Does Country with Multi-ethnic, Multi-linguistic and Multi-religious Society Induce Tourist Arrivals? Worldwide Evidence

(Adakah Masyarakat Negara yang Berbilang Etnik, Berbilang Bahasa dan Berbilang Ugama Boleh Menarik Kedatangan Pelancong? Bukti Seluruh Dunia)

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ABSTRACT

The tourism sector contributes foreign exchange earnings to the nation; tax revenue to the government; and provide jobs to the population as well as open-up business opportunities to the communities. Thus, international tourist arrivals play a central role in stimulating economic growth by ensuring substantial export income in the form of international tourist expenditures to a destination country. A fundamental question that relates international visitors and the destination country is: “Does diversity play an important role in promoting tourism?” Studies have found that ethno-linguistic diversity affect a country’s tourism competitiveness negatively. This is because high levels of ethnic diversity tend to be associated with low investment, poor governance as a result of poor communication, low collective action and weak cohesion due to differences in ethnic groups’ value system. In this study, using a sample of 126 countries, our results suggest that ethnic, linguistic, and religious fractionalization negatively affected the destination choice of international tourist arrivals. Nevertheless, national income and safety of a country have positive impact on tourist arrivals, but air pollution affects negatively tourist arrivals to a destination country. Some policy implications that would promote tourism are that a country needs to promote and portray multi-racial country that are safe, peoples enjoy diversity in culture and lived in harmony; good facilities and infrastructure related to tourism; and less pollution.

Keywords: Tourism demand; tourist arrivals; diversity; cross-country analysis

ABSTRAK

Sektor pelancongan menyumbang kepada pendapatan tukaran asing sesebuh negara; hasil cukai untuk kerajaan; dan menyediakan pekerjaan kepada penduduk dan juga membuka peluang perniagaan kepada komuniti. Maka kedatangan pelancong asing memainkan peranan utama merangsang pertumbuhan ekonomi dengan memastikan pendapatan ekspor yang lumayan dalam bentuk perbelanjaan pelancong asing di negara destinasi. Persoalan utama berkaitan dengan pelancong dan negara destinasi adalah: “Adakah diversiti memainkan peranan penting dalam mempromosikan sektor pelancongan?” Dapat jadi kajian dahulu mendapati bahawa diversiti etno-linguistik menjejaskan daya saing sektor pelancongan negara secara negatif. Ini disebabkan diversiti etnik pada tahap tinggi cenderung dikaikan dengan pelaburan yang rendah, tadbir urus yang lemah, yang disebabkan oleh komunikasi yang lemah, tindakbalas kolektif yang rendah dan kepaduan yang lemah yang disebabkan oleh sistem nilai kumpulan etnik yang berbeza. Dengan menggunakan sampel 126 negara, dapatkan hasil kajian ini menunjukkan bahawa pemecahan etnik, linguistik dan uga meraih memberi kesan negatif terhadap pemilihan destinasi pelancong asing. Walau bagaimana pun, pendapatan negara dan tahap keselamatan negara memberi impak yang positif terhadap kedatangan pelancong asing, tetapi pencemaran udara memberi kesan negatif terhadap pelancong dalam memilih negara destinasi. Beberapa implikasi dasar yang boleh disarankan untuk menarik minat pelancong asing ke negara destinasi adalah pentingnya kerajaan mempromosikan dan mengamalkan negara berbilang kaum yang selamat, yang menikmati pelbagai kebudayaan dan hidup berharmoni; kecukupan kemudahan dan infrastruktur yang berkaitan dengan sektor pelancongan; dan negara yang kurang menghadapi pencemaran.

Kata Kunci: Permintaan pelancongan; kedatangan pelancong; diversity; analisa rentas-negara
INTRODUCTION

International tourist arrivals play a central role in stimulating economic growth by ensuring substantial export income in the form of international tourist receipts to a destination country. International tourism receipts are the earnings generated in destination countries from expenditures of the international visitors on accommodation, food and drink, local transport, entertainment, shopping and other services and goods. According to UNWTO (2016), in term of international tourism receipts, Europe take up the largest share of about 36%, followed by Asia and the Pacific (33%), the Americas (24%), Middle East (4%) and Africa (3%).

