XXI SEMEAD
Seminários em Administração
novembro de 2018
ISSN 2177-3866

REVISITING THE TOURISM ON LATIN AMERICA: A PANEL ANALYSIS

MATHEUS BELUCIO
UNIVERSIDADE DA BEIRA INTERIOR

FÁBIO FERNANDES
UNIVERSIDADE DO PORTO

JOSÉ ALBERTO FUINHAS
FACULTY OF ECONOMICS, UNIVERSITY OF COIMBRA

JOSÉ ANTUNES
UNIVERSIDADE DA BEIRA INTERIOR

MATEUS BANKS LIBERATO MARTIN
FACULDADE DE ECONOMIA, ADMINISTRAÇÃO E CONTABILIDADE DA UNIVERSIDADE DE SÃO PAULO - FEA

Agradecimento à orgão de fomento:
Research supported by: NECE, R&D unit funded by the FCT – Portuguese Foundation for the Development of Science and Technology, Ministry of Science, Technology and Higher Education.

REVISITING THE TOURISM ON LATIN AMERICA: A PANEL ANALYSIS

Abstract

The increase of the globalization phenomenon at the end of the XX century was vital for the tourism industry, more information combined with easier ways of movement instigated the decision to travel. The tourism sector is commonly understood as essential for several economies. In this study, through a Panel Var, composed of 26 countries of Latin American (LA) and the Caribbean, it was verified a relationship between the decomposition of the KOF index (social, economic and political), the GDP and the GDP generated by tourism. The temporal horizon comprises data from 1995 to 2015. The results show a bidirectional relationship between social globalization and public investment. Several variables cause unidirectionally the GDP, they are: (i) GDP; (ii) public investment; (iii) economic globalization; (iv) political globalization; (v) exchange rate; (vi) population. The empirical results contribute to the discussions on tourism in LA, providing a theoretical basis that contributes to the decision making of public and private agents.

Keywords: Globalization; GDP; Tourism GDP; Latin America; PVAR – Panel Vector Auto-regressive

1. INTRODUCTION

Some economies depend directly on tourism; in 2016 travel and tourism contributed more than 50% of GDP to the top four countries on the World Travel and Tourism Council list (WTTC, 2016). It is common to find authorities guiding their economies to obtain more tourism revenue (Aydin, 2016).

The selection of the 26 Latin American and Caribbean countries (Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Grenada, Guyana, Honduras, Jamaica, Panama, Paraguay, Peru, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname and Uruguay) occurred through the elimination of those who did not have data or who had missing data in the time series.

Therefore, the general objective of this study is through historical data establish an empirical model with an autoregressive vector panel (PVAR) and point out the causal relationships between macroeconomic variables.

The findings point to the existence of a unidirectional and bidirectional relationship between the variables of the model. Public policy makers as well as tourism agents in Latin America are benefited through empirical knowledge

The results reveal that tourism GDP causes in a unidirectional way Public Investment. While GDP (without counting tourism sector GDP) also causes public investment, but in a bidirectional way,

that is, the tourism sector itself benefits economic development through public investments, as well as other sectors of the economy.

The research continues presenting the existing literature on the phenomenon of tourism in Latin America. In a third step describes the data obtained, their sources and the choice of method of data analysis. Discussion of the results is presented before final conclusions, in the last section still indicated gaps that can be used in future studies.

Algumas economias dependem diretamente do turismo, em 2016 as viagens e turismo contribuíram com mais de 50% do PIB para os quatro primeiros países da lista do World Travel and Tourism Council (WTTC, 2016). É comum encontrar autoridades que orientam suas economias para obter mais receita de turismo (Aydin, 2016).

2. LITERATURE REVIEW

In 2017, international tourist arrivals grew by a remarkable 7%, reaching more than 1,322 million and there is still a good expectation of growth for the year 2018 (UNWTO, 2018). High tourism revenue can become a major budgetary factor and substitute other branches of economic activity (Kurmanaliyeva et al., 2014).

The international tourism of a country depends on how competitive it is in relation to the others, this is widely recognized in the literature (Mendola & Volo, 2017, Andrades & Dimanche, 2017, Gomezelj & Mihalic, 2008, Ritchie & Crouch, 2005; Dwyer & Kim, 2003; Crouch & Ritchie, 1999). Chucky Gee (1999) wrote about the magnitude of the sector in generating income, jobs and the capacity to increase infrastructures in destination countries.

Ritchie and Crouch (2005) point out that the tourist destination to be competitive needs to bring more tourists and / or increase their expenditure, giving a great stay that will be forever remembered, profiting thereby, improving the well-being of locals and preserving the natural capital of the destination.

In recent decades, the causal relationship between tourism and economic growth has been investigated. However, the literature reports conflicting evidence about this relationship (eg, Tugcu, 2014, Aslan, 2013, Cortes-Jimenez & Pulinam, 2010, Gunduz & Hatemi-J, 2005, Balaguer and Cantavella-Jordá, 2002). This may have occurred because of different methodologies and time series, which are used in each study (Dogru & Bulut, 2017).

