

Tourism management synergies in Sub-Saharan Africa

Simplice A. Asongu^{1,2,3}  | Mushfiqur Rahman⁴ | Richard Adu-Gyamfi⁵ | Raufhon Salahodjaev^{6,7}

¹School of Economics, University of Johannesburg, Johannesburg, South Africa

²Department of Economic & Data Science, New Uzbekistan University, Tashkent, Uzbekistan

³University of Tashkent for Applied Sciences, Tashkent, Uzbekistan

⁴School of Business, University of Wales Trinity Saint David, London, UK

⁵International Trade Centre, Geneva, Switzerland

⁶Tashkent State University of Economics, Tashkent, Uzbekistan

⁷ERGO Analytics, Tashkent, Uzbekistan

Correspondence

Simplice A. Asongu, School of Economics, University of Johannesburg, Auckland Park, South Africa.

Email: asongusimplice@yahoo.com and asongus@afridev.org

Abstract

The purpose of this study is to assess how some governance dynamics, such as political stability and the rule of law, moderate the incidence of some macroeconomic factors (i.e., domestic investment and trade openness) on tourism development. The focus of this study is on 47 countries in sub-Saharan Africa with data from 2002 to 2018, and the Generalized Method of Moments is employed as the empirical strategy. From the findings, synergy effects are apparent in the role of the rule of law in moderating domestic investment for tourism development in terms of tourism receipts. It follows that, for the sampled countries, promoting tourism development can be most effective if policies for enhancing domestic investment and promoting the rule of law are implemented simultaneously.

KEYWORDS

economic growth, Generalized Method of Moments, GMM, governance, political stability, rule of law, sub-Saharan Africa, synergy, tourism development, tourism management

How do governance dynamics in terms of the rule of law and political stability moderate domestic investment and trade openness to influence tourism development? This is the research question underpinning this study. There are at least three fundamental reasons for exploring policy synergies that are relevant in promoting the development of the tourism industry in sub-Saharan Africa (SSA): the importance of tourism in the economic development of the subregion; the relevance of governance in creating favorable socio-economic outcomes; and gaps in the tourism development literature. It is worthwhile to put these reasons into perspective.

First, both the policy and scholarly literature are consistent on the importance of tourism in driving economic prosperity and/or economic development (Nyasha et al., 2021; United Nations Environment Programme, 2011; World Bank, 2011) and reducing poverty (Folarin & Adeniyi, 2020) in developing as well

as developed countries (Industrial Development Corporation, 2018; United Nations Conference on Trade and Development [UNCTAD], 2013; World Travel & Tourism Council [WTTC], 2019). The underlying importance of tourism is substantiated by the UNCTAD (2013), which maintains that the criticality of tourism in promoting human and economic development is more apparent when many stakeholders in society partake in the implementation of corresponding tourism development policy initiatives. The underlying perspectives are supported by Folarin and Adeniyi (2020) who opine that Africa stands a good chance to benefit from the positive development externalities of tourism, not least because the continent is characterized by beaches, wildlife, avenues of adventure, and cultural heritages. The discussed advantages of tourism to economic development are very unlikely to be realized if good governance measures are not in place.

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Second, the importance of good governance in driving economic prosperity (which embodies tourism development) is intuitive. Narrowing the framework to the context of the present study, and in order for a macroeconomic policy designed to favor tourism development, the government should be effective at implementing them (Asongu et al., 2019; Bramwell & Lane, 2011; Qian et al., 2016). Such implementation requires, *inter alia*: appropriate respect for the rule of law and a favorable political climate or political stability. Unfortunately, the already sparse literature on tourism development in SSA does not reflect how aspects of governance influence macroeconomic policies for tourism development in the sub-region.

Third, the attendant literature on tourism development has largely focused on drivers of tourism in both developed and developing countries (Alvarez & Campo, 2014; Enders et al., 1992; Kingsbury & Brunn, 2004; Liu & Pratt, 2017; Mehmood et al., 2016; Pizam & Fleischer, 2002; Pratt & Liu, 2016; Richter & Waugh, 1986; Saha & Yap, 2014; Sönmez & Graefe, 1998; Sönmez et al., 1999), especially on the nexus between income inequality and tourism (Adeniyi et al., 2023; Chiu & Wang, 2023; Dossou et al., 2023; Kinyondo & Pelizzo, 2015; Kyara et al., 2023; Seetanah et al., 2023; Zhang & Yang, 2023). Unfortunately, in spite of the evolving literature on such determinants, we are unaware of a contemporary study that assesses how political stability and the rule of law moderate macroeconomic factors (such as domestic investment and trade openness) to influence tourism development.

The closest study on tourism development to the current research in terms of periodicity and geographical focus is Nyasha and others (2021), which has assessed how tourism affects economic development in SSA. The authors conclude that while tourism expenditure negatively affects economic development, tourism receipts have the opposite effect. The present research departs from Nyasha and others (2021) on two main fronts. On the one hand, the present study focuses on tourism development as an outcome variable instead of per capita gross domestic product (GDP). On the other hand, instead of establishing a direct link between tourism and economic development, the present study is not framed as a linear additive model because interactive regressions are involved in examining how governance dynamics of political stability and the rule of law moderate trade openness and domestic investment to ultimately affect tourism dynamics in terms of tourism receipts and tourism expenditure. It follows that the study is framed in terms of macro management of trade openness and domestic investment for tourism development, contingent on political stability and the rule of law.

The study also departs from the attendant contemporary and noncontemporary literature on the nexus between political (in)stability and tourism, which has

largely focused on, *inter alia*: the management of tourism market borders and fluid goods in selected African countries (Akko, 2015); how terrorism influences tourist arrivals (Seabra et al., 2020); nexuses between tourism, terrorism, and political instability (Sönmez, 1998); political transitions and transition events in the choice of a tourism destination (Seyfi & Hall, 2020); and the incidence of geopolitical risks on tourism (Lee et al., 2021).

The rest of the study is organized as follows. We next discuss linkages between political stability, the rule of law, trade openness, domestic investment, and tourism development in order to consolidate the theoretical underpinnings. The data and methodology are then covered, before presenting the empirical results. We finally conclude with implications and future research directions.

POLITICAL STABILITY AND RULE OF LAW IN BOOSTING DOMESTIC INVESTMENT AND TRADE OPENNESS FOR TOURISM

This section is framed to articulate the underpinning linkages between political stability, the rule of law, domestic investment, trade openness, and tourism development in terms of tourism receipts. In essence, its purpose is to provide logical arguments, which are supported by the attendant literature on the fact that domestic investment and trade openness affect tourism development on the one hand and, on the other, that political stability and the rule of law moderate the incidence of domestic investment and trade openness on tourism development.

Domestic investment, trade openness, and tourism development

The importance of domestic investment in driving tourism is both intuitive and empirical. On the intuitive front, several perspectives are worth articulating. For instance, investment at the domestic level may be tailored to the tourism sector in order to promote the tourism industry. Hence, it is logical that with higher domestic investments that are designed to promote tourism, tourism development follows (Alam & Paramati, 2017). From a broader standpoint, investment that is destined to promote domestic infrastructure also favors the development of tourism. For example, investment in road infrastructure, information, and communication technologies, hotels, *inter alia*, obviously promote tourism because tourists intuitively depend on such infrastructure before making traveling decisions (Paramati et al., 2018). On the empirical front, the importance of favorable domestic investment

(public and private) for the development of domestic tourism has been substantially documented in the literature (Akama, 2002; Balalia & Petrescu, 2011; Nawaz, 2016; Ribarić & Ribarić, 2013).

Trade openness is a component of globalization that intuitively increases tourism. Accordingly, trade openness is the economic component of globalization and hence, the possibilities of importing and exporting goods and services also offer tourism opportunities for a plethora of reasons, inter alia: in accordance with Chaisumpunsakul and Pholphirul (2018), the nexus between international trade and international tourism is premised on three principles.

Principle 1: Business travel is stimulated by international trade (Turner & Witt., 2001) and such enhances networking at national, business, and individual levels. Moreover, in accordance with White (2007), the network effect is bolstered by international trade, which promotes exchanges and travels among nations as well as decreases the costs of transactions.

Principle 2: Advertisements of products that are attractive to the attention of consumers are boosted by international trade, with a favorable externality that engenders awareness of not only the products or services in question but also more knowledge about the country from which the product originates. Accordingly, as argued by Kulendran and Wilson (2000), the attention of consumers, as well as their recognition, increases the willingness to travel to the country where the product originates.