In this respect, the fundamental question that relates to international visitors and the destination country is: Why do some destination countries attract more visitors than others? The conventional international tourism demand model suggests factors influencing tourist to a destination country include tourists’ income, tourism prices in a destination relative to those in the origin country, tourism prices in the competing destinations, distance and transportation cost between the destination and the origin country, exchange rate between the currencies of the destination and the origin countries, weather and seasonal factors, marketing (promotional) expenditure, safety and political stability of the destination country, consumer tastes, tourism related facilities and infrastructures, border and languages, consumer expectations, habit persistence, air pollution, crime rates, origin population as well as dummy variables on various special events such as financial crisis, terrorist attack and avian flu outbreak and deterministic trends (see Cho 2010; Crouch 1994; Habibi 2016; Kosnan et al. 2013; Salleh et al. 2007; Song at al. 2010; Tang & Tan 2015; Witt & Witt 1995; Zakaria et al. 2013).

However, in this study, we endeavour to answer our main question: Do countries with social diversity – ethnicities, languages, religions and cultures are able to attract more tourists? This is a pertinent question because the study of tourism and the knowledge of the factors influencing international visitors’ destination choices (tourism demand) may be very important for tourism suppliers and policy makers. In this connection, Eritrea is a good model where cultural diversity works for tourism. Eritrea is home to nine different ethnic groups, but they lives in harmony, show mutual respects for one another by all members of the different ethnic groups; and able to share experience of harmonious co-existence that constantly enriches and strengthens the Eritrean people’s common values and unity. According to Ghebrihiwet (2009), Eritrea is now becoming a tourist’s destination owing to the prevailing harmony, peace and stability in the country. Ghebrihiwet further reports that, “It is a given fact that tourists choose a certain destination for its uniqueness, special endowments, peace and serenity. What make a given destination even more alluring is the custom and tradition of the people inhabiting it. Different people of the world have their own distinct cultures and way of living that set them apart from others. So what could be an ordinary part of daily life for someone might be a mysterious and awesome sight for someone else. And it is this instinct in people to discover what is different and strange that keeps tourism alive.”

Although many countries today are constantly embroiled in conflicts of racial intolerance, political disorders and division along religious lines, which is adversely affecting their progress, however, under ideal circumstances cultural and ethnic diversity can never be a problem; however, it is rather a blessing for Eritrea that enables the fostering mutual respect and co-existence (Ghebrihiwet 2009). Thus, the purpose of the present study is to investigate the relationship between tourism and diversity in 126 countries. In this study we assessed whether ethnic diversity, linguistic diversity and religious diversity can play a role in attracting international tourist to a destination country. Other factors that we consider that a country can offer to the oncoming tourist are a country’s wealth (national income), safety and air pollution. Countries that are safe; provide adequate facilities and infrastructures in related tourism sector; and generate less pollution would induce tourists to a destination country.

The paper is organized as follow. In the next section we discuss the literature related to tourism, and in section 3 is the method used in the analysis. Section 4 presents the results, while the last section contains our conclusion.

LITERATURE REVIEW

It is a fact that diversity has negative connotation to economic development. Studies by Rodrick (1999), La Porta et al. (1999), Grafton and Knowles (2004) and Annett (2001) suggest that high levels of ethnic diversity tend to be associated with low investment, poor governance as a result of poor communication, low collective action and weak cohesion due to differences in ethnic groups’ value system, and poor economic performance. Easterly and Levine (1997) conclude that after accounting for the effects of ethnic diversity on education, political stability, financial depth, black market premiums, fiscal policy, and infrastructure development, ethnic diversity alone accounts for about 28% of the growth differential between the countries of Africa and East Asia. Posner (2004) concludes that their new measures of ethnic fractionalization show strong negative relationship with economic growth in Africa. Patsiurko et al. (2012) show that in the OECD countries, there is a strong inverse relationship between ethnic fractionalization and economic growth. They show that an increase in ethnic fractionalization from 0 to 1 is associated with a 1.99% decline in growth in the OECD countries. Earlier work by Alesina et al. (1999) found
that racially and ethnically fractionalized communities tend to have difficulty engaging in cooperative efforts and marginalize spending on public goods. According to Alesina et al. (1999) when individuals have different preferences, where ethnic groups are polarized, and where politicians have ethnic constituencies, interest groups with an ethnic base are likely to value only the benefits of public goods that accrue to their groups, and discount the benefits for other groups; as a consequence, the share of spending that goes to public goods is low.