Researchers do not cease their quest to understand the effects of tourism on the economy (Croes et al., 2018; Chulaphan & Barahona, 2017) this theme continues to relevant and studied. There are four hypothesis of the relationship between economic growth led by tourism: (i) growth; (ii) conservation; (iii) feedback; and (iv) neutrality.

According to *the hypothesis of growth driven by tourism*, tourism development leads to an increase in economic growth, pointing to the possibility that investment in the tourism sector may subsequently lead to an increase in overall economic growth. This evidence can be found in Shahzad et al. al. (2017); Tugcu (2014); Cortes-Jimenez & Pulina (2010); Gunduz & Hatemi-J (2005); Dritsakis (2004); and Balaguer and Cantavella-Jordá (2002).

The conservation hypothesis states that economic growth leads to the development of tourism, pointing that investment in other sectors of the economy generates positive externalities. Corroborating highlights are found in Aslan's studies (2013); Payne & Mervar (2010); and Oh (2005).

The feedback hypothesis says that economic growth and tourism development are interdependent and can serve as complementary, indicating that investment in other sectors of the economy leads to the development of tourism and investment in the tourism sector leads to increased economic growth. For further examples in the literature: Perles-Ribes et. Al. (2017); Al-mulali, Fereidouni, Lee, & Mohammed (2014); Lee & Chang (2008); Demiröz & Ongan (2005).

The hypothesis of neutrality suggests that there is no causal relationship between the development of tourism and the increase in economic growth, pointing out that policies and investments in tourism have little or no effect on increasing overall economic growth and investment in other sectors of the economy do not develop the tourism significantly. Details can be seen in the studies of Tugcu (2014); Aslan (2013); and Katircioglu (2009).

The World Economic Forum (2017) points to Mexico as the most competitive country in Latin America and the Caribbean, followed by Brazil and Panama. In the global ranking, the countries occupy the 22nd, 27th and 35th positions respectively. Latin America is an important tourist destination and Argentina and Brazil are the countries that have stood out in hosting events (ICCA, 2017). In 2013 Brazil received the World Youth Day event organized by the Catholic Church, with more than 3 million national and international participants. The following year the country hosted the FIFA World Cup (FIFA) and in 2016 it hosted the Olympic Games.

It is commonly seen that tourism is an important driver of a nation's economic growth, especially in developing economies. The tourist destination encourages public and private investment with the intention of attracting more and more visitors. Table X presents the causal relationship between tourism and the hypothesis of growth in Latin America.

Table 1 – TGHL on Latin America

Author (year)	**Sample**	**Period in Study**	**Methodology**	**Causal Relationship**
Rivera, M. A. (2017)	Ecuador	N. A.	VECM and Granger	T ↔ Y
Shahzad et. Al. (2017)	México	1990–2015	QQ	T → Y
Apergis & Payne (2012)	9 Caribbean Countries	1999–2004	PVECM	T ↔ Y
Amaghionyeodiwe (2012)	Jamaica	1970–2005	VECM e FEVD	T → Y
Lorde et al. (2011)	Barbados	1974–2004	ML and Granger	T ↔ Y
Brida et al. – (2011 a)	Brazil	1965–2007	Dinamic panel data analysis	Neutral
Brida et al. – (2011b)	Colombia	1990–2006	VECM and Granger	T ↔ Y
Schubert et al. (2011)	Antígua and Barbuda	1970–2008	VECM and Granger	T ↔ Y
Brida & Risso (2009)	Chile	1988–2008	VECM and Granger	T → Y
Vanegas et al (2008)	Nicaragua	1980–2004	VECM and Granger	T → Y
Brida et al. – (2008a)	Uruguay	1986–2006	VECM and Granger	T → Y
Brida et al. – (2008b)	Mexico	1980–2007	VECM and Granger	T → Y

T → Y: Evidence referring to the hypothesis of growth driven by tourism; T ← Y: Evidence referring to the conservation hypothesis T ↔ Y: Evidence referring to the feedback hypothesis; Neutral: Evidence referring to the neutrality hypothesis.

As observed, the majority of the studies on the causality between tourism and growth in the Latin American context evidences the hypothesis of the growth carried by the tourism. The next section will present the data and methodology of this article.

3. DATA AND METHODOLOGY

This study contains 26 Latin American and Caribbean countries, namely: Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Dominican Republic, El Salvador, Grenada, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname and Uruguay.

The time horizon used includes data between 1995 and 2015. Countries that did not have data for the variables or that for some reason did not present information for some period of the proposed study were eliminated from the study. In the table 2 details of the variables and the descriptive statistics are presented.

