

**CHAPTER 9**  
**TAXATION**

**Quick test**

**Question 1**

- (a) Tax base = £60,000  
Deductible temporary difference of £20,000 (60,000 – 40,000) giving rise to a deferred tax asset.
- (b) Tax base = £120,000 (120,000 – nil)  
Tax base = carrying amount, so no deferred tax implications.
- (c) Tax base = £nil (10,000 – 10,000)  
Carrying amount = £(10,000) – negative because a liability  
Deductible temporary difference of £10,000 [(10,000) < 0] giving rise to a deferred tax asset.
- (d) Tax base = £50,000  
Taxable temporary difference of £40,000 (90,000 – 50,000) giving rise to a deferred tax liability.
- (e) Tax base = £nil (6,000 – 6,000)  
Carrying amount = £(6,000) – negative because a liability  
Deductible temporary difference of £6,000 [(6,000) < 0] giving rise to a deferred tax asset.

**Question 2**

Assume a tax rate of 25%

Annual book depreciation = £200,000/8 = £25,000

<b>Year</b>	<b>Carrying amount</b>	<b>Tax base</b>	<b>Taxable temporary difference</b>	<b>Deductible temporary difference</b>	<b>Deferred tax balance (SoFP)</b>	<b>Statement of profit or loss transfer</b>
	£	£	£	£	£	£
20X2	175,000	160,000	15,000		3,750 Cr	3,750 Dr
20X3	150,000	128,000	22,000		5,500 Cr	1,750 Dr
20X4	125,000	102,400	22,600		5,650 Cr	150 Dr
20X5	100,000	81,920	18,080		4,520 Cr	1,130 Cr
20X6	75,000	65,536	9,464		2,366 Cr	2,154 Cr
20X7	50,000	52,429		2,429	607 Dr	2,973 Cr
20X8	25,000	41,943		16,943	4,236 Dr	3,629 Cr
20X9	0	33,554		33,554	8,389 Dr	4,153 Cr

Note – the balance on the deferred tax account at the end of each year is 25% (the tax rate) of the temporary/deductible difference outstanding at the end of the year. In years 20X2 – 20X6 this is a deferred tax liability. In years 20X7 – 20X9 this becomes a deferred tax asset.

The accounting entry each year transfers the difference in the deferred tax balance at each successive statement of financial position date to the statement of profit or loss.

e.g. Accounting entry at **31 December 20X2** is:

		£	£
Dr	Statement of profit or loss tax expense	3,750	
			£
Cr	Deferred tax (SoFP)		3,750

Accounting entry at **31 December 20X3** is:

		£	£
Dr	Statement of profit or loss tax expense	1,750	
			£
Cr	Deferred tax (SoFP)		1,750

Accounting entry at **31 December 20X5** is:

		£	£
Dr	Deferred tax (SoFP)	1,130	
			£
Cr	Statement of profit or loss tax expense		1,130

etc.

### **Develop your understanding**

#### **Question 3**

Taxable temporary difference = £1.4 million

Deferred tax liability at 31 March 20X3 = 25% x 1.4m = £350,000

which is an increase of 350,000 – 280,000 = £70,000 over the previous year's deferred tax liability

#### **Statement of profit or loss tax expense for the year ended 31 March 20X3**

	£
Current tax on current year profits	260,000
Under-provision from previous year	55,000
Increase in deferred tax liability	<u>70,000</u>
Total income tax	<u>385,000</u>

#### **Statement of financial position at 31 March 20X3**

	£
Current tax liability	260,000
Non-current deferred tax liability	350,000

**Question 4**

	20X1	20X2	20X3	20X4	20X5	20X6	20X7
	£	£	£	£	£	£	£
Accounting profit	80,000	80,000	80,000	80,000	80,000	80,000	80,000
Accounting depreciation	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Tax depreciation	(12,000)	(9,000)	(7,000)	(5,000)	(4,000)	(3,000)	(2,000)
Taxable profit	74,000	77,000	79,000	81,000	82,000	83,000	84,000
<b>Tax payable @ 30%</b>	<b>22,200</b>	<b>23,100</b>	<b>23,700</b>	<b>24,300</b>	<b>24,600</b>	<b>24,900</b>	<b>25,200</b>