On the other hand, a study by Alesina et al. (2003) suggest that going from complete homogeneity (an index of 0) to complete heterogeneity (an index of 1) will reduce annual growth by 1.9%. Comparing between South Korea of having an ethnic fractionalization index of 0.002 and Uganda having an ethnic fractionalization index of 0.93; 1.8% of the differences between their growths can be explained by different degrees of ethnic fractionalization. However, Alesina et al. (2003) assert that religious diversity do not effect on economic growth. Study by Campos and Kuzeyev (2007) also found that ethnic diversity is negatively related to economic growth but not linguistic and religious diversity. On the other hand, the work by Collier and Hoeffler (2000) indicate that social (ethnic, linguistic and religious) fractionalization has no effect on the risk of conflict. Nevertheless, according to Alesina and La Ferrara (2005) at higher level of economic development ethnic diversity can be beneficial to a nation – in a way such that diversity of different skills can be blend together in the production process that will increase productivity and also enhance economic growth.

On one hand, to answer whether diversity is bad for economic growth for 48 states in the United States, Ratna et al. (2009) found that racial diversity reduces gross state product (GSP) growth while linguistic diversity raises GSP growth in the United States. On the other hand, in China, Dincer and Wang (2011) found a negative relationship between ethnic diversity and economic growth across the Chinese provinces. These findings are further supported by Groen (2014) who found that in a sample of 100 cross-country analyses, ethnic diversity has a strong negative impact on economic growth. Nettle et al. (2007) assert that within-nation linguistic diversity is associated with reduced economic performance, which, in turn, increases societal instability. Further, nations which differ linguistically from their neighbours are also less stable. However, religious diversity between neighbouring nations has the opposite effect, decreasing societal instability, particularly in the presence of high linguistic diversity.

Nevertheless, Das and DiRienzo (2009; 2010; 2012) conjecture that, since fractionalization can result in poor governance, low investment, low economic growth, weak communication through linguistic differences, lack of trust and cohesiveness among ethnics; the infrastructure, institutions, and the overall economic and business environment needed to promote and sustain a healthy tourism industry will also be affected. In fact in their study, Das and DiRienzo (2012) found that ethno-linguistic fractionalization negatively impact tourism competitiveness across nations, however, as the level of economic development increases the impact of ethno-linguistic fractionalization will be mitigated. Similar findings were supported by Vietze (2012). Vietze (2012) found that cultural proximity between the country of origin and the country of destination has a positive effect on the tourism flows between these countries. People from countries with the same language (English) have a higher demand for travelling to the US for vacation than people from other countries. Furthermore, tourists coming from Christian countries prefer the US as a holiday destination much more strongly than people from Muslim countries. Thus, people’s destination choice for a vacation country is driven by the demand for cultural similarity to the home country – presumably showing people’s inherent fear of the new and the different. On the other hand, Fourie et al. (2015) found that religious similarity affect tourism positively – tourists prefer to visit countries with the same religious affiliation as their own. For example, “the more people from a pair of countries that share the Muslim or Hindu beliefs, the greater the volume of tourism movements between them” (Fourie et al., 2015: 58). Earlier, Feng (2008) also found that conflict and tensions over economic benefits from tourism happen between ethnic community and outsider entrepreneurs in FengHuang County in China.