Table 2 – Data description and descriptive statistics

Variables	Acronyms	Source	Obs	Mean	Std. Dev.	Min	Max
Social globalization	globs	A	546	60.9584	9.2340	33.0722	83.4463
Tourism GDP	lgdptur	B	546	2.5805	0.7618	0.6707	4.4231
GDP less Tourism GDP	lgdpst	B	546	23.0621	2.3306	19.2272	28.5942
Public Investment	llcinv	B	546	1.1341	3.3547	-4.6052	9.0584
Exchange rate	doer	C	546	295.2755	943.1178	0.4010	6424.3390
Political globalization	globp	A	546	56.3238	21.1910	11.9863	93.5160
Economic globalization	globe	A	546	54.6473	9.5964	27.2625	78.9477
Total globalization	lpopt	D	546	14.6600	2.3657	10.6664	19.1432

Notes: L denotes natural logarithm; A: KOF Swiss Economic Institute; B: World Travel and Tourism Council; C: International Monetary Fund, International Financial Statistics; and D: World Bank.

Love & Zicchino (2006) developed the methodology PVAR used in this article. This technique combines the traditional VAR approach, which treats all variables in the system as endogenous, with the panel-data approach that allows unobserved individual heterogeneity (Grossmann et al., 2014). The PVAR estimation is commonly found in the economic literature (Brana et al. 2012; Neves et al., 2018; Jawadi et al., 2016; Koengkan et al., 2017; Lin & Zhu, 2017). The specification of the equation for the first order PVAR according to Love & Zicchino (2006) can be seen in equation 1:

$$A_{it} = \Gamma_0 + \Gamma_1 z_{it-1} + f_i + d_{c,t} + u_t$$

Where, A_t is a vector of variables, in which all variables are stationary in first differences. Γ_0 is the vector of constant, $\Gamma_1 z_{it-1}$ in equation designates the matrix polynomial, the fixed effects in the model f_i, the effects of time are represented for $d_{c,t}$, and the term of random errors u_t. Some procedures are required to perform a good estimation, details in table 3:

Table 3 – PVAR Estimation

(i)	VIF (variance inflation factor) statistic
(ii)	Hausman test
(iii)	Lag-order selection test
(iv)	PVAR model
(v)	Granger causality Wald test

(vi)	Eigenvalue stability condition
(vii)	FEVD (forecast error variance decomposition) test
(viii)	IRF (impulse response function) test

Being that (I) is used to check stationary, (ii) allows to check multicollinearity, (iii) reveals the existence of fixed or random effects, (iv) determines the number of lags to be used in the model, (v) is the estimation (vii) indicates the amount of information that each variable contributes to the others and (ix) in a dynamic system is the output when input signal is displayed.

4. RESULTS AND DISCUSSION

In this section is presented the empirical results and the discussions regarding the results obtained. The first step to estimate the PVAR model was to verify the FIV statistic (table X). The results of the estimation are within the limits of normality that is equal to or less than 10.

Table 4- VIF statistic

	VIF	1/VIF
dlgdpst	1.19	0.842924
doer	1.15	0.872675
dllcinv	1.05	0.948596
dglobe	1.05	0.948848
dlgdptur	1.05	0.954862
dlpopt	1.03	0.969496
dglobp	1.02	0.977484
dglobs	N.A	N.A
Mean		**1.08**
Note: N.A means not applicable		

The hausman test had has Prob>chi^2 0.0443, which proves that the fixed effects are verifiable for at least one of the dependent variable combinations, the *sigmamore* option of Stata 14 was used. After selecting the lags of the estimation using the *pvarsoc* option, with a maximum of 4 lags, details table 5.

Table 5 – Lag order select

lag	CD	J	J pvalue	MBIC	MAIC	MQIC
1	0.63	230.22	0.03	-915.28	-153.78	-455.64
2	0.97	169.03	0.01	-594.64	-86.97	-288.21
3	1.00	60.00	0.62	-321.84	-68.00	-168.62
4	0.97	78139.30	0.00	77996.11	78091.30	78053.57

The test indicated the number of 1 lag as ideal for estimation (see MBIC, MAIC and MQIC statistics that presented the lowest value for 1 lag). The suggestion was followed and the number applied in the estimation. Table X shows the results of the Granger causality test.

