

Small area estimation in business information technology

Ana F. Militino*

Universidad Pública de Navarra, Pamplona, Spain militino@unavarra.es

M. Dolores Ugarte

Universidad Pública de Navarra, Pamplona, Spain

Tomás Goicoa

Universidad Pública de Navarra, Pamplona, Spain

Abstract

In this paper, alternative logistic model based estimators are suggested to derive estimates from information and communication technology of businesses (ICTB) surveys. Final estimates are benchmarked to match with direct estimates at provincial level and standard errors are given by means of bootstrap techniques. A simulation study is conducted to compare the performance of the estimators. Results are illustrated with the 2010 ICTB survey of the Basque Country (Spain).

Key Words: logistic model, benchmarking, prediction theory