

Analysis of a price mechanism of the Japanese private
nursing home market via nonparametric Bayesian
estimation for a simultaneous model of demand and
supply

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Abstract

This paper analyzes the Japanese private nursing home market. In this market, information asymmetry for consumers' longevity risks yields a complicated price mechanism which might worsen payoffs of many residents. We construct an economic model of simultaneous demand and supply and conduct a prediction analysis to simulate a governmental intervention which forces to vanish the mechanism. Since the conventional econometric methodology based on the generalized method of moments is not suitable for the prediction analysis, we adopt a nonparametric Bayesian methodology called the Polya tree mixture. Our empirical analysis finds that the intervention increases the welfare of many consumers through a reduction of their payment.