



# Accounting for Fixed Assets and Depreciation

## Chapter 9

# Capital & revenue transactions

Capital expenditure is money spent to either:

- Buy fixed asset, or
- Add to the value of an existing fixed asset

Revenue expenditure is expenditure which does not increase the value of fixed assets, but is for running the business on a day-to-day basis.

# Capital expenditure

1. Purchase cost of the fixed asset
2. Delivery cost
3. Installation costs
4. Inspection and testing before use
5. Legal costs in purchasing property and land
6. Architects fees for building plans and construction supervision
7. Demolition costs

<b>Transaction</b>	<b>Classification</b>
Purchase of computer system	Capital
Upgrading of computer system	Capital
Repairs to computer system	Revenue
Extension to restaurant premises	Capital
Painting premises for first time	Capital
Repainting of premises	Revenue
Purchase of machinery	Capital
Cost of transporting machinery	Capital
Light and heat bill	Revenue
Building work to existing premises of which one third involved repairs and two thirds involved building an extension to the property	1/3 Revenue 2/3 Capital
Cost of rebuilding warehouse wall that had fallen down	Revenue

# Capital v revenue - vehicles

<b>Transaction</b>	<b>Classification</b>
Purchase of van	Capital
Purchase of petrol for van	Revenue
Initial tax and insurance on van	Capital
Tax and insurance on van there after	Revenue
Spotlights	Capital
Company logo painted on van	Subjective
Replacement engine	Revenue

# Incorrect treatment of capital item

Should capital expenditure be incorrectly treated as revenue expenditure the effects on the final accounts are as follows

- In the profit and loss account expenses will be overstated and thus profit will be understated.
- In the balance sheet fixed assets and total assets will be understated as well as capital being understated. (remember if profit falls then capital falls)

# Incorrect treatment of revenue item

Should revenue expenditure be incorrectly treated as capital expenditure then the effects on the final accounts are as follows.

- In the profit and loss account expenses are understated and thus profit is overstated.
- In the balance sheet fixed assets are greater and capital is greater because profit has increased.

# Subjectivity of classifications

Distinguishing between capital and revenue expenditure can be a subjective process despite the guidelines laid out by the accounting and taxation bodies. Where this subjectivity exists there exists for management and owners of businesses opportunities to manipulate and create false and misleading accounting statements

It is important to remember that a company's eagerness to show strong profits (companies seeking investors) can help even further to blur the distinction between capital and revenue expenditure. The same applies when a company prefers to show its more impoverished side (submitting accounts for tax purposes).



# Nature of fixed assets

Those assets of significant value which:

- are of long life
- are to be used in the business
- are not bought with the intention of being re-sold

# Depreciation

- Fixed assets do not last forever
- Depreciation is the difference between the cost of buying and any proceeds on disposal
  - ▶ Cost of vehicle €80,000
  - ▶ Proceeds from sale €5,000
  - ▶ Depreciation is €75,000
- Depreciation is the part of the cost of the fixed asset consumed during its period of use.
- Depreciation is an expense and is charged to the profit and loss account

# Causes of depreciation

- Physical deterioration
- Economic factors
- The time factor
- Depletion

# Common methods of depreciation

- Straight line depreciation
- Reducing balance depreciation

# Straight line method

Estimates are made for the number of years of use and scrap or residual value

$$\frac{\text{Cost} - \text{estimated scrap value}}{\text{estimated number of years}}$$

Health and fitness equipment costing €90,000 with likely residual value of €2,000 and usage of 8 years would be depreciated by:

$$\frac{90,000 - 2,000}{8} = \text{€}11,000 \text{ per year}$$

# Straight line depreciation

- Ensures that depreciation is the same each year
- Is popular due to its simplicity.
- In some questions a specified percentage may be applied.
- If an asset is to be depreciated over four years, you could be told to depreciate by 25 per cent per annum straight line.
- If an asset is to be depreciated over five years, you could be told to depreciate by 20 per cent per annum straight line.
- The percentage approach will give you the same result as the formula approach when there is no residual value.

# Reducing balance method of calculating depreciation

Using this method the depreciation charge is a fixed percentage on the cost in the first year and on the reduced balance in later years.

A computer system costing €10,000 three years ago is to be depreciated at a rate of 40 per cent reducing balance.

