

ABSTRACT

The aging population become more familiar in this world. It is seen through the rise in population aging indices which is significantly increased in the most developed countries. OECD contribute to global GDP and its major members are developed countries. The countires have experienced population aging since 2000 and many years ago. Switzerland, Austria, Slovenia, Italy, Spain, the Czech Republic, Germany, Sweden, and Finland are nine European OECD countries that have undergone the most significant population aging compared to other OECD countries over the past 25 years. The concerns that might be considered is the potential of declining average annual working hours which may lead to reduced national output. This study aims to analyze several variables that affect labor supply (working hours): wage rate, GDP per capita, government transfers and subsidies, and internet usage.

The data used in this study consist of 171 panel observations from nine OECD countries over a 19-year period (2004—2022). The data were collected through a literature review using sources from the World Bank and OECD. The data then were analyzed using a panel data regression with the Random Effect Model (REM) and robust standard errors.

The results indicate a nonlinear relationship between wages and working hours, confirming the Backward Bending Labor Supply Curve theory. Increases in wages raise work hours up to a turning point at a wage level of 64.378 USD, with an elasticity of 3,894. After this wage threshold, further wage increases tend to reduce working hours, with an elasticity of -0,176. Other variables, such as GDP per capita, government transfers and subsidies, and internet usage are negatively and significantly related to working hours.

Keywords: Labor Supply, Working Hours, Wage Rate, GDP per capita, Transfer& Subsidy, Internet