



INTERNATIONAL RATE OF RETURN



An investment's internal rate of return (IRR) is the discount rate that makes the present value of all expected future cash flows equal to zero. It is the **rate which equates the PV of outflows to PV of inflows**.

We can represent the IRR as the rate that solves
$$0 = \sum_{t=0}^N \frac{CF_t}{(1+IRR)^t}$$



Decision Rule

The decision rule for the internal rate of return is to invest in a project which provides a return greater than the cost of capital. The cost of capital, in the context of IRR is the minimum acceptable rate of return.

For independent projects and situations in which there is no capital rationing, then

If.....	This means that.....	And you.....
IRR > COST OF CAPITAL	The investment is expected to increase shareholder wealth	Should accept the project
IRR < COST OF CAPITAL	The investment is expected to decrease shareholder wealth	Should reject the project
IRR = COST OF CAPITAL	The investment is expected not to change shareholder wealth	Should be indifferent between accepting or rejecting the project

When evaluating mutually exclusive projects, the one with the highest IRR may not be the one with the best NPV. The IRR may give a different decision than NPV when evaluating mutually exclusive projects because of the reinvestment assumption:

- ⊕ NPV assumes cash flows reinvested at cost of capital
- ⊕ IRR assumes cash flows reinvested at the internal rate of return.



Advantage:

- ⊕ The time value of money is taken into account
- ⊕ All the cash flows in the project are considered
- ⊕ IRR is easier to use as instantaneous understanding of desirability can be determined by comparing it with the cost of capital.



Disadvantage:

- ⊕ The calculation process is tedious if there are more than one cash outflows interspersed between the cash inflows, there can be multiple IRRs.
- ⊕ The IRR approach creates a peculiar situation if we compare two projects with different inflow outflow patterns.

Modified IRR

Modified IRR (MIRR) method is similar to the IRR, but is theoretically superior in that it overcomes two weaknesses of the IRR. The MIRR correctly assumes reinvestment at the project's cost of capital (k) and avoids the problem of multiple IRR's. However MIRR is not used as widely as the IRR in practice.

There are three basic steps of the MIRR:

- ⊕ Estimate all cash flows.
- ⊕ Calculate the future value of all cash inflows (using k) at the last year of the project's life.
- ⊕ Determine the discount rate that causes the future value of all cash inflows determined in step 2, to be equal to the firm's investment at time zero. This discount rate is known as the MIRR.

A company is considering two mutually exclusive projects. The finance director thinks that the project with higher IRR should be chosen as both projects have same initial outlay and length of life. The company anticipated a cost of capital of 10% and the net after-tax cash flows of the projects are as follows:

Year	0	1	2	3	4	5
Cash Flows:						
Project X	(200)	35	80	90	75	20
Project Y	(200)	218	10	10	4	3



Required:

- Calculate IRR of each project.
- State, with reasons which project you would recommend.

Year	0	1	2	3	4	5
Discount factors (10%)	1	0.91	0.83	0.75	0.68	0.62
Discount factors (20%)	1	0.83	0.69	0.58	0.48	0.41



(a) Calculation of IRR of each Project

Project X

Year	Cash flows	Discount Factors @10%	Discounted values	Discount Factors @20%	Discounted values
0	(200)	1.00	(200)	1.00	(200)
1	35	0.91	31.85	0.83	29.05
2	80	0.83	66.40	0.69	55.20
3	90	0.75	67.50	0.58	52.20
4	75	0.68	51.00	0.48	36.00
5	20	0.62	12.40	0.41	8.20
		NPV	+29.15		-19.35

IRR of Project X

At 20% NPV is -19.35

At 10% NPV is +29.15

$$\text{IRR} = 10 + \frac{29.15}{29.15 + 19.35} \times 10 = 10 + \frac{29.15}{48.50} \times 10 = 16.01\%$$

Project Y

Year	Cash flows	Discount Factors @10%	Discounted values	Discount Factors @20%	Discounted values
0	(200)	1.00	(200)	1.00	(200)
1	218	0.91	198.38	0.83	180.94
2	10	0.83	8.30	0.69	6.90
3	10	0.75	7.50	0.58	5.80
4	4	0.68	2.72	0.48	1.92
5	3	0.62	1.86	0.41	1.23
		NPV	+18.76		-3.21

IRR of Project Y

At 20% NPV is -3.21

At 10% NPV is +18.76

$$\text{IRR} = 10 + \frac{18.76}{18.76 + 3.21} \times 10 = 10 + \frac{18.76}{21.97} \times 10 = 18.54\%$$

- (b) If the company follows IRR method, then Project Y –should be selected because of higher internal rate of return (IRR).



