

Tourism and Economic Growth in Trinidad and Tobago: the case of a small oil and gas exporting country

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Overview

- **Developing countries in their quest for economic growth and development, have experimented with various growth strategies:**
- Import substitution industrialization
- Export led-growth
- Tourism led growth hypothesis (TLGH).

Overview (cont'd)

- **TLGH falls under the auspices of the Services led growth paradigm, Ghani and Kharas (2009)**
- Developing countries with an initially low technological base can grow by focusing on their comparative advantages: a most viable alternative to industrialization.
- Economic growth as a result of TLGH occurs when tourism stimulates across the overall economy spillovers and other externalities (Marin,1992).

Tourism and economic diversification

- Tourism industry: a “within the border” international laboratory where new export products can be developed: product diversification (Lejarraja and Walkenhorst 2007).
- The development of critical positive externalities such as learning by doing, managerial skills, innovation technological skills and entrepreneurship which unlike the energy sector can be developed and transferred across to other sectors of the economy.

Tourism and economic diversification (cont'd)

“Tourism was recognized as an important factor for future growth of post-rentier GCC countries” (Karaolak, 2012:3).

The path of economic diversification through development of tourism has proven successful in the UAE, especially in Dubai” (Sharply 2008, Karolak, 2012).

Previous Literature

- **Baluguer and Cantavella-Jorda (2002) showed that the TLGH is applicable to developed countries.**
- Quarterly time series data spanning the first quarter of 1975 to the first in 1997.
- Found a long run relationship between tourism with economic growth and the real effective exchange rate.
- Tourism granger causes economic growth.

Previous Literature (cont'd)

- Tiwari (2011), Akinboade and Braimoh (2009), Kim et al (2006) validated TLGH for the BRICS and the Asians countries.
- Durbarry (2004): tourism can be an alternative to conventional exports as a vehicle of economic growth in the island economy of Mauritius.
- Disaggregating exports he found that tourism expansion (1%) via its multiplier effects, increases economic growth more similar increases in commodity and manufacturing exports.

Previous Literature (cont'd)

- Lorde et al (2011), focusing on Barbados, utilized innovation accounting, cointegration and causality methods.
- The specification of output and the statistical techniques employed can influence the long and short run relationships.
- Depending on how output is measured the results could be contrasting.

Previous Literature (cont'd)

- **Hosein and Tewarie (2004): first attempt at validating TLGH in case of T&T.**
- found that tourism growth is associated with economic growth in Trinidad and Tobago.
- Cumulative experience functions and correlation estimates suggest causality runs from tourism to economic growth.
- But no evidence of Granger causality.
- **This current study undertakes a multivariate cointegration approach in an attempt to search for evidence of Granger causality.**

Methodology

- This study utilizes:
- ADF , KPSS and the Lumsdaine and Papell (1997) unit root tests
- Johansen cointegration technique
- VECM estimation
- Impulse response analysis
- Variance Decomposition analysis
- Granger causality tests

RESULTS: Unit Root Tests

Variable	ADF Null of one unit root		KPSS Null of no unit root		Lumisdaine and Papell Null of one unit root	
	Level	1 st Diff.	Level	1 st Diff.	Level	Breakpoints
IPI	0.7469	-8.9135	0.9935	0.1791	-0.2733	1996Q4,2002 Q3
Tour	0.0634	-2.3649	0.7977	0.3323	0.3159	1997Q1,2008Q2
Reer	-1.1382	-5.5445	0.8997	0.3878	0.7578	1999Q1,2007Q3
xm	-1.0878	-11.140	0.8777	0.0524	-3.7139	1998Q1,2008Q2

Co-integration Results

Null Hypothesis	Alternative Hypothesis	Test Statistic	0.5 Critical Value	P-Values
Trace Test				
r=0	$r \leq 1$	47.59	47.86	0.053
r=1	$r \leq 1$	17.61	29.80	0.59
Max-Eigenvalue Test				
r=0	$r \leq 1$	29.99	27.58	0.024
r=1	$r \leq 1$	11.56	21.13	0.592

