor et al. (2017), respectively.

We can discuss several policy implications of the results. Firstly, a higher level of legal system quality and a better protection of property rights can provide the efficiency of usage in the scarce resources. Secondly, to enhance the tourism, policymakers should provide impartial courts and judicial independence in the solution of conflicts. This is even a more issue in developing countries since they have not yet completed the infrastructure investments in the development of tourism sector and private companies desire to solve conflicts with an effective and integrated judicial system. A higher level of legal system quality and a better protection of property rights can also decrease the level of corruption; therefore, the effectiveness of the legal system enhances the development of tourism by decreasing corruption. The legal system quality and the protection of property rights, which is a strong indicator of institutional quality, can directly promote the inbound tourism.

Thirdly, policymakers should provide a clear definition of property rights since it promotes inbound tourism. Furthermore, according to our findings, providing lower regulatory restrictions on the sale of real property can increase the number of real property sales to foreigners. Similarly, reducing the military interference in the rule of law and politics

positively affects the inbound tourism. This can decrease the uncertainty in tourists and tourism firms when they decide their travel decisions and tourism investments.

Finally, we find that a higher crime rate decreases the number of international tourists since crime is one of the leading indicators of “image” of the country. Crime is also an indicator perception of security. Looking at the tourism firms, a higher crime rate results in a higher insurance premium to cover the cost of possible crime incidents. Therefore, policymakers should also aim to decrease the crime rate to promote the inbound tourism since the negative image and higher insurance premium will discourage the arrivals of international tourists. In addition, since we find that a lower reliability of police should be negatively related to the inbound tourism, and therefore, the control mechanism over the police needs to be increased. In short, policymakers, particularly in poor economies, should attempt to improve the effectiveness of the legal system and the protection of the property rights to enhance the inbound tourism.

7. Conclusion

In this paper, we examined the effects of the legal system and the protection of property right on the inbound tourism in the panel dataset of 152 countries for the period from 1995 to 2015. For this purpose, we implemented not only the fixed-effects estimators but also the system GMM estimators to solve a possible endogeneity problem. We also utilized the Hausman–Taylor method to solve a potential omitted variable problem. In addition, we used several model specifications, and the findings show that promoting the efficiency of the legal system and the protection of the property rights is positively associated with the inbound tourism. We also performed several robustness checks and analysed the economies at the different development level. We also addressed a potential omitted variable problem by considering various geographical and macroeconomic controls. Furthermore, we focused on the sub-

indexes of the legal system and property rights. Finally, we performed various robustness analysis by excluding outlier observations and excluding countries in different continents. Our baseline results are robust to perform all of these robustness analyses and the sensitivity check.

In the countries with a higher efficiency of the legal system and property rights, legal institutions can quickly and rightly protect the civil rights and property of all individuals from the aggressive manners. Therefore, enhancing the well-defined property rights of individuals (especially the foreigners) can be a significant policy tool to promote the inbound tourism. Our study does not actually suggest that tourists take the legal system and property rights into account when they choose their destinations, but enhancing institutional quality may work in attracting more international tourists. Overall, the results indicate that a higher efficiency of the legal system and property rights can be a significant policy tool for providing the sustainability of tourism development.

Future studies on the related topic can investigate the role of other measures of the quality of institutions on tourism indicators. For instance, the European Union countries can be a natural candidate for examining the effects of institutional quality on inbound tourism because they are the biggest source of outbound tourism. At this stage, the potential impact of enhancing the quality of institutions in attracting the European tourists can be analysed.

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Figure 1. Scatter Plot for the Relationship between the Log Number of Tourist Arrivals and the Index of Legal System and Property Rights (Period Average)

