### STATUTORY BOARD FINANCIAL REPORTING STANDARD

**SB-FRS 12** 

# **Income Taxes**Illustrative Examples

#### Illustrative examples

These illustrative examples accompany, but are not part of, SB-FRS 12.

#### **Examples of temporary differences**

## A. Examples of circumstances that give rise to taxable temporary differences

All taxable temporary differences give rise to a deferred tax liability.

#### Transactions that affect profit or loss

- 1 Interest revenue is received in arrears and is included in accounting profit on a time apportionment basis but is included in taxable profit on a cash basis.
- Revenue from the sale of goods is included in accounting profit when goods are delivered but is included in taxable profit when cash is collected. (*note:* as explained in B3 below, there is also a **deductible** temporary difference associated with any related inventory).
- 3 Depreciation of an asset is accelerated for tax purposes.
- 4 Development costs have been capitalised and will be amortised to the statement of comprehensive income but were deducted in determining taxable profit in the period in which they were incurred.
- 5 Prepaid expenses have already been deducted on a cash basis in determining the taxable profit of the current or previous periods.

#### Transactions that affect the statement of financial position

- Depreciation of an asset is not deductible for tax purposes and no deduction will be available for tax purposes when the asset is sold or scrapped. (note: paragraph 15(b) of the Standard prohibits recognition of the resulting deferred tax liability unless the asset was acquired in a business combination, see also paragraph 22 of the Standard.)
- A borrower records a loan at the proceeds received (which equal the amount due at maturity), less transaction costs. Subsequently, the carrying amount of the loan is increased by amortisation of the transaction costs to accounting profit. The transaction costs were deducted for tax purposes in the period when the loan was first recognised. (notes: (1) the taxable temporary difference is the amount of transaction costs already deducted in determining the taxable profit of current or prior periods, less the cumulative amount amortised to accounting profit; and (2) as the initial recognition of the loan affects taxable profit, the exception in paragraph 15(b) of the Standard does not apply. Therefore, the borrower recognises the deferred tax liability.)
- A loan payable was measured on initial recognition at the amount of the net proceeds, net of transaction costs. The transaction costs are amortised to accounting profit over the life of the loan. Those transaction costs are not deductible in determining the taxable profit of future, current or prior periods. (notes: (1) the taxable temporary difference is the amount of unamortised transaction costs; and (2) paragraph 15(b) of the Standard prohibits recognition of the resulting deferred tax liability.)
- The liability component of a compound financial instrument (for example a convertible bond) is measured at a discount to the amount repayable on maturity (see SB-FRS 32 *Financial Instruments: Presentation*). The discount is not deductible in determining taxable profit (tax loss).

#### Fair value adjustments and revaluations

- Financial assets or investment property are carried at fair value which exceeds cost but no equivalent adjustment is made for tax purposes.
- An entity revalues property, plant and equipment (under the revaluation model treatment in SB-FRS 16 *Property, Plant and Equipment*) but no equivalent adjustment is made for tax purposes. (note: paragraph 61A of the Standard requires the related deferred tax to be recognised in other comprehensive income.)

#### **Business combinations and consolidation**

- The carrying amount of an asset is increased to fair value in a business combination and no equivalent adjustment is made for tax purposes. (*Note that on initial recognition, the resulting deferred tax liability increases goodwill or decreases the amount of any bargain purchase gain recognised.* See paragraph 66 of the Standard.)
- Reductions in the carrying amount of goodwill are not deductible in determining taxable profit and the cost of the goodwill would not be deductible on disposal of the business. (*Note that paragraph 15(a) of the Standard prohibits recognition of the resulting deferred tax liability.*)
- 14 Unrealised losses resulting from intragroup transactions are eliminated by inclusion in the carrying amount of inventory or property, plant and equipment.
- Retained earnings of subsidiaries, branches, associates and joint ventures are included in consolidated retained earnings, but income taxes will be payable if the profits are distributed to the reporting parent. (note: paragraph 39 of the Standard prohibits recognition of the resulting deferred tax liability if the parent, investor or venturer is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.)
- Investments in foreign subsidiaries, branches or associates or interests in foreign joint ventures are affected by changes in foreign exchange rates. (notes: (1) there may be either a taxable temporary difference or a deductible temporary difference; and (2) paragraph 39 of the Standard prohibits recognition of the resulting deferred tax liability if the parent, investor or venturer is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.)
- The non-monetary assets and liabilities of an entity are measured in its functional currency but the taxable profit or tax loss is determined in a different currency. (notes: (1) there may be either a taxable temporary difference or a deductible temporary difference; (2) where there is a taxable temporary difference, the resulting deferred tax liability is recognised (paragraph 41 of the Standard); and (3) the deferred tax is recognised in profit or loss, see paragraph 58 of the Standard.)

#### **Hyperinflation**

Non-monetary assets are restated in terms of the measuring unit current at the end of the reporting period (see SB-FRS 29 Financial Reporting in Hyperinflationary Economies) and no equivalent adjustment is made for tax purposes. (notes: (1) the deferred tax is recognised in profit or loss; and (2) if, in addition to the restatement, the non-monetary assets are also revalued, the deferred tax relating to the revaluation is recognised in other comprehensive income and the deferred tax relating to the restatement is recognised in profit or loss.)

## B. Examples of circumstances that give rise to deductible temporary differences

All deductible temporary differences give rise to a deferred tax asset. However, some deferred tax assets may not satisfy the recognition criteria in paragraph 24 of the Standard.

