

Chapter 5

Result Analysis, Conclusion and Recommendation

After the cash flows are calculated, the investors cannot analyse them if they don't calculate payback period, the net present value and internal rate of return from the cashflows. As the last chapter, it showed the cash flows and the above results. In this chapter, the results can be analysed as follow:

5.1 Result analysis

The results from five years project of 15,000 liter storage tank

- Payback period = 22.0 months
- Net present value = 184,876.58 baht, at interest rate of 8.25 %
- Internal rate of return = 50.05 %

The payback period 22.0 months are very fast for this investment. Especially, net present value of 184,876.58 baht shows that it is well above zero. The theory of net present value mentions that if net present value of project is more than zero, the investors can accept the project. Hence, this net present value can make the company firm in the investment project. Not only net present value but internal rate of return also performs same as net present value. Cost of capital in this case study is set at 11.75% (Minimum Loan Rate, MLR) as of 20 October 1998. [see Appendix E]. The above internal rate of return result, 50.05% is much higher than the cost of capital very much. So, the project could be confidently accepted in terms of investment rule.

The results from five years project of 20,000 liter storage tank

- Payback period = 18.2 months
- Net present value = 275,178.23 baht as interest rate 8.25 %
- Internal rate of return = 63.22 %

The results of 20,000 liter storage tank is even better than the case of 15,000 liter storage tank. The payback period is very fast and the net present value is also well above zero. The internal rate of return is also much higher than MLR of 11.75 %. Again, this internal rate of return value is consistent with the finding from the net present value, which also recommended acceptance this project.

As a consequence, the company could be confident in investing in both projects.

5.2 Recommendation

Even though both of the values are very high, the company should find the minimum margin that makes net present value equal zero. The least margin in the chapter 3 is found from the margin data after Managed Float exchange rate. From that concept, if the margin in the future were lower than the least margin, the company would use this minimum margin for decision. This minimum margin can help the company decided for the investment because now Thailand economy is critical. Some customers may reduce their productivity and it may effect for our selling volume of fuel oil. Hence, the price, which the company set for them, may make the lower margin. Hence, this study prepared the chart between volume and unit margin at zero net present value. This chart will help the company find the suitable margin that will not make the company loss. Even the economy isn't critical, the company can use this chart found the suitable margin

which some competitors compete with it in the price war. (This chart is shown on the chart 4.1)

The example for using the chart – if customer needs to use a 20,000 liter storage tank and consumes the fuel oil A about 40,000 liter per month. How could the company set the price for this customer? (the interest rate is 13 %)

From the chart 4.1, the minimum unit margin that the company should set at the base of margin is about 0.10 baht per liter. So, the price that should set for the customer should generate the margin more than 0.10 baht per liter. At this minimum unit margin, it will cover the investment at the end of year 5th. If the company set the unit margin more than this, it will cover the investment faster than 5 years.

This study hope that the least margin values on these charts will help the company decided to invest for customers by cover the investment cost at most 5 years.