Principle 3: In order to ease corresponding activities, trade at the international level constrains domestic economies to develop the relevant infrastructure (e.g., communication and transportation systems) that are essential in facilitating the attendant trade. The position that infrastructural development attracts international tourists' arrivals is supported by Santana and others (2011).

In summary, in light of the underlying principles, it is evident to posit that international trade is positively related to international tourists' arrivals (Chaisumpunsakul & Pholphirul, 2018; Leitao, 2010). Moreover, in many countries, governments play a critical role in the prosperity of the tourism industry (Akama, 2002), not least because, inter alia, governments ensure political stability and maintain the rule of law, which are also relevant in decreasing perceived risks on the part of tourists in relation to tourism destinations.

The role of political stability and rule of law in tourism development

Given that tourism is an economic sector that is highly fragmented, many stakeholders are involved in the successful development of the sector. Among these

stakeholders is the role of good governance in enhancing and easing the arrivals of international tourists through the guarantee of an enabling legal and socio-political environment that reduces the perceived risks of tourists in the destination country (Akama, 1997, 2002; Hughes, 1994). Within this framework, it has been argued by Balalia and Petrescu (2011) that, the government has a critical role in supervising, facilitating, and controlling tourism. Furthermore, as the authors have posited, the public sector is relevant in the growth of tourism because it engages some investments that are both essential in good governance and promotion of the domestic economy as an attractive destination through, inter alia: (i) maintenance of quality standards, (ii) development of infrastructure, and (iii) protection of tourists against violence. In essence, as argued by Ribarić and Ribarić (2013), the actions of the government to improve environmental conditions that are favorable for economic prosperity and overall production engender a direct influence on the tourism industry.

In light of the above, the intuition for considering the rule of law and political stability as government factors that moderate the importance of trade openness and domestic investment in tourism within an empirical framework of interactive regressions builds on the following foundational elements: (i) When political stability is apparent within a country, the country is more likely to attract tourists, especially if the country has interesting tourist destinations. This foundation is based on the fact that it has been documented in the tourism literature that tourists prefer destinations that are characterized by less violence and political strife (Pizam & Mansfeld, 2006; Seabra et al., 2013). (ii) Respect for the rule of law is important in promoting tourism in countries because the rule of law is a dimension of institutional governance, which is conceived as the respect by the state and citizens of institutions that govern interactions between the government and citizens (Ajide et al., 2020; Ajide & Raheem, 2016a, 2016b). In essence, the supporting literature is consistent with the position that tourists are attracted to destinations in which perceived risks are reduced and the rule of law is highly respected (Asongu & Acha-Anyi, 2020; Lepp et al., 2011).

DATA AND METHODOLOGY

Data

This study focuses on 47 SSA countries using data of annual periodicity from 2002 to 2018, which are obtained from two principal sources: the World Governance Indicators (WGI) and World Development Indicators (WDI) of the World Bank.¹ Choosing the selected countries in SSA is premised on the

availability of data at the time of the study. Moreover, consistent with the research closest to this study (Nyasha et al., 2021), in order for the data structure to be consistent with the empirical strategy to be adopted, the data is improved in terms of nonoverlapping intervals. Accordingly, the choice of the Generalized Method of Moments (GMM) as the estimation strategy in this study requires that the number of agents or countries should be significantly higher than the number of years in each country.

In light of the above and in accordance with Nyasha and others (2021), the current data structure consisting of 17 years (or $T = 17$) and 47 countries (or $N = 47$), is improved to reduce T with the help of data averages or three-year nonoverlapping intervals, which yield six data points (i.e., $T = 6$): 2002–2003, 2004–2006, 2007–2009, 2010–2012, 2013–2015, and 2016–2018. Accordingly, because 17 is not divisible by three, the first data point consists of a two-year nonoverlapping interval. The technique of improving a data structure to be consistent with the estimation technique is in accordance with contemporary GMM-centric literature (Asongu, 2020; Asongu & Odhiambo, 2020a, 2020b). It follows that reducing T from 17 to 6 improves the analytical perspective because instrument proliferation would be mitigated in the post-estimation diagnostic tests to assess the validity of the overall GMM model.

The outcome variable adopted in this study for tourism development is tourism receipts as a percentage of total exports. The choice of this proxy is in line with contemporary tourism literature (Osinubi & Osinubi, 2020; Sahni et al., 2021). The study uses “international tourism, receipts (% of total exports)” as the dependent variable because it is more aligned with the estimation technique being employed. Moreover, the number of tourism arrivals is instead employed as a control variable because adopting it as a dependent variable would require adopting an estimation technique consistent with count data (e.g., negative binomial regressions). Accordingly, compared with a negative binomial regression, the GMM estimation technique is more robust in terms of accounting for some dimensions of endogeneity.

Consistent with the motivation of the study and the extant literature, domestic investment is proxied by gross fixed capital formation as a percentage of GDP (Nyasha et al., 2021) while trade openness is measured with imports plus exports of goods and services as a percentage of GDP (Asongu et al., 2020).

Moreover, the choices of political stability/no violence and the rule of law indicators from the WGI indicators of the World Bank to proxy for political stability and law are consistent with contemporary governance literature (Ajide & Raheem, 2016a, 2016b). While political stability broadly proxies for political governance, the rule of law broadly proxies for institutional governance. Moreover, political stability is highly correlated with “voice & accountability” (i.e., a component of political governance) while the rule of law is also highly correlated with corruption control (i.e., a component of institutional governance).

To account for variable omission bias, the following variables are involved in the conditioning information set: tourism expenditure (Rosselló-Nadal & He, 2020), GDP per capita (Masron & Subramanian, 2020), financial development (Al-Mulali et al., 2021; Khalid et al., 2020), and tourist arrivals (Rosselló-Nadal & He, 2020). In essence, all the adopted elements in the conditioning information set are expected to positively influence tourism receipts in line with the attendant literature. Accordingly, the choice of these control variables is also supported by the corresponding tourism development literature (Alvarez & Campo, 2014; Enders et al., 1992; Kingsbury & Brunn, 2004; Liu & Pratt, 2017; Mehmood et al., 2016; Pizam & Fleischer, 2002; Pratt & Liu, 2016; Richter & Waugh, 1986; Saha & Yap, 2014; Sönmez & Graefe, 1998; Sönmez et al., 1999).

The definitions of variables as well as their corresponding sources are disclosed in Appendix A. Appendix B provides the summary statistics, while the correlation matrix is captured in Appendix C.

Methodology

Specification

Building on recent GMM-specific literature (Asongu & Minkoua, 2018; Asongu et al., 2017; Tchamyou, 2019; Tchamyou et al., 2019), the adoption of the GMM technique is founded on three main motivational elements. First, it is apparent from the previous section that restructuring the dataset to make it compatible with the GMM strategy has yielded the $N > T$ condition, which is imperative for the adoption of the attendant estimation strategy. Second, the outcome variable (i.e., tourism receipts) is characterized by some degree of persistence owing to the fact that the correlation between its level and the first lags series is higher than the rule of thumb critical mass of 0.800 established in the corresponding GMM-centric literature (Tchamyou, 2020, 2021). Third, the estimation technique is also tailored to account for endogeneity in view of the fact that: (i) the unobserved heterogeneity is controlled with the help of time-fixed effects that also

¹The 47 sampled countries are: Benin; Burkina Faso; Burundi; Central African Republic; Chad; Congo Democratic Republic; Eritrea; Ethiopia; The Gambia; Guinea; Guinea-Bissau; Liberia; Madagascar; Malawi; Mali; Mozambique; Niger; Rwanda; Sierra Leone; Somalia; South Sudan; Tanzania; Togo; Uganda; Angola; Botswana; Cabo Verde; Cameroon; Comoros; Congo Republic; Cote d'Ivoire; Equatorial Guinea; Eswatini; Gabon; Ghana; Kenya; Lesotho; Mauritania; Mauritius; Namibia; Nigeria; Sao Tome and Principe; Senegal; South Africa; Sudan; Zambia and Zimbabwe.

control for cross-sectional dependence, and (ii) simultaneity or reverse causality is also taken on board through an internal instrumentation process.

