

The Impact of Information and Communication Technology Investments on Employment in Japan and Korea

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Abstract

The effect of ICT investments is only visible with a long lag and particularly so in employment. There have been two contesting views on the effects of ICT investment on employment: the complementarity relationships between capital and higher skills and the substitutability relationships between capital and lower skills and between the ICT capital intensity and wage rate of unskilled workers. The purpose of this paper is to provide empirical evidence on the impact of the skill-biased technical change associated with the introduction of ICT investment on labor demand in Japan and Korea. Our estimates of the effect of the ICT intensity on wage shares from both the Japanese dataset and the Korean dataset are in general consistent with O'Mahony et al. (2008), in the sense that we find capital-skill complementarity and technology-skill substitutability during the period of 1995-2015.

Keywords: Information and communication technology, Skill-biased technological change,
Capital-skill complementarity

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