What Are the Factors Determining Tourists Destinations in Africa?

Kareem Olayinka Idowu and Ajide Kazeem Bello
Department of Economics, University of Ibadan, Ibadan, Nigeria

Abstract: This study examines the factors that determine the choice of tourism destination in Africa. The study has included both endogenous and exogenous variables in the determination of factors that determine tourism destination choice in Africa. Using a dynamic Generalized Method Moments panel data analysis, it is discovered that exogenous variables such as political instability, crime rate and endogenous variables such as world income are not the major determinants of tourist arrivals to African destinations. However, past experience of tourists and telecommunication infrastructures are the major determinants. Apart from these, tourists are also sensitive to prices through real exchange rate. The results of this study however, conform with Naude and Saayman, Eilat and Einav and Alper, Muhittin and Farit. The conclusion in this study is that the exogenous variables such as political instability and the level of crime rate in each African destination are not vital determinants of tourists choice of African destinations. The implication of this is that for African destinations to further reap from the potentialities embedded in tourism sector, African government must be able to stabilize their macro economies and at the same time provide functional infrastructures. Maintenance of peace and political stability as well as reduction in the level of incessant crime rate in the various destinations will also be adequate.

Key words: Tourism, destination choice, dynamic panel, incessant crime, instability, telecommunication

INTRODUCTION

Tourism is one of the most flourishing and emerging industry in the world with international receipt growing by over 10% over the last 10 years except for the recent decline experienced in the second half of 2008 which was due to the global recession. As at end of 2008, international tourist arrivals were estimated to be 924 million (WTO, 2009). Despite tourism potentials of creating many employment opportunities and foreign exchange in any economy, it is also a means of enhancing each country destination's infrastructural facilities as well as promoting cooperation and understanding among people all over the world. Tourism has become a means by which many countries especially the developing countries, improve their income base and at the same time show case their traditional heritage. Tourism in African continent has been seen as a means of enhancing economic growth and development (Kester, 2003) as well as launching the image of the continent to the outside world (Olayinka and Gbadebo, 2007). According to Christie and Crompton (2001), the contribution of tourism industry in the Gross Domestic Products (GDP) and exports in many African countries has been improving overtime. As identified by WTO (2009) report, there has been significant growth (about 4%) in the level of international tourist arrivals in Africa, despite the global

economic meltdown that has affected tourist arrivals to Europe and Asia negatively. Further, the WTO (2008) put the value of US$28.3 billion as the amount that was generated in 2007 from economic activities in the travel and tourism industry in Sub-Saharan Africa (SSA). It is also discovered that about 2.5% of the GDP in the region is attributed to tourism industry that has generated about 5.5% of all employment in the region (Kareem, 2008).

However, in spite of Africa's potential in tourism, the continent's tourism endowments have been underdeveloped and underutilized. WTO (2004) report indicates that Africa has attracted <5% of international tourist arrivals in 2004 and had received <3% of international tourism receipt. Africa in 2008 received about 46.9 million of the international tourist arrivals and got international tourism receipts of US$28.3 billion in 2007 which is very far to what Europe, America and Asia got. Furthermore, despite African potentials in tourism industry there are limited empirical studies on the issues concerning the hypothetical subject matter in the continent.

This is the reason why Christie and Crompton (2001) opined that the lack of appropriate empirical studies on tourism in Africa is what contributed to the inadequate policy guidance to the industry. It is against this backdrop of gaps in empirical studies of tourism in Africa that this study intends to contribute to the frontier of

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Corresponding Author: Kareem Olayinka Idowu, Department of Economics, University of Ibadan, Ibadan, Nigeria

knowledge in tourism literature by evaluating the factors that determine choice of tourism destinations in Africa through the inclusion of both endogenous and exogenous variables using a dynamic Generalized Method of Moment (GMM) panel data analysis between the period of 1995-2007. The inclusion of these exogenous variables such as political instability, crime rate, etc., in empirical studies is scarce in the literature. This might be due to the destinations that were often investigated in empirical tourism research, i.e., the developed countries. However, due to some peculiarities in African countries it is relevant to consider these variables in the determination of tourism destination choice in the continent.

