

Pramporn Saengchote 2009: A Study of Relationship between Technology Investment and Profit in Electronics Industry in Thailand. Master of Economics, Major Field: Economics, Department of Economics. Thesis Advisor: Assistant Professor Supachat Sukharomana, Ph.D. 137 pages.

The main objective of this study is to test the relationship between technology investment and profit in electronics industry. Investment cost data and profit of twenty two manufactures over the period of 1993 to 2007 are used to test the hypothesis that profit in the previous periods induce the current investment to improve embodied manufacturing technology. The Granger's Causality method is used for the test and identifying the period that the previous profits may induce the investment in current year.

The result showed that previous profit of the manufactures in the last one year, the last two year, and the last three year of some manufactures induce current investment. However, the major percentage of manufacturer invests on current period basing on the firm profit of the last three years. Moreover, when taking into account the size of manufacturers by the amount of asset registration. It is found that the current investment of large firm induced by the last one year profit. For the medium firm size the current investment is induced by the last 3 years profit. For the small firm the result of the test is inconclusive. These finding showed that in electronic industry, the new investment in new technology electronics have been changing and the embedded technology in the manufacturing process has been adopted at all the times. The large firm is quickly responding that the medium size manufactures. Manufacturers keep on investing the modern embodied technology all the time.

In summary, the findings from the study lead to a recommendation that the government authorities should pay more attention to the investment behavior of the manufacturers in electronics industry. Investment incentives on the new embedded technology such as the tax reduction on imported machine and equipment should be designed to facilitate the investment.

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