ASERS

Journal of Environmental Management and Tourism

Quarterly
Volume IX
Issue 4(28)
Summer 2018
ISSN 2068 – 7729
Journal DOI
http://dx.doi.org/10.14505/jemt

ASERS
Publishing

Summer 2018
Volume IX
Issue 4(28)

Contents:

SUMMER 2018
Volume IX
Issue 4(28)

Call for Papers
Fall Issues 2018
Journal of Environmental Management and Tourism

Journal of Environmental Management and Tourism is an interdisciplinary research journal, aimed to publish articles and original research papers that should contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences.

Journal will publish original research and seeks to cover a wide range of topics regarding environmental management and engineering, environmental management and health, environmental chemistry, environmental protection technologies (water, air, soil), pollution reduction at source and waste minimization, energy and environment, modeling, simulation and optimization for environmental protection; environmental biotechnology, environmental education and sustainable development, environmental strategies and policies, etc. This topic may include the fields indicated above, but are not limited to these.

Authors are encouraged to submit high quality, original works that discuss the latest developments in environmental management research and application with the certain scope to share experiences and research findings and to stimulate more ideas and useful insights regarding current best-practices and future directions in environmental management.

Journal of Environmental Management and Tourism is indexed in SCOPUS, RePEC, CEEOL, ProQuest, EBSCO and Cabell Directory databases.

All the papers will be first considered by the Editors for general relevance, originality and significance. If accepted for review, papers will then be subject to double blind peer review.

Deadline for submission:	15th August 2018
Expected publication date:	October 2018
Website:	https://journals.aserspublishing.eu/jemt
E-mail:	jemt@aserspublishing.eu

To prepare your paper for submission, please see full author guidelines in the following file: JEMT_Full_Paper_Template.docx, then send it via email at jemt@aserspublishing.eu.

DOI : http://dx.doi.org/10.14505/jemt.v9.4(28).12

Economic Growth, Agricultural Output and Tourism Development in Nigeria: An Application of the ARDL Bound Testing Approach

Adedoyin Isola LAWAL
Landmark University, Nigeria
lawal.adedoyin@lmu.edu.ng; adedoyinisola@gmail.com

Abiola John ASALEYE
Landmark University, Nigeria
abiola.asa@lmu.edu.ng

Joseph ISEOLORUNKANMI
Landmark University, Nigeria
Joe.iseolorunkanmi@lmu.edu.ng

Olabisis Rashidat POPOOLA
Covenant University, Nigeria
ola.bisi@covenantuniversity@edu.ng

Suggested Citation:

Lawal, A. I., Asaleye, A. J., IseOlorunkanmi, J, Popoola, O.R. (2018). Economic Growth, Agricultural Output and Tourism Development in Nigeria: An Application of the ARDL Bound Testing Approach. *Journal of Environmental Management and Tourism,* (Volume IX, Summer), 4(28): 786-794. DOI:10.14505/jemt.v9.4(28).12

Article's History:

Received April 2018; *Revised* May 2018; *Accepted* June 2018.

Abstract:

Drawing from three tourism-growth theories: tourism led growth theory; growth led tourism theory; tourism – growth neutrality theory; and one agriculture-growth nexus theory – agriculture overlapping theory, this study used the autoregressive distributed lag (ARDL) bound testing approach to examine whether or not cointegration exist among economic growth, agricultural output and tourism development in Nigeria. We intend to know what policy instruments need to be manipulated so as to achieve economic growth, increase agricultural output and enhance tourism development. From the results, it is evidence that a two –way cointegration exists between economic growth and agricultural output on the one hand, and between economic growth and tourism development on the other hand. The study also observed that a compelling long run relationship exist between agricultural output and tourism development. To achieve sustainable economic growth, policy makers are advised to pursue heavy investment in the tourism industry, adopts improved farming strategies driven by simple technology among others

Keywords: tourism; economic growth, agricultural output; Nigeria; ARDL.

JEL Classification: G10; E20; Z32.