MATERIALS AND METHODS

The model for specification in this study shall follow the empirical model of Halicioglu (2004) which looked at the influence of world income, relative prices and transportation cost on tourism arrivals. Though, this model will be re-modified to the deal with the reality in the African continent. And this is the fact that there is political dimension to tourism demand in the continent that was not considered in the Halicioglu (2004) model.

Thus, we readjust the model to include political dimension to tourism demand and this is by including crime rate, political instability and terrorism attack into the model (Naude and Andrea (2005); Olayinka and Gbadebo, 2007). Infrastructural variable such as number of fixed and mobile available for tourists in the continent will also be included. Thus, specify the system equation model as follows:

$$\ln TA_{it} = \alpha_{i0} + \alpha_{i1}\ln WY_{it} + \alpha_{i2}\ln EXC_{it} + \alpha_{i3}\ln CR_{it} \quad (1)$$
$$+ \alpha_{i4}POL_{it} + \alpha_{i5}\ln TEL_{it} + \alpha_{i6}\ln TA_{it} + \varepsilon_{it}$$

Here:

i   =   1---N that the 20 countries that is selected for the study
TA   =   The total tourist arrivals in African
WY   =   The real world income
EXC =   The exchange rate adjusted to relative prices between Africa and the rest of the world
CR   =   The crime rate measured by the incidence of recorded crime rate on the continent
POL =   The measure of political instability
Tel =   The number of telecommunication services

We expect that α_1 $\alpha_6 > 0$ and α_2, α_3, α_4, $\alpha_5 < 0$. This study shall cover the period from 1995-2007.

Estimation technique: Panel data analysis shall be used in the study to estimate the demand for tourism in Africa. Its specification is given as:

$$X = V\beta + \alpha + N$$

For = 1,---, Z and t = 2,----,T. X here is the tourist arrivals of country j in period t. β is a 1×k vector of explanatory variables. α is the fixed effect estimates. The fixed effect estimator will allow us to show the short term and specific country/cross-section effects. The use of panel data technique will give us the avenue to address traditional econometric problems in cross-country regression such as unobserved country effects, outliers, dynamics and model uncertainty. Generalized Method of Moment (GMM) will also be used in order to deal with the problem of endogeneity that might arise.

RESULTS AND DISCUSSION

We show different results in this section in order to make adequate comparison among them. Table 1 shows the result of the dynamic panel data technique used in this study. The dynamic result gives four different outcomes of the technique vis a vis, fixed effect, random effect, difference and the orthogonal deviation. The dynamic results show that in all the four outcome of the model, exchange rate in all these models is inversely related to tourist arrivals indicating that appreciation of destinations currencies often discourage prospective tourists form coming to Africa and that tourist are sensitive to prices. It is important to note that this variable is significant at 5% level for all the models and it is highly inelastic.

This result goes with the studies of Alper *et al.* (2009), Habibi *et al.* (2008) and Onder *et al.* (2009). Crime rate in the continent also has an inverse effect with the tourist arrivals that is as the incidence of crime increases in the destinations, there will be reduction in the inflow of tourists to these destinations. This is in conformity with the study of Olayinka and Gbadebo (2007). The lagged value of tourist arrivals (Alper *et al.* (2008) called this

Table 1: Panel GMMr result-dynamic

Variables	Fixed effect	Random effect	Difference	Orthogonal deviation
Constant	-3.0941	-1.1005	-	-
	(-1.98)**	(-0.43)		
ln TA (-1)	0.6012	1.0512	0.0920	2.0612
	(2.87)**	(23.26)***	(2.83)***	(2.92)***
Exc	-0.0202	-3.06E-05	-0.0245	-0.0832
	(-2.61)**	(-2.52)**	(-1.97)**	(-2.63)**
lnCrime	-0.1652	-0.0446	-0.0720	-0.1886
	(-1.57)	(-2.56)**	(0.78)	(-1.78)
lnTel	0.6574	0.1257	0.7341	0.5018
	(3.83)***	(-3.40)***	(5.97)***	(6.01)***
Pol	-0.0342	0.0532	0.0126	-0.0262
	(-0.81)	(1.91)	(0.19)	(-0.86)
WY	0.0711	0.0371	0.0414	0.0712
	(0.16)	(0.69)	(0.97)	(1.19)
Adj R²	0.91	0.88	0.81	0.84

