

Impact of Internet Penetration on Income Inequality in Developing Asia: an Econometric Analysis

Rachaphum Panichsombat

Lee Kuan Yew School of Public Policy, National University of Singapore, 259772, Singapore

Corresponding author. E-mail: rachaphum.p@gmail.com

<https://doi.org/10.12982/CMUJASR.2016.0009>

ABSTRACT

The advent of technological progress has rapidly transformed the world in both positive and negative ways. Asia is one of the regions where technology and innovation have tangibly influenced lives and societies. Although the impact of technology is vast, previous studies have focused heavily on growth and productivity, with the effect on inequality underexplored. This paper examines the relationship between Internet penetration, measured by the number of Internet users per 100 persons, and income inequality using the Gini Index. While emphasizing the Asia Pacific, the econometric analysis used panel data from 191 countries around the world from 1990 to 2015. The empirical results suggested that the effects for developed and developing countries varied. Internet use in more developed countries was associated with a higher reduction in the Gini Index (lower inequality) compared to their developing counterparts. Internet penetration in the Asia Pacific did not improve inequality, although Internet use in developed Asia harmed income equality less than in developing Asia.

Keywords: Internet penetration, Income inequality, Technology, Econometrics, Asia

INTRODUCTION

Asia has grown rapidly and near constantly over the past several decades. Asia's share in world GDP in real USD Purchasing Power Parity (PPP) has increased sharply from 23.2 percent in 1990 to 38.8 percent in 2014 (Barua, 2015). Despite a slight dip recently, the ADB (2016) estimated that developing Asia will continue to contribute 60% of world growth. While scholars have identified many determinants of economic

growth and development, this paper will focus on one – the role of technology, specifically the Internet.

Technology has been a key driver of economic growth worldwide. In the most fundamental sense, economic output can increase in two ways – increase inputs or increase the amount of output from any given input, the latter of which can be achieved through technological innovation (Rosenburg, 2014). While the economy grows and