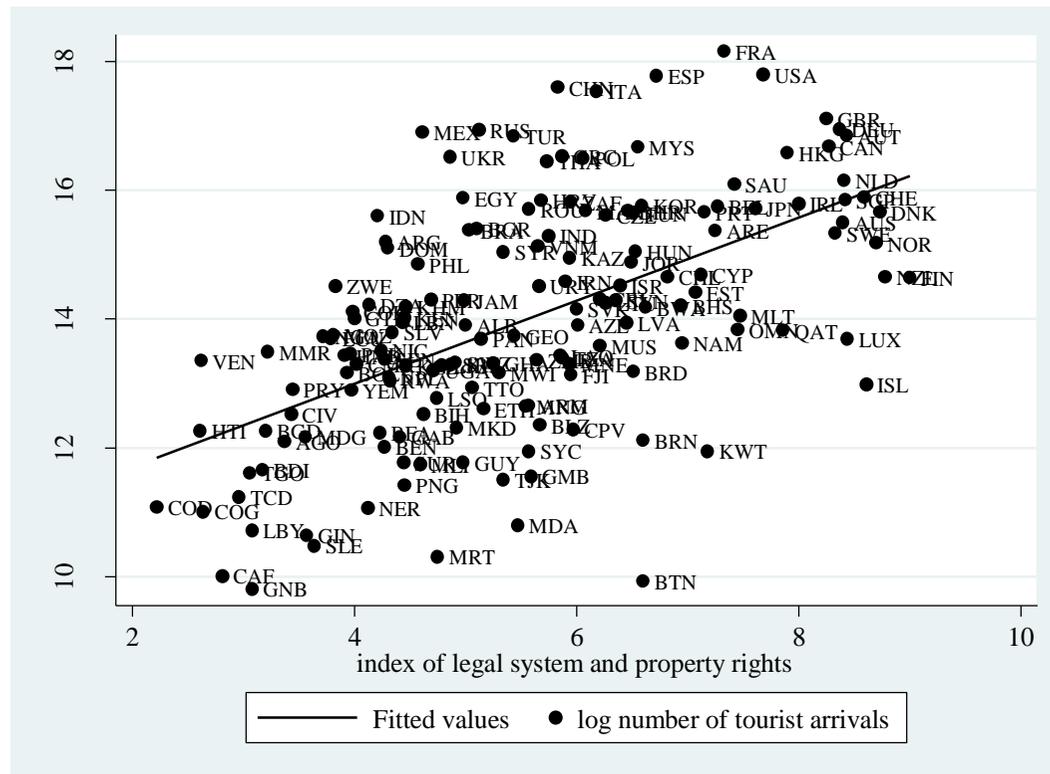


Table 1. Descriptive Summary Statistics

Variables	Definition	Data Source	Mean	Standard Deviation	Minimum	Maximum	Observations
International Tourism: Number of Tourist Arrivals	Logarithmic Form	World Bank, World Development Indicators	14.06	1.846	7.972	18.24	2,381
Legal System and Property Rights	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.666	0.336	0.150	2.260	2,209
Judicial Independence	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.483	0.569	-1.790	2.280	1,840
Impartial Courts	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.478	0.402	-0.690	2.270	2,205
Protection of Property Rights	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.629	0.391	-0.140	2.260	1,858
Military Interference in Rule of Law and Politics	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.745	0.600	-1.970	2.230	2,198
Integrity of the Legal System	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.755	0.434	-1.790	2.230	1,979
Legal Enforcement of Contracts	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.398	0.525	-1.210	2.230	1,792
Regulatory Restrictions on the Sale of Real Property	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.891	0.425	-0.920	2.230	1,673
Reliability of Police	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.624	0.398	0.190	2.260	1,330
Business Costs of Crime	Logarithmic Form	Fraser Institute, Economic Freedom: Gwartney et al. (2017)	1.715	0.394	0.060	2.270	1,330
Gross Domestic Product per Capita (Current USD)	Logarithmic Form	World Bank, World Development Indicators	8.435	1.575	4.751	11.62	2,488
Nominal Exchange Rate (Domestic Currency per USD)	Logarithmic Form	World Bank, World Development Indicators	3.290	2.729	-5.896	22.62	2,270
Trade Openness (Exports plus Imports as Share of GDP)	Logarithmic Form	World Bank, World Development Indicators	4.338	0.629	-1.771	6.092	2,463
Number of Heritage	Level	United Nations Educational, Scientific and Cultural Organization	4.853	6.961	0.000	52.00	1,968
Total Surface Area (km ²)	Logarithmic Form	Central Intelligence Agency, The World Fact Book	10.94	2.073	5.768	16.65	2,510
Total Land Area (km ²)	Logarithmic Form	Central Intelligence Agency, The World Fact Book	11.90	2.074	5.768	16.61	2,510
Coastline (km)	Logarithmic Form	Central Intelligence Agency, The World Fact Book	7.069	1.756	1.411	12.21	1,969
Coastline per Total Land Area	Logarithmic Form	Central Intelligence Agency, The World Fact Book	1.240	14.73	0.000	185.2	2,512
Landlocked Countries	Dummy Variable	Central Intelligence Agency, The World Fact Book	0.216	0.411	0.000	1.000	2,512
International Tourism: Tourism Receipts (Current USD)	Logarithmic Form	World Bank, World Development Indicators	20.38	2.234	13.45	26.18	2,398

