

Chaiyawut Panusathit 2010: An Economic Analysis of Nonionic Surfactant  
Production Investment Project: A Case Study of Thai Ethoxylate Company.  
Master of Economics, Major Field: Economics, Department of Economics.  
Thesis Advisor: Associate Professor Ruangdej Srivardhana, Ph.D. 121 pages.

The objectives of the this research were 1) to study general nature of petrochemical industry and an existing project of non-ionic surfactant production, the case of Thai ethoxylate company 2) to analyze economic cost and benefit of the project and 3) to analyze the viability of the project under risk situation. It was assumed that the project life was 20 years and the discount rate of 5.4375% was used in the study.

The study's results showed that the project has net present value (NPV) of 1,312,229,135 Baht, benefit cost ratio (BCR) is 1.048 and internal rate of return of the project (IRR) is 29.448 percent. From these research results the project was viable in economic sense. The results of sensitivity studies by assuming cost increase or benefit decrease by 5% indicated inviability of the project. It was also found that cost of the project could be increased up by 4.811 percent or benefit reduced by 4.590 percent before the project became inviable.

It can be concluded that this project had economic feasibility and was worth investment. In addition, the government should promote down-stream petrochemical industry and develop more new products since up-stream products could help stabilize downstream industries. The interplay between up and down stream industries, besides creating stability among them, could also create value added products of the country.

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