Introduction

In the recent, tourism is fast becoming a major global growth driven sector. This has motivated the government of various emerging economies to calibrate tourism into their future growth driven policies. For instance, the Nigerian government in the year 2004 to identified tourism development as key to achieving her objective of being one of the first largest economies by the year 2020. In the same vein, agricultural sector remains a major player in the non-oil sector of the Nigeria economy. The ability of tourism development and/or agricultural development to advance growth remains an inconclusive but interesting debate among scholars.to influence economic growth in emerging economies has been a subject of hot discussion and remains inconclusive. Drawing from three tourism-

growth theories: tourism led growth theory; growth led tourism theory; tourism – growth neutrality theory; and one agriculture-growth nexus theory – agriculture overlapping theory, this study used the autoregressive distributed lag (ARDL) bound testing approach to examine whether or not cointegration exist among economic growth, agricultural output and tourism development in Nigeria. the study is set out to investigate what policy instrument is to be adjusted in order to promote economic growth, increase agricultural output as well as enhancing tourism development. We intend to know what policy instruments need to be manipulated so as to achieve economic growth, increase agricultural output and enhance tourism development. From the results, we could observed that a bi-cointegration run between economic growth and agricultural output as well as between economic growth and tourism. it is evidence that a two - way cointegration exists between economic growth and agricultural output on the one hand, and between economic growth and tourism development on the other hand. The study also noted the existence of significant long run linkages between agricultural output and tourism development. Observed that a compelling long run relationship exist between agricultural output and tourism development. To promoted growth, it is advisable that the government pursue to achieve sustainable economic growth, policy makers are advised to pursue heavy investment in the tourism industry, adopts improved farming strategies driven by simple technology among others.

1. Literature Review

Theoretical Foundations

Tourism - Growth Hypothesis

The theoretical note that described the linkage between growth and tourism can best be classified into three viz: Tourism – led growth; growth –led tourism; and tourism – growth neutrality theories. The tourism –led growth theory is an offshore of the export – led growth hypothesis of the classical economists (Perles-Ribes, Ramon-Rodriguez, Rubia and Moreno-Izquierdo 2017).The theory is premised on the fact that it is tourism that engenders growth (Antonakakis, Dragouni and Fillis 2015; Brida, Cortes-Jimenez and Pulina 2016; Cheam, Mahmood, Abdullah and Ong 2013; Chou 2013).

The proponents of the economic growth – tourism hypothesis are of the views that economic growth is what induces tourism development. This is premised on the fact that tourists, like other rent seeking economic agents are engender to economies with potential investment opportunities (Ohlan 2017; Tang 2011; Tang 2013; Tang and Tan 2013; 2015; Tang and Abosedra 2016; Tang, Tiwari and Shahbaz 2016; Sebri and Abid 2012).

The tourism – growth neutrality hypothesis proposed that the link between tourism and growth are at best described to be neutral, in other words, a zero-sum connection exists between the two are of the view that no relationship exist between tourism and growth. This hypothesis states that economic growth and tourism development independently evolve (Perles, Ramon, Rubia and Moreno 2016; Kadir and Karim 2012; Othman *et al*. 2012; Cheam et al. 2013; Tang and Jang 2009).

The theoretical notes connecting agriculture to growth can be found in agriculture overlapping theory which rely on Cobb-Douglas production function to explain the impact of labour, capital and land in increasing agricultural output needed to grow the economy (Collier and Dercon 2014; Dorosh and Thurlow 2013; Dorosh and Thurlow 2014; Dorosh and Thurlow 2016; Feng, Wang, Liu and Huang 2017; Hazell 2013; Inwood 2017; Yamaguchi and Kinugasa 2014; Streifeneder 2016).

Empirical literatures on the link between each of these constructs are best mixed and remain inconclusive. Table1 below presents a brief of some of the notable empirical works on the links between tourism and growth framework the summary of some empirical works on tourism-growth nexus, while Table 2 presents the summary of some empirical notes on agriculture-growth nexus. From the Tables, it is evidence that the discussion on the link among the variables remains inconclusive.

Table 1. A brief presentation of empirical works on Tourism – Growth framework Summary of Literature on Tourism - Growth hypothesis

Authors	Period	Method used	Findings/ Direction of Relationship
Tang, (2011)	1995M1 – 2009M2	ECM based t-test, Granger causality	EG → TOUR
Kadir and Karim, (2012)	1998 – 2005	Pedroni test, Panel Granger causality	TOUR → EG
Othman *et al,*(2012)	1970 – 2010	ARDL, Granger causality	TOUR ↔ EG
Cheam *et al*, (2013)	1974 – 2010	Johansen test, Granger causality	TOUR ↔ EG
Tang, (2013)	1974 – 2009	ARDL, Granger causality	TOUR ↔ EG
Tang and Tan, (2013)	1995M1 – 2009M2	Combined cointegration test, Recursive Granger causality test	TOUR → EG
Cortes-Jimenez and Pulina, (2010)	1960 – 2004	ADF, PP, Johansen Cointegration	TOUR ↔ EG
Perles, Ramon, Rubia and Moreno, 2016	1980 – 2014	Unit root tests	TOUR ↔ EG