Table 2. Correlation Matrix

Regressors	Log Legal System and Property Rights	Log Tourist Arrivals	Log Gross Domestic Product per Capita	Log Nominal Exchange Rate	Log Trade Openness
Log Legal System and Property Rights	1.000	–	–	–	–
Log Tourist Arrivals	0.549	1.000	–	–	–
Log Gross Domestic Product per Capita	0.717	0.595	1.000	–	–
Log Nominal Exchange Rate	–0.430	–0.367	–0.519	1.000	–
Log Trade Openness	0.281	0.059	0.255	–0.130	1.000

Table 3. Results of the Benchmark Fixed-Effects Estimators

Explanatory Variables	(I)	(II)	(III)	(IV)	(V)	(VI)
Log Gross Domestic Product per Capita	–	1.529*** (0.048)	1.524*** (0.047)	1.519*** (0.047)	1.528*** (0.047)	1.539*** (0.047)
Log Nominal Exchange Rate	–	0.051*** (0.010)	0.051*** (0.010)	0.051*** (0.010)	0.051*** (0.010)	0.051*** (0.010)
Log Trade Openness	–	0.192*** (0.033)	0.189*** (0.033)	0.187*** (0.033)	0.193*** (0.033)	0.195*** (0.033)
Log Total Land Area (km ²)	–	–	8.383*** (1.965)	–	–	–
Log Surface Land Area (km ²)	–	–	–	8.701*** (1.962)	–	–
Number of Heritage	–	–	–	–	0.803 (0.954)	–
Legal System and Property Rights (Log)	0.539*** (0.074)	0.179*** (0.061)	0.180*** (0.061)	0.183*** (0.061)	0.181*** (0.061)	–
Legal System and Property Rights (Level)	–	–	–	–	–	0.029** (0.014)
Constant Term	13.37*** (0.074)	0.005 (0.388)	–100.9*** (23.67)	–105.0*** (23.70)	11.43*** (0.074)	0.041 (0.388)
Observations	2,134	1,859	1,857	1,857	1,853	1,859
Number of Countries	154	152	150	150	150	152
R-squared	0.026	0.440	0.446	0.446	0.441	0.438
Robust Hausman Test	27.4 [0.00]	36.2 [0.00]	27.1 [0.00]	24.5 [0.00]	23.1 [0.00]	29.7 [0.00]

Notes: Dependent variable is the log number of tourist arrivals. The robust standard errors clustered at the country levels are in the parentheses. The year fixed-effects and the country fixed-effects are included in the regressions. The probability values are in the brackets. *** and ** indicate the statistical significance at the 1% and 5% levels, respectively.

Table 4. Results of the Benchmark Fixed-Effects Estimators: Different Country Groups

Explanatory Variables	Low- and Lower Middle Income Economies (I)	Low- and Lower Middle Income Economies (II)	Upper Middle- and High Income Economies (III)	Upper Middle- and High Income Economies (IV)	Non-OECD Countries (V)	Non-OECD Countries (VI)	OECD Countries (VII)	OECD Countries (VIII)
Log Gross Domestic Product per Capita	1.715*** (0.096)	1.718*** (0.095)	1.363*** (0.048)	1.368*** (0.048)	1.547*** (0.055)	1.556*** (0.054)	1.310*** (0.102)	1.309*** (0.101)
Log Nominal Exchange Rate	0.051*** (0.014)	0.051*** (0.014)	0.094*** (0.025)	0.090*** (0.025)	0.049*** (0.011)	0.049*** (0.011)	0.122*** (0.043)	0.123*** (0.042)
Log Trade Openness	0.143*** (0.046)	0.144* (0.046)	0.368*** (0.057)	0.368*** (0.057)	0.186*** (0.036)	0.189*** (0.036)	0.348*** (0.102)	0.340*** (0.102)
Legal System and Property Rights (Log)	0.184** (0.086)	–	0.111** (0.051)	–	0.299*** (0.067)	–	0.276** (0.133)	–
Legal System and Property Rights (Level)	–	0.048* (0.026)	–	0.025* (0.014)	–	0.049* (0.026)	–	0.044* (0.026)
Observations	793	793	1,066	1,066	1,449	1,449	360	360
Number of Countries	64	64	88	88	117	117	35	35
R-squared	0.389	0.387	0.534	0.532	0.431	0.429	0.545	0.545
Robust Hausman Test	20.4 [0.00]	27.3 [0.00]	26.5 [0.00]	30.1 [0.00]	28.2 [0.00]	25.6 [0.00]	23.7 [0.00]	29.9 [0.00]