Long Run Results

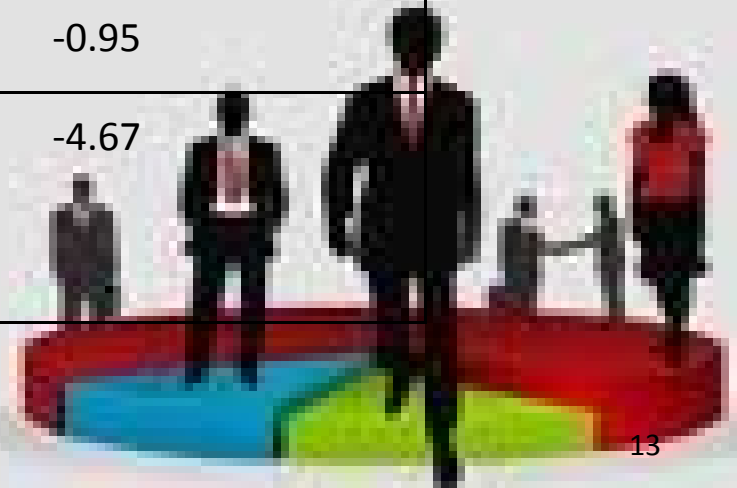
Cointegrating Equation

$$\text{TOUR} = 9.4 + 0.03 \text{ IPI} - 0.45 \text{ REER}^{**} + 0.56 \text{ XM}^{***}$$

$$(\text{DOSL}) \text{ TOUR} = 10.45 + 0.005 \text{ IPI} - 0.32 \text{ REER}^{**} + 0.65 \text{ XM}^{**}$$

Dependent Variable in VECM	ECT	t-statistics
D(TOUR)	-0.16***	-2.08
D(IPI)	-0.0007	-0.002
D(REER)	-0.03	-0.95
D(xm)	0.65***	-4.67

***, **, * significant at 1%, 5% and 10% levels respectively



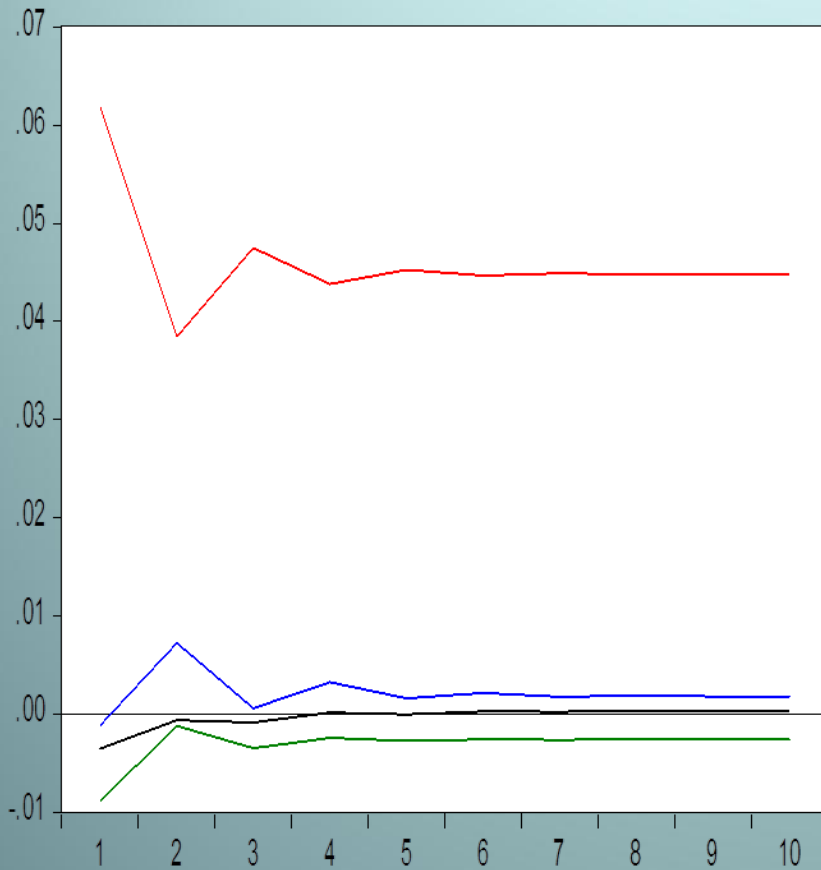
Short Run Results

Dependent Variable	Null Hypothesis	Wald Statistic
Tour	ipi does not Granger-cause tour	0.1438
	reer does not Granger-cause tour	0.0124
	xm does not Granger-cause tour	0.9771
ipi	tour does not Granger-cause ipi	1.4820
	reer does not Granger-cause ipi	0.5031
	xm does not Granger-cause ipi	0.0011
Reer	tour does not Granger-cause reer	0.2414
	ipi does not Granger-cause reer	0.2276
	xm does not Granger-cause reer	0.0555
xm	tour does not Granger-cause xm	3.5327*
	ipi does not Granger-cause xm	0.0883
	reer does not Granger-cause xm	1.6121

