

Scale of economies in Australian tourism industry

Abstract: The measurement of scale economies in tourism industry has not been done much so far, as tourism is not a specific industry under international statistical standard. Among many industries related to tourism, four sectors (accommodation, transport, retail trade and recreational service) across six states and two territories from 1997 to 2007 will be studied as they contribute 67% of tourism output in Australia. The model to be used is an approximated translog cost function of output and price of input and input share equations. By comparing simultaneous system estimation and single cost function estimation using *OLS*, we find that both estimation methods suggest increasing returns for each sector except for accommodation. Moreover, estimation with simultaneous equations suggest that four sectors are more likely to exhibit increasing returns due to the allocation efficiency imposed by input share equations. This provides strong evidence for promotion of tourism.

Key words: scale of economies; translog cost function; simultaneous system estimation; promotion