The Effect of PM2.5 on Labor Supply of Middle-Aged and Elderly Individuals: Evidence from China

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Abstract

Poor health is one of the most critical factors that can affect exit from labor markets among middle-aged and elderly individuals. Recent studies have shown that air pollution, particularly PM2.5, can cause various illnesses, such cardiovascular diseases. In this paper, we examine the effects of PM2.5 on the exit from labor markets and health of middle-aged and elderly people. The regression results show that higher PM2.5 concentrations increase the probability of lung-related diseases, heart-related diseases, asthma and exit from labor markets. Specifically, we found that a 10 microgram per cubic meter (about one standard deviation) increase in PM2.5 concentration is associated with a 78.1% increase in the probability of heart-related diseases and a 22.7% increase in exit from labor markets for non-farmers. This implies that roughly 8.32 million people could continue participating in the labor market if the government can reduce PM2.5 concentration by 10 microgram per cubic meter.

Keywords: PM2.5; health; chronic diseases; labor market exit; middle-aged individuals

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