Governance Quality and Tourism: Moderation of Social Determinants of Crime

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Abstract

Researchers have identified the impact of crime rates on tourism development, and in this study, we intend to look into the possible social causes behind those impacts. In this pursuit, we analyse the moderating role of social determinants of crime in shaping the association between tourism development and governance for 30 Asia-pacific countries over 1990-2017. In methodological terms, we have employed principal component analysis (PCA) for index building and generalized method of moments (GMM) for the estimation of long run elasticities. Using PCA, we have built separate indices for tourism development and social indicators. Results of GMM indicate that incidents of unemployment and increase in refugee population can diminish the positive impact of education on the association between tourism development and governance. The policymakers need to focus more on capacity building and job creation for internalizing the social imbalances, which might hamper the governance quality for fostering the development of tourism sector.

Keywords: Tourism development; Refugee; Crime; Governance; GMM

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INTRODUCTION

According to Global Rescue 2018 Travel Safety Survey, 82% of the respondents are concerned about their travel safety. With respect to potential dangers, the respondents ranked terrorism, medical issues, and crime as the top three concerns before deciding their travel plan (Global Rescue, 2018). This concern is validated by numerous travel advisories issued by the United States since 2018.[2] Hence, the objective of this study is to understand the moderating role of the social determinants of crime in shaping the impact of governance quality on tourism development, by extending the work of Santana-Gallego, Fourie & Rosselló (2019). In keeping with the future directions provided by Santana-Gallego et al. (2019), this aspect of tourism development has not been analyzed in the literature of tourism economics; hence, it is the theoretical contribution of the study.

Going by the social determinants of crime identified by Hewitt, Beauregard, Andresen & Brantingham (2018), unemployment and educational attainment have been categorized as two social determinants of criminal activities. There are specific reasons for choosing these two social determinants of criminal activities. First, there are numerous evidences of coexistence between incidents of crime and unemployment (Bell, Bindler & Machin, 2018; Janko & Popli, 2015). Insufficient infrastructural investment on job creation by government might lead to rise in the criminal activities within a nation (Montolio, 2018). Second, without adequate educational facilities, the decline in educational attainment is evident. Owing to the lack of required knowledge, people fail to enter the skilled labor force, and thereby, they get indulged in criminal activities (Cano-Urbina & Lochner, 2019). In a nutshell, unemployment and lack of educational attainment are the possible reasons for limited access to economic benefits, and this

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[2] https:// travel.state.gov/content/travel/en/traveladvisories/traveladvisories.html

developmental marginalization can be considered as the potential reason behind the rise in criminal activities. Becker (1968) analyzed these aspects in his seminal work.

Moreover, given the geopolitical scenario, refugee migration might also cause a socio-cultural shift, and sometimes consequential violence (Russel, 2003). Owing to the transformation brought forth by refugees in the societal structure, refugee migration has been considered as the third social determinants of crime in this study. The tourism sector being important in determining the social order through employment generation, therefore, any imbalance in the social order should have an impact on the tourism sector itself. Driven by this view, three social determinants of crime have been identified, i.e. unemployment, lack of educational attainment, and the refugee migration, and these three social indicators, can have a significant impact on the tourism sector by disturbing the social order. The criminal activities impacted by these social determinants of crime can affect the governance quality, which is a prime factor for institutionalizing the law and order of any nations (Buscaglia, 2003). In this study, the impact of three social determinants of crime has been analyzed in shaping the association between governance quality and tourism development for 30 Asia-pacific countries over 1990-2017.

Asia Pacific region is chosen as the unit of analysis for several reasons. First, this region is the second most visited destination after Europe (UNWTO, 2018). Second, the safety and security concerns in this region are rising (Global Rescue, 2018). Third, this region represents more than half of world's population with significant opportunities for growth in tourism, thus highlighting the importance of safety for international tourists.

Contribution of this study is two-folded: (a) analyzing the role of social determinants of crime in shaping the association between governance quality and tourism development, (b) focusing on

the social reasons of safety issues in the Asia Pacific region, thereby presenting new perspectives

from emerging economies.

DATA AND METHODOLOGY

In this study, the impacts of quality of governance, unemployment, educational attainment,

and refugees on tourism development have been analyzed for 30 Asia-Pacific countries (*i*) from

1990 to 2017 (*t*). The analytical model is as per the following:

$$Tour_{it} = \alpha_0 + \alpha_1 Gov_{it} + \sum_{n=i*t} \beta_n SocInd_{it} + \sum_{n=i*t} \gamma_n (SocInd_{it} * Gov_{it}) + \epsilon_{it} \qquad (1)$$

where, *Tour* is the tourism development index developed by using number of international tourist

arrivals (*TourArr*), international tourism receipts (*TourInc*) and expenditures (*TourExp*) in

current US$, *Gov* is the governance quality index developed by using government effectiveness

(*GovEff*), political stability and absence of violence/terrorism (*PolSt*), regulatory quality

(*RegQty*), and rule of law (*Rule*), *SocInd* is the matrix of social indicators: unemployment

(*UnEmp*), net primary school enrollment (*Enrol*), and refugee population (*Ref*).[3] Variable

definitions and data sources are specified in Table 1.