Source: Authors compilation 2018

Table 2. A brief presentation of empirical works on Summary of Literature on Agriculture - Growth hypothesis

Authors	Period	Method used	Findings/ Direction of Relationship
Dorosh and Thurlow, (2016)	1998 – 2010	CGE model	No significant relationship exist
Collier and Dercon, (2014)	1962 – 2012	CGE, SAM	A→EG
Alary *et al*, (2016)	2000 – 2010	Calibration model, Scenario Analysis	A→EG
Sebri and Abid, (2012)	1980 – 2007	Granger causality tests	A←EG
Inwood (2017)	2012 Census	ANOVA	EG ↔ A

Source: Authors compilation 2018

2. Methodology

Data used in the study consist of annual data sourced from year 2000 to 2016. Data on tourism are sourced from World Tourism Council data base online, while data on economic growth and agricultural output were obtained from the publications of the Central Bank of Nigeria Statistical Bulletin (various issues). Equation (1) represents the economic growth-tourism-agricultural nexus.

$$RGDP = f(TOUR, AGRIC) \quad (1)$$

where RGDP represents economic growth is a proxy for economic growth, TOUR is a proxy for tourism development and AGRIC is a proxy for agricultural output.

The ARDL estimation techniques:

The current study employed the ARDL in preference to other cointegration techniques like Johansen 1991, Engle and Granger 1987, because: (i) it can be employed irrespective of the order of the regressor applied regardless of the order of the regressor; (ii) it is better off when the database is relatively small faced with small data size as currently experienced; (iii) it accommodates different optimal lag for the variables modeled allows variables to have different optimal lag; (iv) it employs a single reduced form equation for determining both long and short runs relationship among the variables (Asaleye *et al.* 2018; Oye *et al.* 2018; Babajide and Lawal 2016; Babajide, Lawal and Somoye 2015; Lawal, *et al*. 2016a; Lawal et al. 2016b[1].

The ARDL framework for the study is as follows:

[1] It is the results of the unit root tests that determine whether or not ARDL will be used. The study employed a number of unit root test ADF, PP and Lee and Strazicih test and observed that all the variables are stationary at integrated order 0 and 1. Results of the Unit root tests are available on demand.

$$\Delta \text{InRGDP}_t = \beta_{01} + \sum_{i=1}^{n1} \beta_{11}\ \Delta \text{In}RGDP_{i-t} + \sum_{i=0}^{n2} \beta_{12}\ \Delta \text{InTOUR}_{t-i} + \sum_{i=0}^{n3} \beta_{13}\ \Delta \text{AGRIC}_{t-t} + \phi_{11} \text{InRGDP}_{t-1} + \phi_{12} \text{In}TOUR_{t-1}\ \phi_{13} \text{AGRIC}_{t-1}\ \varepsilon_{t1} \quad (2)$$

where, *In* represents the log of the variables Where *In* is the log of the variables, RGDP represents Real Gross Domestic Product, TOUR represents tourism development and AGRIC connotes agricultural output were as earlier defined, Δ and β_{01} equals the first difference operator and the constant terms respectively, β_{11} ….β_{13} are the short run coefficients, ϕ_{11} …..ϕ_{13} represents the long run coefficients, n_1 ….n_3 represents the lag length while ε_{t-1} is the white noise error terms. In order to test for the existence or otherwise of the short run β_1 and the long run ϕ_1, the authors formulated the H0 and H1 hypothesis as shown below. β_{01} represents the first difference operator, β_{01} is the constant terms; β_{11} ….β_{13} represents the short run coefficients, ϕ_{11} …..ϕ_{13} are the long run coefficients, n_1 ….n_3 are the lag length and ε_{t-1} represents the white noise error terms.

We formulate the H_0 and H_1 hypothesis as shown below so as to test for existence of short run β_1 and long run ϕ_S.

H_0: no long-run relationship	H_1: a long-run relationship
$\phi_{11} = \phi_{12} = \phi_{13} = 0$ $\phi_{21} = \phi_{22} = \phi_{23} = 0$ $\phi_{31} = \phi_{32} = \phi_{33} = 0$ $\phi_{41} = \phi_{42} = \phi_{43} = 0$	$\phi_{11} \neq \phi_{12} \neq \phi_{13} \neq 0$ $\phi_{21} \neq \phi_{22} \neq \phi_{23} \neq 0$ $\phi_{31} \neq \phi_{32} \neq \phi_{33} \neq 0$ $\phi_{41} \neq \phi_{42} \neq \phi_{43} \neq 0$