(* , ** , *** significant at 1,5 and 10%)

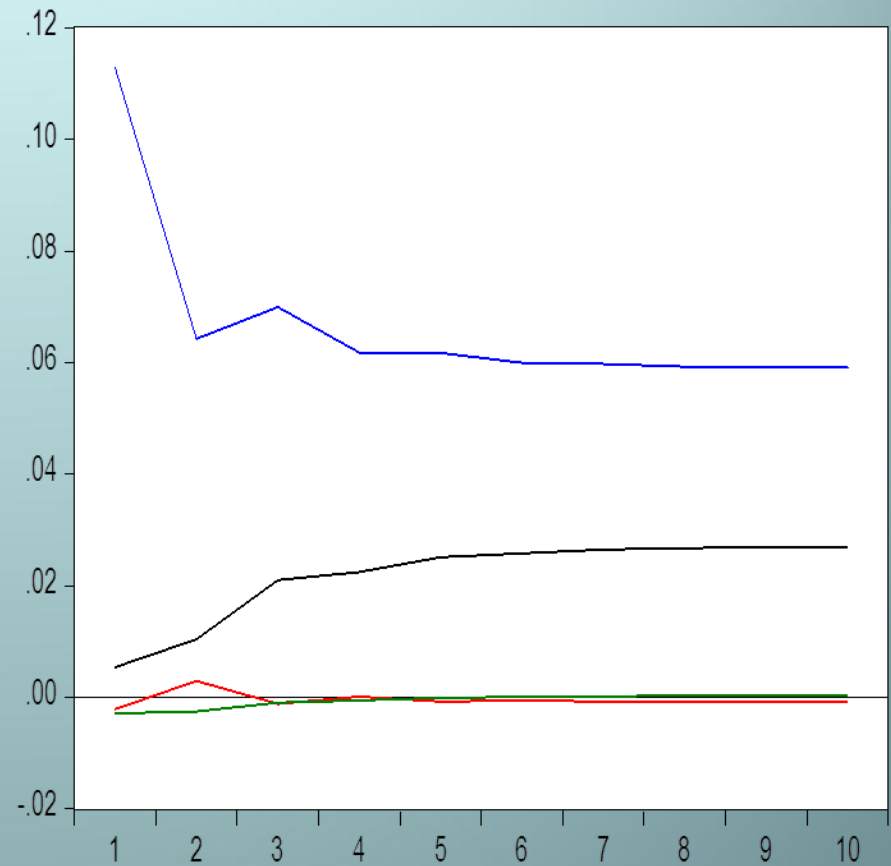
Results (Impulse responses)

Response of IPI to Generalized One S.D. Innovations



— TOUR — IPI — REER — XM

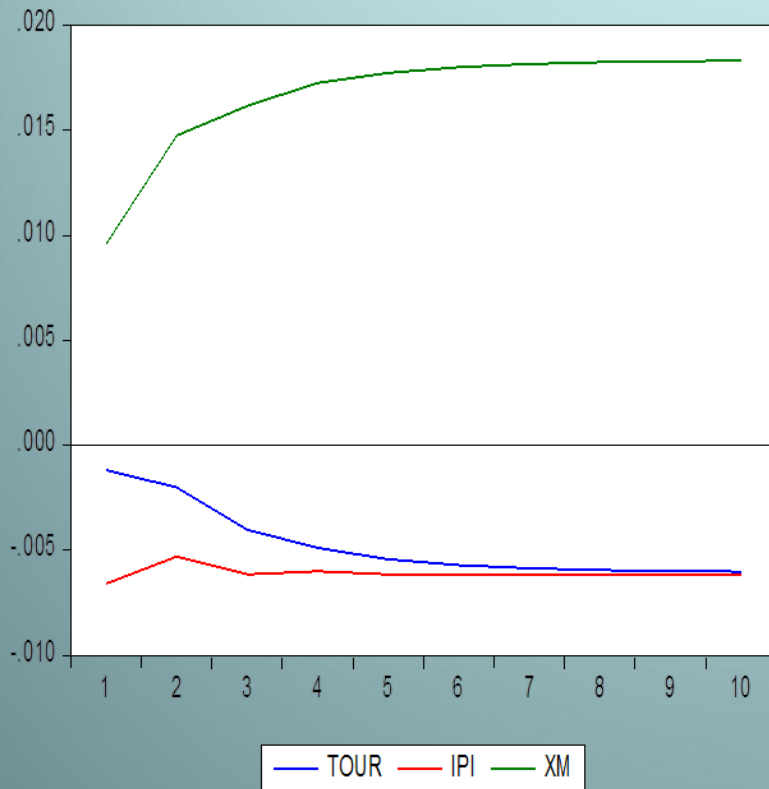
Response of TOUR to Generalized One S.D. Innovations