METHODOLOGY

The demand for tourism or the determinants for international tourist arrivals goes beyond income of the origin country and tourism prices. For example, Cho (2010) found that demographic of the destination country (population), accessibility (by air), cultural and natural heritage, environmental condition (CO2 emission), and infrastructure on road network, social factor, and distances are importance determinant in tourism demand in his study on Asia, the Americas, Europe and the Oceania countries. According to Kester (2003) deficiency in facilities and accommodation, lack of image and poor perceptions, poverty, disease and conflict shay away visitors from a destination country while Gauci et al. (2002) include poor public health services, and fear of personal safety as obstacle to tourism. On one hand, Cleverton (2002) indicates that quality tourism products, strong marketing, efficient tour operators and good banking and communication facilities are important determinants for tourism demand; however, Naude and Saayman (2005) posit that hotel capacity, malaria, political stability, internet usage, urbanization rate, and death rate are importance determinants of tourist arrivals in Africa.
It is important to note that many of the previous work on tourism demand has evaluated factors on the push-pull framework. According to Dann (1977), Klenosky (2002), Kao et al. (2008), and Prayag and Ryan (2011) the “push” refers to internal factors (motivation) that drives individual to travel and take vacation, while the “pull” refers to the external factors (attraction) that lead individual to decide on a destination country to travel. Although the inclusion of the supply factors or the pull factors is rare in estimating tourism demand; however, these factors from the point of view of the host country could be important in attracting more tourist arrivals to a destination country (Tsounta 2008). The proponents of the supply side argued that the destination country is a tourism product that consists of five elements (Smith 1994): (i) the physical plant, (ii) service, (iii) hospitality, (iv) freedom of choice, and (v) involvement. The physical plant is the core of the tourism product. It may consist of sites, natural resources, waterfalls, wildlife, resorts, hotels, mobile and internet equipment, and conditions of physical environment such as weather, water and air quality, crowding and tourism related infrastructures. Service refers to input services of the physical facilities to make it useful to the tourists. For example, is an internet service available? Is housekeeping helpful? Hospitality is an expression of welcome by local residents to tourists arriving in their community. Freedom of choice means that the tourist can enjoy their vacation at their own pace, for example, which hotel to stay, which restaurant to dine and lunch, which mode of transportation to ride, and that these experiences will enhance their satisfaction and gain extra value from their visit. Involvement refers to good feeling that can be acquired when a tourist can participates in the events or festivals perform by the local community. According to Smith (1994: 590-591) “Involvement, combined with freedom of choice, warm hospitality, competent service, and a good physical plant (which includes accessibility, acceptable environmental quality, good weather, and appropriate numbers of other people) virtually guarantees a quality and satisfying tourism product”.

Goodall (1991) reiterate that the pull factors, not the push factors that are critical to tourism demand (cited in Mehmetoglu, 2011). Furthermore, recent findings by Hsu, Tsai and Wu (2009) indicate that the 3 most important reasons tourist travel to Taiwan are to visit Taipei 101 (formerly known as Taipei World Financial Center), visiting friends/relatives and personal safety; while price is the least important deciding factor for tourists to come to Taiwan. In this study, we follow the supply side proponents such as Smith (1994), Seyidov and Adomaitiene (2016), Kao et al. (2008), Klenosky (2002), and Xu (2010) by specifying a cross-country tourism demand model as follow,

\[
\log\text{Tourist}_i = \alpha_0 + \alpha_1 \log\text{Wealth}_i + \alpha_2 \log\text{CO2 emission}_i \\
+ \alpha_3 \text{Safety}_i + \alpha_4 \text{Diversity}_j + \epsilon_i \tag{1}
\]

where \(\epsilon_i\) is the error term, \(\text{Tourist}_i\) = international tourist arrivals per capita in country \(i\), proxy for tourism demand, \(\text{Wealth}_i\) = real gross domestic product per capita proxy for national income in country \(i\), \(\text{CO2 emission}_i\) = carbon dioxide emissions in country \(i\), \(\text{Safety}_i\) = “Political Stability and Absence of Violence”, a governance indicator to proxy for the quality of the government, that could guarantee safety and security in the destination county \(i\), \(\text{Diversity}_j\) = measures of fractionalization \((j\) refers to ethnic, linguistic, religion and cultural diversity) in country \(i\). It is expected a priori \(\alpha_1, \alpha_3 > 0\) and \(\alpha_2, \alpha_4 < 0\). All variables were transformed into natural logarithm (denotes by log) before estimation except for diversity and Safety.