PRICING DECISION FOR SPECIAL ORDER

Organizations producing goods and services need to set the price for their product. Setting the price for an organization's product is one of the most important decisions a manager faces. It is one of the most crucial and difficult decisions a firm's manager has to make. Pricing is a profit planning exercise.



Special order pricing is a technique used to calculate the lowest price of a product or service at which a special order may be accepted and below which a special order should be rejected. Usually a business receives special orders from customers at a price lower than normal. In such cases, the business will not accept the special order if it can sell all its output at normal price. However when sales are low or when there is idle production capacity, special orders should be accepted if the incremental revenue from special order is greater than incremental costs.

This method of pricing special orders, in which price is set below normal price but the sale still generates some contribution per unit, is called contribution approach to special order pricing. The idea is that it is better to receive something above variable costs, than receiving nothing at all.



Incremental Analysis Components

Short-term management decisions such as special orders are best performed when based on an incremental analysis. While decisions can be made by examining side-by-side income statements and identifying the differences, incremental analysis is the most straight forward, the shortest, and the easiest approach. Incremental analysis enables managers to focus on the relevant parts of a decision.

Incremental Revenue

Incremental revenues are the additional revenues generated from accepting the special order. The revenue can result from additional sales of products or from providing services. If the company is operating at less than capacity, revenue of regular customers will not be affected. If the company is operating at capacity, it will have to give up some regular sales in order to provide the special order.



Incremental Costs

Incremental costs are the additional costs incurred from accepting a special order. Variable product costs are always incremental and cause profits to decline. Variable operating costs include selling costs such as commissions and shipping costs are relevant as well. Cost savings do not exist in special order decisions.

Amounts That Are Not Relevant in Special Order Decisions

Costs that will be incurred regardless if a special order decision is accepted or not are not relevant for special order decisions. Most often, a company's recurring fixed costs will remain the same in total if a special order is accepted. Occasionally the acceptance of a special order may cause additional fixed costs. In these cases, these additional fixed costs are relevant and should be considered in an incremental analysis. Sunk costs are not relevant with any special order decision process.

Evaluating Special Order Decisions

Special order decisions should be generally be accepted if the order is expected to increase profit.

Accept or Reject?

If incremental revenues **are less than** incremental costs, reject the special order unless qualitative characteristics overwhelmingly impact the decision.

If incremental revenues **are greater than** incremental costs, accept the special order unless qualitative characteristics overwhelmingly impact the decision.

If incremental revenues **are equal to** incremental costs, focus primarily on qualitative characteristics to evaluate the decision.

The following example is used to illustrate special order pricing:

Example: 1

Flowers Inc. manufactures silk roses. Bud Company has approached Flowers with a proposal to buy 2,000 silk roses for ₹4.00 each. Regular customers are charged ₹4.25 for each rose. Flowers have the necessary capacity. The following costs are associated annually with silk roses with the company's normal production and sales of 10,000 roses:

Direct material	₹21,000
Direct labour	₹13,000
Manufacturing Overhead	₹9,000
Total	₹43,000

Forty percent of the manufacturing overhead is variable. All fixed overhead is allocated equally to all products produced. In good form, prepare an incremental analysis to analyze whether Flowers should accept the order from Bud Company.

Solution

Step 1: Determine incremental revenue. The sale of 2,000 roses at \$4 each will increase revenue by \$8,000 and is relevant.

$$₹4.00 \times 2,000 = ₹8,000$$



The normal sales of 10,000 roses is not incremental as it will produce the same revenue regardless if the special order is accepted or not.

Step 2: Determine incremental variable costs. When 2,000 additional roses are produced, the company will incur material, labour, and variable overhead costs for these roses. Because unit variable costs remain the same regardless of the activity level, you must calculate the variable unit cost for both materials and labour.

