

SLFRS 16

Chartered Accountancy Corporate Level Financial Reporting and Governance (FRG)

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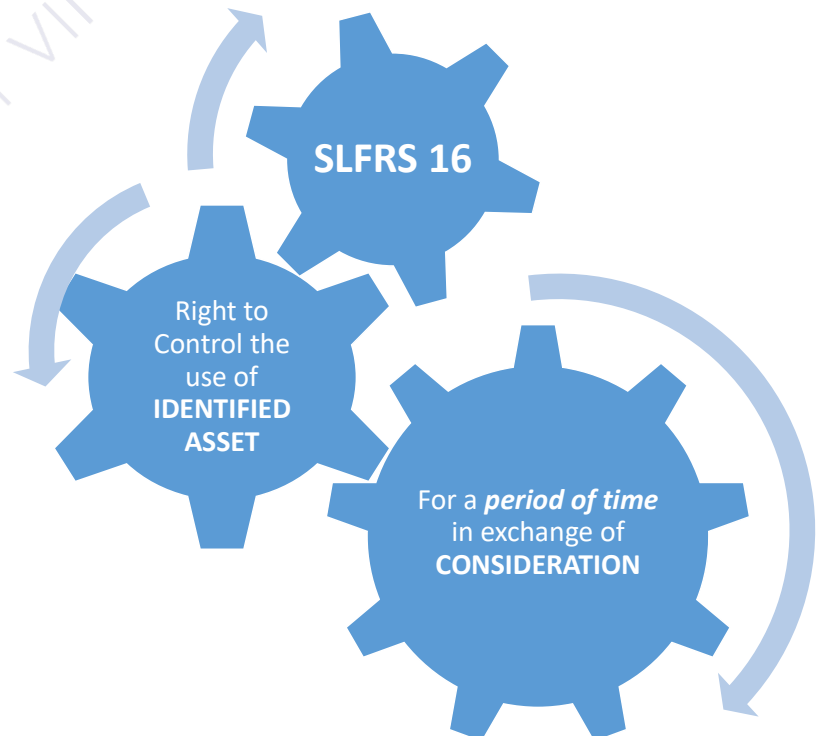
LEASING

SLFRS 16



C.S.W. ANTHONY

Lease Agreement Under SLFRS 16 – Para 9



Question 01

Blackcutt has outsourced its waste collection to a private sector provider called Waste and Co and pays an annual amount to Waste and Co for its services. Waste and Co purchases the vehicles and uses them exclusively for Blackcutt's waste collection. The vehicles are painted with the Blackcutt local government organisation name and colours. Blackcutt can use the vehicles and the vehicles are used for waste collection for nearly all of the asset's life. If a vehicle breaks down or no longer must functions, Waste and Co provide replacement vehicles fitted with the same waste disposal containers and equipment and painted with the local government organisations name and colours. (6 marks)

Lease

The issue here is whether the arrangement with the private sector provider Waste and Co is, or contains, a lease, even if it does not take the legal form of a lease. The **substance of the arrangement should be considered** in connection with the IFRS 16 *Leases*. Key factors to consider are as follows.

- (i) Is there an **identifiable asset**?
- (ii) Does the customer have the right to **obtain substantially all the economic benefits** from use of the asset throughout the period of use?
- (iii) Who has the **right to direct how and for what purpose the asset is used**?
- (iv) Does the customer **have the right to operate the asset throughout the period of use** without the supplier having the right to change those operating instructions?

The answer in each case is yes.

(i) The vans are an identifiable asset. Although Waste and Co can substitute another vehicle if one of the existing vehicles needs repairing or no longer works, this substitution right is not substantive because of the significant costs involved in fitting out the vehicle for use by Blackcutt.

(ii) Blackcutt can use the vehicles and uses them exclusively for waste collection for nearly all their life. It therefore has a right to obtain substantially all the economic benefits from the use of the asset.

(iii) Blackcutt controls the vehicles, since it stipulates how they are painted, and ostensibly owns them because they must be painted with Blackcutt's name. It therefore has the right to direct how and for what purpose the asset is used.

(iv) As indicated in (ii) above, Blackcutt has the right to operate the asset throughout the period of use, although it has outsourced the driving to Waste and Co.

The arrangement is a lease. A right-of-use asset should be recorded, and a lease liability set up, equal to the present value of the future lease payments. The service element relating to the waste collection must be considered as a separate component and charged to profit or loss.

**Lessee
accounting**

**Lessors
accounting**

**Sale &
Lease
back**

01. Application of This standard *Para 05*

02. Initial measurement

ROUA *Para 23, 24*

Lease Liability *Para 26*

03. Subsequent Measurement

ROUA *Para 29*

Lease Liability *Para 36*

04. Re- Assessment & Modification

Re-assessment *Para 39,40*

Modification *Para 44*

**Lessee
accounting**

02. Initial measurement

Example: Initial measurement of a lease

X plc enters into a lease. The following information is relevant:

X Plc must pay five annual rentals of \$100,000 in arrears.

X Plc must also guarantee the residual value of the asset at the end of the lease term to be \$40,000.

X Plc incurs initial direct costs of \$5,000.