In this study, is our key variable of interest. The data for fractionalization were obtained from Alesina et al. (2003) and Fearon (2003). Alesina et al. (2003) distinguish between ethnic, linguistic and religious groups; while Fearon (2003) differentiates between ethnic and cultural diversities. In this study, we endeavor to construct a new measure of fractionalization based on Alesina et al. (2003) by combining all three measures of fractionalization indexes by applying the following formula: \((\text{score}-3)/(M-3)\) (see Anuchitworawong & Thampanishvong 2015). To construct the new composite fractionalization index, we called, fractionalization index by first, we rank each of the three indexes – ethnic, linguistic and religion, from smallest to largest, and denotes 1 for smallest index for ethnic, for linguistic and for religious. After we obtain the ranking for each of these indexes, the ranks assigned to each index were added for each country. Each country’s score will be ranging from 3 to M. A higher index suggests higher (heterogeneity) level of multicultural diversity (plural society).

In a tourism demand model, wealth of a nation is the most prominent factor determining tourist arrivals to a destination country. A wealthy destination country will have the impression that transportation system, facilities and accommodation, public health services, tour operators, banking and communication facilities are excellent and efficient compared to less developed countries (Naude & Saayman 2005). A destination country with transportation and financial system and good facilities and accommodations would attract more visitors. Past researches have generally used real GDP or income per capita to control for a country’s level of economic development. Thus, higher income economies will attract more international tourist arrivals.

The governance indicator – political stability and the absence of violence was used to proxy for safety, security and stability of the destination countries. A country with good governance will ensure political stability and the absence of violence, social conflict and ethnic tensions. Neumayer (2004) found that human rights violations, conflict and other political motivated violent events negatively affect tourist arrivals, and the most vulnerable
to the impact of political violence are those countries mildly dependent on tourism revenue as their source of income. Yap and Saha (2013) analyse using a fixed effects panel data on 139 countries and found that both political instability and terrorism have negative effects on tourism demand, but political instability causes severe damage to the industry and the effects are stronger in comparison to terrorist attacks. For example, a one-unit increase in political instability decreases tourist arrivals and tourism revenue between 24% to 31%, and 30% to 36%, respectively. On the other hand, Fernando, Bandara, Liyanaarachch, Jayathilaka and Smith (2013) studied Sri Lanka, a country that experienced almost three decades of civil war, and found that major war-related incidents reduce the tourist arrival numbers by 5.2% per month compared to a period when peace is restored in the country.

As cited in Steiner (2007), studies by Hollier (1991), Bar-On (1996), Meyer (1996), Sonmez (1998) and Wahab (1996) suggest that violent political instability resulted in a decrease in the number of tourist arrivals in the MENA region. Thus, a destination country with good governance will make visitors feel safe and secured from any unwanted events or tragedies. In this study we used “Political Stability and Absence of Violence”, based on the database - World Governance Indicators provided by the World Bank (Kaufman et al. 2008). Accordingly, this governance indicator measures “perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.” In a more recent study by Habibi (2016) on a panel of 33 countries for the period 2000-2012, she found that countries with political stability and absence of violence induce tourist arrivals.

Lastly, another important variable that has the potential to influence international tourist arrivals is pollution. Tourism theory has recognized the importance of environmental quality in potential tourists’ decision making process when choosing a destination country (Mihalic 2000). Environmental quality refers to the quality of the natural features of the destination that can be deteriorated by human activities. Thus, maintaining a high level of environmental quality such as fresh air is important for competitiveness in the tourism industry. For example, Anaman and Looi (2000) studied the impact of the 1997 and 1998 haze-related pollution events on the tourism industry in Brunei, and they found that air pollution adversely affected Brunei’s tourism industry. They estimated that as a result of the haze and air pollution, the monthly tourist arrivals has been reduced by about 29%, resulting in total tourism revenue losses of about B$8 million.