#### Transactions that affect profit or loss

- Retirement benefit costs are deducted in determining accounting profit as service is provided by the employee, but are not deducted in determining taxable profit until the entity pays either retirement benefits or contributions to a fund. (note: similar deductible temporary differences arise where other expenses, such as product warranty costs or interest, are deductible on a cash basis in determining taxable profit.)
- Accumulated depreciation of an asset in the financial statements is greater than the cumulative depreciation allowed up to the end of the reporting period for tax purposes.
- The cost of inventories sold before the end of the reporting period is deducted in determining accounting profit when goods or services are delivered but is deducted in determining taxable profit when cash is collected. (note: as explained in A2 above, there is also a taxable temporary difference associated with the related trade receivable.)
- The net realisable value of an item of inventory, or the recoverable amount of an item of property, plant or equipment, is less than the previous carrying amount and an entity therefore reduces the carrying amount of the asset, but that reduction is ignored for tax purposes until the asset is sold.
- Research costs (or organisation or other start-up costs) are recognised as an expense in determining accounting profit but are not permitted as a deduction in determining taxable profit until a later period.
- Income is deferred in the statement of financial position but has already been included in taxable profit in current or prior periods.
- A government grant which is included in the statement of financial position as deferred income will not be taxable in future periods. (note: paragraph 24 of the Standard prohibits the recognition of the resulting deferred tax asset, see also paragraph 33 of the Standard.)

#### Fair value adjustments and revaluations

Financial assets or investment property are carried at fair value which is less than cost, but no equivalent adjustment is made for tax purposes.

#### **Business combinations and consolidation**

- A liability is recognised at its fair value in a business combination, but none of the related expense is deducted in determining taxable profit until a later period. (Note that the resulting deferred tax asset decreases goodwill or increases the amount of any bargain purchase gain recognised. See paragraph 66 of the Standard.)
- 10 [Deleted]
- 11 Unrealised profits resulting from intragroup transactions are eliminated from the carrying amount of assets, such as inventory or property, plant or equipment, but no equivalent adjustment is made for tax purposes.
- 12 Investments in foreign subsidiaries, branches or associates or interests in foreign joint ventures are affected by changes in foreign exchange rates. (notes: (1) there may be a

taxable temporary difference or a deductible temporary difference; and (2) paragraph 44 of the Standard requires recognition of the resulting deferred tax asset to the extent, and only to the extent, that it is probable that: (a) the temporary difference will reverse in the foreseeable future; and (b) taxable profit will be available against which the temporary difference can be utilised).

The non-monetary assets and liabilities of an entity are measured in its functional currency but the taxable profit or tax loss is determined in a different currency. (notes: (1) there may be either a taxable temporary difference or a deductible temporary difference; (2) where there is a deductible temporary difference, the resulting deferred tax asset is recognised to the extent that it is probable that sufficient taxable profit will be available (paragraph 41 of the Standard); and (3) the deferred tax is recognised in profit or loss, see paragraph 58 of the Standard.)

## C. Examples of circumstances where the carrying amount of an asset or liability is equal to its tax base

- Accrued expenses have already been deducted in determining an entity's current tax liability for the current or earlier periods.
- A loan payable is measured at the amount originally received and this amount is the same as the amount repayable on final maturity of the loan.
- 3 Accrued expenses will never be deductible for tax purposes.
- 4 Accrued income will never be taxable.

#### Illustrative computations and presentation

Extracts from statements of financial position and statements of comprehensive income are provided to show the effects on these financial statements of the transactions described below. These extracts do not necessarily conform with all the disclosure and presentation requirements of other Standards.

All the examples below assume that the entities concerned have no transaction other than those described.

#### Example 1 - Depreciable assets

An entity buys equipment for 10,000 and depreciates it on a straight-line basis over its expected useful life of five years. For tax purposes, the equipment is depreciated at 25% a year on a straight-line basis. Tax losses may be carried back against taxable profit of the previous five years. In year 0, the entity's taxable profit was 5,000. The tax rate is 40%.

The entity will recover the carrying amount of the equipment by using it to manufacture goods for resale. Therefore, the entity's current tax computation is as follows:

			Year		
	1	2	3	4	5
Taxable income	2,000	2,000	2,000	2,000	2,000
Depreciation for tax purposes	2,500	2,500	2,500	2,500	0
Taxable profit (tax loss)	(500)	(500)	(500)	(500)	2,000
Current tax expense (income) at 40%	(200)	(200)	(200)	(200)	800

The entity recognises a current tax asset at the end of years 1 to 4 because it recovers the benefit of the tax loss against the taxable profit of year 0.

The temporary differences associated with the equipment and the resulting deferred tax asset and liability and deferred tax expense and income are as follows:

			Year		
	1	2	3	4	5
Carrying amount	8,000	6,000	4,000	2,000	0
Tax base	7,500	5,000	2,500	0	0
Taxable temporary difference	500	1,000	1,500	2,000	0
Opening deferred tax liability	0	200	400	600	800
Deferred tax expense (income)	200	200	200	200	(800)
Closing deferred tax liability	200	400	600	800	0

The entity recognises the deferred tax liability in years 1 to 4 because the reversal of the taxable temporary difference will create taxable income in subsequent years. The entity's statement of comprehensive income includes the following:

			Year		
	1	2	3	4	5
Income	2,000	2,000	2,000	2,000	2,000
Depreciation	2,000	2,000	2,000	2,000	2,000
Profit before tax	0	0	0	0	0
Current tax expense (income)	(200)	(200)	(200)	(200)	800
Deferred tax expense (income)	200	200	200	200	(800)
Total tax expense (income)	0	0	0	0	0
Profit for the period	0	0	0	0	0

#### Example 2 - Deferred tax assets and liabilities

The example deals with an entity over the two-year period, X5 and X6. In X5 the enacted income tax rate was 40% of taxable profit. In X6 the enacted income tax rate was 35% of taxable profit.

Charitable donations are recognised as an expense when they are paid and are not deductible for tax purposes.

In X5, the entity was notified by the relevant authorities that they intend to pursue an action against the entity with respect to sulphur emissions. Although as at December X6 the action had not yet come to court the entity recognised a liability of 700 in X5 being its best estimate of the fine arising from the action. Fines are not deductible for tax purposes.