Unit direct material cost = ₹21,000/10,000 roses = ₹2.10 per rose

Unit direct labor cost = ₹13,000/10,000 roses = ₹1.30 per rose

Unit variable overhead cost = [₹9,000 x 40%]/10,000 roses = ₹0.36 per rose

The unit costs of ₹2.10, ₹1.30, and ₹0.36 are for a single rose. Multiple the unit costs by the 2,000 roses in the special order to obtain total incremental variable costs:

Direct materials cost for the special order = ₹2.10 x 2,000 = ₹4,200

Direct labor cost for the special order = ₹1.30 x 2,000 = ₹2,600

Variable overhead cost for the special order = ₹0.36 x 2,000 = ₹720

Because variable costs are increased, profit will decrease by these three incremental amounts. The incremental variable costs are shown as negative amounts in the incremental analysis.

Step 3: Determine incremental fixed costs. Allocated fixed overhead is not relevant because the total fixed overhead of ₹5,400 (60% x ₹9,000) will result in the same total amount no matter if the order is accepted or not.

Step 4: List the amounts in good form beginning with incremental revenue. The analysis should appear similar to the form of an income statement with descriptive line item labels:

Incremental revenue	₹8,000
Incremental costs:	
Direct materials	(4,200)
Direct Labour	(2,600)
Variable Overhead	(720)
Incremental increase in profit if the order is accepted	₹480

Note the distinctive label adjacent to the ₹480 net total line of the analysis. It contains three key components:

- The 'incremental increase' (or decrease) indicates that the change is incremental, and whether the change is an increase or decrease.
 - The 'in profit' indicates what financial component the change will affect.
 - 'If the order is accepted' indicates what action must be taken to result in the additional (reduction of) profit.
- Because profit is expected to increase by ₹480 if the order is accepted, managers should follow through and accept the order.

Example: 2

Marlson Chair Company received an offer in October 2014 to sell 25,000 outdoor patio chairs to Easy Life Corporation. Easy Life will like Marlson & Co. to bid for the proposed sales order and indicates that this is a one-time order.

Marlson Company produces 4,00,000 chairs annually by operating at 80% of full capacity. Regular selling price for the type of chairs is ₹33. The chairs required are similar to those currently being produced by Marlson & Co. Budgeted annual production costs and other expenses for 2014 are as follows:



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Volume of 4,00,000 chairs	Total	Per unit
Raw Material	₹17,00,000	₹4.25
Direct Labour	23,00,000	5.75
Variable factory overhead	31,00,000	7.75
Fixed factory overhead	25,00,000	
Variable selling costs	5% of selling price	
Fixed selling & Administration overhead	₹14,50,000	

Marlson Company wants to earn a minimum profit of Re.1 per chair and no selling expenses will be incurred for special order transactions. Assume that normal operations will not be affected by the special order and that regular sales volume for 2014 is 4,00,000 chairs as initially planned.

Required:

- (i) What should be minimum price to be quoted by Marlson & Co.?
- (ii) Prepare an income statement analysis showing the position of Marlson & Co. Without special order, for special order and with special order.

Solution:

(i)

Variable cost to be incurred	(Per unit)
Raw Material	₹4.25
Direct Labour	5.75
Variable Overhead	7.75
Total Variable cost per unit	17.75
Total incremental cost for 25,000 units (25,000 × ₹17.75)	₹4,43,750
Desired Profit (25,000 × Re.1.00)	25,000
	4,68,750
Units selling price to be quoted by Marlson & Co. (4,68,750 ÷ 25,000)	₹18.75

(ii) Income Statement Analysis

Details	Without special order	For special order	With special order
Sales	₹1,32,00,000	₹4,68,750	₹1,36,68,750
Less: Variable costs:			
Raw Material	₹17,00,000	₹1,06,250	₹18,06,250
Direct Labour	23,00,000	1,43,750	24,43,750
Variable Factory Overhead	31,00,000	1,93,750	32,93,750
Variable Selling Costs	6,60,00	-	6,60,000
Total Variable Costs	77,60,000	4,43,750	82,03,750
Total Contribution	54,40,000	25,000	54,65,000
Fixed Factory Overhead	25,00,000	-	25,00,000
Fixed Selling & Adm. Overhead	14,50,000	-	14,50,000
Total Fixed Overhead	39,50,000	-	39,50,000
Profit	14,90,000	25,000	15,15,000

In short run, as long as relevant revenues are in excess of relevant costs for each decision, profit will be increased or losses decreased. A policy of minimizing losses can also be continued for short period, as in the long term, a company must generate profits, if it is to stay in business.