The interest rate implicit in the lease is 8%.

The double entries to account for this lease are as follows:

Dr		Cr
On initial recognition		
	Right of use asset	426,494
	Lease liability	426,494
	Right of use asset	5,000
	Cash	5,000

03. Subsequent measurement

Example: Subsequent measurement of the asset

X Plc enters into a 5 year lease of a machine on 1 January Year 1.

The lease liability at the commencement of the lease was \$426,494 and X Plc incurred initial direct costs of \$5,000 when arranging the lease.

X Plc has guaranteed the residual value of the asset at the end of the lease term at \$40,000.

The estimated useful life of the asset is 5 years.

The accounting policy for similar owned machines is to depreciate them over their useful life on a straight line basis.

Annual depreciation charge:

Initial cost:	\$
Lease liability on initial measurement	426,494
Initial direct costs	5,000
	<hr/>
	431,494
Residual value	(40,000)
Depreciable amount	<hr/>
	391,494
Useful life (shorter of the lease term and the useful life)	5 years
Annual depreciation charge	<hr/>
	78,299

03.Subsequent measurement

Subsequent measurement of the liability

During each year, the lessee makes one or more lease payments. The payment is recorded in the ledger account as follows.

Illustration: Lease payment

	Debit	Credit
Lease liability	X	
Cash/bank		X

A lease liability is measured as follows at each reporting date:

Illustration: Subsequent measurement of lease liability

Amount borrowed at the start of the lease (the amount recognised on initial recognition of the lease)

Plus: Interest accrued

Minus: Repayments (lease payments)

Repayment of loan principal

Adjustment on remeasurement of the liability (see later)

Amount owed now.

S
X
X
(X)
(X)
X
X

Example: Allocation of the finance charge

X Plc enters into a 5 year lease of a machine on 1 January Year 1.

The lease liability at the commencement of the lease was \$426,494 and X Plc incurred initial direct costs of \$5,000 when arranging the lease.

X Plc has guaranteed the residual value of the asset at the end of the lease term at \$40,000.

The interest rate implicit in the lease is 8%.

Lease liability:

Year	Opening liability	Interest (8%)	Lease payments	Closing liability
1	426,494	34,120	(100,000)	360,614
2	360,614	28,849	(100,000)	289,463
3	289,463	23,157	(100,000)	212,620
4	212,620	17,010	(100,000)	129,630
5	129,630	10,370	(140,000)	0
		113,506		

Example: Total finance charge

X Plc enters into a 5 year lease of a machine on 1 January Year 1.

The lease liability at the commencement of the lease was \$426,494 and X Plc incurred initial direct costs of \$5,000 when arranging the lease.

X Plc has guaranteed the residual value of the asset at the end of the lease term at \$40,000.

Total finance charge

Lessee's lease payments:	\$
Annual rentals (5 × 100,000)	500,000
Guaranteed residual value	40,000
	<hr/>
	540,000
Amount on initial recognition	(426,494)*
	<hr/>
Total finance charge (interest)	113,506
	<hr/>

* This is the amount of the liability. The asset is recognised at \$431,494.

The final payment

In the above example the final payment by the lessee is \$140,000. This is in fact made up of two amounts, the final rental of \$100,000 and the guaranteed residual value of \$40,000.

It is worth considering the payment in respect of the guaranteed residual value in a little more detail.

At the end of the lease the asset that is the subject of the lease is transferred back to the lessor. It has been depreciated down to its estimated residual value of \$40,000.

The transfer is recorded as follows:

Example: Final payment in respect of the guaranteed residual value

Debit		Credit
Lease liability	40,000	
Right-of-use asset		40,000

In other words the \$40,000 part of the final year payment to the lessor of \$140,000 is not cash but the transfer of the asset.

Example (continued): Final payment in respect of the guaranteed residual value

The asset has a carrying amount of \$40,000 at the end of the lease but is only worth \$35,000.

The lessee would make the following double entries.

Write down the asset	Debit	Credit
Statement of comprehensive income	5,000	
Asset under lease		5,000
Pay the lessor the guaranteed residual value		
Lease liability	40,000	
Asset held under lease		35,000
Cash/bank		5,000

Example: Split of current and non-current liability at the end of year 1

	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
Year					
1	426,494	(100,000)	34,120	(65,880)	360,614
2	360,614	(100,000)	28,849	(71,151)	289,463
				↑	↑
				This is the current liability	This is the non-current liability

Liability:	S
Current liability	71,151
Non-current liability	289,463
Total liability (for proof)	<u>360,614</u>



Important

Lease payments made in advance

An earlier section explained that if two leases are identical except that the rentals are in arrears for one and in advance for the other, the interest rates implicit in each will be higher for the lease for which the payments are in advance. This is because although the total lease payments are the same, if payment is in advance they will be received by the lessor (paid by the lessee) over a shorter period.

The overall result should be that the initial right of use asset and the total finance charge is the same.

