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TOURISM FORECASTING AND TACKLING FLUCTUATING PATTERNS: A COMPOSITE LEADING INDICATOR APPROACH

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Abstract:

A growing interest is surfacing toward the non-linearities in tourism demand forecasting. This paper aims to construct a tourism composite indicator to anticipate the cyclical movement for the tourism demand in Fiji. The time duration tackled in the current study is under the span of approximately two decades from 2000 to 2017. Apart from an indicator construction approach and turning point dating algorithm, we proposed a two regime Markov switching model to analyse the Fijian tourism cycle. The empirical results revealed the composite leading indicator accorded a signalling approach for Fijian tourism demand with an average lead time of 2.75 months. Furthermore, the prior-recognition of the tourism economic transition with adequate dating evaluation of the tourism cycle is obtained from the filtered probabilities through the Markov switching models.

Key words: *Fijian tourism demand forecasting, composite leading indicator approach, turning point dating, near-term forecasting, non-parametric approach*

1. Introduction

According to the statistical evidence from the World Tourism Organisation (UNWTO) in 2017, the total contribution of tourism (including broader impacts from investment, supply chain, and induced income impact) to world income was USD 7,631.3 billion (10.2% of world GDP) for the year 2016. Nonetheless, the tourism industry generated 108,741,000 jobs (3.6% of total employment) and the trend is speculated to be upward in nature. Apart from the momentous attribute by the world GDP and employment