H_0: no short-run relationship	H_1: a short-run relationship
$\beta_{11} = \beta_{12} = \beta_{13} = 0$ $\beta_{21} = \beta_{22} = \beta_{23} = 0$ $\beta_{31} = \beta_{32} = \beta_{33} = 0$ $\beta_{41} = \beta_{42} = \beta_{43} = 0$	$\beta_{11} \neq \beta_{12} \neq \beta_{13} \neq 0$ $\beta_{21} \neq \beta_{22} \neq \beta_{23} \neq 0$ $\beta_{31} \neq \beta_{32} \neq \beta_{33} \neq 0$ $\beta_{41} \neq \beta_{42} \neq \beta_{43} \neq 0$

Deciding on either to reject or accept H_0 (no co-integration among the variables) is based on the following criteria:

If F- Statistics (F_s) > upper bond, then we reject H_0, thus the variables are co-integrated;

If F_s < lower bound, then we accept H_0, thus we conclude that the variables are not co-integrated.

But if $F_s \geq$ lower bound and ≤ Upper bound, under this condition, the decision is inconclusive (Lawal *et al*. 2016c; Lawal *et al*. 2017; Lawal *et al.* 2018).

3. Research Findings:

Table 3 presents the results of the long run relationship among the variables. In order to address the problem of endogeneity, we re-estimated each of the variables as independent variables. The results as shown in Table 3 shows that when we normalized the regression in the *In*RGDP, *In*TOUR and *In*AGRIC, evidence reveals that a significant long run relationship exist among the three constructs. a compelling long run relationship exists among the variables when the regression is normalized in the InRGDP, *In*TOUR and *In*AGRIC implying that the variables are cointegrated.

Table 3: F-Statistics for testing existence of a long run relationship among the variables

Model	*F – statistic*	Decision.
F_{InRGDP}*(InRGDP/InTOUR,InAGRIC)*	4.2316*	Co – integration exist
F_{InTOUR}*(InTOUR/InRGDP,InAGRIC)*	5.3246*	Cointegration exist
$F_{InAGRIC}$*(InAGRIC/InRGDP,InTOUR)*	6.1103*	Cointegration exist

Source: Author's Computation (2018)

The relevant critical value bounds presented in this table are obtained from Pesaran and Shin (1999), Pesaran *et al.* (2001). The Critical values for all the regressions with intercept and trends are 2.762 – 3.428 at 10% significance level and 3.084 – 4.219 at 5% significance level. *, ** denotes 5%, 10% significance levels respectively.

Having proved that the variables are cointegrated, we estimated the long run and short run ARDL model based on Schwartz Bayesian Criteria. The results are presented in Table 4. As shown in the Table, it is evidence both at the long run and short run that the connection between tourism and economic growth is positive and significant a positive and significant relationship exist both at long and short run between tourism and economic growth, as well as between tourism and agricultural output in the long run, though no relationship exist in the short run. Our findings further reveals that the connection between agriculture and economic growth is positive and significant. The result also show that a significant and positive relationship exist between agriculture and economic growth. The findings are in line with the findings of Kadir and Karim (2012); Tang and Tan (2013) but contradict Dorosh and Thurlow (2016) and Tang (2011).

Table 4. Estimated long –run and short run coefficients using the ardl selected based on schwarz bayesian criterion

Regressors	lnRGDP		lnTOUR		lnAGRIC	
	LR	SR	LR	SR	LR	SR
lnRGDP			0.7108 [3.0805]**	0.3647 [0.6219]**	0.1273 [2.0168]**	0.0887 [0.4884]**
lnTOUR	0.3506 [1.8703]**	0.0070 [0.4071]**			0.3244 [2.9698]**	0.10721 [2.3504]**
lnAGRIC	0.32659 [3.7576]**	0.26570 [0.8979]**	-2.0341 [-0.334]**	0.1640 [0.8440]		
Trend	0.0049 [0.8739]	0.0105 [2.142]	0.0798 [1.1516]	-0.0102 [-1.877]	0.0232 [2.9174]	0.0032 [4.4219]
ECM (-1)		-0.5380 [-3.09]***		0.1348 [2.9623]		-0.1389 [-3.271]**

Note: t-statistics are presented in squared brackets. Asterisks ***, **,* represents 1%, 5% and 10% significant levels respectively.
Source: Author's Computation (2018) using Microfit 4.0

With respected to the magnitude of elasticity in the model, the result shows that the impact of tourism on RGDP in the long run is about 0.35 at 5% level of significance. The implication is that a 1% change in tourism will induce at least 35% changes in RGDP. On the degree of elasticity among the variables, the result shows that the long run impact of tourism on RGDP is about 0.35 and is statistically significant at 5% level. The implication is that a 1% change in tourism will lead to about 35% changes in RGDP in the same direction. The ECM term is negative and significant. From the result, it is evidence that the coefficient of the dependent variable (RGDP) is negative and significant at 1% when RGDP is the dependent variable, the coefficient is negative and significant at 1% level of significant with a speed of adjustment of 53.8%