In X2, the entity incurred 1,250 of costs in relation to the development of a new product. These costs were deducted for tax purposes in X2. For accounting purposes, the entity capitalised this expenditure and amortised it on the straight-line basis over five years. At 31/12/X4, the unamortised balance of these product development costs was 500.

In X5, the entity entered into an agreement with its existing employees to provide healthcare benefits to retirees. The entity recognises as an expense the cost of this plan as employees provide service. No payments to retirees were made for such benefits in X5 or X6. Healthcare costs are deductible for tax purposes when payments are made to retirees. The entity has determined that it is probable that taxable profit will be available against which any resulting deferred tax asset can be utilised.

Buildings are depreciated for accounting purposes at 5% a year on a straight-line basis and at 10% a year on a straight-line basis for tax purposes. Motor vehicles are depreciated for accounting purposes at 20% a year on a straight-line basis and at 25% a year on a straight-line basis for tax purposes. A full year's depreciation is charged for accounting purposes in the year that an asset is acquired.

At 1/1/X6, the building was revalued to 65,000 and the entity estimated that the remaining useful life of the building was 20 years from the date of the revaluation. The revaluation did not affect taxable profit in X6 and the taxation authorities did not adjust the tax base of the building to reflect the revaluation. In X6, the entity transferred 1,033 from revaluation surplus to retained earnings. This represents the difference of 1,590 between the actual depreciation on the building (3,250) and equivalent depreciation based on the cost of the building (1,660, which is the book value at 1/1/X6 of 33,200 divided by the remaining useful life of 20 years), less the related deferred tax of 557 (see paragraph 64 of the Standard).

Curren	it tax	expe	ense
• • • • • • •			

•		<i>X</i> 5	X6
Accounting profit		8,775	8,740
Add			
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
		17,025	18,590
Deduct			
Depreciation for tax purposes		(8,100)	(11,850)
Taxable profit		8,925	6,740
Current tax expense at 40%		3,570	
Current tax expense at 35%			2,359
Carrying amounts of property, plant and equipment			
	Building	Motor vehicles	Total
Balance at 31/12/X4	50,000	10,000	60,000
Additions X5	6,000	_	6,000
Balance at 31/12/X5	56,000	10,000	66,000
Elimination of accumulated depreciation on	<b>(</b> )		()
revaluation at 1/1/X6	(22,800)	_	(22,800)
Revaluation at 1/1/X6	31,800	<u> </u>	31,800
Balance at 1/1/X6	65,000	10,000	75,000
Additions X6		15,000	15,000
	65,000	25,000	90,000
Accumulated depreciation	5%	20%	
Balance at 31/12/X4	20,000	4,000	24,000
Depreciation X5	2,800	2,000	4,800
Balance at 31/12/X5	22,800	6,000	28,800
Revaluation at 1/1/X6	(22,800)	0,000	(22,800)
Balance at 1/1/X6	(22,000)	6,000	6,000
	2 250		
Depreciation X6 Balance at 31/12/X6	3,250	5,000 11,000	8,250
Dalatice at 31/12/AU	3,250		14,250
			continued

## ... continued Carrying amounts of property, plant and equipment

Carrying amount			
31/12/X4	30,000	6,000	36,000
31/12/X5	33,200	4,000	37,200
31/12/X6	61,750	14,000	75,750
Tax base of property, plant and equipment			
Cost	Building	Motor vehicles	Total
Balance at 31/12/X4	50,000	10,000	60,000
Additions X5	6,000		6,000
Balance at 31/12/X5	56,000	10,000	66,000
Additions X6		15,000	15,000
Balance at 31/12/X6	56,000	25,000	81,000
Accumulated depreciation	10%	25%	
Balance at 31/12/X4	40,000	5,000	45,000
Depreciation X5	5,600	2,500	8,100
Balance at 31/12/X5	45,600	7,500	53,100
Depreciation X6	5,600	6,250	11,850
Balance 31/12/X6	51,200	13,750	64,950
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 at 31/12/X4

	Carrying amount	Tax base	Temporary differences
Accounts receivable	500	500	_
Inventory	2,000	2,000	_
Product development costs	500	_	500
Investments	33,000	33,000	_
Property, plant & equipment	36,000	15,000	21,000
TOTAL ASSETS	72,000	50,500	21,500
Current income taxes payable	3,000	3,000	_
Accounts payable	500	500	_
Fines payable	_	_	_
Liability for healthcare benefits	_	_	_
Long-term debt	20,000	20,000	_
Deferred income taxes	8,600	8,600	_
TOTAL LIABILITIES	32,100	32,100	
Share capital	5,000	5,000	_
Revaluation surplus	_	_	_
Retained earnings	34,900	13,400	
TOTAL LIABILITIES/EQUITY	72,000	50,500	
TEMPORARY DIFFERENCES			21,500
Deferred tax liability	21,500 at 40%	6	8,600
Deferred tax asset	_	_	_
Net deferred tax liability			8,600

#### Deferred tax assets, liabilities and expense at 31/12/X5

	Carrying amount	Tax base	Temporary differences
Accounts receivable	500	500	_
Inventory	2,000	2,000	_
Product development costs	250	_	250
Investments	33,000	33,000	_
Property, plant & equipment	37,200	12,900	24,300
TOTAL ASSETS	72,950	48,400	24,550
Current income toyon payable	2 570	2 570	
Current income taxes payable	3,570 500	3,570 500	_
Accounts payable Fines payable	700	700	<del>-</del>
• •		700	(2,000)
Liability for healthcare benefits	2,000	40.475	(2,000)
Long-term debt  Deferred income taxes	12,475	12,475	_
	9,020	9,020	(2,000)
TOTAL LIABILITIES	28,265	26,265	(2,000)
Share capital	5,000	5,000	_
Revaluation surplus	_	_	_
Retained earnings	39,685	17,135	
TOTAL LIABILITIES/EQUITY	72,950	48,400	
TEMPORARY DIFFERENCES			22,550
Deferred tax liability	24,550 at 40%	, 0	9,820
Deferred tax asset	2,000 at 40%	, 0	(800)
Net deferred tax liability			9,020
Less: Opening deferred tax liability			(8,600)
Deferred tax expense (income) related to the origination and reversal of temporary differences			420