Net book value b/f	48,000	42,000	36,000	30,000	24,000	18,000	12,000
Depreciation	6,000	6,000	6,000	6,000	6,000	6,000	6,000
<b>Net book value c/f</b>	<b>42,000</b>	<b>36,000</b>	<b>30,000</b>	<b>24,000</b>	<b>18,000</b>	<b>12,000</b>	<b>6,000</b>
Tax base b/f	48,000	36,000	27,000	20,000	15,000	11,000	8,000
Tax depreciation	12,000	9,000	7,000	5,000	4,000	3,000	2,000
<b>Tax base c/f</b>	<b>36,000</b>	<b>27,000</b>	<b>20,000</b>	<b>15,000</b>	<b>11,000</b>	<b>8,000</b>	<b>6,000</b>
Temporary difference	6,000	9,000	10,000	9,000	7,000	4,000	0
<b>Deferred tax provision in statement of financial position @ 30%</b>	<b>1,800</b>	<b>2,700</b>	<b>3,000</b>	<b>2,700</b>	<b>2,100</b>	<b>1,200</b>	<b>0</b>

The statement of profit or loss will show the following:

	20X1	20X2	20X3	20X4	20X5	20X6	20X7
	£	£	£	£	£	£	£
Profit before tax	80,000	80,000	80,000	80,000	80,000	80,000	80,000
<b>Current tax</b>	<b>22,200</b>	<b>23,100</b>	<b>23,700</b>	<b>24,300</b>	<b>24,600</b>	<b>24,900</b>	<b>25,200</b>
<b>Deferred tax*</b>	<b>1,800</b>	<b>900</b>	<b>300</b>	<b>(300)</b>	<b>(600)</b>	<b>(900)</b>	<b>(1,200)</b>
Profit after tax	56,000	56,000	56,000	56,000	56,000	56,000	56,000

\*This is the movement in the statement of financial position provision for deferred tax.

Note how the profit after tax is now the same in each of the years – accounting for deferred tax has had the effect of “income smoothing”.

### **Question 5**

Under IFRS, an asset or liability is recognised if it meets the definition of such in the *Conceptual Framework* document. The definitions refer to the right to receive or the obligation to transfer economic benefits as a result of a past event.

The accounting model used to account for deferred tax, referred to as “the balance sheet liability method” by Kingfisher plc in its accounting policies, is that of IAS 12 *Income Taxes*, and is based on the premise that the tax effects of transactions should be recognised in the same period as the transactions themselves. The approach is based on the assumption that an asset will ultimately be recovered or realised by a cash inflow which will enter into the determination of future taxable profits. Thus the tax payable on the realisation of the asset should be provided for. It is argued that it would be inconsistent to represent that the asset can be recovered at its statement of financial position value whilst ignoring the tax consequences.

This tax is referred to as deferred tax, and a deferred tax liability meets the definition of a liability in the framework – i.e. a past event has given rise to an obligation in the form of increased taxation which will be payable in the future.

Similarly, for a liability carried in the statement of financial position, there is an implicit assumption that the liability will ultimately be settled by a cash outflow. The outflow will enter into the determination of tax profits, and any tax deduction allowable will effectively be an asset. It would be inconsistent to recognise the liability whilst ignoring the tax consequences of its recognition. A deferred tax asset arises and similarly meets the *Conceptual Framework* definition of an asset.

In order to determine the amount of deferred tax, the approach taken is based on these temporary differences that arise between the carrying amount of assets and liabilities in the statement of financial position and their corresponding tax values (referred to in IAS 12 as tax bases). The tax base is essentially the tax consequence that will occur when the carrying amount of the asset or liability is recovered or settled.

### **Question 6**

The IASB’s approach to deferred tax in its standard, IAS 12 *Income Taxes*, is that of the liability method. Under IFRS an asset or liability is recognised if it meets the definitions in the *Conceptual Framework*, which refer to the right to receive or the obligation to transfer economic benefits as a result of a past event. The model used to account for deferred tax is based on the idea that the tax effects of transactions should be recognised in the same period as the transactions themselves.

It is based on the assumption that an asset will ultimately be recovered or realised by a cash inflow that will enter into the determination of future profits. Tax payable on the realisation of the asset should be provided for because it would be inconsistent to show that the asset can be recovered at its statement of financial position value while ignoring

the tax consequences. From the same logic, it would be inconsistent to show a liability while ignoring the tax consequences of its recognition.

