Lecture 03

Part 2 - Making Capital Investment Decisions

ICT111-2
Financial Management

More on NPV

Setting up a **discounted cash flow analysis**

A relevant cash flow for a project is a change in the firm's overall **future cash flow that comes about as a direct consequence of** the decision to take **that project**. Because the relevant cash flows are defined in terms of changes in, or increments to, the firm's existing cash flow, they are called the incremental cash flows associated with the project.

Incremental cash flows

The incremental cash flows for project evaluation consist of *any and all* changes in the firm's future cash flows that are a direct consequence of taking the project.

Put another way, it is the difference between a firm's future cash flows with a project and those without the project.

Any cash flow that exists regardless of *whether or not* a project is undertaken is *not* relevant.

Incremental cash flows

e.g. The following investments are independent projects.

A – if undertaken, the net cash of the company is expected to be increased from 100,000 to 125,000.

B – if undertaken, the variable cost of the company is expected to be reduced by 12,500

What are values taken into investment appraisal calculation in each of above situations?

A **sunk cost**, by definition, is a cost we have already paid or have already incurred the liability to pay. Such a cost cannot be changed by the decision today to accept or reject a project.

e.g. consultancy fees

Opportunity costs

The most valuable alternative that is given up if a particular investment is undertaken.

Opportunity costs

e.g. The company is thinking of launching a new product line. The said new product is expected to be produced in a building bought(at a cost of Rs.100,000) years ago. The said plant in a dilapidated state.
The saleable value of the building stood at Rs. 10,000.

What is the value taken for project evaluation?

Side effects

Remember that the incremental cash flows for a project include all the resulting changes in the *firm's* future cash flows. It would not be unusual for a project to have side, or spillover, effects, both good and bad.

Negative impact on the cash flows of an existing product from the introduction of a new product is called **erosion.**

For example, one of Walt Disney Company's concerns when it built Euro Disney was that the new park would drain visitors from the Florida park, a popular vacation destination for Europeans.

Side effects contd.

erosion The cash flows of a new project that come at the expense of a firm’s existing projects.

Example

One of Walt Disney Company’s concerns when it built Euro Disney was that the new park would drain visitors from the Florida park, a popular vacation destination for Europeans.

Net working capital (Investment decision)
Working capital = Current asset – Current liabilities

Normally a project will require that the firm invest in net working capital in addition to long-term assets.

Anyway As a project winds down, these receivables are collected ,inventories are sold, bills are settled and cash balances can be drawn down. These activities **free up** the **net working capital originally invested**.

<u>Should be added to the initial investment and reimbursed at the end of the period</u>.

Additional capital investment - ?

Financing costs

This is not to say that financing arrangements are unimportant. They are just something **to be analyzed separately**.

Having chosen the project we can take a look at how the project is financed.(<u>financing decision</u>)

Project Operating Cash Flow

Operating cash flow = Earnings before interest and taxes
+ Depreciation
- Taxes

Depreciation – non-cash item (will be discussed in detail in the question practice***)

Inflation - (will be discussed in detail in the question practice)

Tax - (will be discussed in detail in the question practice)

Question practice