

Time Series Modelling of Tourism Demand from the USA, Japan and Malaysia to Thailand

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Abstract

Even though tourism has been recognized as one of the key sectors for the Thai economy, international tourism demand, or tourist arrivals, to Thailand have recently experienced dramatic fluctuations. The purpose of the paper is to investigate the relationship between the demand for international tourism to Thailand and its major determinants. The paper includes arrivals from the USA, which represents the long haul inbound market, from Japan as the most important medium haul inbound market, and from Malaysia as the most important short haul inbound market. The time series of tourist arrivals and economic determinants from 1971 to 2005 are examined using ARIMA with exogenous variables (ARMAX) models to analyze the relationships between tourist arrivals from these countries to Thailand. The economic determinants and ARMA are used to predict the effects of the economic, financial and political determinants on the numbers of tourists to Thailand.

1. Introduction

Thailand is one of the most important tourism destinations in Asia. The numbers of tourist arrivals from different countries of origin has been increasing continuously over the last few decades. The USA, Japan and Malaysia are Thailand's major tourist source markets, representing long haul, medium haul and short haul tourism markets to Thailand, with market shares of 7.21%, 10.35% and 11.88% of total international tourist arrivals to Thailand in 2005, respectively (Tourism Authority of Thailand, 2005). The average annual growth rates during the period 1971-2005 were 4.74%, 10.42% and 8.03%, respectively, for the USA, Japan and Malaysia.

The USA is the most important long haul inbound tourism market to Thailand, and is considered to be one of the highest potential growth markets to Thailand. This market has had strong growth rate since 1996, driven by strong economic growth. However, the market has slowed down and has faced a serious decrease in 2003 because of the Iraq conflict, as well as the SARS outbreak, but resumed its normal growth pattern in 2004. In 2005, there were 639,658 American visitors, or 7.21% of international visitor arrivals. Most Americans visited