It is a common practice in literature, when using the ARDL model to test the long run coefficients with that of the short run (see Lawal *et al*. 2016; Babajide *et al*. 2015). The authors used the Cumulative Sum of Recursive Residuals (CUSUM) as well as the Cumulative Sum of Squares (CUSUMQ) to test the stability of our model. It is expected that for stability of model to be upheld, the plots of both CUSUM and CUSUMQ lies with the range of 5% significant level. Given this condition, we accept the null hypothesis that the coefficients of the error correction models are stable, otherwise we accept the alternative hypothesis that the model is not stable.

Figure 1a. Plot of Cumulative Sum of Recursive Residuals

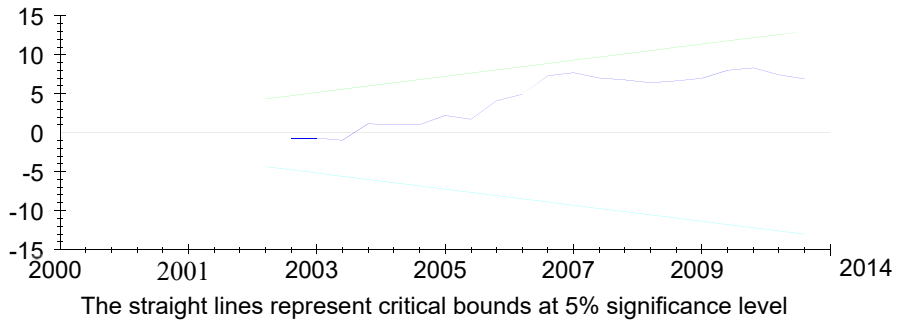
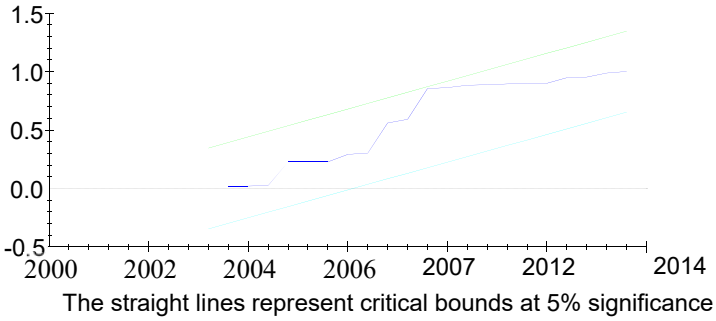


Figure 1b. Plot of Cumulative Sum of Squares of Recursive Residuals



Conclusion

The study investigated the linkages among economic growth, tourism and agriculture with focus on Nigeria by employing the ARDL estimation techniques and observed that significantly, long run and short run linkages exist among the constructs. the relationship among economic growth, tourism and agriculture in Nigeria by employing the ARDL estimation techniques and observed that a compelling long run and short run relationship exist among the variables. This implies that each of tourism and agricultural output largely contributes to economic growth. Since Nigeria targets to be among the first twenty largest economies in the world by the year 2020, concerted effort should be made to expend the tourism industry; bottleneck militating investment in the tourism sector should be eliminated. Tourism incentive packages like easy tourist visa, tourism development fund to provide infrastructure in the tourists' sites, promotion of security that guarantee safety of tourists among others should be pursued. In the same vein, policy makers should ensure that concerted effort is channel to the agricultural sector, food security agenda of the government should pursue with utmost tenacity. Credit facilities as well as Produce-buy-back guarantee scheme should be provided to farmers to boost their production capacity.

Acknowledgements

The authors are grateful to the Management of Landmark University, Omu Aran, Nigeria for providing the financial grant to support this scientific project.

