



What is the Leading Shock in Health Care Sector in Korea? A VECM Approach

Eun-Hae SHIN; Jae-Young LIM

seh0710@korea.ac.kr; jylimecon@korea.ac.kr

Department of Food and Resource Economics, Korea University

According to the OECD Health Data 2009, the increasing rate of total medical expenditures in Korea is highest among all member countries; the pace of increase was twice as high as the average of OECD member countries in 1990s, and such trend has continued in 2000s. The Korean government therefore faces increasing pressures to reduce expenditures in its National Health Insurance (NHI) system. In essence, suggesting the most appropriate policy device brings about a question of what are the driving factors behind the escalating trend in health care costs. This study attempts to answer this question by adopting a vector error correction model (VECM).

Prior to estimation, given that results from VECM are sensitive to variable selection and choice of ordering of variables, this study first selects four variables that may contribute to an increase in health care costs from previous literatures and existing data: economic conditions and insurance coverage rates as demand-initiated factors, and the number of physicians and medical devices as supply-initiated factors. This paper then conducts Granger causality tests with these variables, and several impact paths are established to order them.

The long-run and short-run equations obtained from the models with each path imply that the insurance coverage rate influences in both long- and short-run while economic condition has only a short-term influence on aggregate medical expenditures; this is confirmed by impulse response analysis and variance decompositions, which exhibit that innovations to demand-initiated sides more explain changes of medical costs. These results suggest that expanding NHI coverage rate is not a “panacea”. Raising it up to 80% or so as some people claim is a very risky approach, allowing medical expenditures to soar even higher. If any, it must take place in certain areas expected to become indispensable tomorrow. All in all, the Korean government must adopt a “reserved” approach in dealing with the NHI coverage rate.

JEL Code: H51, I11, I18