#### Deferred tax assets, liabilities and expense at 31/12/X6

	Carrying amount	Tax base	Temporary differences
Accounts receivable	500	500	_
Inventory	2,000	2,000	_
Product development costs	_	_	_
Investments	33,000	33,000	-
Property, plant & equipment	75,750	16,050	59,700
TOTAL ASSETS	111,250	51,550	59,700
Current income taxes payable	2,359	2,359	_
Accounts payable	500	500	_
Fines payable	700	700	
Liability for healthcare benefits	3,000	_	(3,000)
Long-term debt	12,805	12,805	_
Deferred income taxes	19,845	19,845	_
TOTAL LIABILITIES	39,209	36,209	(3,000)
Share capital	5,000	5,000	-
Revaluation surplus	19,637	_	_
Retained earnings	47,404	10,341	
TOTAL LIABILITIES/EQUITY	111,250	51,550	
TEMPORARY DIFFERENCES			56,700
Deferred tax liability	59,700 at 35%		20,895
Deferred tax asset	3,000 at 35%		(1,050)
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 at 5%		1,127
Deferred tax attributable to revaluation surplus	31,800 at 35%		(11,130)
Deferred tax expense (income) related to the origination and reversal of temporary differences			822

#### Illustrative disclosure

The amounts to be disclosed in accordance with the Standard are as follows:

#### Major components of tax expense (income) (paragraph 79)

	X5	X6
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)
Tax expense	3,990	2,054

#### Income tax relating to the components of other comprehensive income (paragraph 81(ab))

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

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

#### Explanation of the relationship between tax expense and accounting profit (paragraph 81(c))

The Standard permits two alternative methods of explaining the relationship between tax expense (income) and accounting profit. Both of these formats are illustrated below.

(i) a numerical reconciliation between tax expense (income) and the product of accounting profit multiplied by the applicable tax rate(s), disclosing also the basis on which the applicable tax rate(s) is (are) computed

	<i>X</i> 5	<i>X</i> 6
Accounting profit	8,775	8,740
Tax at the applicable tax rate of 35% (X5: 40%)	3,510	3,059
Tax effect of expenses that are not deductible in determining taxable profit:		
Charitable donations	200	122
Fines for environmental pollution	280	_
Reduction in opening deferred taxes resulting from reduction in		
tax rate		(1,127)
Tax expense	3,990	2,054

The applicable tax rate is the aggregate of the national income tax rate of 30% (X5: 35%) and the local income tax rate of 5%.

(ii) a numerical reconciliation between the average effective tax rate and the applicable tax rate, disclosing also the basis on which the applicable tax rate is computed

	<i>X</i> 5	<i>X</i> 6
	<u></u> %	<u></u> %
Applicable tax rate	40.0	35.0
Tax effect of expenses that are not deductible for tax purposes:		
Charitable donations	2.3	1.4
Fines for environmental pollution	3.2	_
Effect on opening deferred taxes of reduction in tax rate		(12.9)
Average effective tax rate (tax expense divided by profit before tax)	45.5	23.5

The applicable tax rate is the aggregate of the national income tax rate of 30% (X5: 35%) and the local income tax rate of 5%.

### An explanation of changes in the applicable tax rate(s) compared to the previous accounting period (paragraph 81(d))

In X6, the government enacted a change in the national income tax rate from 35% to 30%.

### In respect of each type of temporary difference, and in respect of each type of unused tax losses and unused tax credits:

- (i) the amount of the deferred tax assets and liabilities recognised in the statement of financial position for each period presented:
- (ii) the amount of the deferred tax income or expense recognised in profit or loss for each period presented, if this is not apparent from the changes in the amounts recognised in the statement of financial position (paragraph 81(g))

	<i>X</i> 5	<i>X</i> 6
Accelerated depreciation for tax purposes	9,720	10,322
Liabilities for healthcare benefits that are deducted for tax purposes only when paid	(800)	(1,050)
Product development costs deducted from taxable profit in earlier years	100	-
Revaluation, net of related depreciation		10,573
Deferred tax liability	9,020	19,845

(note: the amount of the deferred tax income or expense recognised in profit or loss for the current year is apparent from the changes in the amounts recognised in the statement of financial position)

#### Example 3 – Business combinations

On 1 January X5 entity A acquired 100 per cent of the shares of entity B at a cost of 600. At the acquisition date, the tax base in A's tax jurisdiction of A's investment in B is 600. Reductions in the carrying amount of goodwill are not deductible for tax purposes, and the cost of the goodwill would also not be deductible if B were to dispose of its underlying business. The tax rate in A's tax jurisdiction is 30 per cent and the tax rate in B's tax jurisdiction is 40 per cent.

The fair value of the identifiable assets acquired and liabilities assumed (excluding deferred tax assets and liabilities) by A is set out in the following table, together with their tax bases in B's tax jurisdiction and the resulting temporary differences.

	Amount recognised at acquisition	Tax base	Temporary differences
Property, plant and equipment	270	155	115
Accounts receivable	210	210	_
Inventory	174	124	50
Retirement benefit obligations	(30)	_	(30)
Accounts payable	(120)	(120)	
Identifiable assets acquired and liabilities assumed, excluding deferred tax	504	369	135

The deferred tax asset arising from the retirement benefit obligations is offset against the deferred tax liabilities arising from the property, plant and equipment and inventory (see paragraph 74 of the Standard).