<b>Year 1</b>	<b>Original cost</b>	<b>€10,000</b>
	<b>Depreciation charge to P &amp; L for the first year</b> 40% of €10,000 the original cost	<b><u>€ 4,000</u></b>
	<b>Net book value Balance sheet end of year 1</b>	<b>€ 6,000</b>
<b>Year 2</b>	<b>Depreciation charge to P &amp; L for the second year</b> 40% of €6,000 the net book value at end year 1	<b><u>€ 2,400</u></b>
	<b>Net Book value Balance Sheet end of year 2</b>	<b>€ 3,600</b>
<b>Year 3</b>	<b>Depreciation charge to P &amp; L for the third year</b> 40% of €3,600 the net book value at end of year 2	<b><u>€ 1,440</u></b>
	<b>Net Book value balance sheet end of year 3</b>	<b>€ 2,160</b>

Depreciation amounts  
to €7,840  
(4,000+2400+1440)

# The key differences

## **Straight line**

- Calculated on original cost spent
- Depreciation amount is the same amount each year

## **Reducing balance**

- Calculated on the net book value
- Depreciation amount is different each year (reduces)



# Depreciation

The purpose of depreciation is to spread the total cost of an asset over the periods in which it is available to be used.

The method chosen should be that which allocates the cost to each period in accordance with the amount of benefit gained from the use of the asset in that period.

# Accounting for depreciation

Double entry is...

	<b>Account</b>	<b>Amount</b>
<b>DEBIT</b>	Profit and Loss Account	The annual depreciation charge
<b>CREDIT</b>	The Provision for Depreciation Account	The annual depreciation charge

Balance Sheet appears as...

<b>Historic Cost</b>	<i>less</i> <b>Accumulated Depreciation</b>	<i>equals</i> <b>Net Book Value</b>
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# Steps in accounting for depreciation

1. Enter opening balances where necessary and update the fixed asset account with any transactions that have occurred during the period.
2. Balance the fixed asset account(s)
3. Calculate the annual depreciation and account for it by
  - ▶ Crediting the depreciation account
  - ▶ Debiting the profit & loss account
4. Balance the depreciation account(s)
5. If required show balance sheet extract by taking the closing balances from the fixed asset and the depreciation accounts.

# Accounting for depreciation

Returning to the health and fitness equipment which was purchased for €90,000. It is estimated that the residual value of the equipment at the end of 8 years is a scrap value of €2,000. The annual depreciation amounts to €11,000.

Show the accounting entries and the affect on the final accounts for the first three years.

# Year 1

Equipment Account			
Yr 1	Bank a/c	€90,000	
Bank Account			
			Yr 1    Equipment a/c                    €90,000
Profit & Loss Account			
Yr 1	Provision depreciation a/c	€11,000	
Provision for Equipment Account			
			Yr 1    P&L account                    €11,000

The final accounts of year 1 would appear as follows:

### P&L extract for first year

<i>less</i> Expenses	
Provision depreciation equipment	11,000

### Balance Sheet as at end year 1

<i>Fixed Assets</i>	<i>Cost</i>	<i>Depreciation</i>	<i>NBV</i>
Equipment	90,000	11,000	79,000

# Year 2

Equipment Account					
Yr 1	Bank a/c	90,000	Yr 1	Bal c/d	90,000
Yr 2	Bal b/d	90,000	Yr 2	Bal c/d	90,000
Yr 3	Bal b/d	90,000			

  

Profit & Loss Account					
Yr 2	Provision depreciation a/c	11,000			

  

Provision for Equipment Account					
Yr 1	Bal c/d	11,000	Yr 1	P&L account	11,000
			Yr 2	Bal b/d	11,000
Yr 2	Bal c/d	22,000	Yr 2	P&L a/c	11,000
		22,000			22,000
			Yr 3	Bal b/d	22,000

The final accounts of year 2 would appear as follows:

P&L extract for second year	
less Expenses	
Provision depreciation equipment	11,000

Balance Sheet as at end year 2			
Fixed Assets	Cost	Deprec.	NBV
Equipment	90,000	22,000	68,000

11,000 year 1 plus  
11,000 year 2

# Year 3

DR		Equipment Account		CR	
Yr 1	Bank a/c	90,000	Yr 1	Bal c/d	90,000
Yr 2	Bal b/d	90,000	Yr 2	Bal c/d	90,000
Yr 3	Bal b/d	90,000	Yr 3	Bal c/d	90,000
Yr 4	Bal b/d	90,000			

DR		Profit & Loss Account		CR	
Yr 3	Provision dep a/c	11,000			

DR		Provision for Equipment Account		CR	
Yr 1	Bal c/d	11,000	Yr 1	P&L account	11,000
			Yr 2	Bal b/d	11,000
Yr 2	Bal c/d	22,000	Yr 2	P&L a/c	11,000
		22,000			22,000
			Yr 3	Bal b/d	22,000
Yr 3	Bal c/d	33,000	Yr 3	P&L a/c	11,000
		33,000			33,000
			Yr 4	Bal b/d	33,000