Equations (1) and (2) present the standard system estimation approach with, respectively, level and first difference specifications:

$$TR_{i,t} = \sigma_0 + \sigma_1 TR_{i,t-\tau} + \sigma_2 M_{i,t} + \sigma_3 G_{i,t} + \sigma_4 MG_{i,t} + \sum_{h=1}^4 \delta_h W_{h,i,t-\tau} + \eta_i + \xi_t + \varepsilon_{i,t}, \quad (1)$$

$$TR_{i,t} - TR_{i,t-\tau} = \sigma_1 (TR_{i,t-\tau} - TR_{i,t-2\tau}) + \sigma_2 (M_{i,t} - M_{i,t-\tau}) + \sigma_3 (G_{i,t} - G_{i,t-\tau}) + \sigma_4 (MG_{i,t} - MG_{i,t-\tau}) + \sum_{h=1}^4 \delta_h (W_{h,i,t-\tau} - W_{h,i,t-2\tau}) + (\xi_t - \xi_{t-\tau}) + (\varepsilon_{i,t} + \varepsilon_{i,t-\tau}), \quad (2)$$

where $TR_{i,t}$ represents the tourism receipts variable of country i in period t ; M denotes a macroeconomic channel (trade openness or domestic investment); G reflects one of the two governance dynamics (political stability or the rule of law); MG is the interaction between a macroeconomic channel and a governance moderating proxy (“political stability \times trade,” “political stability \times domestic investment,” “rule of law \times trade,” and “rule of law \times domestic investment”); σ_0 is a constant; τ is the degree of auto-regression, which is a three-year lag (i.e., denoted by one in the equation) because such a one period lag appropriately captures previous information to explain the model; W is the vector of control variables (*tourism expenditure*, *GDP per capita*, *financial development*, and *tourists arrivals*); η_i is the country-specific effect; ξ_t is the time-specific constant; and $\varepsilon_{i,t}$ is the error term.

Among available GMM options, this research adopts the Roodman (2009) extension of Arellano and Bover (1995), which previous GMM-centric studies have established to be superior to the less contemporary difference and system GMM approaches because it controls for cross-sectional dependence and mitigates the proliferation of instruments. It follows that the GMM approach adopted in this study is based on forward orthogonal deviations instead of previous differences as in Arellano and Bover (1995). The specification is *two-step* because it controls for heteroskedasticity. In essence, the *one-step* approach accounts for homoskedasticity.

Identification and exclusive restrictions

Insights into properties of identification and exclusive restrictions are very relevant for a robust GMM

specification, not least because this is paramount for the information criteria essential for the validity of estimated models. The identification process is a narrative that entails the attribution of three categories of variables: the outcome variable, the endogenous explaining or predetermined variables, and the strictly exogenous variables. Obviously, the outcome variable in this study is annual tourism receipts while the endogenous explaining variables constitute the main macroeconomic channels (i.e., trade openness and domestic investment), the governance moderating variables (i.e., the rule of law and political stability), and the control variables (tourism expenditure, GDP per capita, financial development, and tourists arrivals). Moreover, the choice of the strictly exogenous variable as the years or time-invariant variable is consistent with arguments in the GMM-centric literature, which maintain that it is not likely for years to become endogenous upon a first difference (Asongu & Odhiambo, 2020c; Roodman, 2009; Tchamyou & Asongu, 2017; Tchamyou et al., 2019).

The corresponding validation of the assumption of exclusive restriction entails establishing that the strictly exogenous variable can affect the outcome variable exclusively via the exogenous components of the adopted endogenous explaining variables. In light of the above insights, in the findings that are disclosed in the next section, the null hypothesis corresponding to the Difference in Hansen Test (DHT) should not be rejected in order for the discussed assumption of exclusive restriction to be valid. This narrative on the assessment of exclusive restrictions in GMM regressions based on forward orthogonal deviations is consistent with recent studies (Odhiambo, 2020; Tchamyou, 2020, 2021).

EMPIRICAL RESULTS

The empirical findings are disclosed in Tables 1 and 2. While the first focuses on the nexuses between tourism receipts, domestic investment, political stability, and the rule of law, the second is concerned with linkages between tourism receipts, trade openness, political stability, and the rule of law. Each of the tables is presented in two main categories: one on political stability and the other on the rule of law. Moreover, each category entails four main specifications, with the first specification encompassing one control variable and the fourth specification adopting four control variables. It follows that the control variables are increased from one specification to the other given that the second and third specifications, respectively, have two and three control variables.

Borrowing from the contemporary GMM-oriented literature, four criteria of information are employed to determine the validity of estimated models.² In the light of these criteria, the models are overwhelmingly valid

except the last specification in Table 1 in which the Hansen test is rejected. It is relevant to underline that the Hansen test takes precedence over the Sargan test in case of any apparent conflict of interest. This is essentially because, in light of the information criteria, while the Hansen test is robust and unfavorably affected by the proliferation of instruments, the Sargan test is not robust and not unfavorably influenced by instrument proliferation. Hence, it is worthwhile for the Hansen test to be preferred and a measure taken to avoid instrument proliferation by assessing that for each specification, the number of countries is higher than the corresponding number of instruments.

In order to assess the overall incidence of a governance dynamic in moderating a macroeconomic channel for tourism receipts, the net effects of the moderating variables are computed, as in the contemporary literature on interactive regressions (Asongu et al., 2020; Tchamyou, 2021). To put this point into perspective, in the penultimate specification of Table 1, the net effect of domestic investment on tourism receipts from the moderating role of the rule of law is 0.0058 ($[0.238 \times -0.753] + [0.185]$). In the calculation, the unconditional effect of domestic investment is 0.185, the mean value of the rule of law is -0.753 while the conditional impact from the interaction between the rule of law and domestic investment is 0.238.

The following findings can be established from Tables 1 and 2. First, there are synergy effects from the role of the rule of law in moderating domestic investment for tourism receipts. The synergy effects build on the perspective that both the unconditional and conditional effects used in the computation of the corresponding net effects are positive. The understanding of synergy effects is consistent with the contemporary interactive regression literature (Asongu & Acha-Anyi, 2017; Asongu & Nwachukwu, 2017). Second, in spite of significant interactive effects from the other combinations of macroeconomic and governance variables, net effects are not computed because at least one estimated coefficient needed for their computations in the corresponding specifications is not significant. Third, most of the significant control variables have the expected signs.

It is important to clarify that the consistent significance of domestic investment in the right-hand-side (RHS) of Table 1 compared with the left-hand-side (LHS) can be traceable to domestic investment associating more with the rule of law in elucidating the outcome variable or tourism receipts. The comparative relevance is further confirmed by a higher significant negative interactive effect, which can also be explained by the fact that there is a comparatively higher degree of substitution between domestic investment and the rule of law in the RHS, not least because, as apparent in the correlation matrix in the Appendix, domestic investment is more positively correlated with the rule of law (i.e., 0.254) compared with political stability (i.e., 0.148). These findings must be interpreted in terms of associations because consistent with Brambor and others (2006) on the drawbacks of interactive regressions as well as contemporary interactive regressions literature, estimated coefficients are not interpreted in isolation, which is why net effects are computed (Asongu & Le Roux, 2023; Tchamyou et al., 2023). These net effects entail both the conditional or interactive effect as well as the unconditional effect of the main mechanism.

The findings are further discussed in two main strands: the findings pertaining to domestic investment and those related to trade openness. On the front of domestic investment, the findings are broadly consistent with the strand of literature supporting the role of domestic investment or infrastructural development in tourism promotion (Akama, 2002; Alam & Paramati, 2017; Balalia & Petrescu, 2011; Nawaz, 2016; Paramati et al., 2018; Ribarić & Ribarić, 2013). Moreover, the findings also support the importance of governance in providing domestic infrastructure for tourism development (Akama, 1997, 2002; Balalia & Petrescu, 2011; Hughes, 1994).

On the other hand, the findings are not very supportive of the importance of trade openness in promoting tourism contingent on good governance in the perspectives of the rule of law and political stability. It follows that the principles outlined earlier underpinning the relevance of trade openness in tourism development (Kulendran & Wilson, 2000; Santana et al., 2011; Turner & Witt, 2001; White, 2007) do not withstand empirical scrutiny within the remit of the study. This may be explained by the fact that most of the sampled countries have registered trade deficits over the past decade (Moussa, 2016) and, by extension, have registered more trade imports which stimulate tourists to leave the domestic economy to foreign destinations. In accordance with the principles outlined earlier, exports of goods and services are more likely to promote domestic tourism than imports of goods and services.

Before concluding, it is important to articulate that the established findings are consistent with both

²First, the null hypothesis of the second-order Arellano and Bond autocorrelation test (AR (2)) in difference for the absence of autocorrelation in the residuals should not be rejected. Second the Sargan and Hansen over-identification restrictions (OIR) tests should not be significant because their null hypotheses are the positions that instruments are valid or not correlated with the error terms. In essence, while the Sargan OIR test is not robust but not weakened by instruments, the Hansen OIR is robust but weakened by instruments. In order to restrict identification or limit the proliferation of instruments, we have ensured that instruments are lower than the number of cross-sections in most specifications. Third, the Difference in Hansen Test (DHT) for exogeneity of instruments is also employed to assess the validity of results from the Hansen OIR test. Fourth, a Fisher test for the joint validity of estimated coefficients is also provided" (Asongu & De Moor, 2017, p. 200).