No deduction is available in B's tax jurisdiction for the cost of the goodwill. Therefore, the tax base of the goodwill in B's jurisdiction is nil. However, in accordance with paragraph 15(a) of the Standard, A recognises no deferred tax liability for the taxable temporary difference associated with the goodwill in B's tax jurisdiction.

The carrying amount, in A's consolidated financial statements, of its investment in B is made up as follows:

Fair value of identifiable assets acquired and liabilities assumed, excluding deferred tax	504
Deferred tax liability (135 at 40%)	(54)
Fair value of identifiable assets acquired and liabilities assumed	450
Goodwill	150
Carrying amount	600

Because, at the acquisition date, the tax base in A's tax jurisdiction, of A's investment in B is 600, no temporary difference is associated in A's tax jurisdiction with the investment.

During X5, B's equity (incorporating the fair value adjustments made as a result of the business combination) changed as follows:

At 1 January X5	450
Retained profit for X5 (net profit of 150, less dividend payable of 80)	70
At 31 December X5	520

A recognises a liability for any withholding tax or other taxes that it will incur on the accrued dividend receivable of 80.

At 31 December X5, the carrying amount of A's underlying investment in B, excluding the accrued dividend receivable, is as follows:

Net assets of B	520
Goodwill	150
Carrying amount	670

The temporary difference associated with A's underlying investment is 70. This amount is equal to the cumulative retained profit since the acquisition date.

If A has determined that it will not sell the investment in the foreseeable future and that B will not distribute its retained profits in the foreseeable future, no deferred tax liability is recognised in relation to A's investment in B (see paragraphs 39 and 40 of the Standard). Note that this exception would apply for an investment in an associate only if there is an agreement requiring that the profits of the associate will not be distributed in the foreseeable future (see paragraph 42 of the Standard). A discloses the amount of the temporary difference for which no deferred tax is recognised, ie 70 (see paragraph 81(f) of the Standard).

If A expects to sell the investment in B, or that B will distribute its retained profits in the foreseeable future, A recognises a deferred tax liability to the extent that the temporary difference is expected to reverse. The tax rate reflects the manner in which A expects to recover the carrying amount of its investment (see paragraph 51 of the Standard). A recognises the deferred tax in other comprehensive income to the extent that the deferred tax results from foreign exchange translation differences that have been recognised in other comprehensive income (paragraph 61A of the Standard). A discloses separately:

- (a) the amount of deferred tax that has been recognised in other comprehensive income (paragraph 81(ab) of the Standard); and
- (b) the amount of any remaining temporary difference which is not expected to reverse in the foreseeable future and for which, therefore, no deferred tax is recognised (see paragraph 81(f) of the Standard).

#### **Example 4 – Compound financial instruments**

An entity receives a non-interest-bearing convertible loan of 1,000 on 31 December X4 repayable at par on 1 January X8. In accordance with SB-FRS 32 *Financial Instruments: Presentation* the entity classifies the instrument's liability component as a liability and the equity component as equity. The entity assigns an initial carrying amount of 751 to the liability component of the convertible loan and 249 to the equity component. Subsequently, the entity recognises imputed discount as interest expense at an annual rate of 10% on the carrying amount of the liability component at the beginning of the year. The tax authorities do not allow the entity to claim any deduction for the imputed discount on the liability component of the convertible loan. The tax rate is 40%.

The temporary differences associated with the liability component and the resulting deferred tax liability and deferred tax expense and income are as follows:

	Year			
	X4	<i>X</i> 5	<i>X</i> 6	X7
Carrying amount of liability component	751	826	909	1,000
Tax base	1,000	1,000	1,000	1,000
Taxable temporary difference	249	174	91	
Opening deferred tax liability at 40%	0	100	70	37
Deferred tax charged to equity	100	_	_	_
Deferred tax expense (income)		(30)	(33)	(37)
Closing deferred tax liability at 40%	100	70	37	

As explained in paragraph 23 of the Standard, at 31 December X4, the entity recognises the resulting deferred tax liability by adjusting the initial carrying amount of the equity component of the convertible liability. Therefore, the amounts recognised at that date are as follows:

	1,000
Equity component (249 less 100)	149
Deferred tax liability	100
Liability component	751

Subsequent changes in the deferred tax liability are recognised in profit or loss as tax income (see paragraph 23 of the Standard). Therefore, the entity's profit or loss includes the following:

	Year			
	X4	X5	X6	X7
Interest expense (imputed discount)	_	75	83	91
Deferred tax expense (income)		(30)	(33)	(37)
	_	45	50	54

#### **Example 5 – Share-based payment transactions**

In accordance with SB-FRS 102 *Share-based Payment*, an entity has recognised an expense for the consumption of employee services received as consideration for share options granted. A tax deduction will not arise until the options are exercised, and the deduction is based on the options' intrinsic value at exercise date.

As explained in paragraph 68B of the Standard, the difference between the tax base of the employee services received to date (being the amount the taxation authorities will permit as a deduction in future periods in respect of those services), and the carrying amount of nil, is a deductible temporary difference that results in a deferred tax asset. Paragraph 68B requires that, if the amount the taxation authorities will permit as a deduction in future periods is not known at the end of the period, it should be estimated, based on information available at the end of the period. If the amount that the taxation authorities will permit as a deduction in future periods is dependent upon the entity's share price at a future date, the measurement of the deductible temporary difference should be based on the entity's share price at the end of the period. Therefore, in this example, the estimated future tax deduction (and hence the measurement of the deferred tax asset) should be based on the options' intrinsic value at the end of the period.

As explained in paragraph 68C of the Standard, if the tax deduction (or estimated future tax deduction) exceeds the amount of the related cumulative remuneration expense, this indicates that the tax deduction relates not only to remuneration expense but also to an equity item. In this situation, paragraph 68C requires that the excess of the associated current or deferred tax should be recognised directly in equity.