For the recent haze pollution in China, a survey conducted by Zhang et al. (2015) upon potential tourists who have the intentions to travel to Beijing in the next two years. This is because the perceptions and attitudes of these individuals about haze are most important for the development of Beijing tourism in the near future. They conclude that many potential tourists would pay close attention to the haze pollution levels of destinations when tourism plans are approaching, and travel time would be adjusted to avoid terrible weather. Thus, given the harmfulness of haze pollution, it is reasonable to believe that tourists may have negative tourism experiences and may consider abandoning their travel plans when haze weather becomes unacceptable (Zhang et al., 2015). Tang and Tan (2015) studied the impact of haze pollution in Malaysia, and testing on a panel of tourist arrivals from 12 countries for the period 1989 to 2010, they found that pollution adversely affected tourist arrivals to Malaysia. On the other hand, Sajjad et al. (2014) investigate the long-run relationship between carbon dioxide emissions (CO2) and international tourism receipts and international tourism revenue. They found that CO2 adversely affects international tourism receipts for South Asia, MENA, Sub-Saharan Africa and East Asia and Pacific regions. Similarly, CO2 has negative impacts on international tourism revenue for the whole region.

In this study the data for the number of international tourist arrivals per capita (Tourist), real gross domestic product per capita (Wealth), carbon dioxide emissions from the agriculture sector (CO2 emission) were obtained from the World Development Indicators available in the World Bank database. Data for the governance indicator – political stability and absence of violence, were collected from the World Governance Indicators available at the World Bank database (info.worldbank.org/governance/wgi/index.asp). The data for fractionalization was obtained from Alesina et al. (2003) that provide ethnic, language and religion fractionalization indexes; and Fearon (2003) that provides ethnic and cultural fractionalization indexes. Given that the index is a probability measure, it ranges from 0 to 1, such that countries values close to 0 are very homogenous in regard to ethnic, language and religion diversity. The reference year is 2011, and our sample consists of 126 countries.

RESULTS AND DISCUSSIONS

The results in estimating Equation (1) is presented in Tables 1. In Table 1 we present six estimated equations (models) that correspond to six different measures of fractionalization, namely; Fearon_Ethnic, Fearon_Cultural, Alesina_Ethnic, Alesina_Language, Alesina_Religion, and Alesina Multi. In this study all regression equations were estimated using ordinary least square and corrected for heteroscedasticity using Newey-West consistent standard error (Newey and West, 1987). For each of the estimated regression equation, we report the test for heteroscedastic errors (ARCH test) and multicollinearity among the variables (VIF). Generally,
in all estimated regressions, the null hypothesis of homoscedastic errors cannot be rejected at least at the 1% level. The variance inflation factor (VIF) clearly suggest that multicollinearity is not a problem in each of the estimated regression equations. In all cases the mean VIF is around 3 or less and this figure is lower than the cut-off threshold value of 10 (Hair et al. 2010; Rovai et al. 2014). For all estimated equations, the goodness of fit is reasonably high.

The importance of income is clearly shown in all models; with income variable consistently show positive and statistically significant at the 1% level. The positive relationship between income and tourist arrivals would suggest that a 10% increase in the wealth of the nation would induce about 5% to 6% more tourists to a destination country. The pollution variable, CO2 emission, clearly suggest an inverse relationship with tourist arrivals, and are significant at 1% level in all cases, The inverse relationship would suggest that a polluted country do not induce tourist as their destination country. This implies that tourists are “health conscious” and therefore prefer to visit countries that are free from haze and pollution. Nevertheless, a 10% reduction in pollution will induce about 4% increase in international tourist arrivals. On the other hand, our results clearly suggest the importance of “safety and security” in affecting tourist arrivals. Interestingly, in all six estimated equations, the governance indicator is positive and significant at the 1% level. These results clearly suggest that international tourists prefer countries that are safe, economically and politically stable and lack of violence.

For our variable of interest – the fractionalization variables are significant and show negative sign in all estimated equation except for the religious fractionalization (Alesina Religion). For Fearon’s measure of fractionalization, the ethnic fractionalization (Fearon Ethnic) is significant at the 1% level, while the cultural fractionalization (Fearon Cultural) is significant at the 5% level. On the other hand, for the
Alesina’s fractionalization indexes, both the linguistic (Alesina Language) and ethnic Alesina Ethnic () fractionalizations are significant at the 5% level. These results clearly indicate that countries with ethnic, linguistic and cultural diversities are unfortunately would receive less number of tourists’ inflow. Our results support the earlier findings by Das and DiRienzo (2012) and concur to Vietze (2012) that people prefer to visit countries of “cultural similarity to their home country.” Nevertheless, our study further suggests that religious diversity has no effect on international tourist arrivals.