Researchers computation, *,** and *** denote 10, 5 and 1% level of significant

variable minor mouth) which is the number of previous tourist arrivals, the number of available telecommunication infrastructure and world income all has direct effects on the number of tourist arrivals which confirm the study of Fayissa *et al.* (2009). The number of telecommunication infrastructures for the four outcomes are statistically significant indicating that it is an important factor that influences tourists choice of destinations. This conforms to the result of Onder *et al.* (2009). The same can be said of the previous number of tourist arrivals in the continent as all the outcomes show that this variable is relevant determinant of tourist demand which is in line with the results of Alper *et al.* (2008). An interesting thing here is that the autonomous variable indicates that if countries of destinations do not make efforts to develop tourism through the improvement in telecommunication infrastructure, reduced crime rate and stable political situation, there will be reduction in the number of tourist arrivals in Africa.

CONCLUSION

This study has empirically determined factors that influence the choice of tourism destinations in Africa. In selecting the variables for this study, considered both the endogenous and exogenous variables due to the peculiarities of African destinations. That is we have selected the economic variables as well as the socio-political variables that influence the tourists choice of destinations. The study found that there three important factors determining tourists choice of African destinations, they are the level of telecommunication infrastructural facilities that were put in place, the real exchange rate (price sensitivity) and the experience of past tourists that have visited African destinations which Alper *et al.* (2008) called word of mouth effects. Interestingly, the political instability, crime rate and world income are not major determinants in African destinations.

REFERENCES

Alper, A., F. Kula and M. Kaplan, 2008. International tourism demand for Turkey: A dynamic panel data approach. Munich Personal RePEc Archive Paper No. 10601, September.

Alper, A., F. Kula and M. Kaplan, 2009. International tourism demand for Turkey: A dynamic panel data approach. Research Journal of International Studies, Issue 9, January, 2009, pp: 65-73. http://www.eurojournals.com/rjis_9_07.pdf.

Christie, I.T. and D.E. Crompton, 2001. Tourism in Africa. Africa region working paper, series No. 12. The World Bank, Washington DC.

Fayissa, B., C. Nsiah and B. Tadesse, 2009. Tourism and economic growth in Latin American Countries (LAC): Further empirical evidence. Department Econ. Fin. Working Paper Series.

Habibi, F., K.A. Rahim and C. Lee, 2008. United Kingdom and United States tourism demand for Malaysia: A cointegration analysis. MPRA Paper No. 13590. http://mpra.ub.uni-muenchen.de/13590/1/MPRA_paper_13590.pdf.

Halicioglu, F., 2004. An ARDL model of international tourist flows to Turkey. Global Business and Economics Review 2004 Anthology, pp: 614-624. http://129.3.20.41/eps/it/papers/0503/0503005.pdf.

Kareem, O.I., 2008. A panel data analysis of demand for tourism in Africa. Proceedings of the 14th Annual Conference on African Econometric Society, July 2008, Cape Town, South Africa, pp: 1-27.

Kester, J.G.C., 2003. International tourism in Africa. Tourism Econ., 9: 203-221.

Naude, W.A. and S. Andrea, 2005. The determinants of tourism arrivals in Africa: A panel data regression analysis. Tourism Econ., 11: 365-391.

Olayinka, I.K. and O.O. Gbadebo, 2007. Tourism and reputation in Africa: A panel data analysis. African Journal of Economic Policy, Vol. 14, No. 2, December. http://ajol.info/index.php/ajep/article/view/44921/0.

Onder, O.A., A. Candemir and N. Kumral, 2009. An empirical analysis of the determinants of international tourism demand: The case of Izmir. Cong. ERSA, 17: 1525-1533.

WTO, 2004. World tourism barometer. Volume 2, No. 3, October 2004. http://www.unwto.org/facts/eng/pdf/barometer/october2004.pdf.

WTO, 2008. Tourism highlights. Edition 2008. http://www.hospitalitynet.org/news/4039214.search?query=tourism%20highlights.

WTO, 2009. UNWTO world tourism barometer. Volume 7, No. 1, January 2009. http://www.world-tourism.org/facts/eng/pdf/barometer/UNWTO_Barom09_1_en.pdf.