Responsibility Centres

Responsibility centres

A responsibility centre is part of an organisation for whose activities a manager is deemed to be responsible. The type of responsibility centre depends on the type of activities for which responsibility is carried.

Cost Centre

A cost centre or expense centre can be defined as a responsibility centre where a manager is accountable only for costs which are under his control. It is a production or service location for which costs can be identified or accumulated prior to allocation to cost units. A cost centre manager is responsible for the cost of inputs to the organisation. The performance of the manager of a cost centre can be assessed by comparing actual performance with budgeted targets for price, usage and efficiency.

Revenue Centre

A revenue centre is a responsibility centre where a manager is accountable solely for the revenue generation that is under his control. An example would be a sales team with a target geographical area which is under the control of a sales manager. The manager would have no responsibility for the production cost of the items his team is selling, but has responsibility for meeting sales targets in terms of sales volume, sales revenue or market share. A revenue centre manager has responsibility for the revenue generated by outputs from the organisation.

Profit Centre

A profit centre is a combination of a cost centre and a revenue centre where a manager has responsibility for both production costs and revenue generation. The degree of responsibility carried by a manager can be higher with a profit centre than with a cost centre or a revenue centre, and the manager may be responsible for purchasing, production planning, product mix and pricing decisions. The performance of the manager of a profit centre is unlikely to be assessed on the fine detail of cost and revenue data but by the extent to which agreed targets for overall cost, revenue and profit have been achieved.

Investment Centre

With an investment centre, the manager of a profit centre is given additional responsibility for investment decisions regarding working capital and the purchase and replacement of fixed assets. The manager of an investment centre is likely to be assessed with an aggregate measure that links periodic profit to the assets employed in the period to generate that profit. An example of such an aggregate measure is return on capital employed.

Controllable and traceable return on investment

	Division A	**Division B**	**Total**
Sales revenue	xx	xx	
Controllable cost	(x)	(x)	
Controllable profit (used for divisional manager)	**XX**	**XX**	
Traceable costs	(x)	(x)	
Traceable profits (used for division)	**XX**	**XX**	**XX**
Common costs			(x)
Profit of division			XX

Controllable costs

Controllable items are those that are under the control of divisional manager and are used for the performance appraisal of **divisional manager**. For example

1. If centralized purchasing department purchase fuel and divisional manager have no control over its purchasing then cost of fuel will be classified as uncontrollable cost.
2. If centralized HR department recruit all employees and settle their wages and divisional manager is not involved in the decision then labour cost will be classified as uncontrollable cost

3. If purchasing of machinery (for example computer or any specialized machinery) is done by purchasing department then its depreciation and insurance will not be controllable costs because both are directly related to cost of machinery which is uncontrollable by manager.

In all of above cases, we don't include costs into controllable cost and hence it is not reflected in controllable profits.

If division is a **profit centre** then performance of its divisional manager will be measured by using controllable profits, using following formula

Controllable profit % = controllable profits / sales revenue x 100
Expense to sales ration = controllable costs / sales revenue x 100

If division is **investment centre** then performance of its divisional manager will be measured by using controllable ROCE and controllable RI

Controllable ROCE = controllable profits / controllable capital employed x 100

Controllable RI	
Controllable profits	xx
Imputed interest (capital employed x required return)	(xx)
Controllable RI	XX

Note: controllable capital employed is capital employed less any machinery whose purchasing is not controllable by divisional manager

Traceable costs

Traceable costs are those that can be traced directly to the division and included in the performance appraisal of division.

4. if centralized purchasing department purchase fuel and divisional manager have no control over its purchasing then cost of fuel will be classified as uncontrollable cost but still it's a traceable cost because it relates to division and division is getting its benefit

5. if centralized HR department recruit all employees and settle their wages and divisional manager is not involved in the decision then labour cost will be classified as uncontrollable cost but still it's a traceable cost because it relates to division and division is getting its benefit

6. If purchasing of machinery (for example computer or any specialized machinery) is done by purchasing department then its depreciation and insurance will not be controllable costs because both are directly related to cost of machinery which is uncontrollable by manager but still it's a traceable cost because it relates to division and division is getting its benefit

If division is a **profit centre** then performance of division will be measured by using traceable profits, using following formula

Traceable profit % = Traceable profits / sales revenue x 100
Expense to sales ratio = Traceable costs / sales revenue x 100

If division is **investment centre** then performance of division will be measured by using Traceable ROCE and Traceable RI

Traceable ROCE = Traceable profits / Traceable capital employed x 100

Traceable RI	
Traceable profits	xx
Imputed interest (capital employed x required return)	(xx)
Traceable RI	XX

Note: Traceable capital employed is total capital employed of division

ALL CONTROLLABLE COSTS ARE ALSO TRACEABLE COSTS (because it relates to division) BUT ALL TRACEABLE COSTS ARE NOT CONTROLLABLE (because all costs which are related to a division not necessarily controllable by divisional manager)

Advantages of ROI

- Comparison: It can compare performance of different divisions having different amount of capital invested.
- It can be benchmarked against the performance of similar divisions so that company can have idea about return generated through capital investment
- A convenient method to understand

Disadvantages of ROI

- This may not be suitable method for many division facing different types of risks
- Misleading impression of improved performance as if investments Centre maintains the same annual profit and keeps same assets, then its ROI will continuously increase due to decrease in net book value of assets.
- Criticism is also on ROI arise from the valuation of assets used in the denominator
- If managers will be judged on the basis of ROI only then it will result in short term focus of managers

Advantages of RI

- It approves only those projects which earn above cost of capital of investment and eliminate any project earning lower profits
- More flexible as compared with ROI since different cost of capital can be used for investment centres facing different risks

Disadvantages of RI

- Since its an absolute value, it cannot be used for performance measurement of cost centres having different amount of investment
- Criticism is also on RI arise from the valuation of assets used in the calculation of imputed interest

Example of controllable and traceable ROCE and RI

A large multinational company uses return on investment (ROI) to measure the performance of its divisions. *Divisional managers have control over divisional revenues, and are given limited control over costs. Cash, land and buildings are managed by group head office*. Divisional managers have control over all other divisional assets and liabilities.
Head office has a required rate of return of 15% for all divisions. Details of the performance of the Neeskens Division are given below.