MEANING OF SALARY FOR DIFFERENT COMPUTATIONS

The term "salary" has been assigned different meanings for the purposes of different computations as under:

Different items	Salary for the purpose of (a) house rent allowance, (b) gratuity (not being gratuity under the Payment of Gratuity Act, 1972), (c) leave encashment (d) NPS, (e) employer's contribution towards recognized provident fund	Salary for the purpose of rent-free house [see Note 1]	Salary for the purpose of enter-tainment allowance	Salary for the purpose of computing the ceiling of ₹50,000 for the purpose of "specified employees" [see Note 2]
Basic Salary	√	√	√	√
Dearness allowance/pay (forming part of salary as per the terms of employment or forming part of salary for computing all retirement benefits)	√	√	x	√
Dearness allowance/pay (not forming part of salary as per the terms of employment or forming part of salary for computing one or more retirement benefits)	x	x	x	√
Advance Salary	x	x	x	√
Arrears of Salary	x	x	x	√
Leave encashment at the time of retirement	x	x	x	√
Salary in lieu of notice	x	√	x	√
Fees	x	√	x	√
Commission (as % of turnover achieved by the employee)	√	√	x	√



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Commission (not as a % of turnover achieved by the employee)	x	√	x	√
Bonus	x	√	x	√
Gratuity	x	x	x	√
Uncommuted pension	x	√	x	√
Annuity from employer	x	√	x	√
Employer's contribution towards provident fund	x	x	x	x
Annual accretion to the credit balance in provident fund	x	x	x	x
Retrenchment compensation	x	x	x	√
Remuneration for extra work	x	√	x	√
Voluntary payments	x	√	x	√
Salary from a United Nations Organisation	x	x	x	x
Payment received at the time of voluntary retirement [which is not exempt under section 10(10C)]	x	x	x	√
City compensatory allowance	x	√	x	√
House rent allowance [which is not exempt under section 10(13A)]	x	√	x	√
Entertainment allowance [to the extent it is not deductible under section 16(ii)]	x	√	x	√
Special allowance [exempt under section 10(14)]	x	x	x	x
Special allowance [not exempt under section 10(14)]	x	√	x	√
Foreign allowance [exempt under section 10(7)]	x	x	x	x
Tiffin allowance	x	√	x	√
Fixed medical allowance	x	√	x	√
Allowance to High Court Judges	x	x	x	x



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Allowance from a United Nations Organisation	x	x	x	x
Compensatory allowance under article 222(2) of the Constitution	x	x	x	x
Any other allowance	x	√	x	√
Amount reimbursed to the employee which is taxable as perquisite under section 17(2) [e.g., gas bills paid by the employee and reimbursed by employer]	x	x	x	√
Amount directly paid by employer on behalf of employee and which is taxable as perquisite under section 17(2) [e.g., gas bills paid by the employer directly to the gas company on behalf of employee]	x	x	x	x
Any other monetary payment which is taxable as profits in lieu of salary [e.g., payment of overtime allowance to employee]	x	√	x	√
Any other perquisite chargeable to tax under section 17(2)	x	x	x	x

Notes:

- For the purpose of valuation of the perquisite in respect of rent-free house, salary of the previous year during which rent-free house is given, should be considered. It should be computed on accrual basis. Moreover, salary from all the employers in respect of the said period shall be taken into consideration.
- For the purpose of finding out whether or not an employee is a specified employee the following shall be deducted - **(a)** standard deduction*, **(b)** deduction on account of entertainment allowance under section 16(ii); **(c)** deduction on account of professional tax. Where the salary is received from more than one employer during the relevant previous year, the aggregate salary from these employers will have to be taken into account for the purpose of determining the aforesaid monetary ceiling of ₹ 50,000.

SOME TYPICAL ADJUSTMENTS IN THE CONTEXT OF AMALGAMATION



A. For Liquidation Expenses if paid by Purchasing Company

Particulars [Merger Method]		Debit ₹	Credit ₹
Profit & Loss / Reserves A/c	Dr.	XXX	
To Cash / Bank A/c			XXX

Particulars [Purchase Method]		Debit ₹	Credit ₹
Goodwill/Capital Reserve A/c	Dr.	XXX	
To Cash / Bank A/c			XXX



Example:

G Ltd. acquired P Ltd. and the liquidation expenses of ₹40,000 is paid by G Ltd. Hence, the journal entry in the books of G Ltd. Will be

Particulars [Merger Method]		Debit ₹	Credit ₹
Profit & Loss / Reserves A/c	Dr.	40,000	
To Cash / Bank A/c			40,000

Particulars [Purchase Method]		Debit ₹	Credit ₹
Goodwill/Capital Reserve A/c	Dr.	40,000	
To Cash / Bank A/c			40,000

B. For cancellation of Mutual Owing

Particulars		Debit ₹	Credit ₹
Creditor/Bills payable A/c	Dr.	XXX	
To Debtors/Bills receivable A/c			XXX



Example:

A Ltd. will absorb B Ltd.

