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## Human capital inequality and economic growth: evidence with sub-national data from Thailand

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## **Abstract**

**Purpose** – The purpose of this paper is to find the effects of human capital inequality on economic growth. **Design/methodology/approach** – Thailand Labor Force Survey has been used to generate provincial average years of schooling and Gini coefficient of years of schooling for the years 1995–2012. Econometric techniques have been employed to identify the effects of human capital inequality on economic growth.

**Findings** – Economic growth is inversely affected by the distribution of human capital in Thailand. The coefficient of human capital inequality suggests that if Gini coefficient increases by 0.01 points, gross provincial product (GPP) decreases by about 2 percentage points in the long run. However, the effect of average years of schooling in GPP is not significant.

**Research limitations/implications** – There is a lack of strong theoretical background for the relationship between human capital inequality and economic growth to support the empirical study.

**Practical implications** – The findings of the study help to design and evaluate education policies in developing countries like Thailand and other low- and middle-income countries.

**Originality/value** – This paper is among the first attempts to analyze the effect of human capital inequality on economic growth with sub-national level annual data. In addition, it considers cross sectional dependence in panel model.

**Keywords** Cointegration, Economic growth, Cross sectional dependence **Paper type** Research paper

## 1. Introduction

Is inequality the stumbling block in economic growth? The existing literature mostly concentrates on income inequality and growth relationship, and a very few studies focus on human capital inequality and growth nexus. But the issue of human capital inequality and growth relationship received more attention for two issues. First, human capital inequality is more robust compared to income inequality in growth regression (Castelló-Climent and Doménech, 2002); and second, there are negligible changes in income inequality (sometimes increasing), while there is a declining trend in human capital inequality over the time horizon (Castelló-Climent and Doménech, 2014). The inequality—growth theories are explained with wealth inequality, and many recent research works used income inequality as a proxy for wealth inequality (Aghion *et al.*, 1999). This paper focuses on human capital inequality and its effects on economic growth, a widely discussed issue in the last decade.

In a boarder concept, human capital includes abilities, skills and talents that are built in an individual through education, experience and health (Sauer and Zagler, 2014; Goldin, 2016). Since education through formal schooling system plays an essential role to obtain the components of human capital (Sauer and Zagler, 2014), previous research on human capital inequality and economic growth used average years of schooling data to represent human capital



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