Advantage and disadvantages of the different capital budgeting techniques

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Payback Period

Advantages

1. Simple to compute
2. Provides some information on the risk of the investment
3. Provides a crude measure of liquidity

Disadvantages

1. No concrete decision criteria to indicate whether an investment increases the firm's value
2. Ignores cash flows beyond the payback period
3. Ignores the time value of money
4. Ignores the risk of future cash flows

Discounted Payback Period

Advantages

1. Considers the time value of money
2. Considers the riskiness of the project's cash flows (through the cost of capital)

Disadvantages

1. No concrete decision criteria that indicate whether the investment increases the firm's value
2. Requires an estimate of the cost of capital in order to calculate the payback
3. Ignores cash flows beyond the discounted payback period

Net Present Value

Advantages

1. Tells whether the investment will increase he firm's value
2. Considers all the cash flows
3. Considers the time value of money
4. Considers the risk of future cash flows (through the cost of capital)

Disadvantages

1. Requires an estimate of the cost of capital in order to calculate the net present value.
2. Expressed in terms of dollars, not as a percentage.

Profitability Index

Advantages

1. Tells whether an investment increases the firm's value
2. Considers all cash flows of the project
3. Considers the time value of money
4. Considers the risk of future cash flows (through the cost of capital)
5. Useful in ranking and selecting projects when capital is rationed

Disadvantages

1. Requires an estimate of the cost of capital in order to calculate the profitability index
2. May not give the correct decision when used to compare mutually exclusive projects.

Internal Rate of Return

Advantages

1. Tells whether an investment increases the firm's value
2. Considers all cash flows of the project
3. Considers the time value of money
4. Considers the risk of future cash flows (through the cost of capital in the decision rule)

Disadvantages

1. Requires an estimate of the cost of capital in order to make a decision
2. May not give the value-maximizing decision when used to compare mutually exclusive projects
3. May not give the value-maximizing decision when used to choose projects when there is capital rationing
4. Cannot be used in situations in which the sign of the cash flows of a project change more than once during the project's life

Modified Internal Rate of Return

Advantages

1. Tells whether an investment increases the firm's value
2. Considers all cash flows of the project
3. Considers the time value of money
4. Considers the riskiness of future cash flows (through the cost of capital in the decision rule)

Disadvantages

1. Requires an estimate of the cost of capital in order to make a decision
2. May not give the value-maximizing decision when used to compare mutually exclusive projects
3. May not give the value-maximizing decision when used to choose projects when there is capital rationing