Insert Table 1 about here.

Generalized method of moments (GMM) has been used for model estimation. This test is

preceded by the multicollinearity and unit root testing, and checking of cointegration.[4] During

empirical analysis, two models have been tested; one for capturing the effects of the social

determinants of crime and the other for capturing the effects of the governance index in presence

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[3] *Tour_{it}* and *Gov_{it}* indices are prepared using principal component analysis (PCA). Results are available on request.
[4] Results are available on request.

of social determinants of crime. Both the models have been analyzed for each of the social determinants of crime, and then combining them into one model.

RESULTS AND ANALYSIS

The results of the analysis are reported in Table 2. Hansen's J test is rejected for all the models, thus signifying the rejection of overidentification issue, whereas the acceptance of DWH test at 1 percent significance level indicates the correctness of the instruments used. The quality of governance measured using by governance index (Gov_{it}) has a positive impact on the tourism development ($Tour_{it}$).

Insert Table 2 about here.

Insert Table 3 about here.

Considering the social determinants of crime, the impact of Gov_{it} is found to be varying upon it's interaction with the social determinants of crime. Table 3 presents the elasticity values. First, net primary educational enrolment ($Enrol_{it}$) has positive impact on tourism development, and through its interaction with Gov_{it}, there is increase in its overall impact on tourism development. This segment of results signifies that educational attainment helps in enhancing the impact of governance quality on tourism development. Second, unemployment ($UnEmp_{it}$) has negative impact on tourism development, and after its interaction with Gov_{it}, the overall impact of Gov_{it} on tourism development has decreased. This segment of results signifies that unemployment diminishes the impact of the governance quality on tourism development. For Portugal, Alegre, Mateo, and Pou (2013) have identified this issue. Third, refugee population (Ref_{it}) has negative impact on tourism development, and after its interaction with Gov_{it}, the overall impact of Gov_{it}

on tourism development has decreased. Del Chiappa and Presenza (2013) identified this issue in case of Italy. Lastly, for the combined model, the impact of Gov_{it} becomes negative after its interaction with the social determinants of crime, which indicates that the disturbances in the social structure of a nation might dampen the effect of governance.

Governance quality helps in building the foundation of sustainable tourism by creating synergy among different stakeholders and bringing transparency in the ecosystem, educational attainment complements the governance quality by enhancing the level of awareness among citizens (Feighery, 2006). However, the existence of unemployment might create imbalance in the economic system by increasing the crime rate and rent-seeking mechanism (Braun, 2019), which in turn deteriorates the effectiveness of governance quality in promoting sustainable tourism. Lastly, increase in the refugee population can have diverse impact on the societal structure, as the lack of access to economic resources might lead them to indulge in criminal activities (Hales, Dredge, Higgins-Desbiolles & Jamal, 2018). Moreover, the refugee protection mechanisms in the Asia-Pacific nations are still at a nascent stage, and therefore, the growing and marginalized refugee population in these nations can create a pool of negative social capital (Allen, 2009), which might deteriorate the quality of governance through criminal and terrorist activities. The occurrences of such events can have a direct impact on the sustainable tourism development, as the existing quality of governance might not be able to encounter such social imbalances.

Lastly, Dumitrescu and Hurlin's (2012) panel causality test was conducted, and the outcomes reported in Table 4 show unidirectional causality to be running from Gov_{it}, $UnEmp_{it}$, and Ref_{it} to $Tour_{it}$. The bidirectional causal association between $Tour_{it}$ and $Enrol_{it}$ indicates that mutuality exists between education and tourism development. This association is an extension of the

finding of Satta, Spinelli, and Parola (2019). This segment of results is a validation of the findings of GMM estimation.

Insert Table 4 about here.