Tabela 6 – Granger causality

Equation\ Excluded	chi2	df	Prob>Chi2	Equation\ Excluded	chi2	df	Prob>Chi2
dglobs				**doer**			
dlgdptur	0.445	1	0.505	**dglobs**	13.707	1	0.000
dlgdpst	10.817	1	0.001	**dlgdptur**	5.381	1	0.020
dllcinv	84.920	1	0.000	**dlgdpst**	11.289	1	0.001
doer	1.892	1	0.169	**dllcinv**	86.153	1	0.000
dglobp	14.304	1	0.000	**dglobp**	40.812	1	0.000
dglobe	14.281	1	0.000	**dglobe**	19.199	1	0.000
dlpopt	0.000	1	0.992	**dlpopt**	122.559	1	0.000
ALL	129.665	7	0.000	**ALL**	238.711	7	0.000
dlgdptur				**dglobp**			
dglobs	8.655	1	0.003	**dglobs**	12.417	1	0.000
dlgdpst	17.578	1	0.000	**dlgdptur**	16.827	1	0.000
dllcinv	9.605	1	0.002	**dlgdpst**	9.664	1	0.002
doer	0.080	1	0.778	**dllcinv**	60.415	1	0.000
dglobp	0.056	1	0.813	**doer**	16.405	1	0.000
dglobe	0.145	1	0.703	**dglobe**	8.663	1	0.003
dlpopt	31.577	1	0.000	**dlpopt**	122.238	1	0.000
ALL	58.336	7	0.000	**ALL**	187.193	7	0.000
dlgdpst				**dglobe**			
dglobs	18.480	1	0.000	**dglobs**	6.891	1	0.009
dlgdptur	10.895	1	0.001	**dlgdptur**	15.687	1	0.000
dllcinv	82.774	1	0.000	**dlgdpst**	10.786	1	0.001
doer	8.371	1	0.004	**dllcinv**	86.648	1	0.000
dglobp	38.918	1	0.000	**doer**	14.019	1	0.000
dglobe	30.179	1	0.000	**dglobp**	28.069	1	0.000
dlpopt	108.148	1	0.000	**dlpopt**	156.260	1	0.000
ALL	227.189	7	0.000	**ALL**	231.811	7	0.000
dllcinv				**dlpopt**			
dglobs	5.069	1	0.024	**dglobs**	0.042	1	0.838
dlgdptur	14.501	1	0.000	**dlgdptur**	90.760	1	0.000
dlgdpst	27.136	1	0.000	**dlgdpst**	26.597	1	0.000
doer	1.755	1	0.185	**dllcinv**	86.017	1	0.000
dglobp	13.753	1	0.000	**doer**	4.596	1	0.032
dglobe	1.211	1	0.271	**dglobp**	15.547	1	0.000
dlpopt	5.855	1	0.016	**dglobe**	2.290	1	0.130
ALL	87.005	7	0.000	**ALL**	139.834	7	0.000

The model is accepted as exogenous with a statistical probability of 1%. In sum, most of the variables have a causal relationship of 1%. Three variables generate instigating results that allow for several discussions: a) GDPST causes unidirectionally GDPTUR, that is, the wealth of Latin American countries generates tourism attractiveness, thus benefiting the tourism sector; b) The GDPTUR unidirectionally causes the CINV, so all the wealth that the tourism sector generates becomes more investments in the country. It is up to the decision-makers and regulators to properly apply these investments, so the wealth of tourism will effectively contribute to economic growth; c) GDPST has two-way causal relation to investment, so what the nation generates (wealth)

becomes public investment that possibly will return to generate wealth. In addition to private and international investment, the economies have good prospects for growth.

The curse of resources must be remembered and diversification strategies may be the best alternative for countries that are mostly developing or in a state of poverty. In these economies it is common to find antagonists such as corruption, drug trafficking or lack of security, which is not good for the image of the tourist destination, and tourists are very concerned about their personal security (Liu & Pratt, 2017).

Social globalization has a unidirectional causal relationship with tourism GDP. Reaffirming that the countries of Latin America and the Caribbean need to further develop the creation of connections to increase the gains from tourism. It is up to the public agents to establish measures and regulations that facilitate and increase the publicity of the destinations internationally.

It is usually plausible that the exchange rate does not influence tourism GDP, since tourism is based on the consumption of products and services in the sector. The consumption decision of the foreigners usually coming from rich countries of the Asian, European or North American continents are not influenced by the exchange rate variation.

When talking about globalization, tourism is spoken of, and this activity is of real importance for the developing countries, since it is a way for foreign capital to enter these countries and create jobs. The tourism sector brings stability to the local population of regions where there is tourism attractiveness. It is important to note that international measures to support globalization can benefit the destination, but if these are not applied correctly by local agents, there will be imbalances in the native population due to the fact that the sector cannot absorb the totality of the local labour force. Further details of causal relationships can be observed through the summary flow in Figure 1.

