

The suitability of hedonic models for cost-benefit analysis: Evidence from commuting flows

Abstract

We compare two estimates of benefits arising from the construction of new bridges in south-west Norway. One estimate comes from a hedonic property value model. Rather than follow an approach which is strictly theoretically correct, we adopt Rosen's simple first-stage approach. To investigate and validate whether this simplified approach gives a reasonable estimate, we compare it to an estimate derived from a travel demand model. We find that a variant of an ex post hedonic house price model gives very similar estimates to the estimates from the commuting model. This supports a hypothesis that the simplistic hedonic approach is reasonable.

Keywords: Road infrastructure, benefit valuation, time savings, hedonic model, method validation