References

[1] Alary, V. *et al.* 2016. Economic assessment of conservation agriculture, options in mixed crop-livestock systems in Brazil using farm modeling. *Agricultural Systems* 144: 33–45. Available at: http://dx.doi.org/10.1016/j.agsy.2016.01.008

[2] Antonakakis, N., Dragouni M., and Filis, G. 2014. How strong is the linkage between tourism and economic growth in Europe? *Economic Modelling,* 44: 142–155. Available at: http://dx.doi.org/10.1016/j.econmod.2014.10.018

[3] Asaleye, A. J., Fashina, O. A., Ogunjobi, J. O. and Lawal, A. I. 2018. Foreign aid, human capital and economic growth nexus: Evidence from Nigeria. Accepted for publication in Journal of International Studies 11(2) (www.jois.eu)

[4] Babajide, A. A. and Lawal, A. I. 2016. Macroeconomic behaviour and FDI inflows in Nigeria: an application of the ARDL model. *British Journal of Economics, Finance and Management Sciences,* 11(1): 84 – 107. Available at: www.ajournal.co.uk/BJEFM.htm

[5] Babajide, A. A., Lawal, A. I. and Somoye, R. O. 2015. Monetary Policy Dynamics and the Stock Market Movements: Empirical Evidence from Nigeria. *Journal of Applied Economic Sciences, 8(38): 1179 – 1188.* Available at: *www*.cesmaa.eu/journals/jaes/

[6] Brida, J., Cortes-Jimenez, I., and Pulina, M. 2014. Has the tourism-led growth hypothesis been validated? A literature review. *Current Issues in Tourism*, 19(5): 394-430. Available at: http://dx.doi.org/10.1080/13683500.2013.868414

[7] Cheam, C. L., Mahmood, R., Abdullah, H., and Ong, S. C. 2013. Economic growth, tourism and selected macroeconomic variables: a triangular causal relationship in Malaysia. Margin: *The Journal of Applied Economic Research*, 7(2): 185-206. Available at: https://doi.org/10.1177/0973801013483503

[8] Chou, M. C. 2013. Does tourism development promote economic growth in transition countries? A panel data analysis. *Economic Modelling,* 33: 226–232 Available at: http://dx.doi.org/10.1016/j.econmod.2013.04.024

[9] Collier, P., and Dercon, S. 2014. African agriculture in 50 years: Smallholders in a rapidly changing world. *World Development*, 63(10): 92–101. https://doi.org/10.1016/j.worlddev.2013.10.001

[10] Cortes-Jimenez, I., and Pulina, M. 2010. Inbound tourism and long-run economic growth. *Current Issues in Tourism*, 13(1): 61-74. https://doi.org/10.1080/13683500802684411

[11] Dorosh, P., and Thurlow, J. 2013. Agriculture and small towns in Africa. *Agricultural Economics*, 44: 435–445. Available at: https://onlinelibrary.wiley.com/journal/15740862

[12] Dorosh, P., and Thurlow, J. 2014. Can cities or towns drive African development? Economywide analysis for Ethiopia and Uganda. *World Development,* 63(10): 113–123. Available at: http://dx.doi.org/10.1016/j.worlddev.2013.10.014

[13] Dorosh, P., and Thurlow, J. 2016. Beyond Agriculture versus Non-Agriculture: Decomposing Sectoral Growth–Poverty Linkages in Five African Countries, *World Development*. Available at: http://dx.doi.org/10.1016/j.worlddev.2016.08.014

[14] Feng, C., Wang, M., Liu, G-C, and Huang, J-B. 2017. Sources of economic growth in China from 2000–2013 and its further sustainable growth path: A three-hierarchy meta-frontier data envelopment analysis. *Economic Modelling,* 64: 334–348. Available at: https://doi.org/10.1016/j.econmod.2017.04.007

[15] Hazell, P. B. R. 2013. Options for African agriculture in an era of high food and energy prices. *Agricultural Economics*, 44(Supplement): 19–27. Available at: https://doi.org/10.1111/agec.12047

[16] Inwood, S. 2017. Agriculture, health insurance, human capital and economic development at the rural-urban-interface. *Journal of Rural Studies* 54: 1-14. Available at: http://dx.doi.org/10.1016/j.jrurstud.2017.05.009

[17] Kadir, N., and Karim, M. Z. A. 2012. Tourism and economic growth in Malaysia: evidence from tourist arrivals from ASEAN-5 countries. *Ekonomska Istrazivanja- Economic Research*, 25(4): 1089-1100. Available at: https://doi.org/10.1080/1331677X.2012.11517550

[18] Lawal A. I., Kazi P. K., Adeoti O. J., Osuma G. O., Akinmulegun S. and Ilo B. 2017. Capital Flight and the Economic Growth: Evidence from Nigeria. *Binus Business Review*, 8(1): 171 – 177. Available at: https://10.21512/bbr.v8i2.2090

[19] Lawal I. A., Atunde I. O. and Ahmed, V., Asaleye, A. 2016b. Exchange Rate Fluctuation and the Nigeria Economic Growth. *EuroEconomica* 35(2): 124 – 138. Available at: www.euroeconomica-danubius.ro/