A deferred tax liability or asset is calculated by determining the differences between the carrying amount of assets and liabilities in the statement of financial position and their corresponding tax bases. These differences are multiplied by the tax rates that are expected to apply when the liability is settled or the asset is realised. Usually this is the tax rate that has been enacted or is known will be enacted at the statement of financial position date. Therefore if there changes in these temporary differences from one year to the next and/or changes in enacted tax rates, the deferred tax balances will change. The changes will be adjusted through the statement of comprehensive income.

The approach is consistent with the IASB's emphasis on the statement of financial position definitions and balances, with differences in values of some assets and liabilities from one year to the next passing through the statement of comprehensive income.

The impact of this, as seen in Worked examples 9.3 and 9.4 in the textbook, is to normalise the tax rate that appears to have been used to calculate the income tax expense in the statement of profit or loss. In other words the income tax expense will be closer to the book profit before tax multiplied by the enacted tax rate, and thus post-tax profits will be "smoothed". It could be argued that this makes the tax charge and profits more useful and understandable. Users may find it difficult to comprehend large distortions in post-tax profits based on other methods of calculating deferred tax such as a partial provision method.

Conceptually there are other criticisms to the liability approach to deferred tax. The principal issue in accounting for deferred tax is how to account for the future tax consequences of the future recovery or settlement of the carrying amounts of the assets and liabilities. The approach used by the IASB means that only one of the liabilities, i.e. tax, is being provided for, and no other costs which will be incurred, such as overhead costs.

Another argument is that in reality tax is paid in accordance with tax legislation when it becomes a legal liability. Therefore, deferred tax is neither asset nor liability until this point.

**Take it further**

**Question 7**

	<i>SoFP carrying amount</i>	<i>Tax base</i>	<i>Temporary difference</i>
	£000	£000	£000
Property, plant and equipment	10,000	2,400	7,600
Other intangible assets	5,000	0	5,000
Investments	10,500	9,000	1,500
8% long-term borrowings	9,600	10,000	400
Pension liabilities	4,520	5,000	<u>480</u>
			<u>14,980</u>
Trade receivables	7,000	7,500	(500)
Other receivables	4,600	5,000	(400)
Trade and other payables	5,000	4,000	<u>(1,000)</u>
			<u>(1,900)</u>
			£000
Deferred tax liability			
= Taxable temporary difference of £14,980 @ 30%			4,494
Deferred tax asset			
= Deductible temporary difference of £(1,900) @ 30%			<u>(570)</u>
Net deferred tax liability			3,924
Less existing liability			<u>(3,600)</u>
Increase in deferred tax liability			<u>324</u>

**Notes**

- (i) The investments are valued at fair value with the increase over cost of £1.5 million credited to equity. Therefore, the related deferred tax of 30% x £1.5 million = £450,000 is debited to equity.
- (ii) As the development costs have been allowed for tax already, it will have a tax base of zero.
- (iii) The accrual for compensation will not be allowed until a later period and, therefore, will reduce the tax base relating to trade and other payables.
- (iv) The assets and liabilities whose tax bases and carrying amounts are same are not included in the above calculations.

Adjustment required at 30 June 20X6:

	£000	£000
Dr   Equity	450	
Cr   Deferred tax liability		324
Cr   Statement of profit or loss tax charge		126

**Question 8**

**Current tax expense**

	20X5	20X6
	£000	£000
Accounting profit	8,775	8,740
<i>Add back:</i>		
Depreciation for accounting purposes	4,800	8,250
Charitable donations	500	350
Fine for environmental pollution	700	–
Product development costs	250	250
Healthcare benefits	2,000	1,000
	<u>17,025</u>	<u>18,590</u>
<i>Deduct:</i>		
Depreciation for tax purposes	(8,100)	(11,850)
Taxable profit	<u>8,925</u>	<u>6,740</u>
Current tax expense at 40%	<u>3,570</u>	
Current tax expense at 35%		<u>2,359</u>

**Tax base of property, plant and equipment**

	Building	Motor vehicles	Total
	£000	£000	£000
<i>Cost</i>			
Balance at 31/12/X4	50,000	10,000	60,000
Additions 20X5	6,000	–	6,000
Balance at 31/12/X5	56,000	10,000	66,000
Additions 20X6	–	15,000	15,000
Balance at 31/12/X6	<u>56,000</u>	<u>25,000</u>	<u>81,000</u>
<i>Accumulated tax depreciation</i>	@ 10%	@ 25%	
Balance at 31/12/X4	40,000	5,000	45,000
Depreciation 20X5	5,600	2,500	8,100
Balance at 31/12/X5	45,600	7,500	53,100
Depreciation 20X6	5,600	6,250	11,850
Balance at 31/12/X6	<u>51,200</u>	<u>13,750</u>	<u>64,950</u>

