

THE ASEAN GDP SYNCHRONIZATION EXPERIENCE:  
A NONPARAMETRIC TEST OF SYNCHRONICITY

by

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## ABSTRACT

Following Harding and Pagan (2006a), the Modified Bry-Boschan Algorithm of locating turning points and a nonparametric procedure of testing the synchronicity of bivariate cycles were used to assess the synchronicity of the GDP cycles of 12 Asian countries, namely, Singapore, Cambodia, Vietnam, Macao, Indonesia, Thailand, Malaysia, Taiwan, Philippines, Hong Kong, Korea and Japan. Similar nonparametric and other parametric procedures were used to ascertain the results, including Pearson's contingency coefficient, output correlations, principal component analysis, univariate Markov-switching autoregression and Markov-switching vector autoregression. Results based on the different procedures do not vary much and point to a general evidence of synchronization. Evidence of one regional sub-block comprising of Thailand, Malaysia and Korea was found in this exercise.

Keywords: Business cycle, Modified Bry-Boschan Algorithm, Markov-switching vector autoregression