**Capital Budgeting Methods**

There are four capital budgeting methods to analyze financial information:

1. Net present value (NPV)

2. Internal rate of return (IRR)

3. Payback

4. Accrual accounting rate of return (AARR)

Both the net present value (NPV) and internal rate of return (IRR) methods use discounted cash flows, which we discuss in the following section.

**Net Present Value Method**

The **net present value (NPV) method** calculates the expected monetary gain or loss from a project by discounting all expected future cash inflows and outflows back to the present point in time using the required rate of return. To use the NPV method, apply the following three steps:

**Step 1:** Draw a Sketch of Relevant Cash Inflows and Outflows.

**Step 2:** Discount the Cash Flows Using the Correct Compound Interest

**Step 3:** Make the Project Decision on the Basis of the Calculated NPV**.** If NPV is zero or positive, financial considerations suggest that the project should be accepted; its expected rate of return equals or exceeds the required rate of return. If NPV is negative, the project should be rejected; its expected rate of return is below the required rate of return..

**Internal Rate-of-Return Method**

The **internal rate-of-return (IRR) method** calculates the discount rate at which an investment’s present value of all expected cash inflows equals the present value of its expected cash outflows. That is, the IRR is the discount rate that makes NPV= $0.

**Payback Method**

**payback method** measures the time it will take to recoup, in the form of expected future cash flows, the net initial investment in a project. As in NPV and IRR, payback does not distinguish among the sources of cash flows, such as from operations, purchase or sale of equipment, or investment or recovery of working capital.



**Accrual Accounting Rate-of-Return Method**

**Accrual Accounting Rate of Return (AARR) method** divides the average

annual (accrual accounting) income of a project by a measure of the investment in it.