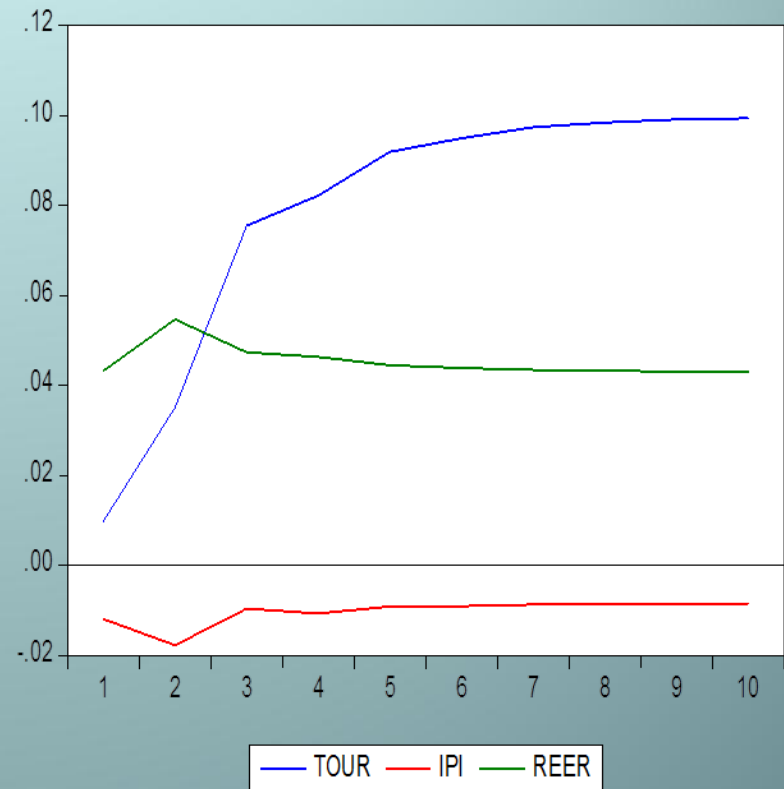
— TOUR — IPI — REER — XM

Results (Impulse responses) cont'd

Response of REER to Generalized One S.D. Innovations



Response of XM to Generalized One S.D. Innovations



Results: Variance Decomposition (Tour)

Period	Std. Er	Tour	Ipi	REER	xm
1	0.113	100	0.00	0.00	0.00
5	0.175	95.76	0.06	0.02	4.16
10	0.226	91.82	0.04	0.04	8.09

Variance Decomposition (Output)

Period	Std.Er	Tour	ipi	Reer	xm
1	0.062	0.037	99.96	0.0	0.0
5	0.108	0.565	98.84	0.535	0.059
10	0.148	0.380	98.86	0.635	0.121

Results: Variance Decomposition (xm)

Period	Std.Er	Tour	ipi	Reer	xm
1	0.206	0.226	0.324	94.66	95.28
5	0.313	22.76	0.651	86.87	64.89
10	0.412	41.37	0.515	73.22	45.31

Conclusions

TLGH applicable for T&T; the presence of a long run equilibrium relationship between tourism expansion and economic growth

Lack of any evidence of short run causality between output and tourism suggests the need for the development of the backward and forward linkages.

The dummy variables were all negative and highly significant:
support for festival tourism

the real contribution of tourism may not be in its contribution to GDP but in its contribution in entrepreneurship, empowering the peoples and giving them a sense of ownership.

This can result in ideas which are necessary for innovation and competitiveness

THE END

**THANKS
FOR YOUR
ATTENTION.**