Sundry creditors of B Ltd. includes ₹20,000 due to A Ltd.

Pass Journal Entry in the books of A Ltd. after absorption.

Particulars		Debit ₹	Credit ₹
Creditor A/c	Dr.	20,00	
To Debtors A/c		0	20,000

C. For adjustment of Unrealised Profit

Particulars [Merger Method]		Debit ₹	Credit ₹
Profit & Loss/ Reserve A/c	Dr.	XXX	
To Stock Reserve A/c			XXX

Particulars [Purchase Method]		Debit ₹	Credit ₹
Goodwill/Capital Reserve A/c	Dr.	XXX	
To Stock Reserve A/c			XXX



Example:

A Ltd. will absorb B Ltd.
 Stock of A Ltd. includes goods of ₹30,000 supplied by B Ltd. at cost plus 20%
 Pass journal entries in the books of A Ltd.



Particulars [Merger Method]	Debit ₹	Credit ₹
Profit & Loss/ Reserve A/c Dr. To Stock Reserve A/c [30,000 × (20/120)]	5,000	5,000

Particulars [Purchase Method]	Debit ₹	Credit ₹
Goodwill/Capital Reserve A/c Dr. To Stock Reserve A/c [30,000 × (20/120)]	5,000	5,000

- D. Separate accounting adjustment/entry is not required for statutory reserves in the case of merger as all reserves are also recorded in the transferee's book including statutory reserves.**

In case of amalgamation by way of purchase, the reserves being internal liabilities, are not recorded in the books of transferee and to comply with the requirements of particular statute, the statutory reserves created in the books of transferor company is required to be maintained for some more years .

To fulfill the requirement of maintenance of statutory reserves the transferee company shall record the statutory reserves in its books by debiting to amalgamation adjustment account and crediting statutory reserve.

When the maintenance of statutory reserves is no longer required, the entry passed should be reversed

Particulars	Debit ₹	Credit ₹
Amalgamation Adjustment A/c Dr. To Statutory Reserves A/c	XXX	XXX

Example:

G Ltd. takes over P Ltd. on 31.03.2015
 There is Export Profit Reserve of ₹25,000 in the Balance Sheet of P Ltd. which is to be maintained for two more years.



Particulars	Debit ₹	Credit ₹
Amalgamation Adjustment A/c Dr. To Statutory Reserves A/c	25,000	25,000



HUMAN RESOURCE ACCOUNTING AS PER LEV & SCHWARTZ MODEL [at the time of retirement]



Definition: Human Resource Accounting is the process of identifying and measuring data about human resources and communicating this information to interested parties.