FURTHER ANALYSIS USING QUANTILE REGRESSION

It is well known that OLS estimates the effect of the explanatory variables on the mean of the conditional distribution of the dependent variable. To allow the effect of the explanatory variables on the entire conditional distribution of the dependent variable, we also employ the quantile regression (Koenker & Basset 1978). Quantile regression allows the estimated parameters to differ at different points of the conditional distribution of the dependent variable. Therefore, a number of different quantile regressions give us a more complete description of the underlying conditional distribution.

The quantile regression is defined as follows

\[ \text{logTourist}_i = x_i \beta_\tau + \mu_{\tau i} \]  

where \( x_i \) equals a vector of explanatory variables as defined above, \( \beta_\tau \) equals the vector of parameters associated with the \( \tau \)-th percentile, and \( \mu_{\tau i} \) equals an unknown error term. The \( \text{Quantile}_\tau (\text{logTourist}|x_i) = x_i \beta_\tau \) equals the \( \tau \)-th conditional quantile of logTourist given \( x \) with \( \tau(0,1) \). By estimating \( \beta_\tau \), using different values of \( \tau \), quantile regression permits different parameters across different quantiles of tourist arrivals. In other words, repeating the estimation for different values of \( \tau \) between 0 and 1, we trace the distribution of logTourist conditional on \( x \) and generate a much more complete picture of how explanatory variables affect the dependent variable. The \( \tau \)-th quantile regression estimates \( \beta_\tau \), by solving the following minimization problem and the median regression occurs when \( \tau = 0.5 \) and the coefficients of the absolute values both equal one.

\[
\min_{\beta_\tau} \left[ \frac{1}{\tau} \sum_{i \in [\text{logTourist} \geq x_i \beta_\tau]} |\text{logTourist}_i - x_i \beta_\tau| + \frac{1}{1-\tau} \sum_{i \in [\text{logTourist} < x_i \beta_\tau]} |\text{logTourist}_i - x_i \beta_\tau| \right].
\]

In Panel A of Table 2 presents the estimated results of the quantile regressions for Model 3 only. Model 3 was chosen based on the Schwarz criterion that shows the smallest statistic among other models. Table 2 reports the pseudo \( R^2 \), a quantile measure of goodness of fit. The pseudo \( R^2 \) increases from the 10th quantile to the 40th quantile and then starts to decrease until the 90th quantile. This indicates that the model explains tourist arrivals in the lower quantiles better than the tourist arrivals in the higher quantiles. Nevertheless, our results suggest that all variables are significant and show correct sign in all the estimated equation for the various quantiles, except for in the 70th, 80th and 90th quantiles, and Diversity in the 90th quantile.

As for the income variable, our quantile regression results suggest that the number of tourist arrivals in the lower quantile response less to changes in income compared to the number of tourist arrivals in the higher quantiles. For example, a 10% increase in income will induce 3.7% number of tourist arrivals in the 10th quantile compared to 5.2% number of tourist arrivals in the 90th quantile. On one hand, the impact of pollution on tourist arrivals is different between different quantiles. The impact of pollution on tourist arrivals in the lower quantiles (10th, 20th & 30th) and higher quantiles (60th, 70th, 80th and 90th) is greater than the middle quantiles (40th and 50th). This implies that tourists at the lower and higher quantiles are more responsive to air pollution compared to the tourists in the middle quantiles. On the other hand, tourists it seems that not all of them are concern about safety and security of countries that they visited. Our results indicate that tourists at the lower and middle quantiles were responsive to the safety and security of the country they visited. However, the safety and security of a destination country has no effect on tourist arrivals at the higher quantiles (70th, 80th and 90th). Similarly, ethnic diversity has no effect on tourist arrivals at the 90th quantile; but ethnic diversity does matter for tourists at other quantiles, particularly for the lower quantiles at 10th and 20th quantiles.