The final accounts of year 3 would appear as follows:

P&L extract for third year	
<i>less Expenses</i>	
Provision depreciation equipment	11,000

Balance Sheet as at end year 3			
<i>Fixed Assets</i>	<i>Cost</i>	<i>Deprec.</i>	<i>NBV</i>
Equipment	90,000	33,000	57,000

# Depreciation policy

- ① To ignore dates during the year in which the assets were bought or sold, merely calculating a full year's depreciation on the assets in use at the end of the year. Assets bought get full years depreciation while assets sold get no depreciation for that period

OR

- ② Provision for deprecation made on the basis of one month's ownership, one month's provision for depreciation.



# Tackling depreciation questions

## Find key information

### ■ Depreciation method

- ▶ Straight line
- ▶ Reducing balance

### ■ Depreciation policy

- ▶ Value of assets at end of year
- ▶ 1 months ownership = 1 months depreciation

# Disposal of a fixed asset

- If an asset is sold there may be a difference between the net book value of the asset and the proceeds of the sale.
- Difference due to depreciation being an estimate.
- There will be a loss or profit if the amount provided for as depreciation is different from the actual depreciation that occurred.
- A disposal account is opened to account for the transactions.

# Steps in accounting for a disposal

1. Transfer the original cost from the fixed asset account to the disposal account
  - ▶ Credit the fixed asset account
  - ▶ Debit the disposal account
2. Transfer the amount depreciated on the asset sold from the depreciation account to the disposal account
  - ▶ Debit the depreciation account
  - ▶ Credit the disposal account
3. Account for the proceeds of the sale
  - ▶ Credit the disposal account with the proceeds from the sale
4. Find the difference in the disposal account and transfer it to the profit & loss account

# Example

Alpha Hotels maintains its furniture assets at cost, depreciating at a rate of 10% per annum using the straight line method. The company has a policy of depreciating assets in existence at the year-end. The following is extracted from the balance sheet at 31 December 2003.

	Cost	Accumulated depreciation	Net book value
Furniture	€200,000	€122,000	€78,000

During the year the business purchased new furniture for €30,000 on 5 May. Furniture, originally costing €18,000 when purchased in March 2000, was sold for €8,000 on 31 May.

# Approach

- It must be noted that the hotel's policy is to depreciate based on assets in existence at the year-end. This is the same policy as giving a full year's depreciation in the year of purchase and none in the year of sale.
- In this example the hotel has already acquired furniture and equipment costing €200,000 prior to 2004. During 2004 year the hotel buys new furniture and sold some old furniture.
- It is important to note that assets sold are taken out of the asset account at original cost as they are recorded at that value in the account.

Furniture Account					
1/1/04	Balance b/d	200,000	31/5/04	Disposal a/c	18,000
5/5/04	Bank a/c	30,000	31/12/04	Balance c/d	212,000
		<u>230,000</u>			<u>230,000</u>
1/1/05	Balance b/d	212,000			

Provision for Depreciation Account					
31/5/04	Disposal a/c	7,200	1/1/04	Balance c/d	122,000
	<i>(18,000 x 10% x 4 years)</i>		31/12/04	P&L a/c	21,200
31/12/04	Balance c/d	136,000		<i>(212,000 x 10%)</i>	
		<u>143,200</u>			<u>143,200</u>
			1/1/05	Balance b/d	136,000

Furniture Disposal Account					
31/5/04	Furniture	18,000	31/5/04	Provision depreciation	7,200
			31/5/04	Bank a/c	8,000
			31/5/04	P&L a/c (loss)	2,800
		<u>18,000</u>			<u>18,000</u>

## Extracts from the profit and loss account

<i>Expenses</i>	
Provision for furniture depreciation	21,200
Loss on sale of furniture	2,800

## Extracts from the balance sheet

	Cost	Accumulated Depreciation	NBV
<i>Fixed Assets</i>			
Furniture	212,000	136,000	76,000

# Depreciation policy affects profit

The depreciation policy of a business directly affects the level of net profit.

For example should a company decide to depreciate its assets worth €2,500,000 over ten years on a straight line basis then it would charge depreciation in the profit and loss account of €250,000.

Should the company decide that the life of its assets is closer to twenty years then the amount of depreciation charged in the profit and loss account will amount to €125,000. Thus profit would be €125,000 greater due to the change in estimate of the life of the asset.

Estimating the life of an asset can be a subjective process.