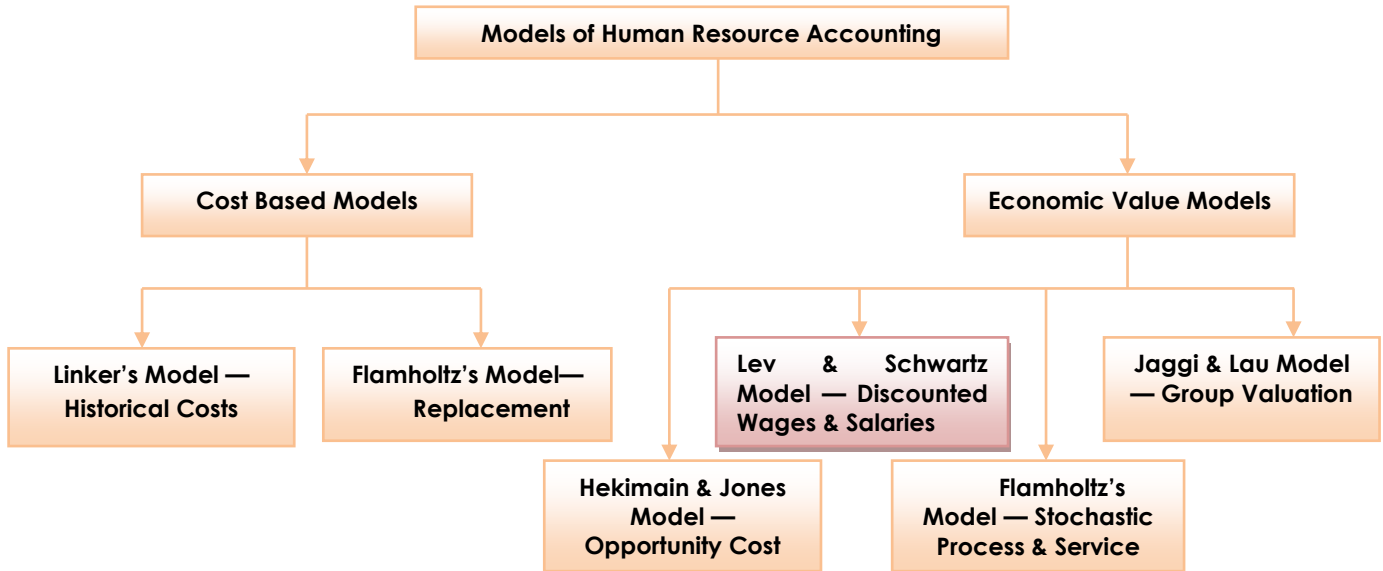
Human Resource Accounting is a **recent phenomenon** in India. Leading Public Sector Units like OIL, BHEL, NTPC, MMTC and SAIL etc. have started reporting Human Resources in their annual reports as additional information.

Companies in India have basically adopted the model of Human Resource Valuation as advocated by **Lev and Schwartz**. Indian Companies focused their attention on the present value of employee earning as a measure of their human capital.

Purposes of Human Resource Accounting —

- Identifies, quantifies and reports the investments made in human resources by an organization;
- Provides useful information for decision making;
- Helps preparation of financial statement and facilitates its comparison;
- Enables efficient allocation and utilisation of funds.

Following are the models that are applied to compute the value of human resources:



Now we will discuss the “Lev & Schwartz Model — Discounted Wages & Salaries” [only valuation at the point of retirement] —

As per this model, value of Human Resources is determined by the **Present Value of Estimated Future Earning** i.e. wages, salaries which are discounted by the rate of return on investment i.e. Cost of Capital.

Valuation of Human Resources:

$$V = \sum_{t=r}^t \frac{I(t)}{(1+r)^{t-n}}$$

Where,

- V = the human capital value of a person **n** year old
- I(t) = the person's estimated **annual earnings up to retirement**
- r = a discount rate specific to the person.
- t = retirement age of the person.





Example:

From the following details, compute the total value of human resources of skilled and unskilled group of employees according to Lev and Schwartz Model:

	Skilled	Unskilled
(i) Annual average earning of an employee till the retirement age.	₹70,000	₹50,000
(ii) Age of retirement	65 years	62 years
(iii) Discount rate	15%	15%
(iv) No. of employees in the group	30	40
(v) Average age	62 years	60 years

Answer:

Valuation of Employees as per Lev and Schwartz Method:

$$V = \sum_{t=r}^t \frac{I(t)}{(1+r)^{t-n}}$$

Where,

V = the human capital value of a person n year old

I(t) = the person's estimated **annual earnings up to retirement**

r = a discount rate specific to the person.

t = retirement age of the person.

Value of Skilled Employees:

$$\begin{aligned} &= \frac{70,000}{(1+0.15)^{65-62}} + \frac{70,000}{(1+0.15)^{65-63}} + \frac{70,000}{(1+0.15)^{65-64}} \\ &= \frac{70,000}{(1+0.15)^3} + \frac{70,000}{(1+0.15)^2} + \frac{70,000}{(1+0.15)^1} \\ &= ₹ (46,026.14 + 52,930.06 + 60,869.57) = ₹ 1,59,825.77. \end{aligned}$$

Total value of skilled employees is ₹ 1,59,825.77 × 30 employees = ₹ 47,94,773.

Value of Unskilled Employees:

$$\begin{aligned} &= \frac{50,000}{(1+0.15)^{62-60}} + \frac{50,000}{(1+0.15)^{62-61}} \\ &= \frac{50,000}{(1+0.15)^2} + \frac{50,000}{(1+0.15)^1} \\ &= ₹ (37,807.18 + 43,478.26) = ₹ 81,285.44 \end{aligned}$$

Total value of Unskilled employees is ₹ 81,285.44 × 40 employees = ₹ 32,51,417.6.