Neeskens division profit and loss account
Year ended 30 September 2006

	£000
Sales	7,500
Operating costs (other than depreciation)	(3,600)
Depreciation: land and buildings	(40)
Depreciation: plant and machinery	(300)
Apportioned head office cost	(1,500)
Divisional profit	2,060

Neeskens division balance sheet as at 30 September 2005 (extract)

	£000	**£000**
Fixed assets (net book value)		
Land and buildings		2,000
Plant and machinery		13,200
		15,200
Current assets		
Stock	1,200	
Debtors	1,400	
Cash	500	
	3,100	
Less creditors due within one year		
Trade creditors	(1,400)	
Net current assets		1,700
Net Assets		16,900

Required:
(a) Calculate both the controllable and traceable return on investment (based upon opening investment) for the Neeskens division for the year ended 30 September 2006.

Q2. The Biscuits division (Division B) and the Cakes division (Division C) are two divisions of a large, manufacturing company. Whilst both divisions operate in almost identical markets, each division operates separately as an investment centre. Each month, operating statements must be prepared by each division and these are used as a basis for performance measurement for the divisions. Last month, senior management decided to recharge head office costs to the divisions. Consequently, each division is now going to be required to deduct a share of head office costs in its operating statement before arriving at 'net profit', which is then used to calculate return on investment (ROI). Prior to this, ROI has been calculated using controllable profit only. The company's target ROI, however, remains unchanged at 20% per annum. For each of the last three months, Divisions B and C have maintained ROIs of 22% per annum and 23% per annum respectively, resulting in healthy bonuses being awarded to staff. The company has a cost of capital of 10%. The budgeted operating statement for the month of July is shown below:

	B	**C**
	$'000	**$'000**
Sales revenue	1,300	1,500
Less variable costs	(700)	(800)
Contribution	600	700
Less controllable fixed costs	(134)	(228)
Controllable profit	466	472
Less apportionment of head office costs	(155)	(180)
Net profit	311	292
Divisional net assets	$23·2m	$22·6m

Required

(a) Calculate the expected annualised Return on Investment (ROI) using the new method as preferred by senior management, based on the above budgeted operating statements, for each of the divisions. (2 marks)

(b) The divisional managing directors are unhappy about the results produced by your calculations in (a) and have heard that a performance measure called 'residual income' may provide more information.

Calculate the annualised residual income (RI) for each of the divisions, based on the net profit figures for the month of July. (3 marks)

(c) Discuss the expected performance of each of the two divisions, using both ROI and RI, and making any additional calculations deemed necessary. Conclude as to whether, in your opinion, the two divisions have performed well. (6 marks)

Sports Co is a large manufacturing company specialising in the manufacture of a wide range of sports clothing and equipment. The company has two divisions: Clothing (Division C) and Equipment (Division E). Each division operates with little intervention from Head Office and divisional managers have autonomy to make decisions about long-term investments.

Sports Co measures the performance of its divisions using return on investment (ROI), calculated using controllable profit and average divisional net assets. The target ROI for each of the divisions is 18%. If the divisions meet or exceed this target the divisional managers receive a bonus.

Last year, an investment which was expected to meet the target ROI was rejected by one of the divisional managers because it would have reduced the division's overall ROI. Consequently, Sports Co is considering the introduction of a new performance measure, residual income (RI), in order to discourage this dysfunctional behaviour in the future. Like ROI, this would be calculated using controllable profit and average divisional net assets.

The draft operating statement for the year, prepared by the company's trainee accountant, is shown below:

	Division C	Division E
	$'000	$'000
Sales revenue	3,800	8,400
Less variable costs	(1,400)	(3,030)
Contribution	2,400	5,370
Less fixed costs	(945)	(1,420)
Net profit	1,455	3,950
Opening divisional controllable net assets	13,000	24,000
Closing divisional controllable net assets	9,000	30,000

Notes:

(1) Included in the fixed costs are depreciation costs of $165,000 and $460,000 for Divisions C and E respectively. 30% of the depreciation costs in each division relates to assets controlled but not owned by Head Office. Division E invested $2m in plant and machinery at the beginning of the year, which is included in the net assets figures above, and uses the reducing balance method to depreciate assets. Division C, which uses the straight-line method, made no significant additions to non-current assets. It is the policy of both divisions to charge a full year's depreciation in the year of acquisition.

(2) Head Office recharges all of its costs to the two divisions. These have been included in the fixed costs and amount to $620,000 for Division C and $700,000 for Division E.

(3) Sports Co has a cost of capital of 12%.

Required:

(a) (i) Calculate the return on investment (ROI) for each of the two divisions of Sports Co. (6 marks)

(ii) Discuss the performance of the two divisions for the year, including the main reasons why their ROI results differ from each other. Explain the impact the difference in ROI could have on the behaviour of the manager of the worst performing division. (6 marks)

(b) (i) Calculate the residual income (RI) for each of the two divisions of Sports Co and briefly comment on the results of this performance measure. (4 marks)

(ii) Explain the advantages and disadvantages of using residual income (RI) to measure divisional performance. (4 marks)

(20 marks)