

CHAPTER SIX

CONCLUSION

6.0 Introduction

The primary objective of this paper is to investigate the macroeconomic demand for medical care. The health capital model was applied to examine the Singaporean and Malaysian cases. Granger causality between the log of demand for medical care and the log of net consumption expenditure as well as the log of the relative price of medical care was investigated.

Overall, the results suggest that net consumption expenditure and the relative price of medical care are key determinants of macroeconomic demand for medical care in the long run (cited in Lee and Kong, 1999; pp. 329). According to **Grossman (1972)** and **Lee and Kong (1999)**, economic theory proposes a negative 'link' between the demand for medical care and the relative price of medical care, while a positive 'link' occurs between the demand for medical care and the net consumption expenditure in the short run as well as in the long run.

This negative relative price relationship arises from diminishing marginal productivity of health capital resulting in a downward sloping demand curve, whereby increase in relative price would cause decline in the quantity of demand for medical care. The positive relationships between medical care demand and net consumption

expenditure, shows that medical care demand is strongly dependent on net consumption expenditure. All the estimated parameters in the utility function have theoretically consistent signs.

Although health economics has been comparatively neglected in the literature, health and medical care appears to be increasingly critical industries in Asia. Owing to the growing population and increase in the stock of knowledge, demand for health and medical care has risen rapidly. **Michael Grossman (1972)** constructed a model of the demand for the commodity “good health” to explain such relationships.

6.1 Key Findings

The results based on the Unit Root Test indicate that all series are first-order integrated. Johansen’s Cointegration Test and the Granger Causality Test were used to investigate time series properties.

The Johansen Cointegration Test reveals that at most, there is one cointegrating vector for both countries. The long run elasticities (from the normalized cointegrating regressions) imply that the relative price of medical care is negatively related with the demand for medical care. It is significant at the critical level for both countries. Net consumption expenditure is positively related with medical care demand where it is significant at the critical level for Singapore but insignificant for Malaysia.

For Singapore, results indicate that medical care service is a necessary good with consumption elasticity less than unity. On the other hand, its relative price elasticity is about unity. In Malaysia, medical care remains a necessity with an inelastic consumption curve; the relative price elasticity is also inelastic.

The findings suggest that in Singapore, net consumption expenditure and the relative price of medical care are the key long run determinants influencing the medical care demand. In Malaysia, the relative price of medical care is the key determinant in the medical care demand equation. The relative price strategy is an important influence on the revenue and also the quantity demanded. Net consumption expenditure also affects medical care demand in Malaysia because the series are cointegrated and share a common stochastic trend.

Meanwhile, for the Granger Causality Test, the results for Bivariate as well as Pairwise Granger Causality Test in Singapore reveals a unilateral relationship exists between the medical care demand with the net consumption expenditure and the relative price of medical care. This indicates that demand for medical care is a main health indicator in Singapore. In Malaysia, since a unilateral relationship exists between the relative price of medical care with the medical care demand and the net consumption expenditure, therefore relative price of medical care plays an important role in Malaysia. Any changes in the market price mechanism would then trigger the chain of causality.

For Singapore, medical care demand is the most volatile compared to net consumption expenditure and the relative price of medical care; this is because when utility preferences of the market have changed, medical care demand is the first to change. Nevertheless, the relative price is the least volatile. Conversely, for Malaysia, net consumption expenditure is the most volatile compared to other series. This results from the behavioral characteristics of the decision makers. The relative price for Malaysia is relatively less volatile as a result of the government's effort to maintain relative hospital prices at a reasonable level.

6.2 Limitations

There are a number of limitations in this study; the sample only employs annual data with limited observations. The scope is also limited to health models in two selected countries only.

6.3 Suggestions For Future Research

Since the scope of the study is confined to only two countries in Asia, it is suggested that future researchers examine other countries, particularly in South East Asia for comparison.

6.4 Conclusion

By adapting Grossman's Health Model, the study evaluates factors that contribute towards health choices in Singapore and Malaysia. We draw attention to the correlation between consumption patterns and health decisions. The negative impact of relative prices is also highlighted. Policymakers may employ the study, to understand macroeconomic relationships that govern health issues.