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The Impact of E-Commerce Development Index on the Service Sector Employment Market in Iran

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EXTENDED ABSTRACT

The e-commerce development index measures the level of access, use and skill of using ICT in different regions. On the other hand, employment is considered as one of the macroeconomic variables, which is very important to pay attention to because of the widespread unemployment in the country. The current research has been studied with the hypothesis of the positive effect of e-commerce on employment in the service sector of the country, according to the statistics of 31 provinces, in a period of 4 years (1395-1398) using panel data method. The results of the estimation of the model according to the significance of the variables in this study show that the ICT skill index has a negative effect and the mobile broadband internet penetration coefficient has a positive effect on employment.

INTRODUCTION

The high volume of Internet users in the country has provided a market for online businesses, which increases the demand for human resources who have sufficient skills at the level of modern technologies. Considering the significant job-seeking population in the country, the development of ICT infrastructure can provide a platform for the promotion of e-commerce, which includes a large portion of employment in the service sector. Therefore, by using the e-commerce development index, it is possible to examine its positive and negative effects on the employment market, and by providing a solution, a step can be taken to solve the problem of unemployment, which is one of the most important economic problems in the country's development.

METHODOLOGY

This research aims to examine the hypothesis of the positive impact of ICT indicators on employment using the panel estimation method and in a 4-year period for 31 provinces of the country. The provincial statistics related to employment, GDP and capital stock were extracted from the website of Iran Statistics Center. The variable of mobile broadband internet penetration was obtained from the regulation and radio communications website and the skill index statistics were obtained from the website of the Ministry of Communications.

FINDINGS

The results indicate the positive effect of internet penetration on employment. Considering that employment statistics are related to people of working age, as a result, the share of service sector employees has increased. With a 1% increase in the skill index, employment in the service sector decreases by 0.2%. In fact, having digital literacy for the use of ICT in business is an essential part of business development. The real GDP variable with a positive effect of 0.1% of a on employment states that if production increases by 1%, if ICT tools are used, employment increases by 0.1% .

CONCLUSION

Among the examined indices, mobile broadband internet penetration rate confirms the research hypothesis and ICT skill index rejects it, but has a significant relationship with it. With the facilities that ICT has put in front of the communities, it has brought the production and employment process with positive effectiveness.

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