

FINANCIAL ACCOUNTING AND TAX PRINCIPLES

In the first of two articles about accounting for taxation under IAS12, **Teresa Marsh** explains what deferred tax is and how to deal with it.

It is important to understand how to

account for taxation, because it has an impact on the income statement (in the tax expense account) and the balance sheet (in the income tax and deferred tax accounts). The tax expense on the income statement has three components: the tax charge for the period; any under- or over-provision of tax for the previous period; and the increase or decrease in the deferred tax provision. Let's focus here on the third component.

Before addressing how to account for deferred tax, you should know what it is and how it arises. The tax charge is calculated on a company's taxable profit, not its accounting profit. These two figures are rarely the same, as there will be some expenses included in arriving at the accounting profit that are not allowed as a deduction from taxable profit. In the UK, for example, entertaining customers is not an allowable tax deduction against profit, so that amount is added back to the accounting profit to arrive at the taxable profit. Differences that are never allowable are known as permanent differences. But some aren't permanent, because they are allowed as a deduction against taxable profit in a different period from which they are deducted from the accounting profit. These are called temporary differences, as they will reverse in future and give rise to deferred tax. The most common example is depreciation: a temporary difference arises because the rate of depreciation given for accounting purposes is usually slower than the rate of depreciation given for tax purposes.

1 Calculation of X's tax charge

	Year 1 (£)	Year 2 (£)	Year 3 (£)	Year 4 (£)
Accounting profits	500,000	500,000	500,000	500,000
Add back: accounting depreciation	25,000	25,000	25,000	25,000
Less: tax depreciation	(100,000)	0	0	0
Taxable profits	425,000	525,000	525,000	525,000
Income tax @ 30%	127,500	157,500	157,500	157,500

2 X's initial income statement

	Year 1 (£)	Year 2 (£)	Year 3 (£)	Year 4 (£)
Profit before tax	500,000	500,000	500,000	500,000
Income tax expense	(127,500)	(157,500)	(157,500)	(157,500)
Profit for the period	372,500	342,500	342,500	342,500

3 X's income statement accounting for deferred tax

	Year 1 (£)	Year 2 (£)	Year 3 (£)	Year 4 (£)
Profit before tax	500,000	500,000	500,000	500,000
Tax expense: tax charge	(127,500)	(157,500)	(157,500)	(157,500)
deferred tax	(22,500)	7,500	7,500	7,500
Profit after tax	(350,000)	350,000	350,000	350,500

The following example illustrates why we account for deferred tax and shows its effect on the income statement. Imagine that firm X has accounting profits of £500,000 in each of its first four years. The figure of £500,000 has been arrived at after charging depreciation of £25,000 a year on a non-current asset bought for £100,000 on the first day of X's first year. The equivalent tax depreciation is 100 per cent – ie, £100,000 given in year one. The rate of income tax is 30 per cent.

The tax charge, based on taxable profits, is derived in table 1. The accounting depreciation has been added back, because it's not an allowable expense for tax purposes. Tax depreciation is given as a deduction instead.

Based on what we've done so far, the income statement would look like table 2. From it we can see that profit before tax is

the same for all years, yet the year-one profit for the period is higher than the equivalent figure in each of the subsequent years. This is because the tax expense varies, as it has been calculated on taxable profits, not accounting profits. The taxable profit in year one is less than the accounting profit, resulting in a lower tax charge. Tax has been deferred until the future. The taxable profits in years two to four are higher than the accounting profits, resulting in a higher tax charge.

Accounting for deferred tax is an application of the accruals concept – matching the tax expense with the accounting profit to which it relates. In this case, £75,000 of extra depreciation has been deducted in arriving at taxable profits in X's first year. The accounting depreciation figure in year one is £25,000, yet £100,000 of tax depreciation has been given. Applying the tax rate to the difference, we are looking at £22,500 (£75,000 x 0.3) of tax that has been deferred equally until years two to four, which we need to reallocate to year one. So the income statement will look like table 3.