CONCLUSION

In this study, the impact of social determinants of crime in shaping the association between governance quality and tourism development has been analyzed for the Asia-Pacific countries. While assessing the impact of criminal activities and communal turbulences on tourism development, the government should look into the possible social causes behind the emergence of these crimes. The results allow to conclude that either unemployment or number of refugees can diminish the effect of governance quality on tourism development, but these two factors together can not only reverse the impact of governance quality, but also subdue the impact of educational attainment. This finding is a contribution in the literature of tourism economics. Therefore, in order to implement sustainable tourism, the betterment of governance quality is not sufficient, as the government also needs to look into the social reasons behind the criminal and terrorist activities inside the countries, and only then the negative impacts of these social factors can be controlled. Henceforth, policymakers should invest more in capacity building and job creation, so that the intrinsic social imbalances being created out of economic inequalities can be controlled. At the same time, the policymakers also need to protect the rights of the refugee migrants, as proper access to economic benefits and social recognition might help them to associate with the new socio-geographic identity, and it might in turn reduce the possibilities of the violence created by them.

Lastly, it needs to be mentioned that data support is an important aspect to design sound policy implications, and various researchers have identified this issue. During the course of analysis, the unavailability of data has been one of the major problems. Owing to this specific issue, other Asia-Pacific countries have been kept out of the analysis. Therefore, the unavailability of data is a limitation of this study, whereas it is also a limitation for these countries in their ways of achieving sustainable tourism. Future studies on this aspect might be carried out by considering the geopolitical risk factors at various frequency levels.

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Table 1: Variable description

Variables	Description	Source
GovEff	Government Effectiveness (estimate between -2.5 to 2.5)	
PolSt	Political Stability and Absence of Violence/Terrorism (estimate between -2.5 to 2.5)	Worldwide Governance Indicators (World Bank, 2018a)
RegQty	Regulatory Quality (estimate between -2.5 to 2.5)	
Rule	Rule of Law (estimate between -2.5 to 2.5)	
TourArr	International tourism, number of arrivals	
TourInc	International tourism, receipts (current US$)	
TourExp	International tourism, expenditures (current US$)	World Development Indicator (World Bank, 2018b)
UnEmp	Unemployment as percentage of total labor force (ILO estimate)	
Enrol	Net Primary School enrollment (in percentage)	
Ref	Refugee population by country of asylum	

Table 2: Results of GMM analysis

	Education		Unemployment		Refugee		Combined	
	Model 1	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*
Gov_{it}	0.13[a]	0.12[a]	1.87[a]	3.37[a]	0.33[a]	0.38[a]	0.08[a]	1.71[a]
$Enrol_{it}$	0.53[a]	1.31[a]	-	-	-	-	1.37[a]	0.83[b]
$Enrol_{it}$ * Gov_{it}	-	0.05	-	-	-	-	-	0.48[a]
$UnEmp_{it}$	-	-	-0.50[a]	-0.83[a]	-	-	-0.09[b]	-1.28[c]
$UnEmp_{it}$ * Gov_{it}	-	-	-	-2.46[a]	-	-	-	-4.98[c]
Ref_{it}	-	-	-	-	-0.14[a]	-0.15[a]	-0.04[a]	-0.18[c]
Ref_{it} * Gov_{it}	-	-	-	-	-	-0.01	-	-0.60[b]
Constant	-2.69[a]	-6.02[a]	0.61[a]	1.37[a]	0.74[a]	0.79[b]	-6.44[a]	-3.49[b]
Hansen's J statistics	0.04	0.52	0.42	0.06	0.62	0.30	1.00	0.35
DWH Test statistics	5.76[a]	5.03[b]	8.69	6.31[a]	5.85[a]	5.07[a]	9.05[a]	9.99[a]

a significant at 1%

b significant at 5%

c significant at 10%

Table 3: Changes in elasticity in tourism development with respect of quality of governance

Model	Nature	Elasticity	Outcome
Education	Without interaction with $Enrol_{it}$	0.13	Positive impact increased
	With interaction with $Enrol_{it}$	0.35	
Unemployment	Without interaction with $UnEmp_{it}$	3.37	Positive impact reduced
	With interaction with $UnEmp_{it}$	0.08	
Refugee	Without interaction with Ref_{it}	0.33	Positive impact reduced
	With interaction with Ref_{it}	0.26	
Combined	Without interaction	0.08	Positive impact became negative
	With interaction	-5.86	

Note: Values are calculated at median

Table 4: Panel causality test results

Dependent Variables	Independent Variables				
	$Tour_{it}$	Gov_{it}	$Enrol_{it}$	$UnEmp_{it}$	Ref_{it}
$Tour_{it}$	-	8.71[a]	4.08[a]	5.76[a]	3.55[a]
Gov_{it}	5.95[a]	-	6.47[a]	5.00[a]	7.53[a]
$Enrol_{it}$	16.04[a]	5.55[a]	-	9.40[a]	1.01
$UnEmp_{it}$	1.13	7.03[a]	5.86[a]	-	1.20
Ref_{it}	1.73	2.98[a]	0.15	1.34	-

a significant at 1%