## CHAPTER 7

## CONCLUSION AND DISCUSSION

This thesis is an analytical study focused on describing the methods to identify the optimal premium for the VHI Program in Haiphong, Vietnam, under the conditions that there is an existing gap between the insured target population and the current insured persons of program, and the premium is high compared to the low income of the informal and daily workers who are the target of the VHI Program. The process of methodological analysis includes 8 steps, applying the theories of health care financing, health insurance, voluntary health insurance, experiences of health insurance from other countries; concepts of demand for health, demand curve, logit analysis by logit model, and price elasticity of demand from theories of micro economics and economic statistics in order to identify the optimal premium as one of the solutions in the short run to extend the membership of the VHI Program. The secondary data and primary data come from a small survey are used to demonstrate the method of study. This methodological analytic method should be implemented not only in Haiphong for next year but also for the other programs which are operating in more than 20 locations in Vietnam now. Table 7.1 shows a summary of final results from chapter 6:

Table 7.1 The Final Results of Chapter 6.

Index	Present Situation	Result of Simulation
1. Target Population of VHI Program	1,060,000	1,060,000
2.VHI Premium (dong)	15,000	12,672
3.Population Covered 4.% Cover Comparing	105,000	139,326
to Target Population 5.Total Cost	9.9	12.1
(million dong) 6.Total Revenue	1,330	1,765
(million dong)	1,575	1,765
7.Surplus (million dong)	245	0

Analyzing the results of simulation in Table 7.1, found that the predicted optimal premium of VHI program in Haiphong should be 12,672 dong at 1995 price, because it satisfies the criteria of the optimal premium for VHI program in Haiphong, when it will contribute to the program's revenue equal to maximum costs predicted, with surplus equal to 0. When the VHI premium will be decreased by 15.5 % from 15,000 dong to 12,672 dong with assumption that the supply side is constant, coefficient of price elasticity of demand  $\eta=1.67 > 1$ , and quantity of population that can be covered by VHI program will be increased by 32.7% from 105,000 to 139,326 persons. Compared to the target population of the VHI program, it will increase from 9.9 % to 12.1 %.

Because of limitation of time and data, the thesis only focuses as the study on the demand side of the VHI program and the affect of price elasticity of demand as the premium when supply side is assumed to be constant. Further study should be done in the case that the supply side is not perfectly elastic (see Figure 7.1).

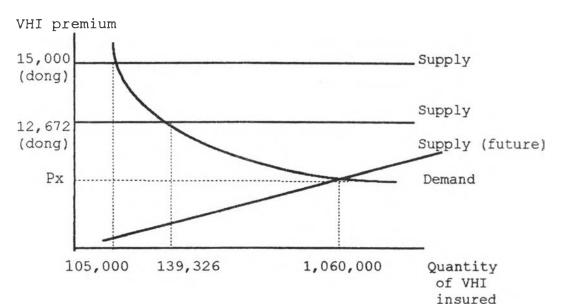


Figure 7.1: Supply and Demand Curve Apply into the Study

In the long run, the aim of VHI program to cover most of its target population, another empirical study needs to combine the method in this study with other social factors such as the feeling and behavior to use health care services within the VHI target population,

the reasons that services did not satisfy the requirement and how do those factors affect the demand and supply sides of VHI program. That combination will be used in order to solve the problems of the program, stabilize the extended number of insured persons with high percent coverage among the target population group. There must be socioeconomic solutions such as improving income living standards of informal workers in urban areas, agriculture workers in rural areas; increasing quality of health care services through investing more capital in the public health sector, which includes increased salary for physicians and health staff, following the experience from Thailand, compulsory regulation for new medical doctors who just graduated from university, have to go and work for the public sector for at least 4-5 years or return the high compensation to the government.

Although the thesis cannot avoid shortcomings, and the researcher has had to overcome these by taking a macro approach, it is the first and important step to begin further in depth study, such as obtaining the criteria of optimal premium for VHI program when in the short run the supply side is inconstant, or opening the other evaluation surveys among the informal workers group, to classify them into sub-groups based on the survey indicators about income, age, education, family size, location... It will be very helpful to apply logit analysis by using this to simulate a lot of different values of regression Y, then estimate and analyze the situations related to probability Pi to buy VHI cards for each classified sub-group among the target population of VHI program, for example to assess the effects of income, age, accessibility...on the probability of buying VHI card. Finally, if we know the number of population for each sub-group, we can better predict the number of people who should buy VHI card, by using each Pi multiple with each corresponding population sub-group.

For the further study, the methodology of this thesis also can be implemented to analysis of the Compulsory Health Insurance scheme in Vietnam, where in some locations there are similar problems as in VHI program in Haiphong and others, for example surplus funds, slowness to extend the number of insured even though it is compulsory scheme. So, research methods from this thesis should be applied to certify the appropriate rate of salary to contribute CHI premium, and assess probabilities to buy CHI card for each worker group, especially in the private industry sector which now is

increasing, yet the government can not control their salary fund effectively. An other case, it is a good practice to implement method of this study in the health insurance program for school children in Haiphong, which has characteristic management similar to the VHI program, such as applying an optimal uniform premium for that program. The research methodology of this thesis also serves as an introduction to policy makers of MOH, governors and managers of the locations where they are operating health insurance programs to refer to in case they carry out the study on certifying the optimal premium for Compulsory Health Insurance scheme or certifying the optimal premium for Integrated Health Insurance scheme, or in case they want to combine two schemes, compulsory and voluntary into one system.