Total value of human resources (Skilled and Unskilled)

$$= ₹ (47,94,773 + 32,51,417.60) = ₹ 80,46,190.60.$$



FAQ ON COMPANIES (COST RECORDS AND AUDIT) RULES, 2014

Question 1.

What is installed capacity and how is this different from total available capacity? How the installed capacity is to be calculated in a multi-product company using the same machine/ facilities? Should installed capacity be the capacity at the beginning of the year or at the end of the year under audit?

Answer:

The Institute of Cost Accountants of India has defined "Installed Capacity is the maximum productive capacity, according to the manufacturer's specifications or determined through an expert study" [CAS-2 of Cost Accounting Standards]. The Installed Capacity to be disclosed in the Quantitative Details of CRA-3 is to be considered as at the beginning of the year. Capacity enhanced during the year should be considered as the increase in Installed Capacity during the year on pro-rata basis. Available capacity is the total installed capacity after adjustment of capacity enhanced during the year and if any capacity is available by means of leasing arrangement or taking on third-party capacity for increasing the total capacity.

If the same available capacity is utilised for production of multiple products, the following different basis may be adopted to determine the available capacity in respect of each of the products:

- (i) If the company has a system of allocating the total available capacity for production of multiple products, then such allocated available capacity is to be considered for the products being manufactured by utilising the same production facility.
- (ii) If the production allocation is not pre-determined and changes from period to period, then the capacity utilisation is to be determined on the basis of total production of all the products taken together and the total available capacity should be considered for all the products.

Question 2.

Whether each and every transactions with Related Parties is to be disclosed under Para D-5 of Annexure to the Cost Audit Report?

Answer:

Details of related Party Transaction are required to be provided in respect of each Related Party and each Product/Service for the year as a whole and not transaction-wise.

Question 3.

Revised Form CRA-2 has been made available by the Ministry of Corporate Affairs conforming to the Companies (Cost Records and Audit) Rules, 2014 on 31st December, 2014. What are the required attachments to Form CRA-2?

Answer:



The Form has provided an attachment button for attachment of certified copy of the Board Resolution appointing the cost auditor. The consent letter of the cost auditor should be attached as optional attachment.

Question 4.

Is CRA-3 applicable for companies whose financial year commenced prior to April 1, 2014? Which Rules are applicable to companies whose financial year commenced on January 1, 2014?

Answer:

The Section 148 of the Companies Act, 2013 and Companies (Cost Records and Audit) Rules, 2014 are applicable from April 1, 2014. Companies that were covered under the erstwhile Companies (Cost Accounting Records) Rules, 2011 and met the threshold limits prescribed therein are required to get the cost audit of their companies audited for the financial year 01/01/2014 to 31/12/2014 under the 2011 Rules and submit their respective reports under Companies (Cost Audit Report) Rules, 2011.

Companies (Cost Records and Audit) Rules, 2014 is applicable to companies maintaining calendar financial year from 01/01/2015 onwards subject to the products/services being covered under Table-A or Table-B of Rule 3 and meeting the prescribed threshold limits.

Question 5.

The Companies (Cost Records and Audit) Rules, 2014 requires submission of a single cost audit report at company level. What is the procedure of certifying and submission of cost audit report of a company where more than one cost auditor is appointed?

Answer:

In case of a company having more than one cost auditor, it would be necessary for the company to appoint/designate one cost auditor as the lead cost auditor for consolidation of the report.

The individual cost auditors appointed for specific units/products would be required to audit and provide Para numbers A-4, B-1, B-2, B-2A, B-2B, B-2C, C-1, C-2, C-2A, C- 2B, C-2C (as applicable), D-1 in respect of the products/services coming under the purview of their respective audits. The individual auditors would also be required to submit to the Board of Directors the individual cost audit report as per Form of the Cost Audit Report given in CRA-3.

The lead auditor would be responsible for preparing the Para numbers A-3, D-2, D-3, D- 4, D-5, D-6 and consolidate Para numbers A-4, B-1, B-2, B-2A, B-2B, B-2C, C-1, C-2, C-2A, C-2B, C-2C (as applicable), D-1 received from the individual cost auditors.

The consolidated report should contain the reports of all the individual cost auditors including the report of the Lead Cost Auditor. In case individual cost auditors have any observations or suggestions or qualifications, they would be required to mention the same under Para 2 of the cost audit report and the lead auditor would have to



mention the specific observations and/or qualifications of all the individual cost auditors in the place provided for the same in the under Para A-1.

