COST DETERMINANTS OF

THE THAI FOOD AND DRUG ADMINISTRATION (FDA)

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The study attempted to investigate cost determinants of the Thai FDA. Multi-product cost functions were constructed, employing the data during 1980-1999 drawn from previous records of actual expenses and various output categories of the Thai FDA. The linear cost functions in which total costs are function of outputs and wage rate were estimated by using ordinary least squares regression analysis.

As a brief data description, total cost of FDA showed a large rising trend at the growth rate 19% on the average during the past 20 years. The percentage of capital stock in the total cost components indicated that land cost tended to be one-fifth of the proportion. Labor expense was also a large proportion in the components. Two types of outputs, pre and post-marketing activities, were employed as the basis for the models. The costs of pre-marketing activities increased sharply during the period 1983-1992 and then fluctuated. The costs of post-marketing activities also increased but declined continuously after 1992. The fluctuation and inconsistency of output volumes have been observed, particularly since 1992, due to the administrative structural changes. Wage rates have been also continuously increasing at the average rate 9.6% each year.

The estimated results revealed that the total cost levels of the Thai FDA could not be explained by the quantitative volume of its outputs. The only output that was significantly negative related to the cost level is amount of product registration. It might be concluded that increases in the volume of product registration would lower the level of costs. Cost elasticities with respect to wage rate ranged from 1.5 to 1.9, implies a labor intensive characteristic of the Thai FDA. The results also indicated that a rise in administrative structural changes after the year 1992 might lower the cost level of post-marketing activities. R^2 values were high, infer that the explanatory variables employed in the models are good determinants of the FDA costs.

With regard to the empirical findings,the gevernment could have an advantage in adoption and fully implementation the output budgeting system in order to efficiently utilize resources.

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Finally, it should be emphasized that the work is not over. On the contrary, it is only the beginning. It's time to evolve and consolidate health economics knowledge, time to face new challenges. Undoubtedly, any mistake in this thesis is solely my own responsibility.

Wanida Kaewpanukrungsi

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Abbreviations

DMS	=	Department of Medical Sciences
FDA	=	Food and Drug Administration
GMP	=	Good Manufacturing Practice
GPO	=	Government Pharmaceutical Organization
INCB	=	the International Narcotic Control Board
IPCS	=	the International Programme on Chemical Safety
NADRMC	=	National Adverse Drug Reaction Monitoring Center