TABLE 1 Tourism receipts, domestic investment, political stability, and rule of law.

Variables and information criteria	Dependent variable: International Tourism Receipts (% of total exports)							
	Domestic Investment and Political Stability				Domestic Investment and Rule of Law			
Tourism Receipts (-1)	1.034*** (0.000)	0.923*** (0.000)	0.930*** (0.000)	0.865*** (0.000)	1.049*** (0.000)	1.1001*** (0.000)	1.054*** (0.000)	0.937*** (0.000)
Domestic Investment (DI)	0.018 (0.814)	-0.041 (0.519)	-0.078 (0.180)	-0.017 (0.547)	0.305*** (0.000)	0.357*** (0.000)	0.185*** (0.005)	0.164*** (0.000)
Political Stability (PS)	-1.615 (0.303)	-0.076 (0.944)	-2.894* (0.063)	-2.186* (0.067)	-	-	-	-
Rule of Law (Law)	-	-	-	-	-10.717*** (0.000)	-9.374*** (0.000)	-5.356*** (0.000)	-5.495*** (0.000)
DI × PS	0.054 (0.196)	0.032 (0.221)	0.181*** (0.004)	0.112** (0.013)	-	-	-	-
DI × Law	-	-	-	-	0.355*** (0.000)	0.319*** (0.000)	0.238*** (0.000)	0.233*** (0.000)
Tourism Expenditure	0.295 (0.205)	0.591*** (0.007)	0.348 (0.114)	0.798*** (0.000)	0.290 (0.190)	0.132 (0.586)	0.281 (0.107)	0.366** (0.013)
GDP per capita (log)	-	-0.998 (0.313)	-2.647** (0.032)	-2.689*** (0.005)	-	0.361 (0.768)	0.623 (0.707)	0.277 (0.782)
Financial Development	-	-	0.027 (0.410)	0.046** (0.046)	-	-	-0.065 (0.304)	-0.027 (0.369)
Tourist Arrivals (log)	-	-	-	0.668* (0.066)	-	-	-	0.085 (0.744)
Time effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Net effect of DI	na	na	na	na	0.0376	0.1168	0.0058	nsa
AR(1)	(0.078)	(0.057)	(0.048)	(0.049)	(0.055)	(0.048)	(0.062)	(0.062)
AR(2)	(0.547)	(0.493)	(0.407)	(0.559)	(0.550)	(0.584)	(0.525)	(0.485)
Sargan OIR	(0.041)	(0.075)	(0.153)	(0.149)	(0.311)	(0.428)	(0.169)	(0.055)
Hansen OIR	(0.297)	(0.204)	(0.647)	(0.474)	(0.323)	(0.168)	(0.141)	(0.078)
<i>DHT for instruments</i>								
(a) Instruments in levels								
H excluding group	(0.207)	(0.373)	(0.665)	(0.232)	(0.666)	(0.833)	(0.974)	(0.373)
Dif(null, H = exogenous)	(0.368)	(0.186)	(0.537)	(0.611)	(0.228)	(0.080)	(0.045)	(0.063)
(b) IV (years, eq(diff))								
H excluding group	(0.522)	(0.146)	(0.507)	(0.320)	(0.397)	(0.211)	(0.185)	(0.038)
Dif(null, H = exogenous)	(0.148)	(0.491)	(0.731)	(0.796)	(0.263)	(0.223)	(0.204)	(0.697)
Fisher	102.25***	83.64***	232.30***	690.86***	57.49***	64.22***	1200.10***	375.15***
Instruments	23	27	31	35	23	27	31	35

(Continues)

TABLE 1 (Continued)

Variables and information criteria	Dependent variable: International Tourism Receipts (% of total exports)							
	Domestic Investment and Political Stability				Domestic Investment and Rule of Law			
Countries	39	39	39	37	40	40	40	38
Observations	172	172	169	162	173	173	170	163

Note: The significance of bold values is twofold. (1) The significance of estimated coefficients and the Fisher statistics. (2) The failure to reject the null hypotheses of: (a) no autocorrelation in the AR(1) and AR(2) tests and; (b) the validity of the instruments in the Sargan and Hansen OIR tests. Constants are included in all regressions. na: not applicable because at least one estimated coefficient needed for the computation of net effects is not significant. nsa: not specifically applicable because the model does not pass all post diagnostics tests. The mean value of the rule of law is -0.753 . The mean value of political stability is -0.562 .

Abbreviations: DHT, Difference in Hansen Test for Exogeneity of Instruments Subsets; Dif, Difference; OIR, Over-identifying Restrictions Test.

***, **, *: significance levels at 1%, 5%, and 10%, respectively.

contemporary and noncontemporary development issues in Africa that are preventing tourism development, especially as it pertains to, inter alia: (i) the case of Kenya in 2015 in which contraction of tourism was the result of poor governance quality (Njoya & Seetaram, 2018; Njoya et al., 2022); (ii) the situation in Mali, in which the creation of Azawad (a state within Mali) substantially deteriorated the tourism sector, especially the organization of the Timbuktu Music Festival, which happened every year from 2002 to 2012, is no longer organized (Montague, 2014; Cissé, 2020); as well as (iii) political instability and the absence of the rule of law owing to an increased presence of terrorists seriously diverting international tourists to Gao, Djenne, Timbuktu, and Bandiagara (Bleck & Michelitch, 2015; Joy, 2018).

CONCLUDING IMPLICATIONS AND FUTURE RESEARCH DIRECTIONS

Domestic investment is relevant in providing the much-needed infrastructure for the development of tourism and international trade and also increases the perception of the country for potential tourists. However, some governance mechanisms are worthwhile to ensure that domestic investment and trade openness channels for tourism development are effective. The purpose of this study has been to assess how some governance dynamics (in terms of the rule of law and political stability) moderate the incidence of some macroeconomic factors (i.e., domestic investment and trade openness) on tourism development in order to establish synergy effects between the policy governance variables and macroeconomic channels. The focus of this study is on 47 countries in SSA with data for the period 2002 to 2018. The GMM is employed as the empirical strategy. From the findings, synergy effects are apparent in the role of the rule of law in moderating domestic investment for tourism development in terms of tourism receipts.

The main policy implication of this study is that, for the sampled countries, promoting tourism development

can be most effective if policies enhancing domestic investment and promoting the rule of law are implemented simultaneously. Moreover, in order to improve the established synergy effects, it would be worthwhile for the sampled countries to boost the rule of law further. This is essential because since the rule of law variable is negatively skewed and, by extension, the net effects are computed on the negative value, the corresponding negative outcomes from the interactions dampen the overall potential positive synergy effects. In other words, had the mean value of the rule of law been 0.753 instead of -0.753 , the overall synergy effects would have been much higher. It follows that improving the rule of law is imperative in order to benefit more from the role of the rule of law in moderating domestic investment for the promotion of tourism.

We do not want to claim to have accomplished more than what the findings have produced. We have built on an existing gap in the literature to position the study and we have established findings that have enabled us to recommend that the rule of law and domestic investment be considered simultaneously. The findings of an empirical analysis can either support or reject existing policy initiatives, especially if they are based on updated data. Hence, the fact that this study, based on contemporary data, confirms what may have been applied in some countries, does not undermine the relevance of the policy implications, not least because the findings are for a given geographical area and a specific period. Moreover, we are not aware of contemporary empirical studies supporting the policy initiative of simultaneously enhancing domestic investment and the rule of law in order to promote tourism in the sampled countries. It is important to note that, according to a World Bank report (Christie et al., 2013), the suggested simultaneous policy proposal is a general objective of most of the sampled countries. We are unaware of actual policies in the sampled countries, which is the reason our study is proposing some policy implications in light of our empirical results.

Furthermore, despite the motivation of this study building on the relevance of trade openness in

TABLE 2 Tourism receipts, trade openness, political stability, and rule of law.

