Attaphon Johnjun 2011: Total Factor Productivity (TFP) of Food Industry in Thailand. Master of Science (Agricultural Economics), Major Field: Agricultural Economics, Department of Agricultural and Resource Economics. Thesis Advisor: Mrs. Isriya Bonyasiri, Ph.D. 118 pages.

The main objectives of this study are to measure the total factor productivity (TFP) of Thailand's food industry in 2008 in overall level and in sub-sector and to analyze factors that determine TFP. The Cobb-Douglas production function is estimated with the Ordinary Least Square (OLS) method using the dataset of the factory survey in 2008.

The results showed that the average food industry's TFP index in 2008 was 94.97, which is less than estimated output of 5.03 percent. Among sub-sectors, the manufacture of vegetable and animal oils and fats had highest TFP index, following by manufacture of bakery products, manufacture of prepared animal feed, manufacture of other food products n.e.c. (soy sauce and fish sauce), manufacture of processing of fruit and vegetables, manufacture of processing and preserving of fish and fish product and manufacture of soft drinks and mineral waters respectively. The empirical result on the factors influencing TFP suggested that research and development (R&D), ratio of foreign direct investment (FDI) to total investment and ratio of number of skilled labor to total labor had positive effect on TFP index with statistical significance. On the other hand, ratio of logistic expenses to total sales had negative impact.

As a result, strategic and planning government agencies related to Thailand's food industry development need to promote research and development as well as attract foreign direct investment, improve skills of labor, and reduce the logistics cost to ensure the growth of TFP.

Student's signature

Thesis Advisor's signature

## สิบสิทธิ์ มหาวิทยาลัยเทษกรร่าสกร์