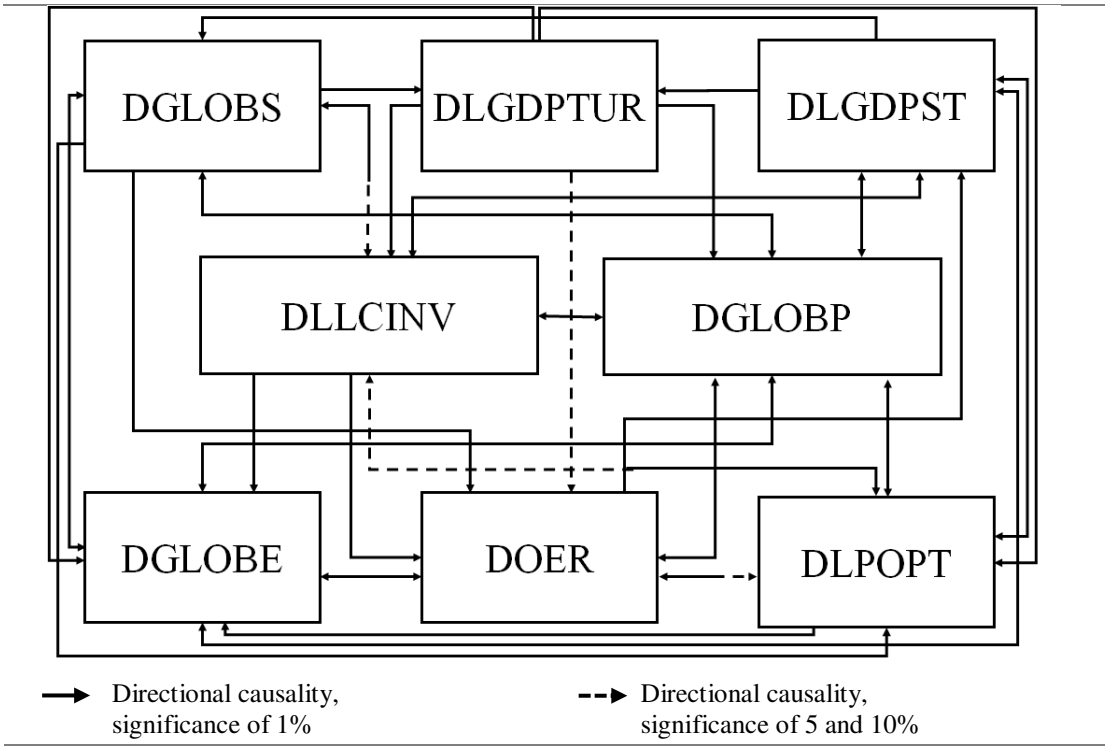
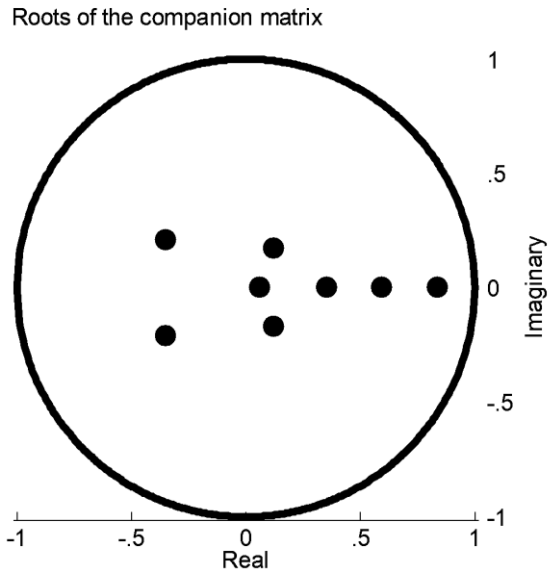


Figure 1 – Summary Flow

To validate the estimated results it is necessary to verify the stability of the model, since stability implies stationarity, being possible through two forms: a) graph and / or the results of the Eigenvalue stability condition. Details table 7.

Table 7 – Graph and Eigenvalue stability condition



Eigenvalue		
Real	**Imaginary**	**Modulus**
0.8377	0.8377	0.8377
0.5966	0.5966	0.5966
-0.3481	-0.3481	-0.3481
-0.3481	-0.3481	-0.3481
0.3550	0.3550	0.3550
0.1215	0.1215	0.1215
0.1215	0.1215	0.1215
0.0633	0.0633	0.0633

Graphically all values are within the circle and the results are less than 1 we assume that the model is stationary or stable, thus possessing the ability to explain.

The following is the calculation of the Forecast-error variance decomposition that was obtained through the command pvarfevd of Stata, these results represent how a variable responds to shocks in another specific variable. Details in Table 8.