Variables and information criteria	Dependent variable: International Tourism Receipts (% of total exports)							
	Trade Openness and Political Stability				Trade Openness and Rule of Law			
Tourism Receipts (-1)	0.872*** (0.000)	0.928*** (0.000)	0.949*** (0.000)	0.860*** (0.000)	0.966*** (0.000)	1.001*** (0.000)	1.101*** (0.000)	0.955*** (0.000)
Trade Openness (TO)	-0.011 (0.551)	0.005 (0.792)	-0.006 (0.657)	-0.026* (0.061)	0.031 (0.202)	0.023 (0.210)	-0.014 (0.216)	0.008 (0.542)
Political Stability (PS)	3.074* (0.075)	0.184 (0.887)	1.364* (0.092)	1.114 (0.135)	-	-	-	-
Rule of Law (Law)	-	-	-	-	-1.751 (0.564)	-0.228 (0.918)	3.944* (0.067)	0.320 (0.841)
TO × PS	-0.035* (0.065)	-0.004 (0.780)	-0.015 (0.102)	-0.013 (0.207)	-	-	-	-
TO × Law	-	-	-	-	-0.0005 (0.985)	-0.011 (0.567)	-0.043** (0.029)	-0.004 (0.721)
Tourism Expenditure	0.430 (0.113)	0.224 (0.227)	0.199 (0.277)	0.554*** (0.000)	0.338* (0.079)	0.359** (0.030)	0.233** (0.047)	0.273** (0.012)
GDP per capita (log)	-	-0.116 (0.834)	-0.023 (0.955)	-0.416 (0.337)	-	0.541 (0.401)	1.166** (0.014)	0.394 (0.229)
Financial Development	-	-	-0.008 (0.701)	0.013 (0.361)	-	-	-0.076** (0.023)	-0.040 (0.100)
Tourist Arrivals (log)	-	-	-	0.266 (0.428)	-	-	-	0.181 (0.381)
Time effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Net effect of TO	na	na	na	na	na	na	na	na
AR(1)	(0.058)	(0.057)	(0.049)	(0.049)	(0.058)	(0.058)	(0.059)	(0.049)
AR(2)	(0.428)	(0.504)	(0.466)	(0.494)	(0.624)	(0.619)	(0.576)	(0.580)
Sargan OIR	(0.276)	(0.334)	(0.377)	(0.516)	(0.906)	(0.974)	(0.843)	(0.568)
Hansen OIR	(0.676)	(0.632)	(0.592)	(0.334)	(0.880)	(0.972)	(0.656)	(0.339)
<i>DHT for instruments</i>								
(a) Instruments in levels								
H excluding group	(0.183)	(0.190)	(0.385)	(0.461)	(0.536)	(0.646)	(0.904)	(0.466)
Dif(null, H = exogenous)	(0.832)	(0.805)	(0.620)	(0.291)	(0.864)	(0.966)	(0.439)	(0.294)
(b) IV (years, eq(diff))								
H excluding group	(0.515)	(0.643)	(0.466)	(0.163)	(0.724)	(0.884)	(0.633)	(0.174)
Dif(null, H = exogenous)	(0.699)	(0.430)	(0.684)	(0.953)	(0.840)	(0.955)	(0.489)	(0.922)
Fisher	63.54***	74.16***	2323.35***	2034.90***	71.24***	1003.99***	333.22***	40735.04***
Instruments	23	27	31	35	23	27	31	35

(Continues)

TABLE 2 (Continued)

Variables and information criteria	Dependent variable: International Tourism Receipts (% of total exports)							
	Trade Openness and Political Stability				Trade Openness and Rule of Law			
Countries	39	39	38	36	40	40	39	37
Observations	173	173	170	163	174	174	171	164

Note: The significance of bold values is twofold. (1) The significance of estimated coefficients and the Fisher statistics. (2) The failure to reject the null hypotheses of: (a) no autocorrelation in the AR(1) and AR(2) tests and; (b) the validity of the instruments in the Sargan and Hansen OIR tests. Constants are included in all regressions. na: not applicable because at least one estimated coefficient needed for the computation of net effects is not significant. The mean value of the rule of law is -0.753 . The mean value of political stability is -0.562 .

Abbreviations: DHT, Difference in Hansen Test for Exogeneity of Instruments Subsets; Dif, Difference; OIR, Over-identifying Restrictions Test.

***, **, *: significance levels at 1%, 5%, and 10%, respectively.

movements across the globe, the lesser relevance of trade openness in affecting tourism receipts could be traceable to the importance of boosting intra-African trade for tourism externalities, as apparent in the motivations of the African Continental Free Trade Agreement (AfCFTA) that aims to substantially boost intra-African trade upon effective implementation (Tchamyou et al., 2023). Trade involves travels and more intra-African trade will obviously engender more intra-African tourism contingent upon a conducive traveling climate characterized by, inter alia, political stability and a respect for the rule of law in the sampled African countries.

In terms of governance dynamics, we have established that political stability—which is a dimension of political governance—is less significant than the rule of law, which is a dimension of institutional governance. The relative significance of the rule of law has been clarified in the discussion. It follows that the election and replacement of political leaders (i.e., political governance) is less significant compared with institutional governance or citizen and state respect of institutions that govern interactions between them (i.e., institutional governance). These definitions are consistent with the recent governance literature (see Tchamyou, 2021).

Future research can consider assessing how the findings are relevant to other developing regions in the world, such as Asia and Latin America. Moreover, considering other mechanisms by which governance standards can influence tourism development would improve insights into other policy synergies that are relevant to the promotion of tourism.

In GMM, while cross-sectional dependence is considered, country-specific effects are not. Cross-sectional dependence is taken into account by controlling for time effects. Country-specific effects are eliminated in order to avoid the correlation between country-specific effects and the lagged dependent variable, which is a source of endogeneity. In light of this caveat, future research can consider country-specific studies with relevant empirical strategies in order to provide findings with more country-specific implications.

Caveats in the study (partly owing to data availability constraints at the time of the study) that are worth incorporating into the suggested future research directions include: first, an understanding that tourism development also has strong elements of domestic tourism. This form of tourism supports a large number of tourism actors in any destination and contributes significantly to national-level development. The predictor variables that affect domestic tourism development are not captured in this component of tourism. Second, the use of international tourism receipts supposes that countries reflect a uniform way of capturing earnings from tourism, and by extension, there is an assumption of the presence of tourism satellite accounts.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

ORCID

Simplice A. Asongu  <http://orcid.org/0000-0001-5227-5135>

REFERENCES

- Adeniyi, Oluwatosin, Wasiu Adekunle, Joshua Afolabi, and Terver T. Kumeka. 2023. "Tourism-Income Inequality Nexus in Africa: Evidence From SADC Countries." *Current Issues in Tourism* 1–19. <https://doi.org/10.1080/13683500.2023.2227377>.
- Ajide, Kazeem B., Olorunfemi Y. Alimi, Simplice A. Asongu, and Ibrahim D. Raheem. 2020. "The Role of Institutional Infrastructures in Financial Inclusion-Growth Relations: Evidence From SSA." *International Journal of Finance and Economics* 27(1): 175–91. <https://doi.org/10.1002/ijfe.2145>.
- Ajide, Kazeem B., and Ibrahim D. Raheem. 2016a. "Institutions-FDI Nexus in ECOWAS Countries." *Journal of African Business* 17(3): 319–41.
- Ajide, Kazeem B., and Ibrahim D. Raheem. 2016b. "The Institutional Quality Impact on Remittances in the ECOWAS Sub-Region." *African Development Review* 28(4): 462–81.
- Akko, Sirili. 2015. "Managing Tourism Market Borders and Fluid Goods in EAC Countries." *Africa Journal of Management* 1(4): 406–10. <https://doi.org/10.1080/23322373.2015.1105462>.
- Al-Mulali, Usama, Sakiru A. Solarin, and Hawssan F. Gholipour. 2021. "Relationship Between Financial Development and Inbound Tourism: A Revisit." *Journal of Public Affairs* 23(3): e2233. <https://doi.org/10.1002/pa.2233>.

