

Economic Impact of E-government Development: Evidence from Panel Data

Agron Chaushi

South East European University, Faculty of Business and Economics, Macedonia
a.caushi@seeu.edu.mk

Besnik Fetai

South East European University, Faculty of Business and Economics, Macedonia
b.fetai@seeu.edu.mk

Blerta Abazi Chaushi

South East European University, Faculty of Business and Economics, Macedonia
b.abazi@seeu.edu.mk

This paper analyzes the impact of e-government development and maturity on economic development. The research borrows the concepts three socio-economic theories namely, institutionalism, endogenous and exogenous growth. Using this framework as the guiding theoretical background, the impact of e-government in economy is evaluated with an econometric analysis on secondary, country level, data. The central premise of the study is that the three aspects of e-government development (provision of online services, development of technology infrastructure, and development of human capital) have an impact on economic growth. In the empirical part of the paper, the panel data models are employed using data from 185 countries from 2003 to 2014. The data used for e-government indicators are taken from United Nations E-government Survey from 2003 to 2014, whereas the economic indicators are taken from World Bank's World Development Indicators database for years 2003 to 2015. The hypotheses of this study are tested using fixed effects model, Hausman-Taylor method, and Arellano-Bond method for dynamic panel estimation. Additionally, to compare the results of the used methods, a comparison of the results is given and the results are discussed.

The empirical investigation has offered a quantitative assessment of the positive effects of e-government maturity on economy. The results show that e-government components have positive relationship with economic development. In the context of this paper, these relationships are positive which can be interpreted as: higher level of e-government indicators, have positive relationships with higher economic development. Thus, this study contributes with its results to researchers, practitioners, and policymakers to justify the e-government strategies and investments.

Keywords: e-government, economic development, panel data