CALAMVS GLADIO FORTIOR

Measurement of Quality-Adjusted Labor Input in Japan, 1955–2012

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Abstract

The purpose of this paper is to construct the cross-classified labor data which provides the industry-level price and quantity of the quality adjusted labor input (QALI) for the Japanese economy during the period of 1955–2012. The data we develop consists of the number of workers (N), the hours worked per worker (h), and the hourly wage (w), which are cross-classified by five categories: gender (2), educational attainment (4), age (11), employment status (5), and industry (46) in each year (totally 20,240 types of labor). The sum of the labor income of employees (Nhw) for the whole economy consistently corresponds to the compensation of employees (COE) in the Japanese System of National Accounts (JSNA), by the Economic Social Research Institute, Cabinet Office. This paper also estimates the labor incomes for self-employed and unpaid family workers as a part of mixed income in the JSNA. This enables us to define the total labor income as an aggregation from the labor incomes measured in each type of labor. Using the developed data, we depict the labor quality changes and its sources in each stage of Japan's economic growths.

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