

## **ABSTRACT**

### **CARIBBEAN TOURISM DEMAND AND VOLATILITY: ECONOMETRIC MODELLING AND FORECASTING**

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This thesis focuses on three main areas. One, it models and forecasts Caribbean tourism demand and volatility. Two, it assesses the causal relationship between tourism demand and tourism volatility. Finally, it discusses how a sustainable tourism product could be developed within the region by evaluating the impact that repeat visitors have on tourist arrivals and volatility.

The output from the tourism demand and volatility models provides a more precise analysis of the dynamics existing between business cycles and the tourism cycles, as well as how the magnitude and speed of changes in economic cycles of major markets affect tourism in the Caribbean. In addition these models examine the price elasticity of the destinations which should give a better understanding of the uniqueness of the different Caribbean markets, and thereby assist in developing regional sustainability and competitiveness in the tourism sector.

The study found a strong causal relationship running from tourism volatility to tourist arrivals. This result implies that policy makers and industry experts could be guided by focussing their efforts on minimising the impact movements in

business or economic cycles have on arrivals. To achieve this objective the authorities would have to implement a diversely sustainable tourism product as well as develop effective disaster recovery measures after the passing of any natural event (hurricanes, storms, floods, earthquakes etc). With regard to man-made efforts, the thesis further recommend that industry specialists should seek out new ways to attract and retain long stay visitors to their markets through the constant use of special events (music, sports and other cultural festivals) supported by increased participation from local communities.

Finally the thesis empirically shows how repeat purchasers positively influence the growth in tourist arrivals in both the long and short-run, while reducing market volatility. The significance of the behaviour of repeat visitors should help policy makers to recognise the importance of building market loyalty and improving customer awareness as they provide prior information on products or services to first timers who are encouraged to visit new markets which could widen the reach of Caribbean products and reduce over reliance on North Atlantic markets.

The main area for further work in this study relates to the aggregate tourist arrival variable which may affect the impact a change in price or some other variable could have upon demand, as each traveller has a different elasticity that is likely to influence the long-term forecasting accuracy of the model. Therefore further research should focus on the disaggregation of tourist arrivals and on

determining the effect quantitative and qualitative variables may have on this revised disaggregated model.

Keywords: Allan Wright; Tourism Demand, Tourism Volatility, Repeat Visitors, Sustainability, Non-stationary Panel Econometrics, Non-linear Panel econometrics.

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