Table 7 – Forecast-error variance decomposition

	Impulse variable							
RVAFH	**dglobs**	**dlgdptur**	**dlgdpst**	**dllcinv**	**doer**	**dglobp**	**dglobe**	**dlpopt**
dglobs								
1	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.8203	0.0000	0.0160	0.0699	0.0564	0.0196	0.0179	0.0000
5	0.7433	0.0118	0.0222	0.1077	0.0739	0.0195	0.0168	0.0047
10	0.7355	0.0178	0.0226	0.1077	0.0735	0.0196	0.0168	0.0063
dlgdptur								
1	0.0001	0.9999	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0068	0.9421	0.0387	0.0087	0.0007	0.0000	0.0002	0.0028
5	0.0069	0.9073	0.0387	0.0179	0.0150	0.0020	0.0025	0.0098
10	0.0070	0.8965	0.0391	0.0207	0.0157	0.0029	0.0026	0.0155
dlgdpst								
1	0.0121	0.0351	0.9528	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0372	0.0401	0.5037	0.1189	0.2081	0.0430	0.0355	0.0134
5	0.0300	0.0523	0.4049	0.1668	0.2600	0.0427	0.0300	0.0133
10	0.0297	0.0580	0.4013	0.1656	0.2580	0.0429	0.0299	0.0147
dllcinv								
1	0.0061	0.0000	0.0013	0.9926	0.0000	0.0000	0.0000	0.0000
2	0.0087	0.0193	0.0068	0.9269	0.0280	0.0086	0.0012	0.0005
5	0.0086	0.0271	0.0070	0.9167	0.0283	0.0089	0.0015	0.0019
10	0.0086	0.0294	0.0073	0.9133	0.0284	0.0090	0.0015	0.0024
doer								
1	0.0019	0.0132	0.6097	0.0106	0.3645	0.0000	0.0000	0.0000
2	0.0312	0.0226	0.3339	0.1460	0.3758	0.0441	0.0288	0.0177
5	0.0261	0.0590	0.2820	0.1695	0.3726	0.0425	0.0251	0.0231
10	0.0255	0.0746	0.2759	0.1667	0.3627	0.0427	0.0250	0.0269
dglobp								
1	0.0001	0.0287	0.2254	0.0030	0.1789	0.5638	0.0000	0.0000
2	0.0174	0.0187	0.1882	0.0862	0.3376	0.3306	0.0086	0.0126
5	0.0154	0.0184	0.1570	0.1403	0.3613	0.2835	0.0103	0.0140
10	0.0153	0.0245	0.1559	0.1398	0.3574	0.2804	0.0103	0.0164
dglobe								
1	0.0013	0.0091	0.4422	0.0130	0.2022	0.0033	0.3289	0.0000
2	0.0118	0.0370	0.2734	0.1377	0.3133	0.0278	0.1822	0.0168
5	0.0105	0.0650	0.2248	0.1693	0.3327	0.0316	0.1473	0.0188
10	0.0104	0.0753	0.2220	0.1673	0.3272	0.0319	0.1446	0.0213
dlpopt								
1	0.0183	0.1075	0.0020	0.0221	0.0035	0.0043	0.0004	0.8418
2	0.0215	0.2735	0.0176	0.0888	0.01384	0.0167	0.0008	0.5672
5	0.0130	0.4187	0.0462	0.1118	0.0337	0.0319	0.0071	0.3376
10	0.0109	0.4639	0.0561	0.1045	0.0382	0.0357	0.0104	0.2804

Nota: RVAFH denote Response variable and Forecast horizon.

In figure 2, it is observed that the impulse-response functions, shows all variables converging to return to zero.

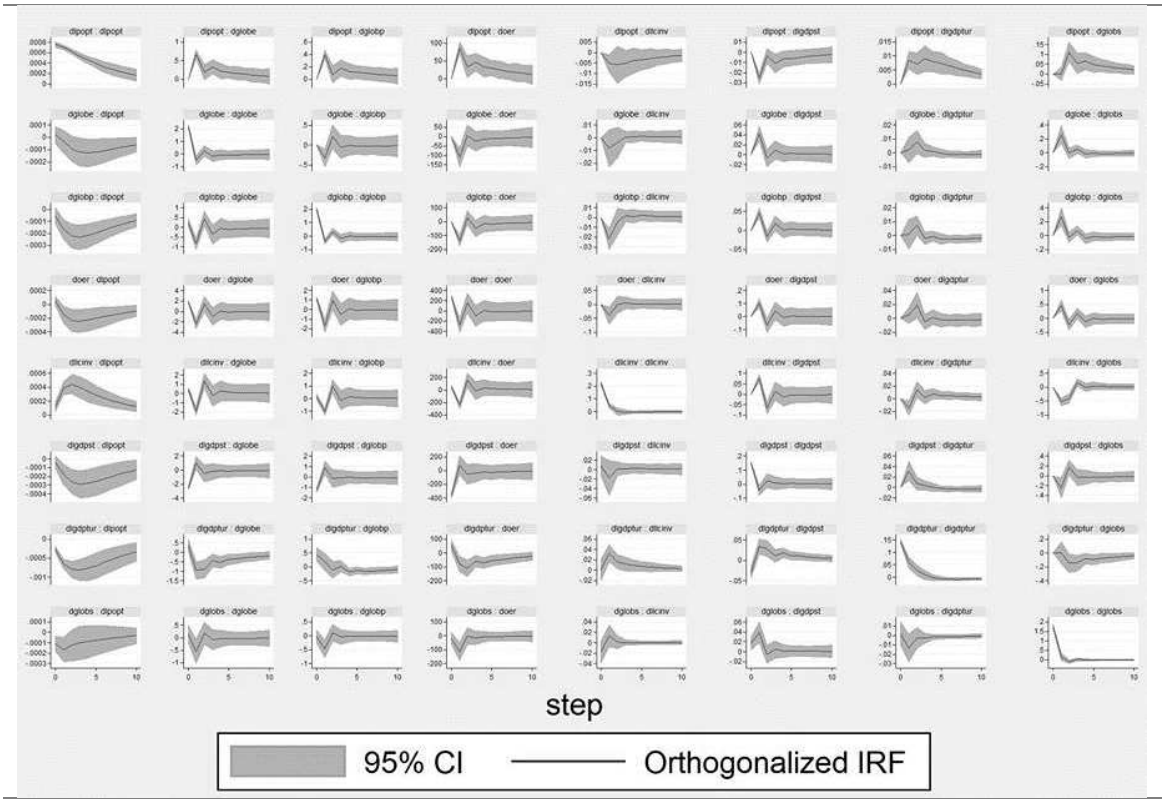


Figure 2 – Impulse: Response

After a certain period, it is likely that through a harmonic motion the variables return to equilibrium. Note that in figure X, most of the variables return to the stability point (up to five years) after a shock.