The entity's tax rate is 40 per cent. The options were granted at the start of year 1, vested at the end of year 3 and were exercised at the end of year 5. Details of the expense recognised for employee services received and consumed in each accounting period, the number of options outstanding at each year-end, and the intrinsic value of the options at each year-end, are as follows:

	Employee services expense	Number of options at year-end	Intrinsic value per option
Year 1	188,000	50,000	5
Year 2	185,000	45,000	8
Year 3	190,000	40,000	13
Year 4	0	40,000	17
Year 5	0	40,000	20

The entity recognises a deferred tax asset and deferred tax income in years 1–4 and current tax income in year 5 as follows. In years 4 and 5, some of the deferred and current tax income is recognised directly in equity, because the estimated (and actual) tax deduction exceeds the cumulative remuneration expense.

#### Year 1

Deferred tax asset and deferred tax income:

$$(50,000 \times 5 \times 1/3^{1} \times 0.40) =$$
 33,333

The deferred tax income is all recognised in profit or loss, because the estimated future tax deduction of 83,333 (50,000  $\times$  5  $\times$   $^{1}/_{3}$ ) is less than the cumulative remuneration expense of 188,000.

#### Year 2

Deferred tax asset at year-end:

$(45,000 \times 8 \times {}^{2}/_{3} \times 0.40) =$	96,000	
Less deferred tax asset at start of year	(33,333)	
Deferred tax income for year		62,667*
* This amount consists of the following:		
Deferred tax income for the temporary difference between the tax		

base of the employee services received during the year and their carrying amount of nil:

$$(45,000 \times 8 \times 1/3 \times 0.40)$$
 48,000

Tax income resulting from an adjustment to the tax base of employee services received in previous years:

(a)	increase in intrinsic value: (45,000 $\times$ 3 $\times$ $^{1}/_{3}$ $\times$ 0.40)	18,000
(b)	decrease in number of options: $(5,000 \times 5 \times 1/3 \times 0.40)$	(3,333)

Deferred tax income for year

The deferred tax income is all recognised in profit or loss, because the estimated future tax deduction of 240,000 (45,000  $\times$  8  $\times$  <sup>2</sup>/<sub>3</sub>) is less than the cumulative remuneration expense of 373,000 (188,000 + 185,000).

62,667

#### Year 3

Deferred tax asset at year-end:

$(40,000 \times 13 \times 0.40) =$	208,000
Less deferred tax asset at start of year	(96,000)
Deferred tax income for year	112,000

The deferred tax income is all recognised in profit or loss, because the estimated future tax deduction of  $520,000 (40,000 \times 13)$  is less than the cumulative remuneration expense of 563,000 (188,000 + 185,000 + 190,000).

The tax base of the employee services received is based on the intrinsic value of the options, and those options were granted for three years' services. Because only one year's services have been received to date, it is necessary to multiply the option's intrinsic value by one-third to arrive at the tax base of the employee services received in year 1.

#### Year 4

1	eai 4		
	Peferred tax asset at year-end:		
(-	$40,000 \times 17 \times 0.40) =$	272,000	
L	ess deferred tax asset at start of year	(208,000)	
	Deferred tax income for year		64,000
	he deferred tax income is recognised partly in profit or loss and partly irectly in equity as follows:		
	Estimated future tax deduction (40,000 x 17) =	680,000	
	Cumulative remuneration expense	563,000	
	Excess tax deduction		117,000
	Deferred tax income for year	64,000	
	Excess recognised directly in equity (117,000 x 0.40) =	46,800	
	Recognised in profit or loss		17,200
}	'ear 5		
	Deferred tax expense (reversal of deferred tax asset)	272,000	
	mount recognised directly in equity (reversal of cumulative eferred tax income recognised directly in equity)	46,800	
Α	mount recognised in profit or loss		225,200
	Current tax income based on intrinsic value of options at xercise date $(40,000 \times 20 \times 0.40) =$	320,000	
Δ	mount recognised in profit or loss (563,000 × 0.40) =	225,200	

#### Summary

Amount recognised directly in equity

	Statement of comprehensive income				of financial ition	
	Employee services expense	Current tax expense (income)	Deferred tax expense (income)	Total tax expense (income)	Equity	Deferred tax asset
Year 1	188,000	0	(33,333)	(33,333)	0	33,333
Year 2	185,000	0	(62,667)	(62,667)	0	96,000
Year 3	190,000	0	(112,000)	(112,000)	0	208,000
Year 4	0	0	(17,200)	(17,200)	(46,800)	272,000
Year 5	0	(225,200)	225,200	0	46,800	0
					(94,800)	
Totals	563,000	(225,200)	0	(225,200)	(94,800)	0

94,800

#### Example 6 - Replacement awards in a business combination

On 1 January 20X1 Entity A acquired 100 per cent of Entity B. Entity A pays cash consideration of CU400 to the former owners of Entity B.

At the acquisition date Entity B had outstanding employee share options with a market-based measure of CU100. The share options were fully vested. As part of the business combination Entity B's outstanding share options are replaced by share options of Entity A (replacement awards) with a market-based measure of CU100 and an intrinsic value of CU80. The replacement awards are fully vested. In accordance with paragraphs B56–B62 of SB-FRS 103 *Business Combinations* (as revised in 2008), the replacement awards are part of the consideration transferred for Entity B. A tax deduction for the replacement awards will not arise until the options are exercised. The tax deduction will be based on the share options' intrinsic value at that date. Entity A's tax rate is 40 per cent. Entity A recognises a deferred tax asset of CU32 (CU80 intrinsic value × 40%) on the replacement awards at the acquisition date.

Entity A measures the identifiable net assets obtained in the business combination (excluding deferred tax assets and liabilities) at CU450. The tax base of the identifiable net assets obtained is CU300. Entity A recognises a deferred tax liability of CU60 ((CU450 - CU300)  $\times$  40%) on the identifiable net assets at the acquisition date.

