

Chapter 5

The Impact of Population Aging on Economic Growth: Panel Data Evidence from Middle East Countries

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ABSTRACT

This study examines the relationship between population aging and economic growth in a panel of 10 selected Middle East countries for the period of 1996–2016. For this purpose, this study uses two different measures of population aging, namely population aged 65 and over and old dependency ratio, to investigate their impacts on economic growth. The study utilizes the three alternative models of static panel data comprised of the pooled ordinary least squares, random effects, and fixed effects. The results of the robust fixed effects model indicate that the population aged 65 and over and the old dependency ratio have a positive effect on economic growth. The finding supports the argument indicating that an aging population does not necessarily adversely affect economic growth in the developing countries as it does in the developed countries. Therefore, the elderly population is not a matter of concern for the Middle East and the mechanisms through which the effect can take place are savings behavior and human capital accumulation of the individuals.

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INTRODUCTION

In recent years, population aging has emerged as one of the most pressing demographic issues. Fertility and mortality decline are two major factors that contribute to population aging. Rapid population aging is being caused by a sharp drop in fertility rates over time, as well as a significant increase in life expectancy. The age structure of the world's population has recently revealed both a challenge for the developed world and opportunities for the developing world (Ven & Smits, 2011). The UN's long-term forecasts support this conclusion. The proportion of working-age people in developed regions will remain static over the next decade, while the working-age share in developing regions will increase.

The Middle East's working-age population is increasing, and its labor contributions must be taken advantage of in order to achieve long-term economic growth. The ability to receive benefits as a result of a shift in the age structure does not last indefinitely, and the aging population will eventually stifle economic growth. An aging population may result in a higher old-age dependency ratio, higher fiscal expenditures, and a lower support ratio – all of which contribute to economic contraction. Also, an aging population may have an impact on national output per capita via labor productivity and the employment-to-population ratio (Guest, 2005). According to Bloom et al. (2010), population aging would lower both labor force participation and the rate of savings, increasing fears about the slowdown in potential economic development. As the population ages, labor force participation tends to decline, which could lead to slower economic growth in the future (Bloom et al., 2011). Furthermore, lower Middle Eastern fertility rates will reduce the number of potential workers, which will have an impact on output production.

The demographic trend in the Middle East discloses an increasing aging population and unparalleled growth in the working-age population. Egypt, Iran, Jordan, and Turkey are among the countries with the fastest-growing populations aging, with populations aged 65 and up ranging from 3.8 percent to 8.5 percent in 2018. (World Bank, 2020). The Middle East's population is expected to age faster than the rest of the world, and this trend will likely continue in the coming decades.

The primary motivation for conducting this study, which uses the Middle East as a case study, is that the region is worried about its increasingly aging population. Population aging has been observed in the past, and this trend is expected to continue, with implications for the Middle East. As a result, it is critical to conduct research on this important demographic phenomenon. The aim of this study is to see how population aging affects economic growth. To investigate the effects of population aging on economic growth, two proxies for population aging are used: the population aged 65 and over and the old dependency ratio. The findings of this research will help country governments better understand demographic change, particularly population aging. The findings could help policymakers make better decisions about human capital and labor force participation by providing additional information.

The following is a breakdown of the study's structure. The research background, which includes economic growth trends and population aging indicators, is presented in the following section. The third section examines the literature that has already been published. Model specifications, estimation approach, variables, and data sources are presented in Section 4, while the empirical results are presented in Section 5, and the conclusions are presented in the last section.

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