Notes: Dependent variable is the log number of tourist arrivals. The constant term is included in the regressions, but the coefficients are not reported. The robust standard errors clustered at the country levels are in the parentheses. The year fixed-effects and the country fixed-effects are included in the regressions. The probability values are in the brackets. ***, **, and * indicate the statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 5. Results of the Benchmark Fixed-Effects Estimators: Sub-indexes of the Legal System and Property Rights

Explanatory Variables	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
Log Gross Domestic Product per Capita	1.481*** (0.043)	1.556*** (0.047)	1.388*** (0.048)	1.573*** (0.047)	1.495*** (0.047)	1.601*** (0.168)	1.573*** (0.189)	1.552*** (0.197)	1.551*** (0.199)
Log Nominal Exchange Rate	0.064*** (0.009)	0.051*** (0.010)	0.061*** (0.009)	0.046*** (0.010)	0.048*** (0.010)	0.030*** (0.008)	0.025*** (0.008)	0.029*** (0.007)	0.026*** (0.007)
Log Trade Openness	0.318*** (0.045)	0.199*** (0.033)	0.298*** (0.045)	0.206*** (0.033)	0.168*** (0.031)	0.439*** (0.105)	0.350*** (0.109)	0.106* (0.062)	0.106* (0.063)
Log Judicial Independence	0.146*** (0.028)	–	–	–	–	–	–	–	–
Log Impartial Courts	–	0.029 (0.040)	–	–	–	–	–	–	–
Log Protection of Property Rights	–	–	0.142*** (0.035)	–	–	–	–	–	–
Log Military Interference in Rule of Law and Politics	–	–	–	0.119* (0.061)	–	–	–	–	–
Log Integrity of the Legal System	–	–	–	–	0.026 (0.041)	–	–	–	–
Log Legal Enforcement of Contracts	–	–	–	–	–	0.138* (0.077)	–	–	–
Log Regulatory Restrictions on the Sale of Real Property	–	–	–	–	–	–	0.153** (0.070)	–	–
Log Reliability of Police	–	–	–	–	–	–	–	0.152** (0.063)	–
Log Business Costs of Crime	–	–	–	–	–	–	–	–	0.098** (0.041)
Observations	1,541	1,855	1,559	1,859	1,638	1,499	1,399	1,105	1,105
Number of Countries	143	152	145	152	136	139	139	132	132
R-squared	0.517	0.439	0.514	0.445	0.454	0.398	0.387	0.398	0.394
Robust Hausman Test	29.2 [0.00]	24.9 [0.00]	25.7 [0.00]	24.5 [0.00]	21.8 [0.00]	23.6 [0.00]	22.3 [0.00]	27.1 [0.00]	26.2 [0.00]

Notes: Dependent variable is the log number of tourist arrivals. The constant term is included in the regressions, but the coefficients are not reported. The robust standard errors clustered at the country levels are in the parentheses. The year fixed-effects and the country fixed-effects are included in the regressions. The probability values are in the brackets. ***, **, and * indicate the statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 6. Results of the Benchmark Regressions: System GMM and the Hausman–Taylor Estimators

Explanatory Variables	System GMM (I)	System GMM (II)	Hausman–Taylor (III)	Hausman–Taylor (IV)
Lagged Log Tourist Arrivals	0.701*** (0.082)	0.713*** (0.083)	–	–
Log Gross Domestic Product per Capita	0.667*** (0.169)	0.651*** (0.172)	1.514*** (0.049)	1.513*** (0.048)
Log Nominal Exchange Rate	0.062* (0.032)	0.079* (0.042)	0.046** (0.020)	0.049** (0.020)
Log Trade Openness	0.542*** (0.103)	0.561*** (0.103)	0.155*** (0.034)	0.156*** (0.034)
Log Coastline (km)	–	–	0.492*** (0.177)	0.529*** (0.193)
Log Coastline per Total Land Area	–	–	–0.002 (0.014)	–0.002 (0.014)
Landlocked Countries	–	–	–0.580 (0.534)	–0.642 (0.539)
Legal System and Property Rights (Log)	0.341*** (0.125)	–	0.202*** (0.070)	–
Legal System and Property Rights (Level)	–	0.110** (0.043)	–	0.032** (0.014)
Observations	1,494	1,494	1,482	1,482
Number of Countries	139	139	118	118
Wald-chi ²	3232.5	2917.2	1257.1	1242.1
AR (1) Test p-value	[0.000]	[0.000]	–	–
AR (2) Test p-value	[0.293]	[0.271]	–	–
Sargan Statistic p-value	[0.255]	[0.267]	–	–

