Relationship between the Economic Growth and Older Adult Population in Asia; Wavelet Coherence Approach

Kethaka Galappaththi*, Ruwan Jayathilaka and Lochana Rajamanthri
SLIIT Business School, Sri Lanka Institute of Information Technology.
kethaka.g@sliit.lk

The older adult population has been increasingly growing over the past few decades in Asia. Therefore, it is of utmost importance to determine the relationship between the older adult population and a primary macroeconomic variable, the GDP growth. This study aims to determine the nature of the complex relationship between the two variables from 1961 to 2020. A panel dataset for fifteen Asian countries from the World Bank was used in this research. The economic growth was expressed through the annual percentage change in Gross Domestic Product (GDP), whereas the older adult population was defined through the population of those aged 65 years and above as a proportion of the total population. The methodology utilized was the Wavelet Coherence Approach since it provides causality at different periods over the past six decades. The findings reveal that a positive relationship existed between the two variables in the 1960s, with the older adult population contributing to economic growth. On the other hand, between 2000 and 2010, the older adult population continued to contribute, leading to economic growth but with a negative correlation. It implies that in recent past growth of elderly population has been saturated while the economy continuous to grow. The conclusions from the study will be helpful for Asian, national and regional policy-making institutions to investigate the past behaviour of the two variables and implement their policies accordingly.

Keywords: Economy, Elderly Population, Asia, Wavelet Coherence