ABSTRACT

The European Commission acknowledging the significance of broadband for the improvement of citizen welfare and its economic benefits, has put in place targets for the diffusion of broadband to all citizens and businesses in the European Union. This manuscript comparatively assesses the current state of affairs in broadband and digital public services in selected South East Europe (SEE) countries in order to identify weaknesses and highlight strengths, and attempts to measure the impact and effectiveness of broadband on the economy. To this direction, the authors focus on evaluating the correlation between broadband and growth and employment. They also estimate the savings achieved by the usage of e-services and the potential savings that will follow their increased utilization over the next years. The analysis is followed by a number of recommendations that aim to support informed decision making. The manuscript builds on four surveys that took place during the second quarter of 2013.

Keywords: Broadband, Cost savings, Digital public services, Employment, Growth, Strategy planning
INTRODUCTION

Access to information, broadband connectivity and financing of virtual accessibility are key components necessary for the development, adoption and use of Information and Communication Technologies (ICT) in the economy and society (Chapman et al., 2003). Inadequacies in the telecommunication infrastructure and accessibility to services among the individual countries and regions of the South East Europe (SEE) area hamper significantly competitiveness and cohesion in SEE countries. Market mechanisms fail to address adequately the low population density and/or rural and remote areas. These problems have been widely acknowledged at European and national level. Member states and regions in the SEE area have adopted virtual accessibility strategies, but further work needs to be done particularly in elaborating comprehensive operational plans and implementing measures to achieve the objectives set regarding the broadband connectivity and accessibility of services.

However, in order to examine and promote policies to tackle the digital gap between SEE areas and the rest of Europe, and among SEE areas as well, large investments are required for infrastructures, operational costs and other subsequent expenditures. This raises the question if there is a repayment and how much this is, in terms of local economy development, employment increase and other cost savings that will justify the significant initial investments.

Unfortunately, measuring the impact of broadband is a quite difficult task. Broadband is a general purpose technology, which means there is no specific output, that it would be easy to measure. Instead, it affects multiple aspects of our professional and personal lives, in multiple ways. Moreover, in the countries under investigation, broadband large-scale penetration is recent or even expected in the near future. This means that the actual effects have not been either expressed or documented. Another consequence of the general purpose nature of broadband, is that the effects become visible a long period of time after its ignition cause. This means that investments in infrastructure or a significant increase in broadband penetration may influence the economy of the area the next two or three years making the identification of the correlation difficult. Changes in employment are also difficult to trace since demand in one area may create a migration (or outsourcing) trend from other areas, or vice-versa.

The purpose of this paper is to provide a comprehensive overview of the current state of affairs regarding broadband and e-Government services in seven SEE countries (Austria, Bulgaria, Greece, Italy, Slovenia, Former Yugoslav Republic of Macedonia - FYROM, Montenegro). In addition, we investigate the impact of broadband on the growth and employment in these countries by specifying the macroeconomic evidence required for the analysis. We then enforce regression analysis on data collected by the respective countries in order to find the correlation between broadband, growth and employment. The period of the examination was set to be from 2001 to 2011 in order to obtain an extended amount of data, and take into account possible influences on the results by the economic crisis and the subsequent recession of the last years in the area. We also estimate the cost savings to companies and the state by the usage of broadband-based e-government services. We then forecast these benefits to 2015 when the respective countries are expected to have reached the e-government usage level which is set by the European digital agenda (European Commission, 2014a). The paper also provides useful and usable information that could lead to suggestions for improvements and joint actions for policy makers that will, in turn, help improve the related policies in the SEE region.

The inception of this paper is attributed to project SIVA. Project SIVA stands for “South East Europe improved virtual accessibility through joint initiatives facilitating the roll-out of broadband networks”. The SIVA partnership consists of 20 partners from the SEE countries listed above. The project aims to contribute to the improvement of the accessibility of SEE territories through broadband services, as substitute for and supplementing physical
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