Determinants of Out-of-pocket Health Payments with Policy Effects

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Abstract

This paper establishes a data-driven framework with nonparametric models with application of scale and allocation effects to study the determinants of out-of-pocket health payments (OOP) in China. The determinants of out-of-pocket health payments are the proportions of medical income, drug income to total hospital revenue, financial aid, number of hospital staff, actual rate of bed usage, return on assets, health care coverage, economic development level, and per capita disposable income. The operation mechanisms of OOP determinants are more different with the three linear factors than with the nonlinear factors. The transformation between linear and nonlinear roles has turned to more complicated since 2008. The scale effect of crowding-in is mainly witnessed via linear mechanism, while the negative allocation effect is mainly observed mainly through a nonlinear mechanism. Thus, the proportion of OOP can be effectively reduced with the comprehensive consideration of return on assets, healthcare coverage, economic development level, and per capita disposable income.

Keywords: Out-of-pocket health payments, path identification, scale crowding-in, negative allocation, policy effects