5. CONCLUSIONS

In this article a Panel VAR was executed for 26 countries of Latin America and the Caribbean. The data includes annual information from 1995 to 2015, maximum period with information available for the variables of globalization and tourism GDP. Being an endogenous and cointegrated model, the Granger causality test was applied.

Our results show that a causal relationship between tourism GDP and public investment. This relationship is a unidirectional-one in the sense that tourism GDP causes public investment. Reinforcing that the Latin American and Caribbean countries also depend on the wealth of this sector to develop in economic, social and political aspects.

Globalization is fundamental for the establishment of international relations between the economies of Latin America and the Caribbean with the other continents. Maintaining good political relations with the rich countries, collaborates for the establishment of agreements to encourage tourism and publicity. Going according to another result obtained in this study where the GDP without the contribution of the tourism sector has a bidirectional relation with the public investment, that is, the public investment that possibly will return to generate wealth. In addition to private and international investment, the economies have good prospects for growth.

This article presents important information to public policy makers as well as tourism agents in Latin America and the Caribbean. The development of good public regulation can generate economic growth and benefits for tourism agents which is reflected in improvements for the population.

REFERENCES

AL-MULALI, U.; FEREIDOUNN, H. G.; LEE, J. Y. M.; MOHAMMED, A. H. (2014): Estimating the tourism-led growth hypothesis: A case study of the Middle East countries. *Anatolia: An International Journal of Tourism and Hospitality Research*, 25(2), 290-298.

AMAGHIONYEODIWE, L. A. (2012): A causality analysis of tourism as a long-run economic growth factor in Jamaica. *Tourism Economics*, 18(5), 1125-1133.

ANDRADES, L.; DIMANCHE, F. (2017): Destination competitiveness and tourism development in Russia: Issues and challenges. *Tourism Management*, 62, 360-376.

APERGIS, N.; PAYNE, J. E. (2012): Tourism and growth in the Caribbean — evidence from a panel error correction model. *Tourism Economics*, 18(4), 449-456.

ASLAN, A. (2014): Tourism development and economic growth in the Mediterranean countries: evidence from panel Granger causality tests. *Current Issues in Tourism*, 17, 363-372.

AYDIN, O. (2016): Tourism Income of Turkey: A Panel Data Approach. *Procedia economics and finance*, 38, 245-256.

BALAGUER, J.; CANTAVELLA-JORDÀ, M. (2002): Tourism as a long-run economic growth factor: The Spanish case. *Applied Economics*, 34, 877-884.

BRANA, S.; DJIGBENOU, M. L.; Prat, S. (2012): Global excess liquidity and asset prices in emerging countries: A PVAR approach. *Emerging Markets Review*, 13(3), 256-267.

BRIDA, J. G., PUNZO, L. F.; RISSO, W. A. (2011a): Research Note: Tourism as a Factor of Growth – the Case of Brazil. *Tourism Economics*, 17(6), 1375-1386.

BRIDA, J. G.; LANZILOTTA, B.; RISSO, W. A. (2008a): Turismo y crecimiento económico: el caso de Uruguay. *PASOS: Revista de Turismo Y Patrimonio Cultural*, 6(3), 481-492.

BRIDA, J. G.; MONTERUBBIANESE, P. D.; ZAPATA-AGUIRRE, S. (2011b): Impactos del turismosobre el crecimientoeconómico y el desarrollo. El caso de los principalesdestinosturísticos de Colombia. *PASOS: Revista de Turismo Y Patrimonio Cultural*, 9(2), 291-303.

BRIDA, J. G.; RISSO, W. A. (2009): Tourism as a factor of long-run economic growth: An empirical analysis for Chile. *European Journal of Tourism Research*, 2(2), 178-185.

BRIDA, J. G.; RISSO, W. A.; SANCHEZ, E. J. (2008b): Tourism's Impact on Long-Run Mexican Economic Growth. *Economics Bulletin*, 1-8.

CHULAPHAN, W., BARAHONA, J. F. (2017): Contribution of disaggregated tourism on Thailand's economic growth. *Kasetsart Journal of Social Sciences*. In press.

CROES, R.; VANEGAS, M. SR. (2008): Cointegration and causality between tourism and poverty reduction. *Journal of Travel Research*, 47, 94-103.

CROUCH, G. I.; RITCHIE, J. R. B. (1999): Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 137-152.

CRPES, R.; RIDDERSTAAT, J.; VAN NIEKERK, M. (2018): Connecting quality of life, tourism specialization, and economic growth in small island destinations: The case of Malta. *Tourism Management*, 65, 212-223.

DEMIRÖZ, D. M.; ONGAN, S. (2005): The Contribution of Tourism to the Long-Run Turkish Economic Growth. *Ekonomický časopis*, 53(9), 880-894.

