The determinants of ICT expenditures by households: a micro data analysis

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This paper examines the determinants of ICT expenditures in 16 OECD countries, including the Czech Republic, looking at Household Expenditures Surveys data. Previous OECD work has shown that average ICT expenditures vary with the gender and the educational attainments of the family head and with the lifecycle and the income of the household. Average data, however, hide the interactions among these factors that occur at the level of households. In order to control for these interactions, this paper analyses the determinants of ICT expenditures based on the household-level data (micro data).

Using a double-hurdle model (a probit model to estimate whether a consumer will spend on a certain good or service or not, followed by a truncated regression model that estimates how much to spend on that good or service) applied on micro data collected by households budget surveys from 16 OECD countries, the paper analyses the effects of determinants on ICT expenditures.

The paper shows that the effects of various determinants between communication services and information technology goods are markedly different. Some determinants, in particular income and presence of children, have significant and relatively similar effects, at the level of more elementary expenditures components (IT goods, IT services, communication goods and communication services). It also shows that the effects of other determinants (such as education level, geographical area, age, or life cycle stage) are less similar across countries or between ICT goods and services.