Week 5 discussion 1

Based on what you discovered in the e-Activity, make at least two recommendations for regarding how your selected company should approach its capital budgeting. Explain the reasoning behind your recommendations.

A capital budgeting analysis conducts a test to see if the benefits (i.e., cash inflows) are large enough to repay the company for three things: (1) the cost of the asset, (2) the cost of financing the asset (e.g., interest, etc.), and (3) a rate of return (called a *risk premium*) that compensates the company for potential errors made when estimating cash flows that will occur in the distant future.

The following is two approaches for capital budgeting:

1. **Net Present Value**

Using a minimum rate of return known as the hurdle rate, the *net present value* of an investment is the *present value of the cash inflows* minus the *present value of the cash outflows*. A more common way of expressing this is to say that the net present value (NPV) is the present value of the benefits (PVB) minus the present value of the costs (PVC)

$$NPV = PVB - PVC$$

By using the hurdle rate as the discount rate, we are conducting a test to see if the project is expected to earn our minimum desired rate of return.

2. **Internal Rate of Return**

The *Internal Rate of Return (IRR)* is the rate of return that an investor can expect to earn on the investment. Technically, it is the discount rate that causes the present value of the benefits to equal the present value of the costs. According to surveys of businesses, the IRR method is actually the most commonly used method for evaluating capital budgeting proposals. This is probably because the IRR is a very easy number to understand because it can be compared easily to the expected return on other types of investments (savings accounts, bonds, etc.). If the internal rate of return is greater than the project's minimum rate of return, we would tend to accept the project.

The calculation of the IRR, however, cannot be determined using a formula; it must be determined using a trial-and-error technique.

Which method is better - the NPV or the IRR? Usually, the NPV is better than the IRR for the following:

1. Reinvestment of Cash Flows: The NPV method assumes that the project's cash inflows are reinvested to earn the hurdle rate; the IRR assumes that the cash inflows are reinvested to earn the IRR. Of the two,

the NPV's assumption is more realistic in most situations since the IRR can be very high on some projects.

2. Multiple Solutions for the IRR: It is possible for the IRR to have more than one solution. If the cash flows experience a sign change (e.g., positive cash flow in one year, negative in the next), the IRR method will have more than one solution. In other words, there will be more than one percentage number that will cause the PVB to equal the PVC.

When this occurs, we simply don't use the IRR method to evaluate the project, since no one value of the IRR is theoretically superior to the others. The NPV method does not have this problem.

Source:
http://campus.murraystate.edu/academic/faculty/lguin/FIN330/CapBudTechniques.htm