- Alam, Md Samsul, and Sudharshan Reddy Paramati. 2017. "The Dynamic Role of Tourism Investment on Tourism Development and CO₂ Emissions." *Annals of Tourism Research* 66(C): 213–5. <https://doi.org/10.1016/j.annals.2017.07.013>.
- Alvarez, Maria D., and Sara Campo. 2014. "The Influence of Political Conflicts on Country Image and Intention to Visit: A Study of Israel's Image." *Tourism Management* 40(February): 70–8.
- Akama, John S. 1997. "Tourism Development in Kenya: Problems and Policy Alternatives." *Progress in Tourism and Hospitality Research* 3(2): 95–105. [https://doi.org/10.1002/\(SICI\)1099-1603\(199706\)3:2<95::AID-PTH58>3.0.CO;2-P](https://doi.org/10.1002/(SICI)1099-1603(199706)3:2<95::AID-PTH58>3.0.CO;2-P).
- Akama, John S. 2002. "The Role of Government in the Development of Tourism in Kenya." *International Journal of Tourism Research* 4(1): 1–14.
- Arellano, Manuel, and Olymipa Bover. 1995. "Another Look at the Instrumental Variable Estimation of Error Components Models." *Journal of Econometrics* 68(1): 29–52. [https://doi.org/10.1016/0304-4076\(94\)01642-D](https://doi.org/10.1016/0304-4076(94)01642-D).
- Asongu, Simplice A. 2020. "Financial Access and Productivity Dynamics in Sub-Saharan Africa." *International Journal of Public Administration* 43(12): 1029–41.
- Asongu, Simplice A., and Paul N. Acha-Anyi. 2017. "ICT, Conflicts in Financial Intermediation and Financial Access: Evidence of Synergy and Threshold Effects." *Netnomics* 18(2–3): 131–68. <https://doi.org/10.1007/s11066-017-9119-5>.
- Asongu, Simplice A., and Paul N. Acha-Anyi. 2020. "Global Tourism and Waves of Terror: Perspectives From Military Expenditure." *Journal of Policy Research in Tourism, Leisure and Events* 12(2): 239–61.
- Asongu, Simplice A., and Sara Le Roux. 2023. "The Role of Mobile Money Innovations in Transforming Unemployed Women to Self-employed Women in Sub-Saharan Africa." *Technological Forecasting and Social Change* 191: 122548. <https://doi.org/10.1016/j.techfore.2023.122548>.
- Asongu, Simplice A., Sara Le Roux, and Nicholas Biekpe. 2017. "Environmental Degradation, ICT and Inclusive Development in Sub-Saharan Africa." *Energy Policy* 111(December): 353–61. <https://doi.org/10.1016/j.enpol.2017.09.049>.
- Asongu, Simplice A., and Jules R. Minkoua. 2018. "Dynamic Openness and Finance in Africa." *The International Journal of Trade & Economic Development* 27(4): 409–30.
- Asongu, Simplice A., and Lieven De Moor. 2017. "Financial Globalisation Dynamic Thresholds for Financial Development: Evidence From Africa." *European Journal of Development Research* 29(1): 192–212. <https://doi.org/10.1057/ejdr.2016.10>.
- Asongu, Simplice A., Joseph Nnana, and Paul N. Acha-Anyi. 2020. "The Openness Hypothesis in the Context of Economic Development in Sub-Saharan Africa: The Moderating Role of Trade Dynamics on FDI." *International Trade Journal* 35(4): 336–59.
- Asongu, Simplice A., Joseph Nnanna, Nicholas Biekpe, and Paul N. Acha-Anyi. 2019. "Contemporary Drivers of Global Tourism: Evidence From Terrorism and Peace Factors." *Journal of Travel & Tourism Marketing* 36(3): 345–57.
- Asongu, Simplice A., and Jacinta C. Nwachukwu. 2017. "The Synergy of Financial Sector Development and Information Sharing in Financial Access: Propositions and Empirical Evidence." *Research in International Business and Finance* 40(April): 242–58.
- Asongu, Simplice A., and Nicholas M. Odhiambo. 2020a. "Insurance Policy Thresholds for Economic Growth in Africa." *The European Journal of Development Research* 32(3): 672–89. <https://doi.org/10.1057/s41287-019-00234-2>.
- Asongu, Simplice A., and Nicholas M. Odhiambo. 2020b. "Foreign Direct Investment, Information Technology and Economic Growth Dynamics in Sub-Saharan Africa." *Telecommunications Policy* 44(1): 101838. <https://doi.org/10.1016/j.telpol.2019.101838>.
- Asongu, Simplice A., and Nicholas M. Odhiambo. 2020c. "How Enhancing Information and Communication Technology Has Affected Inequality in Africa for Sustainable Development: An Empirical Investigation." *Sustainable Development* 27(4): 647–56. <https://doi.org/10.1002/sd.1929>.
- Balalia, A. E., and R. M. Petrescu. 2011. "The Involvement of the Public and Private Sector—Elements with Influence on Travel & Tourism Demand During the Crisis Period." *Tourism and Hospitality Management* 17(2): 217–30.
- Bleck, Jaimie, and Kristin Michelitch. 2015. "The 2012 Crisis in Mali: Ongoing Empirical State Failure." *African Affairs* 114(457): 598–623. <https://doi.org/10.1093/afraf/adv038>.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14(1): 63–82. <https://doi.org/10.1093/pan/mpi014>.
- Bramwell, Bill, and Bernard Lane. 2011. "Critical Research on the Governance of Tourism and Sustainability." *Journal of Sustainable Tourism* 19(4/5): 411–21. <https://doi.org/10.1080/09669582.2011.580586>.
- Chaisumpunsakul, Wipaporn, and Piriya Pholphirul. 2018. "Does International Trade Promote International Tourism Demand? Evidence From Thailand's Trading Partners." *Kasetsart Journal of Social Sciences* 39(3): 393–400. <https://doi.org/10.1016/j.kjss.2017.06.007>.
- Chiu, Yi-Bin, and Zhen Wang. 2023. "Inbound Tourism and Income Inequality: The Role of Banking Sector Development." *Journal of Sustainable Tourism* 31(9): 2080–99. <https://doi.org/10.1080/09669582.2022.2108820>.
- Cissé, Lassana. 2020. "Role of the Traditional Masonry Corporation in the Process of Reconstruction of the Destroyed Mausoleums in Timbuktu, Mali." *The Future of the Bamiyan Buddha Statues*, 123. https://doi.org/10.1007/978-3-030-51316-0_8.
- Christie, Iain, Eneida Fernandes, Hannah Messerli, and Louise Twining-Ward. 2013. *Tourism in Africa: Harnessing Tourism for Growth and Improved Livelihoods*. Washington, DC: The World Bank.
- Dossou, Toyo A. M., Emmanuelle N. Kambaye, Mesfin W. Berhe, and Alastair S. Alinsato. 2023. "Toward Efforts to Lessen Income Inequality in Asia: Exploring Synergies Between Tourism and Governance Quality." *Tourism Management Perspectives* 46: 101086.
- Enders, Walter, Todd Sandler, and Gerald F. Parise. 1992. "An Econometric Analysis of the Impact of Terrorism on Tourism." *Kyklos* 45(4): 531–54.
- Folarin, Oludele, and Oluwatosin Adeniyi. 2020. "Does Tourism Reduce Poverty in Sub-Saharan African Countries?" *Journal of Travel Research* 59(1): 140–55. <https://doi.org/10.1177/0047287518821736>.
- Hughes, Howard L. 1994. "Tourism Multiplier Studies: A More Judicious Approach." *Tourism Management* 15(6): 403–6. [https://doi.org/10.1016/0261-5177\(94\)90059-0](https://doi.org/10.1016/0261-5177(94)90059-0).
- Industrial Development Corporation. (2018). *Partnering for Inclusive Industrialisation*. 2018 Integrated Report.
- Joy, Charlotte L. 2018. "Crimes Against Cultural Heritage in Timbuktu." *Anthropology Today* 34(1): 15–7. <https://doi.org/10.1111/1467-8322.12404>.
- Khalid, Usman, Luke E. Okafor, and Muhammad Shafiullah. 2020. "The Effects of Economic and Financial Crises on International Tourist Flows: A Cross-country Analysis." *Journal of Travel Research* 59(2): 315–34. <https://doi.org/10.1177/0047287519834360>.
- Kingsbury, Paul T., and Stanley D. Brunn. 2004. "Freud, Tourism, and Terror: Traversing the Fantasies of Post-September 11 Travel Magazines." *Journal of Travel & Tourism Marketing* 15(2–3): 39–61. https://doi.org/10.1300/J073v15n02_03.
- Kinyondo, Abel, and Riccardo Pelizzo. 2015. "Tourism, Development And Inequality: The Case of Tanzania." *Poverty & Public Policy* 7(1): 64–79. <https://doi.org/10.1002/pop4.92>.
- Kulendran, N., and Kenneth Wilson. 2000. "Is There a Relationship Between International Trade and International Travel." *Applied*

