

Modelling the efficiency of knowledge economies in the Asia Pacific: a DEA approach

ABSTRACT

This paper measures the performances of 12 selected Asia Pacific countries in developing knowledge-based economies (KE). The performances of the selected countries are evaluated using Data Envelopment Analysis (DEA). The results indicate that four of the emerging countries (India, Indonesia, Thailand and mainland China) are relatively inefficient in K-E development compared to the other eight which are equally efficient. The main reason for their backwardness is due to the outflow of their human capital resource to the developed countries. This seriously undermines the level of their K-E development compared to their counterparts. The results also indicate that knowledge dissemination is generally not a serious problem, except for India. However, in terms of knowledge output, knowledge dissemination becomes the weakest point for all low-scoring countries except China. Both India and China however, encounter serious obstacles in knowledge innovation and external connection.

Keyword: Data envelopment analysis; Knowledge economy; Relative efficiency