In Panel B of Table 2 we report the results of the parameter heterogeneity tests for each pair of inter-quantile comparisons with their respective \( p \)-values. Generally, the tests of equality of the coefficients between the lower quantiles and the higher quantiles cannot reject the hypothesis of parameter homogeneity, as the differences between the lower and higher quantiles are not significant. Similarly, the differences within the lower quantiles and the differences within the higher quantiles are also not significant. However, there is a statistically significant difference between parameter estimates at the 40th quantile and the parameter estimates at the 80th quantile (at 10% level); and between parameter estimates at the 50th quantile and parameter estimates at the 80th quantile (at 5% level). This implies that tourists within this quantiles (40th, 50th and 80th) exhibit parameter heterogeneity, while tourists at the 10th, 20th, 30th, 60th, 70th and 90th quantiles exhibit parameter homogeneity.
CONCLUSION

In this study we have estimated a tourism demand model using cross-country analysis for 126 countries. The main purpose of this study is to investigate whether countries with multi-ethnicity, multi-linguistic and multi-religious society induce international tourist arrivals. We took the approach from the perspective of the supply side in modelling our tourism demand model, in the sense that, we include only the pull factors in the model. We try to answer on the perspective of the host country: What does a country can offer to induce tourist to a destination country? Does a country having a multi-racial society fascinate tourist to visit? Does a wealthy country attract...
more tourists to come for a vacation? Does a country that can provide safety to tourists is desirable for them to spend their holidays? Does a country that are free from pollution is a paradise to spend time with their family for vacation? Thus, in order to answer these questions, we have endeavoured to include measures of diversity, wealth, safety and pollution in the tourism demand model. Generally, our results suggest that all variables – wealth, pollution, safety and diversity are important factors affecting decision of tourist to visit a destination country. Wealth and safety show positive relationship while pollution and diversity suggest negative relationship with tourist arrivals. This would suggest that a wealthy country and a country that the tourist considered ‘safe’ to travel will induce tourist to visit these countries. However, countries that are exposed to pollution and characterised by people of multi-diversities tend to shy away international visitors.

Thus, does this means that it is a curse for a country to have diversities as part of the population? This may not be entirely true. Eritrea as discussed earlier by Ghebrihiwet (2009) is a good example where a country can exploit diversity of their various ethnicities for tourism. Another good example is Malaysia. Malaysia is well known to the world for a country having a multi-racial society offering diversities of various cultures, languages, races and religions. The government of Malaysia through its Tourist Development Corporation played critical role in planning, gearing and developing the tourism industry by proposing and implementing various initiatives through its various five-year economic plans towards promoting good image of the country and provide important and pertinent information on vacation for potential visitors around the world. Through various plans: the National Eco-Tourism Plan (1996) introduced during the Seventh Malaysia Plan (1996-2000); the Rural Tourism Master Plan (2001), and the Second National Tourism Policy (2003-2010) during the Eight Malaysia Plan (2001-2005); and the government effort to drive Malaysia as a high income nation in 2020, tourism has long been identified as one of the growth potential that can realise this vision. Malaysia in fact has the advantage by having a multi-racial society of different cultures, languages and religions that can offer diversities to visitors; and Malaysia can capitalise these situation to boost tourist attractions as a destination country. As a matter of facts, and for the record, Malaysia has been ranked tenth in the world’s top 10th tourism destinations in 2012; 9th in 2011, 2010 and 2009 (WTO, 2010, 2011, 2012, 2013). This has been the result of the various efforts by the Malaysian government in promoting tourism to the world, and taking this sector seriously as it has substantial contributions to foreign exchange earnings and government revenues. Thus, one policy implication is that the tourism authorities can exploit the “good side” of a plural society by exploiting the media by intensifying media coverage both print and digital, as potential tourists are highly dependent on the information, interpretations and images provided by the media. As stressed by Steiner (2007), this information shapes the image of the harmonization of the plural society that will induce tourists to a destination country.

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