The consolidated report so prepared would be converted to XBRL and submitted to the Central Government by the Company in Form CRA-4.

Question 6.

The Companies (Cost Records and Audit) Rules, 2014 covers "Generation, transmission, distribution and supply of electricity" with no corresponding CETA Heading. Whether the Quantitative Information and Abridged Cost Statement in respect of Electricity are required to be reported under the Service Sector in the absence of a CETA Heading?

Answer:

The reporting of electricity generation activity will be considered under "Manufacturing" and should be shown under CETA Heading 2716. Transmission and Distribution activities should be reported under the "Service Sector".

Question 7.

In the abridged cost statement, what are Industry specific operating expenses? When should this be used?

Answer:

Industry Specific operating expenses are those which are peculiar to a particular industry such as Telecommunication Industry which shows expenses such as Network Operating cost, License fee, Radio Spectrum charges, Microwave charges etc. which are peculiar to this Industry and should be disclosed separately in the cost statement. The Industry Specific operating expenses will vary from industry to industry depending upon the nature of operations. The industry specific operating expenses shall have to be identified and reported upon in the abridged cost statement.



DuPont Analysis



The DuPont analysis also called the DuPont model is a financial ratio based on the return on equity ratio that is used to analyze a company's ability to increase its return on equity. In other words, this model breaks down the return on equity ratio to explain how companies can increase their return for investors.

The DuPont analysis looks at three main components of the ROE ratio.

- Profit Margin
- Total Asset Turnover
- Financial Leverage

Based on these three performances measures the model concludes that a company can raise its ROE by maintaining a high profit margin, increasing asset turnover, or leveraging assets more effectively.

The DuPont Corporation developed this analysis in the 1920s. The name has stuck with it ever since.

Formula

The Dupont Model equates ROE to profit margin, asset turnover, and financial leverage. The basic formula looks like this.

DuPont Analysis

$$\text{Return on Equity} = \text{Profit Margin} \times \text{Total Asset Turnover} \times \text{Financial Leverage}$$

Since each one of these factors is a calculation in and of itself, a more explanatory formula for this analysis looks like this.

$$\text{Return on Equity} = \frac{\text{Profit Margin}}{\frac{\text{Net Income}}{\text{Net Sale}}} \times \frac{\text{Total Asset Turnover}}{\frac{\text{Net Sales}}{\text{Average Total Assets}}} \times \frac{\text{Financial Leverage}}{\frac{\text{Total Assets}}{\text{Total Equity}}}$$

Every one of these accounts can easily be found on the financial statements. Net income and sales appear on the income statement, while total assets and total equity appear on the balance sheet.



Analysis

This model was developed to analyze ROE and the effects different business performance measures have on this ratio. So investors are not looking for large or small output numbers from this model. Instead, they are looking to analyze what is causing the current ROE. For instance, if investors are unsatisfied with a low ROE, the management can use this formula to pinpoint the problem area whether it is a lower profit margin, asset turnover, or poor financial leveraging.

Once the problem area is found, management can attempt to correct it or address it with shareholders. Some normal operations lower ROE naturally and are not a reason for investors to be alarmed. For instance, accelerated depreciation artificially lowers ROE in the beginning periods. This paper entry can be pointed out with the Dupont analysis and shouldn't sway an investor's opinion of the company.

Example

Let's take a look at Sally's Retailers and Joe's Retailers. Both of these companies operate in the same apparel industry and have the same return on equity ratio of 45 percent. This model can be used to show the strengths and weaknesses of each company. Each company has the following ratios:

Ratio	Sally	Joe
Profit Margin	30%	15%
Total Asset Turnover	.50	6.0
Financial Leverage	3.0	.50

As you can see, both companies have the same overall ROE, but the companies' operations are completely different.

DuPont Analysis

$$45\% = 0.30 \times 0.50 \times 3.0$$

$$45\% = 0.15 \times 6.0 \times 0.50$$

Sally's is generating sales while maintaining a lower cost of goods as evidenced by its higher profit margin. Sally's is having a difficult time turning over large amounts of sales.

Joe's business, on the other hand, is selling products at a smaller margin, but it is turning over a lot of products. You can see this from its low profit margin and extremely high asset turnover.

This model helps investors compare similar companies like these with similar ratios. Investors can then apply perceived risks with each company's business model.