

A study of Australian individuals' Private Health Insurance

ETC4420 Microeconometrics Assignment

Contents

Introduction	1
Motivation of this study	1
Problem statement	2
Literature review	2
Econometric Model	3
XXXX Model	3
model specification and description	3
explanatory variables	3
output	3
XXXx model	3
Data	3
Discussion	3

Introduction

Motivation of this study

Healthcare is one the most important topics in almost every country. An efficient combination of services from public and private health institutions in a country can certainly facilitate the development in that country and also enhance its residents' welfare. Given people's behavior in healthcare relies heavily on the health insurance coverage, government policy could play a significant role in this scenario. For example, policies encouraging people to buy private health insurance (PHI) can also increase the private hospital usage. Hence, the study of how policies impact individuals' decision on purchasing PHI becomes more and more important. Having accurate estimations of the marginal effect of certain policies on the PHI purchasing decision would be extremely useful for government to make right decisions in the future. As for the statement that "people's behavior in healthcare relies heavily on the health insurance coverage", it is intuitively true. But we still want to confirm its validation, what's more, we want to study to what extend does the health insurance coverage affect the individuals' behaviors. For ease of exposition, only the relationship between the utilization

of dental service and the PHI status will be studied in this paper. But the results can be generalized to other cases including private health service usage etc.

Problem statement

Therefore, in this study, we mainly want to answer two questions. Firstly, what are the determinants of Australian individuals' decision on PHI purchase and how are these determinants affecting the people's choices? Secondly, is an individual's dental service usage affected by his/her PHI status? We will discuss these two questions separately in the following paper.

Literature review

Although a lot of studies have been conducted relating the demand for private health insurance, not much of them asked the question about how PHI is affecting the healthcare utilisation. In terms of dental health services, there are even fewer. (Srivastava, Zhao, and others 2008) Related to our second question in this study, Dawkins et al. (2004) found that making more people purchase PHI does not necessarily increase the utility of the private health services.

Preety and Xueyan studied the impact of private health insurance on the individuals' choice of public versus private hospital services in Srivastava, Zhao, and others (2008). ## Data description The data we use in this study is a randomly selected sample of 25,089 individuals from the 2004/05 Australian National Health Survey (NHS).

Econometric Model

XXXX Model

model specification and description

explanatory variables

output

XXXx model

Data

Discussion

for the second question. Because we assume this sample was randomly selected from the Australian population, both insured and uninsured people are observed. Therefore, there is no observability issue in this case. However, there may still be endogeneity problem in the model caused by the self-selection. To be more specific, the unobservable factors affecting PHI self-selection may be correlated with the factors making a person seeing a dentist. For instance, for people who are highly risk averse, the chance for them to purchase PHI is higher than other people, and it is also likely that they visit dentists more frequently to prevent possible dental disease. The regressor T (whether having PHI) will be positively correlated with the error term in the outcome Y (dentist visits) equation.

Dawkins, Peter, Elizabeth Webster, Sandra Hopkins, Jongsay Yong, and A Palangkaraya. 2004. "Recent Private Health Insurance Policies in Australia: Health Resource Utilization, Distributive Implications and Policy Options." *A Report Prepared for the Department of Premier and Cabinet, the Government of Victoria*.

Srivastava, Preety, Xueyan Zhao, and others. 2008. *Impact of Private Health Insurance on the Choice of Public Versus Private Hospital Services*. University of York. Centre for Health Economics.