- Economics* 32(8): 1001–9. <https://doi.org/10.1080/000368400322057>.
- Kyara, Valensi C., Mohammed M. Rahman, and Rasheda Khanam. 2023. "Pro-wellbeing Tourism: The Dynamic Relationship between Household Consumption Expenditure and Tourism Growth in Tanzania." *Tourism Planning & Development* 20(3): 355–76. <https://doi.org/10.1080/21568316.2021.2012510>.
- Lee, Chien Chiang, Godwin Olasehinde-Williams, and Seyi S. Akadiri. 2021. "Geopolitical Risk and Tourism: Evidence From Dynamic Heterogeneous Panel Models." *International Journal of Tourism Research* 23(1): 26–38. <https://doi.org/10.1002/jtr.2389>.
- Leitao, Nuno C. 2010. "Does Trade Help to Explain Tourism Demand? The Case of Portugal." *Theoretical and Applied Economics* 17(3): 63–74.
- Lepp, Andrew, Heather Gibson, and Charles Lane. 2011. "Image and Perceived Risk: A Study of Uganda and its Official Tourism Website." *Tourism Management* 32(3): 675–84.
- Liu, Anyu, and Stephen Pratt. 2017. "Tourism's Vulnerability and Resilience to Terrorism." *Tourism Management* 60(June): 404–17. <https://doi.org/10.1016/j.tourman.2017.01.001>.
- Masron, Tajul A., and Yogeewari Subramanian. 2020. "Threshold Effect of Institutional Quality and the Validity of Environmental Kuznets Curve." *Malaysian Journal of Economic Studies* 57(1): 81–112. <https://doi.org/10.22452/MJES.vol57no1.5>.
- Mehmood, Shafaqat, Sehida Ahmad, and Afer A. Khan. 2016. "Dynamic Relationships Between Tourist Arrivals, Immigrants, and Crimes in the United States." *Tourism Management* 54(June): 383–92. <https://doi.org/10.1016/j.tourman.2015.12.010>.
- Montague, Angela. 2014. "Contested Nation, Global Space: Tourism and the Politics of Tuareg Heritage in Mali." Doctoral dissertation, University of Oregon.
- Moussa, Nicole. 2016. "Trade and Current Account Balances in Sub-Saharan Africa: Stylized Facts and Implications for Poverty." UNCTAD Working Paper. https://unctad.org/en/PublicationsLibrary/webaladc2016d2_en.pdf.
- Nawaz, Muhammad A. 2016. "Investment and Tourism: Insights From the Literature." *International Journal of Economic Perspectives* 10(4): 581–90.
- Njoya, Eric T., Marina Efthymiou, Alexandros Nikitas, and John F. O'Connell. 2022. "The Effects of Diminished Tourism Arrivals and Expenditures Caused by Terrorism and Political Unrest on the Kenyan Economy." *Economies* 10(8): 191. <https://doi.org/10.3390/economies10080191>.
- Njoya, Eric T., and Neelu Seetaram. 2018. "Tourism Contribution to Poverty Alleviation in Kenya: A Dynamic Computable General Equilibrium Analysis." *Journal of Travel Research* 57(4): 513–24. <https://doi.org/10.1177/0047287517700317>.
- Nyasha, Sheilla, Nicholas M. Odhiambo, and Simplicio A. Asongu. 2021. "The Impact of Tourism Development on Economic Growth in Sub-Saharan Africa." *The European Journal of Development Research* 33: 1514–35. <https://doi.org/10.1057/s41287-020-00298-5>.
- Odhiambo, Nicholas M. 2020. "Financial Development, Income Inequality and Carbon Emissions in Sub-Saharan African Countries: A Panel Data Analysis." *Energy Exploration and Exploitation* 38(5): 1914–31. <https://doi.org/10.1177/0144598720941999>.
- Osinubi, Tolulope, and Olufemi Osinubi. 2020. "Inclusive Growth in Tourism-led Growth Hypothesis: Evidence from Nigeria." *African Journal of Economic Review* 8(2): 141–60.
- Paramati, Sudharshan Reddy, Md Samsul Alam, and Chi Keung M. Lau. 2018. "The Effect of Tourism Investment on Tourism Development and CO₂ Emissions: Empirical Evidence From the EU Nations." *Journal of Sustainable Tourism* 26(9): 1587–607. <https://doi.org/10.1080/09669582.2018.1489398>.
- Pizam, Abraham, and Aliza Fleischer. 2002. "Severity Versus Frequency of Acts of Terrorism: Which Has a Larger Impact on Tourism Demand?" *Journal of Travel Research* 40(3): 337–9. <https://doi.org/10.1177/0047287502040003011>.
- Pizam, Abraham, and Y. Mansfeld. 2006. "Toward a Theory of Tourism Security." In *Tourism, Security & Safety: From Theory to Practice*, edited by Yoel Mansfeld and Abraham Pizam, 1–27. Boston, MA: Butterworth-Heinemann.
- Pratt, Stephen, and Anyu Liu. 2016. "Does Tourism Really Lead to Peace? A Global View." *International Journal of Tourism Research* 18(1): 82–90. <https://doi.org/10.1002/jtr.2035>.
- Qian, Cheng, Nophea Sasaki, Ganesh Shivakoti, and Y. Yuanjie Zhang. 2016. "Effective Governance in Tourism Development—An Analysis of Local Perception in the Huangshan Mountain Area." *Tourism Management Perspectives* 20(October): 112–23. <https://doi.org/10.1016/j.tmp.2016.08.003>.
- Ribarić, Helga, and Ivana Ribarić. 2013. "Government Intervention in Driving the Development of Sustainable Tourism." Paper presented at the 2nd International Scientific Conference Tourism in South East Europe. April 12. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2289808.
- Richter, Linda, and William Waugh, Jr. 1986. "Terrorism and Tourism as Logical Companions." *Tourism Management* 7(4): 230–8.
- Roodman, David. 2009. "How to Do Xtabond2: An Introduction to Difference and System GMM in Stata." *Stata Journal* 9(1): 86–136.
- Rosselló-Nadal, Jaume, and Jianan He. 2020. "Tourist Arrivals Versus Tourist Expenditures in Modelling Tourism Demand." *Tourism Economics* 28(6): 1311–26. <https://doi.org/10.1177/1354816619867810>.
- Saha, Shrabani, and Ghialy Yap. 2014. "The Moderation Effects of Political Instability and Terrorism on Tourism Development." *Journal of Travel Research* 53(4): 509–21. <https://doi.org/10.1177/0047287513496472>.
- Sahni, Herman, Christian Nsiah, and Bichaka Fayissa. 2021. "The African Economic Growth Experience and Tourism Receipts: A Threshold Analysis and Quantile Regression Approach." *Tourism Economics* 27(5): 915–32. <https://doi.org/10.1177/1354816620908688>.
- Santana, María, Francisco J. Ledesma, and Jorge V. Perez. 2011. "Tourism and Trade in OECD Countries: A Dynamic Heterogeneous Panel Data Analysis." *Empirical Economics* 41(2): 533–54. <https://doi.org/10.1007/s00181-011-0477-9>.
- Seabra, Cláudia, Sara Dolnicar, José Luis Abrantes, and Elisabeth Kastenholtz. 2013. "Heterogeneity in Risk and Safety Perceptions of International Tourists." *Tourism Management* 36(June): 502–10. <https://doi.org/10.1016/j.tourman.2012.09.008>.
- Seabra, Cláudia, Pedro Reis, and José Luis Abrantes. 2020. "The Influence of Terrorism in Tourism Arrivals: A Longitudinal Approach in a Mediterranean Country." *Annals of Tourism Research* 80(October 2019): 1–13. <https://doi.org/10.1016/j.annals.2019.102811>.
- Seetanah, Boopen, Narvada Gopy-Ramdhany, and Reena Bhattu-Babajee. 2023. "Can Tourism Curb Income Inequality? Tourism Agenda 2030." *Tourism Review* 78(2): 646–64.
- Seyfi, Siamak, and Michael Hall. 2020. "Political Transitions and Transition Events in a Tourism Destination." *International Journal of Tourism Research* 22(4): 493–506.
- Sönmez, Sevil F. 1998. "Tourism, Terrorism, and Political Instability." *Annals of Tourism Research* 25(2): 416–56.
- Sönmez, Sevil F., Yiorgos Apostolopoulos, and Peter Tarlow. 1999. "Tourism in Crisis: Managing the Effects of Terrorism." *Journal of Travel Research* 38(1): 13–8. <https://doi.org/10.1177/004728759903800104>.
- Sönmez, Sevil F., and Alan R. Graefe. 1998. "Influence of Terrorism Risk on Foreign Tourism Decisions." *Annals of*