IAS12 uses a balance sheet approach to calculate deferred tax. Some students see the phrase "deferred tax" and freeze. But, if you can comfortably account for provisions for impaired debts, there's no reason why

4 The initial three steps of the deferred tax calculation for X's non-current asset

Year	Cost (£)	Total depreciation (£)	CV (£)	Cost (£)	Total tax depreciation (£)	TB (£)	CV – TB (£)	@ 30% (£)
1	100,000	25,000	75,000	100,000	100,000	0	75,000	22,500
2	100,000	50,000	50,000	100,000	100,000	0	50,000	15,000
3	100,000	75,000	25,000	100,000	100,000	0	25,000	7,500
4	100,000	100,000	0	100,000	100,000	0	0	0

deferred tax should cause you any problems, as the double entry is the same in principle. In the first year that a deferred tax provision is created, the whole amount is posted. In all later years, the rise or fall in the provision is posted. There are only two accounts to think about: the deferred tax account on the balance sheet and the tax expense account on the income statement. You must also be able to calculate the amounts to post. There are five steps to follow here:

- Calculate the carrying value (CV) of the asset as per the financial statements and the equivalent tax figure, which is called the tax base (TB). For non-current assets this would be the cost less accumulated depreciation and the cost less the accumulated tax depreciation respectively.
- Find the difference between CV and TB.
- Apply the income tax rate to the difference. This gives you the closing balance on the deferred tax account.
- If this is the first year of accounting for deferred tax, post the whole amount calculated in the previous step. If not, post the difference between what is already recorded in the deferred tax account and what was calculated in the previous step.
- If an exam question asks you to state the journals required rather than write up the ledger accounts, ensure that you indicate clearly whether you are debiting or crediting the respective ledger accounts.

Some questions may provide some of the calculations for you. For example, you may be given the difference between CV and TB, which means you can start at step three.

Let's look again at firm X. A non-current asset is acquired for £100,000 on the first day of its first year and depreciated at 25 per cent (straight line). The equivalent tax depreciation is 100 per cent in year one. The income tax rate is 30 per cent.

Table 4 incorporates the first three steps of the calculation. The figures in its right-hand column represent the closing balance in the deferred tax account on the balance sheet. The journals to post are shown in table 5.

5 The fourth and fifth steps of the calculation

Journals	Dr (£)	Cr (£)
Tax expense (income statement)	22,500	
Deferred tax account (balance sheet)		22,500
Creating the deferred tax at end of Y1 (note that the full amount is posted)		
Deferred tax account (balance sheet)	7,500	
Tax expense (income statement)		7,500
The decrease in the provision at end of Y2 (only the movement is posted: £22,500 - £15,000)		
Deferred tax account (balance sheet)	7,500	
Tax expense (income statement)		7,500
The decrease in the provision at end of Y3 (£15,000 - £7,500)		
Deferred tax account (balance sheet)	7,500	
Tax expense (income statement)		7,500
The decrease in the provision at end of Y4 (£7,500 - £0)		

6 X's deferred tax account

Year	£	Year	£		
1	Bal c/d	22,500	1	Tax expense	22,500
2	Tax expense	7,500	2	Bal b/d	22,500
2	Bal c/d	15,000			
		22,500			22,500
3	Tax expense	7,500	3	Bal b/d	15,000
3	Bal c/d	7,500			
		15,000			15,000
4	Tax expense	7,500	4	Bal b/d	7,500

The figures posted to the tax expense account in the income statement are the same as before. Sometimes it is easier to visualise the position by looking at the ledger account (see table 6). The closing balances highlighted in orange at the end of each year agree with those in table 4. There is no balance on the account at the end of year four, which is what we expected, as at that point the temporary difference has reversed.

The revaluation of a non-current asset could also give rise to deferred tax. In a revaluation, the carrying value of the asset will change (upwards for a gain or downwards for a loss/impairment). But the

tax base of the asset may remain unchanged until it is actually sold. Or, put another way, any gain arising would not be taxable until the asset is sold (or tax relief given if we are dealing with a loss/impairment). The treatment depends upon the rules of the particular tax jurisdiction concerned. Assuming that there is no adjustment to the tax base, deferred tax will arise because we now have a difference between CV and TB. In essence, we would follow the same steps as before to calculate the figure.

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