CHAPTER 5



CONCLUSION AND RECOMMENDATIONS

Chapter 5 is to provide conclusion of the study. In addition, the policy recommendations and the suggestions for further studies will be followed.

5.1 Conclusion

When economic crisis occured, prices of drugs changes accordingly. First adjustment of drug prices took place on an average 132.3 days after baht floatation. The result reveals that percentage change in foreign exchange rate of Thai baht and US dollar (DLNFX) is strong and has positive impact on percentage change in drug prices. The estimated coefficient for drug prices on average is 0.2197 at one percent level of significant. This means that percentage change in drug price on average rises by 0.21 percent for every one percent increase in foreign exchange rate after July 2nd, 1997. When exchange rate depreciates one percent, prices of essential drugs made by original firms increase 0.20 percent, while prices of essential drugs made locally at 0.24 percent. For non-essential drugs, prices of original drugs increased 0.19 percent and local made drug 0.22 percent. It is found that any change in exchange rate greatly influence prices on essential drugs more than non-essential drugs. Prices of local made drugs appreciate higher than those of original drugs. Quantity procured also has an effect on drug prices. The average prices decrease 0.003 percent per month after July 1997. Police General Hospital and Siriraj Hospital purchase lower prices than Ramathibodi Hospital. Cancellation of medium price has an impact on changes in drug prices while other government regulations such as increase in VAT rate and change in CSMBS do not have significant influence on change in drug prices.

5.2 Recommendations for the Policy

- 1. Public hospitals should join together to procure drugs in order to increase the purchased volume because the higher quantity procured, the higher bargaining power of the hospitals. The prices of drugs will decrease when quantity procured increases.
- 2. Government of Thailand raises external loans during economic crisis due to insufficient budget. The information needed to calculate the loans is the estimation of the fund. One of the expenditures in public health sectors is drug procurement the size of which should be as close to reality as possible to eliminate any surplus or insufficiency.

Although exchange rate had great influence, which could be doubled in certain period, drug prices do not rise at the same proportion. So the Ministry of Public Health or public health sectors such as public hospitals should not estimate the budget for drug procurement in an equal proportion to exchange rate increases.

- 3. The Ministry of Public Health should reinstitute the medium price in order to control public hospitals not to buy the expensive drugs because it is found that the prices of drugs increased when medium price was canceled.
- 4. Pharmaceutical companies have to shoulder the risk of fluctuation of Thai currency since raw materials used in the manufacturing and/or finish products are imported. Companies have to learn how to manage this currency risk.

5. Government sectors should encourage research and help to develop raw materials for pharmaceutical industry so as to lessen reliance on foreign countries.

5.3 Suggestions for Further Study

This study has some limitation and deficiency. The empirical results of the study represent mainly the public hospitals and not private hospitals or the drug stores. In the study many samples had to be excluded because some drugs was stopped to procure after July 2nd, 1997 and some drugs just started to be purchased for hospital use after July 2nd, 1997. Some aspects for further study are as follows;

- 1. The period of the study should be extended to see the longer term impact of change in exchange rate on change in drug. This study covered only the changes in exchange rate for fifteen months after baht depreciation. It is possible that drug firms may absorb some risk of fluctuation of the currency so the long term impact of exchange rate on drug prices should be concerned.
- 2. Data should be collected inclusive private hospitals so the results can be comparable to the government hospitals.
- 3. Analysis on change of drug price during economic crisis should be considered on the data collected from drug stores in addition to hospital drug prices. The result may be different from this study because drug stores have less bargaining power and less regulations of procurement. Moreover, drug store is an important channel of drug distribution in public health system.