



# RAMA UNIVERSITY

www.ramauniversity.ac.in

**FACULTY OF COMMERCE AND MANAGEMENT**

**COURSE: B.COM V SEM.**

**SUBJECT: INTRODUCTION TO FINANCIAL MANAGEMENT**

**SUBJECT CODE: BCH 505**

**LECTURE: 13**

**NAME OF FACULTY: DR. PALASH BAIRAGI**

## LECTURE-13



## 2. Rate of Return Method:

This method takes into account the earnings expected from the investment over their whole life. It is known as accounting rate of return method for the reasons that under this method, the accounting concept of profit is used rather than cash inflows. According to this method, various projects are ranked in order of the rate of earnings or rate of return. The project with the higher rate of return is selected as compared to the one with the lower rate of return. This method can be used to make decisions as to accepting or rejecting a proposal. The expected return is determined and the project with a higher rate of return than the minimum rate specified by the firm called cut-off rate, is accepted and the one which gives a lower expected rate of return than the minimum rate is rejected.

The return in investment can be used in several ways as follows:

**Average rate of return method (ARR):** Under this method average profit after tax and depreciation is calculated and then it is divided by the total capital outlay or total investment in the project.

$$\frac{\text{Total Profits (after dep. \& taxes)}}{\text{Net Investment in project x No. Of years of profits}} \times 100$$

Or

$$\frac{\text{Average annual profit}}{\text{Net investment in the Project}} \times 100$$

**Illustration 2.** A project requires an investment of Rs.5, 00,000 and has a scrap value of Rs.20, 000 After 5 years. It is expected to yield profits after depreciation and taxes during the 5 years amounting to Rs. 40,000, Rs. 60,000, Rs. 70,000, Rs. 50,000 and Rs.20, 000. Calculate the average rate of return on the investment.

### Solution:

Total profits = Rs. 40,000+60,000+70,000+50,000+20,000 = Rs. 2, 40,000

Average Profit =  $\frac{\text{Rs. 2, 40,000}}{5}$  = Rs.48, 000

Net Investment in the project = Rs. 5, 00,000 – 20,000(scrap value)  
= Rs 4, 80,000

$$\frac{\text{Average annual profit}}{\text{Net investment in the Project}} \times 100$$
$$\frac{48,000}{4, 80,000} \times 100 = 10\%$$

**Return per unit of investment method:** This method is small variation of the average rate of return method. In this method, the total profit after tax and depreciation is divided by the total investment i.e.

$$\text{Return per Unit of Investment} = \frac{\text{Total profit (after depreciation and tax)}}{\text{Net investment in the project}} \times 100$$

**Illustration 3.** Continuing above illustration, the return per unit of investment shall be:

$$\frac{2,40,000}{4,80,000} \times 100 = 50\%$$

**Return on average Investment method:** In this method the return on average investment is calculated. Using of average investment for the purpose of return in investment is referred because the original investment is recovered over the life of the asset on account of depreciation charges.

$$\text{Return on Average Investment} = \frac{\text{Total profit (after depreciation and tax)}}{\text{Total Net investment/2}} \times 100$$

### **Advantages of Rate of Return Method**

It is very simple to understand and easy to operate.

This method is based upon the accounting concept of profits; it can be readily calculated from the financial data.

It uses the entire earnings of the projects in calculating rate of return.

### **Dis Advantages of Rate of Return Method**

It does not take into consideration the cash flows, which are more important than the accounting profits.

It ignores the time value of money as the profits earned at different points of time are given the equal weighs.