*Tax base*

31/12/X4	10,000	5,000	15,000
31/12/X5	10,400	2,500	12,900
31/12/X6	4,800	11,250	16,050

**Deferred tax assets, liabilities and expense**

	Carrying amount £000	Tax base £000	Temporary differences £000
<b>At 31/12/X4</b>			
Product development costs	500	–	500
Property, plant & equipment	36,000	15,000	21,000
<b>ASSETS</b>	<b>36,500</b>	<b>15,000</b>	<b>21,500</b>
Fines payable	–	–	–
Liability for healthcare benefits	–	–	–
<b>LIABILITIES</b>	<b>--</b>	<b>--</b>	<b>--</b>
Revaluation surplus	–	–	–
<b>LIABILITIES/EQUITY</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>TEMPORARY DIFFERENCES</b>			<b>21,500</b>
Deferred tax liability	21,500 @ 40%		8,600
Deferred tax asset	–	–	–
<b>Net deferred tax liability</b>			<b>8,600</b>
<b>At 31/12/X5</b>			
Product development costs	250	–	250
Property, plant & equipment	37,200	12,900	24,300
<b>ASSETS</b>	<b>37,450</b>	<b>12,900</b>	<b>24,550</b>
Fines payable	700	700	–
Liability for healthcare benefits	2,000	–	(2,000)
<b>LIABILITIES</b>	<b>2,700</b>	<b>700</b>	<b>(2,000)</b>
Revaluation surplus	–	–	–
<b>LIABILITIES/EQUITY</b>	<b>2,700</b>	<b>700</b>	<b>(2,000)</b>
<b>TEMPORARY DIFFERENCES</b>			<b>22,550</b>



Deferred tax liability	£24,550 @ 40%	9,820
Deferred tax asset	£2,000 @ 40%	<u>(800)</u>
Net deferred tax liability		9,020
Less: Opening deferred tax liability		<u>(8,600)</u>
Deferred tax expense (income)		<u>420</u>

**At 31/12/X6**

Product development costs	–	–	–
Property, plant & equipment	75,750	16,050	59,700
<b>ASSETS</b>	<u>75,750</u>	<u>16,050</u>	<u>59,700</u>
Fines payable	700	700	–
Liability for healthcare benefits	3,000	–	(3,000)
<b>LIABILITIES</b>	<u>3,700</u>	<u>700</u>	<u>(3,000)</u>
Revaluation surplus	31,800	–	–
<b>LIABILITIES/EQUITY</b>	<u>32,500</u>	<u>700</u>	<u>(3,000)</u>
<b>TEMPORARY DIFFERENCES</b>			<u>56,700</u>

Deferred tax liability	£59,700 @ 35%	20,895
Deferred tax asset	£3,000 @ 35%	<u>(1,050)</u>
Net deferred tax liability		19,845
Less: Opening deferred tax liability		(9,020)
Adjustment to opening deferred tax liability resulting from reduction in tax rate	£22,550 @ 5%	1,127
Deferred tax attributable to revaluation surplus	£31,800 @ 35%	(11,130)
Deferred tax expense (income)		<u>822</u>

**Disclosures**

The amounts to be disclosed in accordance with IAS 12 are as follows:

**Major components of tax expense (income)**

	20X5	20X6
	£000	£000
Current tax expense	3,570	2,359
Deferred tax expense relating to the origination and reversal of temporary differences	420	822
Deferred tax expense (income) resulting from reduction in tax rate	–	(1,127)
<b>Tax expense</b>	<u>3,990</u>	<u>2,054</u>

**Income tax relating to the components of other comprehensive income**

Deferred tax relating to revaluation of building                      – (11,130)

In addition, in 20X6, deferred tax of £557,000\* was transferred from retained earnings to the revaluation surplus. This relates to the difference between the actual depreciation on the building and equivalent depreciation based on the cost of the building.

\* The disclosure is relevant if Sapper has transferred the excess depreciation arising on the revalued building over depreciation based on the cost of the building from the revaluation surplus to retained earnings (see chapter 10):

		£000
Depreciation on revalued building	65,000 / 20	3,250
Depreciation based on cost	(56,000 – 22,800) / 20	<u>1,660</u>
		<u>1,590</u>
Deferred tax effect	1,590 @ 35%	<u>557</u>