Notes: Dependent variable is the log number of tourist arrivals. The constant term is included in the regressions, but the coefficients are not reported. The robust standard errors clustered at the country levels are in the parentheses. The probability values are in the brackets. ***, **, and * indicate the statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 7. Findings of the Robustness Checks and the Sensitivity Analysis

Type of Analysis	Variables	All Countries
Results of the Benchmark Regressions	Legal System and Property Rights (Log)	0.179*** (0.061)
	Legal System and Property Rights (Level)	0.029** (0.014)
Different Measures of Tourism Development: Log Tourism Receipts	Legal System and Property Rights (Log)	0.235*** (0.076)
	Legal System and Property Rights (Level)	0.041** (0.017)
Excluding the Extreme Units of Log Tourist Arrivals	Legal System and Property Rights (Log)	0.190*** (0.058)
	Legal System and Property Rights (Level)	0.033** (0.013)
Excluding the Extreme Units of Legal System and Property Rights Measures	Legal System and Property Rights (Log)	0.187*** (0.069)
	Legal System and Property Rights (Level)	0.021* (0.011)
Excluding the Latin American and Caribbean Countries	Legal System and Property Rights (Log)	0.205*** (0.075)
	Legal System and Property Rights (Level)	0.033* (0.017)
Excluding the East and South Asian Countries	Legal System and Property Rights (Log)	0.185*** (0.063)
	Legal System and Property Rights (Level)	0.029** (0.014)
Excluding the Sub-Saharan African Countries	Legal System and Property Rights (Log)	0.123** (0.061)
	Legal System and Property Rights (Level)	0.016* (0.009)

Notes: Dependent variable is the log number of tourist arrivals. The constant term, the log gross domestic product per capita, the log nominal exchange rate, the log trade openness are estimated, but their coefficients are not reported. The year fixed-effects and the country fixed-effects are also included in the regressions. The robust standard errors clustered at the country levels are in the parentheses. ***, **, and * indicate the statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A. List of Countries in the Dataset

88 High-income Countries (Those with a Gross National Income (GNI) per Capita Higher than \$3,956)

Albania, Algeria, Argentina, Australia, Austria, Azerbaijan, Bahamas The, Bahrain, Barbados, Belgium, Belize, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Dominican Republic, Estonia, Fiji, Finland, France, Gabon, Germany, Greece, Guyana, Hong Kong, Hungary, Iceland, Iran, Ireland, Israel, Italy, Jamaica, Japan, Kazakhstan, Korea Republic, Kuwait, Latvia, Lebanon, Lithuania, Luxembourg, Macedonia FYR, Malaysia, Malta, Mauritius, Mexico, Montenegro, Namibia, the Netherlands, New Zealand, Norway, Oman, Panama, Paraguay, Peru, Poland, Portugal, Qatar, Romania, Russian Federation, Saudi Arabia, Serbia, Seychelles, Singapore, Slovak Republic, Slovenia, South Africa, Spain, Suriname, Sweden, Switzerland, Thailand, Trinidad and Tobago, Turkey, the United Arab Emirates, the United Kingdom, the United States, Uruguay, and Venezuela.

64 Low-income Countries (Those with a GNI per Capita Less than \$3,956)

Angola, Armenia, Bangladesh, Benin, Bhutan, Bolivia, Burkina Faso, Burundi, Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, Congo Democratic Republic, Congo Republic, Cote d'Ivoire, Egypt, El Salvador, Ethiopia, Gambia The, Georgia, Ghana, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, India, Indonesia, Jordan, Kenya, Kyrgyz Republic, Laos, Lesotho, Madagascar, Malawi, Mali, Moldova, Mongolia, Morocco, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, the Philippines, Rwanda, Senegal, Sierra Leone, Sri Lanka, Swaziland, Tajikistan, Tanzania, Togo, Tunisia, Uganda, Ukraine, Vietnam, Yemen Republic, Zambia, and Zimbabwe.