Goodwill is calculated as follows:

	CU
Cash consideration	400
Market-based measure of replacement awards	100
Total consideration transferred	500
Identifiable net assets, excluding deferred tax assets and liabilities	(450)
Deferred tax asset	32
Deferred tax liability	60
Goodwill	78

Reductions in the carrying amount of goodwill are not deductible for tax purposes. In accordance with paragraph 15(a) of the Standard, Entity A recognises no deferred tax liability for the taxable temporary difference associated with the goodwill recognised in the business combination.

The accounting entry for the business combination is as follows:

			CU	CU
Dr	Goodwill		78	
Dr	Identifiab	le net assets	450	
Dr	Deferred	tax asset	32	
	Cr	Cash		400
	Cr	Equity (replacement awards)		100
	Cr	Deferred tax liability		60

On 31 December 20X1 the intrinsic value of the replacement awards is CU120. Entity A recognises a deferred tax asset of CU48 (CU120  $\times$  40%). Entity A recognises deferred tax income of CU16 (CU48 – CU32) from the increase in the intrinsic value of the replacement awards. The accounting entry is as follows:

			CU	CU
Dr	Defer	red tax asset	16	
	Cr	Deferred tax income		16

If the replacement awards had not been tax-deductible under current tax law, Entity A would not have recognised a deferred tax asset on the acquisition date. Entity A would have accounted for any subsequent events that result in a tax deduction related to the replacement award in the deferred tax income or expense of the period in which the subsequent event occurred.

Paragraphs B56–B62 of SB-FRS 103 provide guidance on determining which portion of a replacement award is part of the consideration transferred in a business combination and which portion is attributable to future service and thus a post-combination remuneration expense. Deferred tax assets and liabilities on replacement awards that are post-combination expenses are accounted for in accordance with the general principles as illustrated in Example 5.

#### Example 7 – Debt instruments measured at fair value

#### **Debt instruments**

At 31 December 20X1, Entity Z holds a portfolio of three debt instruments:

<b>Debt Instrument</b>	Cost (CU)	Fair value (CU)	Contractual interest rate
Α	2,000,000	1,942,857	2.00%
В	750,000	778,571	9.00%
С	2,000,000	1,961,905	3.00%

Entity Z acquired all the debt instruments on issuance for their nominal value. The terms of the debt instruments require the issuer to pay the nominal value of the debt instruments on their maturity on 31 December 20X2.

Interest is paid at the end of each year at the contractually fixed rate, which equalled the market interest rate when the debt instruments were acquired. At the end of 20X1, the market interest rate is 5 per cent, which has caused the fair value of Debt Instruments A and C to fall below their cost and the fair value of Debt Instrument B to rise above its cost. It is probable that Entity Z will receive all the contractual cash flows if it continues to hold the debt instruments.

At the end of 20X1, Entity Z expects that it will recover the carrying amounts of Debt Instruments A and B through use, ie by continuing to hold them and collecting contractual cash flows, and Debt Instrument C by sale at the beginning of 20X2 for its fair value on 31 December 20X1. It is assumed that no other tax planning opportunity is available to Entity Z that would enable it to sell Debt Instrument B to generate a capital gain against which it could offset the capital loss arising from selling Debt Instrument C.

The debt instruments are measured at fair value through other comprehensive income in accordance with SB-FRS 109 Financial Instruments (or SB-FRS 39 Financial Instruments: Recognition and Measurement<sup>2</sup>).

#### Tax law

The tax base of the debt instruments is cost, which tax law allows to be offset either on maturity when principal is paid or against the sale proceeds when the debt instruments are sold. Tax law specifies that gains (losses) on the debt instruments are taxable (deductible) only when realised.

Tax law distinguishes ordinary gains and losses from capital gains and losses. Ordinary losses can be offset against both ordinary gains and capital gains. Capital losses can only be offset against capital gains. Capital losses can be carried forward for 5 years and ordinary losses can be carried forward for 20 years.

Ordinary gains are taxed at 30 per cent and capital gains are taxed at 10 per cent.

Tax law classifies interest income from the debt instruments as 'ordinary' and gains and losses arising on the sale of the debt instruments as 'capital'. Losses that arise if the issuer of the debt instrument fails to pay the principal on maturity are classified as ordinary by tax law.

<sup>&</sup>lt;sup>2</sup> SB-FRS 109 replaced SB-FRS 39. SB-FRS 109 applies to all items that were previously within the scope of SB-FRS 39.

#### General

On 31 December 20X1, Entity Z has, from other sources, taxable temporary differences of CU50,000 and deductible temporary differences of CU430,000, which will reverse in ordinary taxable profit (or ordinary tax loss) in 20X2.

At the end of 20X1, it is probable that Entity Z will report to the tax authorities an ordinary tax loss of CU200,000 for the year 20X2. This tax loss includes all taxable economic benefits and tax deductions for which temporary differences exist on 31 December 20X1 and that are classified as ordinary by tax law. These amounts contribute equally to the loss for the period according to tax law.

Entity Z has no capital gains against which it can utilise capital losses arising in the years 20X1–20X2.

Except for the information given in the previous paragraphs, there is no further information that is relevant to Entity Z's accounting for deferred taxes in the period 20X1–20X2.

#### **Temporary differences**

At the end of 20X1, Entity Z identifies the following temporary differences:

	Carrying amount (CU)	<u>Tax base</u> (CU)	Taxable temporary differences (CU)	Deductible temporary differences (CU)
Debt Instrument A	1,942,857	2,000,000		57,143
Debt Instrument B	778,571	750,000	28,571	
Debt Instrument C	1,961,905	2,000,000		38,095
Other sources	Not spec	ified	50,000	430,000

The difference between the carrying amount of an asset or liability and its tax base gives rise to a deductible (taxable) temporary difference (see paragraphs 20 and 26(d) of the Standard). This is because deductible (taxable) temporary differences are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base, which will result in amounts that are deductible (taxable) in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled (see paragraph 5 of the Standard).

