World Academy of Science, Engineering and Technology
International Journal of Economics and Management Engineering
Vol:11, No:06, 2017

Asymmetrical Informative Estimation for Macroeconomic Model: Special Case in the Tourism Sector of Thailand

Authors : Chukiat Chaiboonsri, Satawat Wannapan

Abstract : This paper used an asymmetric informative concept to apply in the macroeconomic model estimation of the tourism sector in Thailand. The variables used to statistically analyze are Thailand international and domestic tourism revenues, the expenditures of foreign and domestic tourists, service investments by private sectors, service investments by the government of Thailand, Thailand service imports and exports, and net service income transfers. All of data is a time-series index which was observed between 2002 and 2015. Empirically, the tourism multiplier and accelerator were estimated by two statistical approaches. The first was the result of the Generalized Method of Moments model (GMM) based on the assumption which the tourism market in Thailand had perfect information (Symmetrical data). The second was the result of the Maximum Entropy Bootstrapping approach (MEboot) based on the process that attempted to deal with imperfect information and reduced uncertainty in data observations (Asymmetrical data). In addition, the tourism leakages were investigated by a simple model based on the injections and leakages concept. The empirical findings represented the parameters computed from the MEboot approach which is different from the GMM method. However, both of the MEboot estimation and GMM model suggests that Thailand’s tourism sectors are in a period capable of stimulating the economy.

Keywords : TThailand tourism, Maximum Entropy Bootstrapping approach, macroeconomic model, asymmetric information
Conference Title : ICBESS 2017 : International Conference on Business, Economics and Social Sciences
Conference Location : Vienna, Austria
Conference Dates : June 21-22, 2017