DOGRU, T.; BULUT, U. (2017): Is tourism an engine for economic recovery? Theory and empirical evidence. *Tourism Management*.

DRITSAKIS, N. (2004): Tourism as a long-run economic growth factor: An empirical investigation for Greece using causality analysis. *Tourism Economics*, 10 (3), 305-316.

DWYER, L.; Kim, C. (2003): Destination competitiveness: determinants and indicators. *Current Issues of Tourism*, 6(5), 369-414.

DWYER, L.; MELLOR, R.; LIVAIC, Z.; EDWARDS, D.; KIM, C. (2004): Attributes of destination competitiveness: a factor analysis. *Tourism Analysis*, 9(1-2), 91-101.

GOMEZELJ, D. O.; MIHALIC, T. (2008): Destination competitiveness e applying different models, the case of Slovenia. *Tourism Management*, 29(2), 294-307.

GUNDUZ, L.; HATEMI-J, A. (2005): Is the tourism-led growth hypothesis valid for Turkey? *Applied Economics Letters*, 12, 499-504.

ICCA (2017) ICCA announces all-time record number of association meetings in 2016. Available in: https://www.iccaworld.org/newsarchives/archivedetails.cfm?id=6607. Acessed in: 09/05/2018.

JAWADI, F.; MALLICK, S. K.; SOUSA, R. M. (2016): Fiscal and monetary policies in the BRICS: A panel VAR approach. *Economic Modelling*, 58, 535-542. doi.

KATIRCIOGLU, S. T. (2009): Revisiting the tourism-led-growth hypothesis for Turkey using the bounds test and Johansen approach for cointegration. *Tourism Management*, 30, 17-20.

KOENGKAN, M.; FUINHAS, J. A.; MARQUES, A. C. (2017): O impacto da produção de energia eólica no mercado de trabalho: Uma abordagem pvar. *Revista de Estudos Sociais*, 19(38), 36-49.

KURMANALIYEVA; RYSBEKOVA, S.; DUISSENBAYEVA, A.; IZMAILOV, I. (2014). Religious Tourism as a Sociocultural Phenomenon of the Present "The Unique Sense Today is a Universal Value Tomorrow. This is the Way Religions are Created and Values are Made.". *Procedia-Social and Behavioral Sciences*. Vol. 143, 958-963.

LEE, C. C.; CHANG, C. P. (2008): Tourism development and economic growth: A closer look at panels. *Tourism Management*, 29(1), 180-192.

LIN, B.; Zhu, J. (2017): Energy and carbon intensity in China during the urbanization and industrialization process: A panel VAR approach. *Journal of Cleaner Production*, 168, 780-790.

LIU, A.; PRATT, S. (2017). Tourism's vulnerability and resilience to terrorism. *Tourism Management*, 60, 404-417.

LORDE, T.; FRANCIS, B.; DRAKES, L. (2011): Tourism Services Exports and Economic Growth in Barbados. *The International Trade Journal*, 25(2), 205-232.

MENDOLA, D.; VOLO, S. (2017): Building composite indicators in tourism studies: Measurements and applications in tourism destination competitiveness. *Tourism Management*, 59, 541-553.

NEVES, S. A.; MARQUES, A. C.; FUINHAS, J. A. (2018): Could alternative energy sources in the transport sector decarbonise the economy without compromising economic growth? *Environment, Development and Sustainability*, 1-18.

OH, C. O. (2005): The contribution of tourism development to economic growth in the Korean economy. *Tourism Management*, 26(1), 39-44.

PAYNE, J. E.; MERVAR, A. (2010): Research Note: The Tourism–Growth Nexus in Croatia. *Tourism Economics*, 16(4), 1089-1094.

RITCHIE, J. R. B.; CROUCH, G. I. (2005): *The competitive destination: A sustainable tourism perspective.* Oxford: Oxford University Press.

RIVERA, M. A. (2017): The synergies between human development, economic. *Journal of Destination Marketing & Management*, 6, 221-323.

SCHUBERT, F. S.; BRIDA, J. G.; RISSO, W. A. (2011): The impacts of international tourism demand on economic growth of small economies dependent on tourism. *Tourism Management*, 32(2), 377-385.

SHAHZAD, S.; SHAHBAZ, M.; FERRER, R.; KUMAR, R. (2017): Tourism-led growth hypothesis in the top ten tourist destinations. *Tourism Management*, 60, 223-232.

TUGCU, C. (2014): Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region. *Tourism Management*, 42, 207-212.

UNWTO (2018). 2017 International Tourism Results: the highest in seven years. PR No.: 18003. Vol. 16. <http://media.unwto.org/press-release/2018-01-15/2017-international-tourism-results-highest-seven-years>.

WORLD ECONOMIC FORUM (2017). Travel & Tourism Competitiveness Report 2017. Available in: http://ev.am/sites/default/files/WEF_TTCR_2017.pdf. Acessed in: 22/05/2018. ISBN-13: 978-1-944835-08-8.

WTTC - World Travel and Tourism Council. (2016): WTTC data gateway. http://www.wttc.org/datagateway/.