[20] Lawal I. A., Babalola B. M, Otekunrin A. O. and Adeoti J. O. 2016c: External Debt and Economic Growth: Evidence from Nigeria *Acta Universitatis Danubius. Œconomica,* 12(6): 179 -194. Available at: http://journals.univ-danubius.ro/index.php/oeconomica/article/view/3655

[21] Lawal, A. I., Nwanji, T. I., Asaleye, A. and Ahmed, V. 2016a. Economic growth, financial development and trade openness in Nigeria: An application of the ARDL bound testing approach. *Cogent Economics and Finance,* 4:1258810. Available at: http://dx.doi.org/10.1080/23322039.2016.1258810

[22] Lawal, A. I., Somoye, R.O.C., Babajide A. A. and Nwanji, T. I. 2018. The effect of fiscal and monetary policies interaction on stock market performance: Evidence from Nigeria. *Future Business Journal,* 4(1): 16 – 33. Available at: https://doi.org/10.1016/j.fbj.2017.11.004

[23] Ohlan, R. 2017.The relationship between tourism, financial development and economic growth in India. *Future Business Journal,* 3(2): 9–22. Available at: http://dx.doi.org/10.1016/j.fbj.2017.01.003

[24] Othman, R., Salleh, N. H. M., and Sarmidi, T. 2012. Analysis of causal relationship between tourism development, economic growth and foreign direct investment: an ARDL approach. *Journal of Applied Sciences*, 12(12): 1245-1254. Available at: https://scialert.net/abstract/?doi=jas.2012.1245.1254

[25] Oye, O. O., Lawal, A. I., Eneogu A., and IseOlorunkanmi, J. O. 2018. Does exchange rate devaluation affect agricultural output? Evidence from Nigeria. *Binus Business Review*, *9*(2): 115-123. Available at: www.journal.binus.ac.id/index.php/BBR/index

[26] Perles, J., Ramon, A., Rubia, A., and Moreno, L. 2016. Economic crisis and tourism competitiveness in Spain: Permanent effects or transitory shocks? *Current Issues in Tourism,* 19(12): 1210-1234 Available at: https://doi.org/10.1080/13683500.2013.849666

[27] Perles-Ribes, J. F., Ramon-Rodríguez, A. B., Rubia, A. and Moreno-Izquierdo, L. 2017. Is the tourism-led growth hypothesis valid after the global economic and financial crisis? The case of Spain 1957-2014. *Tourism Management,* 61: 96 -109. Available at: http://dx.doi.org/10.1016/j.tourman.2017.01.003

[28] Sebri, M., and Abid, M. 2012. Energy use for economic growth: A trivariate analysis from Tunisian agriculture sector. *Energy Policy* 48: 711–716. Available at: https://doi.org/10.1016/j.enpol.2012.06.006

[29] Streifeneder, T. 2016. Agriculture first: Assessing European policies and scientific typologies to define authentic agritourism and differentiate it from countryside tourism. *Tourism Management Perspectives,* 20: 251–264. Available at: https://doi.org10.1016/j.tmp.2016.10.003

[30] Tang, C. F. 2011. Is the tourism-led growth hypothesis valid for Malaysia? A view from disaggregated tourism markets. *International Journal of Tourism Research*, 13(1): 97 -101. Available at: https://doi.org/10.1002/jtr.807

[31] Tang, C. F. 2013. Temporal Granger causality and the dynamics relationship between real tourism receipts, real income, real exchange rates in Malaysia. *International Journal of Tourism Research*, 15(3): 272-284. Available at: https://doi.org/10.1002/jtr.1869

[32] Tang, C. F., and Tan, E. C. 2013. How stable is the tourism-led growth hypothesis in Malaysia? A view from disaggregated tourism markets. *Tourism Management*, 37: 52-57. Available at: http://dx.doi.org/10.1016/j.tourman.2012.12.014

[33] Tang, C.F. and Abosedra, S. 2016. Tourism and growth in Lebanon: New evidence from bootstrap simulation and rolling causality approaches. *Empirical Economics*, 50(2): 679–696. Available at: https://doi.org/10.1007/s00181-015-0944-9

[34] Tang, C.F., Tiwari, A. K., and Shahbaz, M. 2016. Dynamic inter-relationships among tourism, economic growth and energy consumption in India. *Geosystem Engineering*, 19(4): 158–169. Available at: https://doi.org/10.1080/12269328.2016.1162113

