



CHAPTER 6

CONCLUSION AND SUGGESTIONS

The Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS) a major health problem facing the Thai economy. The cumulative number of reported AIDS patients totaled 13,388 in 1997. The Ministry of Public Health has estimated that the actual number of cumulative HIV cases at the end of the year 2000 will be between 0.5 and 0.6 million (MOPH, 1997).

HIV/AIDS infects mainly adults during their sexually active years and is inevitably fatal. When individuals suffer from AIDS related illnesses and ultimately die, their families are affected by an immediate reduction in their resources and welfare. When the income of households affected by AIDS decreases, they will shift their decisions from spending on various goods and services. In such cases, consumption of essential goods and services may be forgone or sometimes reduced for lack of enough money. This study aims at examining the economic impact of AIDS on household consumption reallocation in Thailand and to estimate the change in economic growth in Thailand without the situation of AIDS.

The study consists of five stages. In the first stage, the per earner household income of AIDS affected families in three regions in Thailand; namely Bangkok Metropolitan Area, Northern region, and other region, was estimated by regression models. The models are based on the relationships between income and ages, occupation, and other characteristics of household head in 1988. In the second step, the income class of AIDS patients was determined by comparing monthly per capita household expenditure separately in urban and rural areas. In the third step, the expected cost of AIDS was calculated by using the probability of being an AIDS patient based on the population in 1997 in a situation with AIDS, and the mean cost of

AIDS from the earlier study. In a situation without AIDS, based on income elasticities of demand, households would allocate this cost to other commodities. In the fourth step the aggregate consumption expenditure on each commodity in a situation without AIDS in the country was calculated. In the final step, the effect of HIV/AIDS on economic growth was examined. Several assumptions were made due to time constraints. Notably the analysis of economic growth, only the consumption component of GDP was taken into account, even though GDP has four main components.

The analysis shows that, in a situation without AIDS, households could reallocate their annual expenditure on ten consumption commodities. This amount will be reallocate to other commodities. The highest reallocated commodity is house and housing expenditures (157.69 million baht) followed by transportation and communication (67.45 million baht), other food (49.28 million baht), meat and fish (28.71 million baht), clothing and foot wear (27.91 million baht), rice and cereals (25.25 million baht), other non-food (24.24 million baht), fruit and vegetable (13.18 million baht), and non- alcohol beverages (3.02 million baht) respectively.

Considering the factor of share containment from the earlier study, the total increase in demand on domestic consumption is 38.55 million baht while total demand on imported consumer goods is decrease by the same amount. Therefore, the country could save the budget amount of 38.55 million baht on imported consumer goods.

Finally, this study attempts to measure the magnitude of the problem in Thailand. Based on national income multipliers available from another study (Sarntisart et al 1998). The results indicate that, in a situation without AIDS, the change in aggregate consumption of imported goods and services could decrease by

38.55 million baht within one year. Consequently, GDP could be increased by 56.53 million baht. This is equivalent to 0.002 per cent of GDP in 1997. MOPH (1997) has estimated that the actual number of cumulative HIV cases at the end of the year 2000 will be between 0.5 and 0.6 million. By assuming that each HIV case has an equal time span of being AIDS, based on the change in aggregate national income in this study, it can be predicted that the GDP in 2000 would increase between 2,111.22 to 2,533.46 million baht.

6.1 Policy Implications

The country will need to continue to spend a large amount on AIDS. Therefore, the economic impact of AIDS on households deserves attention by the government. Appropriate government intervention to help those most affected and most in need should be developed. In the future the HIV/AIDS epidemic will seriously affect the overall economic progress of the country, therefore, concerted efforts and involvement of several ministries are required. The government should also promote private voluntary organizations, which are involved in prevention and control of HIV/AIDS.

It is important to provide the knowledge about AIDS to the people in several groups. These groups should include high risk groups, such as labour force groups and adolescents. AIDS patients cannot earn enough money for their family or their own treatments. Consequently, most of them need subsidy from the government or a private voluntary organization. All of the people in the poorest income class need help from society. The combined efforts by the government, voluntary organizations, and the people will, in a large way, help to promote awareness and control of this costly disease.

6.2 Limitations of this Study

This study contains a number of limitations. Firstly, due to paucity of data on various aspects related to the study, a detailed and in-depth analysis could not be carried out. Secondly, the number of observations on household characteristics in some regions do not cover all age-groups. Moreover, MOPH does not have enough characteristics of AIDS patients. Due to this fact, some earning functions developed in this study do not show any strong explanatory power. For example, the age group of the head of households was supposed to be between 15 to 60 years. But the number of observations in some region was not big enough to represent the entire age group, such as MBA in both areas. Thirdly, the study assumed per capita income of the head of households to represent the per capita income of individuals. Similarly, the other household characteristics were assumed to be the same as individual households. However, in reality this is not so. It might lead to an error in actual income, and income class. Fourthly, in the regression analysis (i.e., in earning function) only broad occupation categories were included. However, each occupation has a number of sub groups with different levels of earning that can affect per earner household income differently. Then the occupations of AIDS patients were specified according to the age-groups. These figures can be referred to as per capita income. Finally, in this study the mean treatment cost of AIDS expenditure was considered equal for all income classes in rural and urban areas. However, the actual expenditure on AIDS may not be the same for all income classes.

6.3 Suggestions for Improvement of the Study

1. A study of this nature requires a large number of observations on household characteristics in all regions in both rural and urban areas. It is essential to capture all household characteristics and form a reliable estimate of per capita income of different income classes in rural and urban areas.

2. The information on the cost of AIDS at different stages of the illness is needed to measure the impact of AIDS on households consumption reallocation. These results can provide information to decision-makers.

3. The study focused on comparative static economic effects of AIDS consumption only. However, AIDS can effect not only household consumption but also human capital investment and labour supply, both of which have important long run effects.

6.4 Recommendations for Future Research

It would be of interest to study the reallocation of consumption through the various stages of HIV (from initial infection to death from AIDS related causes). This would provide more information than only comparing patients with AIDS to those without AIDS.

The actual cost of AIDS may not be the same for all income groups both in rural and urban areas. There is, however, a lack of knowledge on costs of AIDS by patients belonging to different income classes. Since available data is based on the whole group, it is therefore suggested to conduct studies to estimate the costs of AIDS patients belonging to different income classes, by region and by both rural and urban areas.

Finally, the change in consumption during a year in a situation without AIDS may not fully explain the change in economic growth. A one-year period may not be sufficient to study the effect on economic growth. This is because, some patterns of AIDS take more time to develop while other patterns take shorter times to develop. The pattern of AIDS is quite uncertain. During the three phases of AIDS development, consequently, the average treatment costs of the three phases are also different. Detail analysis of these cost is therefore needed. Moreover, consumption, saving and

investment are all inter-related. For instance, an increase in consumption may reduce household savings, which can affect investments and so on. Information on all the components of GDP may be required to study the effect on economic growth. Therefore, it is suggested that future studies include various aspects or components of GDP to estimate the effect of HIV/AIDS on economic growth.