#### Utilisation of deductible temporary differences

With some exceptions, deferred tax assets arising from deductible temporary differences are recognised to the extent that sufficient future taxable profit will be available against which the deductible temporary differences are utilised (see paragraph 24 of the Standard).

Paragraphs 28–29 of SB-FRS 12 identify the sources of taxable profits against which an entity can utilise deductible temporary differences. They include:

- (a) future reversal of existing taxable temporary differences;
- (b) taxable profit in future periods; and
- (c) tax planning opportunities.

The deductible temporary difference that arises from Debt Instrument C is assessed separately for utilisation. This is because tax law classifies the loss resulting from recovering the carrying amount of Debt Instrument C by sale as capital and allows capital losses to be offset only against capital gains (see paragraph 27A of the Standard).

The separate assessment results in not recognising a deferred tax asset for the deductible temporary difference that arises from Debt Instrument C because Entity Z has no source of taxable profit available that tax law classifies as capital.

In contrast, the deductible temporary difference that arises from Debt Instrument A and other sources are assessed for utilisation in combination with one another. This is because their related tax deductions would be classified as ordinary by tax law.

The tax deductions represented by the deductible temporary differences related to Debt Instrument A are classified as ordinary because the tax law classifies the effect on taxable profit (tax loss) from deducting the tax base on maturity as ordinary.

In assessing the utilisation of deductible temporary differences on 31 December 20X1, the following two steps are performed by Entity Z.

## Step 1: Utilisation of deductible temporary differences because of the reversal of taxable temporary differences (see paragraph 28 of the Standard)

Entity Z first assesses the availability of taxable temporary differences as follows:

	(CU)
Expected reversal of deductible temporary differences in 20X2	
From Debt Instrument A	57,143
From other sources	430,000
Total reversal of deductible temporary differences	487,143
Expected reversal of taxable temporary differences in 20X2	
From Debt Instrument B	(28,571)
From other sources	(50,000)
Total reversal of taxable temporary differences	(78,571)
Utilisation because of the reversal of taxable temporary differences (Step 1)	78,571
Remaining deductible temporary differences to be assessed for utilisation in Step 2 $(487,143-78,571)$	408,572

In Step 1, Entity Z can recognise a deferred tax asset in relation to a deductible temporary difference of CU78,571.

## Step 2: Utilisation of deductible temporary differences because of future taxable profit (see paragraph 29(a) of the Standard)

In this step, Entity Z assesses the availability of future taxable profit as follows:

	(CU)
Probable future tax profit (loss) in 20X2 (upon which income taxes are payable (recoverable))	(200,000)
Add back: reversal of deductible temporary differences expected to reverse in 20X2	487,143
Less: reversal of taxable temporary differences (utilised in Step 1)	(78,571)
Probable taxable profit excluding tax deductions for assessing utilisation of deductible temporary differences in 20X2	208,572
Remaining deductible temporary differences to be assessed for utilisation from Step 1	408,572
Utilisation because of future taxable profit (Step 2)	208,572
Utilisation because of the reversal of taxable temporary differences (Step 1)	78,571
Total utilisation of deductible temporary differences	287,143

The tax loss of CU200,000 includes the taxable economic benefit of CU2 million from the collection of the principal of Debt Instrument A and the equivalent tax deduction, because it is probable that Entity Z will recover the debt instrument for more than its carrying amount (see paragraph 29A of the Standard).

The utilisation of deductible temporary differences is not, however, assessed against probable future taxable profit for a period upon which income taxes are payable (see paragraph 5 of the Standard). Instead, the utilisation of deductible temporary differences is assessed against probable future taxable profit that excludes tax deductions resulting from the reversal of deductible temporary differences (see paragraph 29(a) of the Standard). Assessing the utilisation of deductible temporary differences against probable future taxable profits without excluding those deductions would lead to double counting the deductible temporary differences in that assessment.

In Step 2, Entity Z determines that it can recognise a deferred tax asset in relation to a future taxable profit, excluding tax deductions resulting from the reversal of deductible temporary differences, of CU208,572. Consequently, the total utilisation of deductible temporary differences amounts to CU287,143 (CU78,571 (Step 1) + CU208,572 (Step 2)).

#### Measurement of deferred tax assets and deferred tax liabilities

Entity Z presents the following deferred tax assets and deferred tax liabilities in its financial statements on 31 December 20X1:

	(CU)
Total taxable temporary differences	78,571
Total utilisation of deductible temporary differences	287,143
Deferred tax liabilities (78,571 at 30%)	23,571
Deferred tax assets (287,143 at 30%)	86,143

The deferred tax assets and the deferred tax liabilities are measured using the tax rate for ordinary gains of 30 per cent, in accordance with the expected manner of recovery (settlement) of the underlying assets (liabilities) (see paragraph 51 of the Standard).

### Allocation of changes in deferred tax assets between profit or loss and other comprehensive income

Changes in deferred tax that arise from items that are recognised in profit or loss are recognised in profit or loss (see paragraph 58 of the Standard). Changes in deferred tax that arise from items that are recognised in other comprehensive income are recognised in other comprehensive income (see paragraph 61A of the Standard).

Entity Z did not recognise deferred tax assets for all of its deductible temporary differences at 31 December 20X1, and according to tax law all the tax deductions represented by the deductible temporary differences contribute equally to the tax loss for the period. Consequently, the assessment of the utilisation of deductible temporary differences does not specify whether the taxable profits are utilised for deferred tax items that are recognised in profit or loss (ie the deductible temporary differences from other sources) or whether instead the taxable profits are utilised for deferred tax items that are recognised in other comprehensive income (ie the deductible temporary differences related to debt instruments classified as fair value through other comprehensive income).

For such situations, paragraph 63 of the Standard requires the changes in deferred taxes to be allocated to profit or loss and other comprehensive income on a reasonable pro rata basis or by another method that achieves a more appropriate allocation in the circumstances.