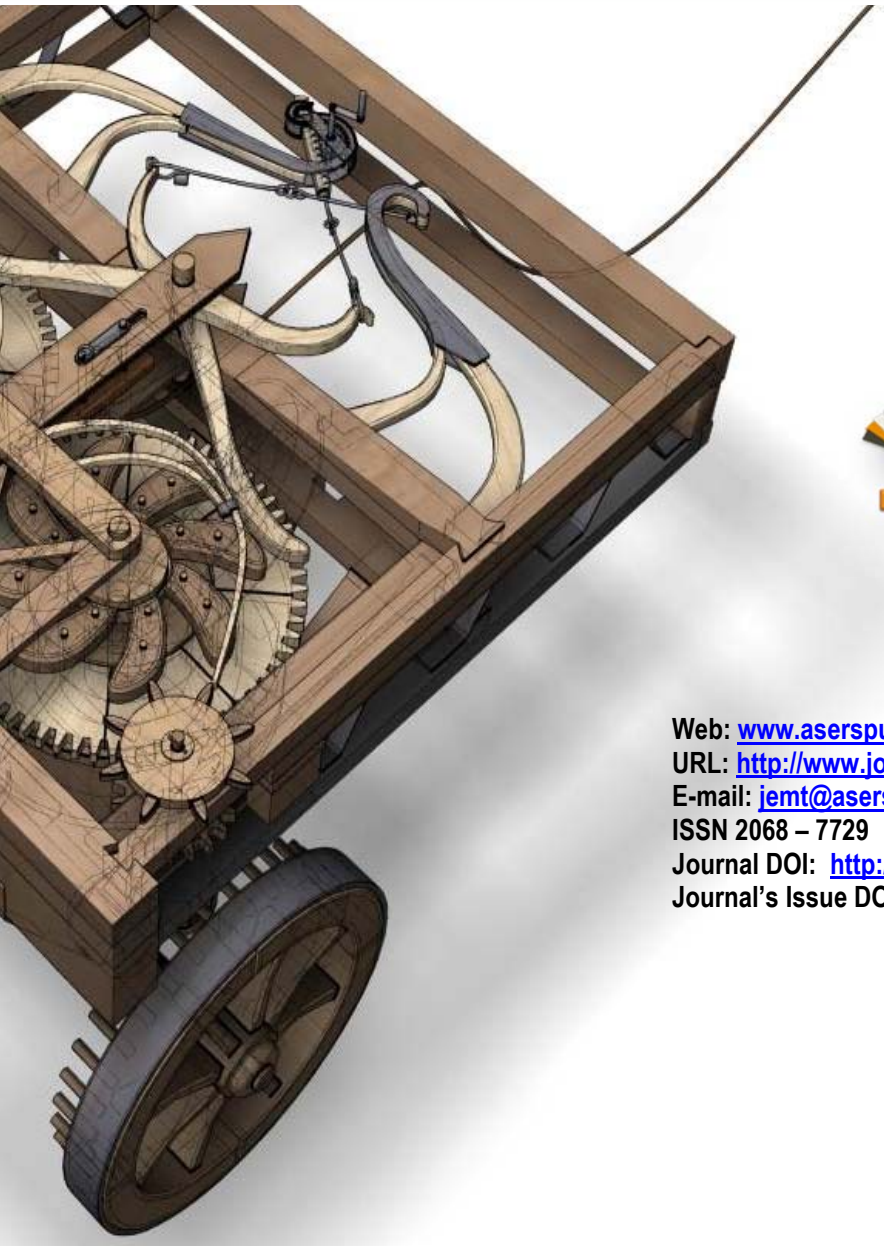
[35] Tang, C.F., and Tan, E.C. 2015. Does tourism effectively stimulate Malaysia's economic growth? *Tourism Management*, 46: 158–163. Available at: http://dx.doi.org/10.1016/j.tourman.2014.06.020

[36] Tang, C.H., and Jang, S.S. 2009. The tourism–economy causality in the United States: A sub-industry level examination. *Tourism Management*, 30(4): 553–558. Available at: 10.1016/j.tourman.2008.09.009

[37] Tugcu, C.T. 2014. Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region. *Tourism Management*, 42: 207–212. Available at: 10.1016/j.tourman.2013.12.007

[38] Yamaguchi, M. and Kinugasa, Y. 2014. *Economic analysis using the overlapping generations model and general equilibrium growth accounting for the Japanese economy: population, agriculture and economic development*. World Scientific Publishing Company, Singapore ISBN-13: 978-9814571487

ASERS



ASERS Publishing

Web: www.aserspublishing.eu
URL: http://www.journals.aserspublishing.eu/jemt
E-mail: jemt@aserspublishing.eu
ISSN 2068 – 7729
Journal DOI: http://dx.doi.org/10.14505/jemt
Journal's Issue DOI: http://dx.doi.org/10.14505/jemt.v9.4(28).00