- Tourism Research* 25(1): 112–44. [https://doi.org/10.1016/S0160-7383\(97\)00072-8](https://doi.org/10.1016/S0160-7383(97)00072-8).
- Tarlow, Peter. 2006. "Terrorism and Tourism." In *Tourism in Turbulent Times Towards Safe Experiences for Visitors*, edited by Jeff Wilks, Donna Pendergast and Peter Leggat, 80–92. Oxford: Elsevier.
- Tchamyou, Vanessa S. 2019. "The Role of Information Sharing in Modulating the Effect of Financial Access on Inequality." *Journal of African Business* 20(3): 317–38. <https://doi.org/10.1080/15228916.2019.1584262>.
- Tchamyou, Vanessa S. 2021. "Financial Access, Governance and the Persistence of Inequality in Africa: Mechanisms and Policy Instruments." *Journal of Public Affairs* 21(2): e2201. <https://doi.org/10.1002/pa.2201>.
- Tchamyou, Vanessa S., and Simplicie A. Asongu. 2017. "Information Sharing and Financial Sector Development in Africa." *Journal of African Business* 18(7): 24–49.
- Tchamyou, Vanessa S., Guido Erreygers, and Danny Cassimon. 2019. "Inequality, ICT and Financial Access in Africa." *Technological Forecasting and Social Change* 139(February): 169–84. <https://doi.org/10.1016/j.techfore.2018.11.004>.
- Tchamyou, Vanessa S., Juste Somé, and Simplicie A. Asongu. 2023. "The African Continental Free Trade Area and Financial Development for Female Labour Force Participation in Africa." In *Forum for Social Economics*, 1–15. London: Routledge. <https://doi.org/10.1080/07360932.2023.2297169>.
- Turner, Lindsay W., and Stephen F. Witt. 2001. "Factors Influencing Demand for International Tourism: Tourism Demand Analysis Using Structural Equation Modeling, Revisited." *Tourism Economics* 7(1): 21–38. <https://doi.org/10.5367/000000001101297711>.
- United Nations Conference on Trade and Development (UNCTAD). 2013. "Sustainable Tourism: Contribution to Economic Growth and Sustainable Development." D/B/C.I/EM.5/2.
- United Nations Environment Programme. 2011. "Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication—A Synthesis for Policy Makers." <https://www.unep.org/greeneconomy>.
- White, Roger. 2007. "Immigrant-Trade Links, Transplanted Home Bias, and Network Effects." *Applied Economics* 39(7): 839–52. <https://doi.org/10.1080/00036840500447849>.
- World Bank. 2011. *Africa Region Tourism Strategy: Transformation Through Tourism- Harnessing*. Washington, DC: The World Bank.
- World Travel & Tourism Council (WTTC). 2019. *Travel & Tourism Economic Impact 2019*. London: WTTC.
- Zhang, Hongru, and Yang Yang. 2023. "Is Tourism Growth Able to Shrink Economic Inequalities? A DSGE Analysis." *Annals of Tourism Research Empirical Insights* 4(1): 100089. <https://doi.org/10.1016/j.annale.2023.100089>.

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APPENDIX A

Table A1

TABLE A1 Definitions of variables.

Variables	Signs	Definitions of variables (measurements)	Sources
Tourism Receipts	Tourism R.	International tourism, receipts (% of total exports)	WDI
Domestic Investment	Domestic I.	Gross fixed capital formation (% of GDP)	WDI
Political Stability	Political St.	"Political stability/no violence (estimate): measured as the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional and violent means, including domestic violence and terrorism"	WGI
Tourism Expenditure	Tourism E.	International tourism, expenditures (% of total imports)	WDI
GDP per capita	GDPpc	Logarithm of GDP per capita (constant 2010 US\$)	WDI
Financial Development	Finance D.	Domestic credit to private sector by banks (% of GDP)	WDI
Tourist Arrivals	Tourists	Number of yearly international tourist arrivals	WDI
Rule of law	Law	"Rule of law (estimate): captures perceptions of the extent to which agents have confidence in and abide by the rules of society and in particular the quality of contract enforcement, property rights, the police, the courts, as well as the likelihood of crime and violence"	WGI
Trade Openness	Trade	Imports plus Exports of goods and services (% of GDP)	WDI

Abbreviations: WDI, World Bank Development Indicators of the World Bank; WGI, World Governance Indicators of the World Bank.

APPENDIX B

Table B1

TABLE B1 Summary statistics.

Variables	Mean	SD	Minimum	Maximum	Observations
Tourism Receipts	13.801	15.066	0.102	72.087	229
Domestic Investment	22.112	9.296	0.000	56.138	257
Political Stability	-0.562	0.903	-3.273	1.064	273
Tourism Expenditure	6.107	4.124	0.118	21.123	233
GDP per capita (log)	7.045	1.003	5.297	9.879	271
Financial Development	18.269	16.979	0.599	102.556	266
International Tourist Arrivals (log)	12.608	1.522	8.366	16.144	239
Rule of law	-0.753	0.647	-2.486	1.065	274
Trade Openness	72.219	33.452	20.762	279.333	261

Abbreviation: SD, standard deviation.

APPENDIX C

Table C1

TABLE C1 Correlation matrix (uniform sample size: 182).

Variables	Tourism R.	Domestic I.	Political St.	Tourism E.	GDPpc	Finance D.	Tourists	Law	Trade
Tourism R.	1.000								
Domestic I.	0.067	1.000							
Political St.	0.360	0.148	1.000						
Tourism E.	0.371	-0.096	0.073	1.000					
GDPpc	0.086	0.151	0.352	0.071	1.000				
Finance D.	0.316	0.183	0.437	-0.023	0.648	1.000			
Tourists	-0.079	0.216	0.119	-0.062	0.471	0.470	1.000		
Law	0.430	0.254	0.760	0.098	0.444	0.672	0.386	1.000	
Trade	-0.156	0.282	0.363	-0.211	0.434	0.313	0.077	0.221	1.000

Abbreviations: Domestic I, Domestic Investment; Finance D, Financial Development; GDPpc, logarithm of GDP per capita; Law, Rule of law; Political St, Political Stability; Tourism E, Tourism Expenditure; Tourism R, Tourism Receipts; Tourists, International Tourists Arrivals; Trade, Trade Openness.

ABOUT THE AUTHORS

Prof. Simplicé A. Asongu holds a PhD from Oxford Brookes University and is currently the Lead Economist and Director of the African Governance and Development Institute (Yaoundé, Cameroon); a Distinguished Visiting Professor at the University of Johannesburg (Johannesburg, South Africa), the Lead Economist and Director of the European Xtramile Centre of African Studies (Liège, Belgium), and Lead Economist and Co-director of “Centre de Recherche pour le Développement Economique” (Bangui, Central African Republic). He is also a Senior Research Fellow at the Africa Growth Institute (Cape Town, South Africa); PhD Supervisor at Covenant University (Ota, Nigeria), the University of Ghana (Accra, Ghana); Antioch University (Los Angeles, Santa Barbara, Midwest, New England, Seattle, USA) and Midlands State University (Gweru, Zimbabwe); DBA Supervisor at Management College of Southern Africa (Durban, South Africa) and Research Associate at the Research Network Africa (Gaborone, Botswana), University of South Africa (Pretoria, South Africa), University of Buea (Buea, Cameroon), and Oxford Brookes University (Oxford, UK). He is also an Associate Editor in some journals, including the Journal of Economic Surveys, Technological Forecasting and Social Change, the Journal of African Business, and the African Journal of Economic and Management Studies.

Dr. Mushfiqur Rahman is a Lecturer of Business and Management at the University of Wales Trinity Saint David, United Kingdom. After completing his Bachelor of Commerce degree, Dr. Rahman obtained an MBA degree and later another MSc degree in Human Resource Management and Employment Relations. He earned his PhD

in Electronic Human Resources Management (e-HRM) at Brunel Business School, Brunel University London. Afterward, he also successfully passed a program on academic writing and reading at the University of Oxford, United Kingdom. He has experience working in leadership positions in corporate fields for many years before venturing into academics. He has also worked on several projects, which has allowed him to become well-experienced in preparing HR budgets and investments. His research areas are HRM, E-HRM, and Leadership. Recently, he published articles in high-ranked refereed journals, such as the International Journal of Human Resource Management, Production, Planning & Control and Journal of Business Ethics.

Dr. Richard Adu-Gyamfi is a Mo Ibrahim Fellow at the International Trade Centre in Geneva Switzerland. He holds a PhD in African Business and Economic Studies (Leipzig University, Germany); an MBA in Small and Medium-sized Enterprise Development (Leipzig University, Germany); and a BA in Publishing Studies (Kwame Nkrumah University of Science and Technology, Ghana). He is the Director of the Managing African Research Network and the Editor-in-Chief of the African Journal of Innovation and Entrepreneurship.

Dr. Raufhon Salahodjaev conducts academic and policy research on international economics, institutions, gender equality, sustainable development, and human capital in both Eurasia and around the world. He has published more than 50 peer-reviewed journal articles in top journals across the social sciences. He also serves as an Associate Professor at Tashkent State University of Economics and AKFA University (Uzbekistan) and an advisor to the Government of Uzbekistan.