Example: Initial measurement of a lease (payments in advance)

X plc enters into a lease. The following information is relevant:

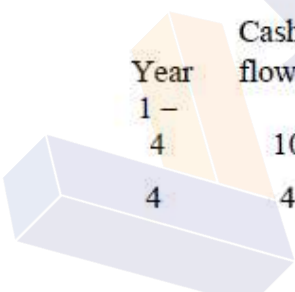
X Plc must pay five annual rentals of \$100,000 in advance.

X Plc must also guarantee the residual value of the asset at the end of the lease term to be \$40,000.

X Plc incurs initial direct costs of \$5,000.

The interest rate implicit in the lease is 12.37%.

The initial measurement of the liability is as follows:

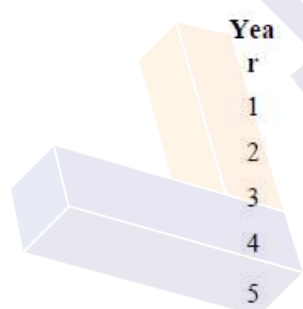


Year	Cash flow	Discount factor at 12.37%	Present value at 12.37%
1 – 4	100,000	3.014	301,404
4	40,000	0.627	25,090
			<u>326,494</u>

Double entry on initial recognition		Dr	Cr
Right of use asset (as before in section 2.3)		431,494	
Cash (first rental)			100,000
Cash (initial direct costs)			5,000
Lease liability			326,494

	Payments in advance	Payments in arrears (see section 2.3)
	\$	\$
Finance charge		
Lessee's lease payments:		
Annual rentals (4 × 100,000)	400,000	
Annual rentals (5 × 100,000)		500,000
Guaranteed residual value	40,000	40,000
	440,000	540,000
Amount on initial recognition	(326,494)	(426,494)
Total finance charge (interest)	113,506	113,506

The finance charge allocation is as follows:



Year	Opening liability	Lease payment	Liability after day 1 payment	Interest (12.37%)	Closing liability
1	326,494	–	326,494	40,387	366,881
2	366,881	(100,000)	266,881	33,013	299,895
3	299,895	(100,000)	199,895	24,727	224,621
4	224,621	(100,000)	124,621	15,379	140,000
5	140,000	(140,000)	0	0	

In the above example, the lease payments are made at the start of each year. The first lease payment has not been included in the initial measurement of the lease liability so there is lease payment shown in year 1.

The lease payment shown in year 2 is on the first day of that year. Therefore, it is deducted from the liability to give an amount upon which interest is charged going forward.

Example: Current and non-current liability

Year	Opening liability	Lease payment	Liability after day 1 payment	Interest (12.37%)	Closing liability
1	326,494	–	326,494	40,387	366,881
2	366,881	(100,000)	266,881		

Total current liability	Non-current liability	Current liability due to interest	Total liability

Liability:

Current liabilities

Interest expense

Capital element of lease liability

Non-current liability

Total liability (for proof)

\$

40,387

59,613

100,000

266,881

366,881

Application of This standard - *Para 05*

Recognition exemption

A company can elect not to apply the lessee accounting rules to short-term leases (lease with a lease term of 12 months or less) and leases for assets of low value (e.g. lap-tops and mobile phones).

The election must be made by class of short term leases but may be made on an asset by asset basis for low value assets.

If such an election is made, the rental costs of the assets are recognised in profit or loss on a straight line basis or some other systematic basis if that gives a better reflection of the benefit arising from the asset.

Portfolio application

The rules in IFRS 16 set out the accounting rules for individual leases.

However, the rules may be applied to a portfolio of leases with similar characteristics. In other words, an entity can account for a number of separate leases as a single lease.

This is only allowed if there is a reasonable expectation that this would not cause the financial statements to differ materially from applying the rules to the individual leases within that portfolio.

Re- Assessment & Modification

Re-measuring the lease liability

Lease liabilities must be remeasured to reflect changes in circumstances.

Circumstances might change over the life of the lease leading to a change in the lease payments. For example, the lease term might change due to a reassessment of whether an option to extend or terminate a lease is made or lease payments might change following a rent review.

A lease liability is remeasured by discounting the revised lease payments:

using a revised discount rate when there is a change in the lease term or in the assessment of an option to purchase the underlying asset; or

by discounting the revised lease payments at the original rate when there is a change in the amounts expected to be payable under a residual value guarantee or in future lease payments resulting from a change in an index or a rate used to determine those payments (e.g. following a market rent review).

Example: Remeasuring the lease liability (change in lease term)

X Plc enters into a 5 year lease of a machine on 1 January Year 1.

The lease liability at the commencement of the lease was \$426,494.

X Plc incurred initial direct costs of \$5,000 when arranging the lease.

X Plc recognised a right of use asset at the commencement of the lease in the amount of \$431,494 (\$426,494 + \$5,000).

X Plc has guaranteed the residual value of the asset at the end of the lease term at \$40,000.

Further information

X Plc has an option to extend the lease term for a further three years at an annual rental of \$110,000.

At the commencement date, X Plc concluded that it was not reasonably certain to exercise the option so the lease term was determined to be 5 years.

X Plc would not have to guarantee a residual value if it were to exercise the option to extend the lease term.

End of Year 4

X plc's circumstances have changed and it is now reasonably certain that it will exercise the option to extend the lease (meeting the conditions in IFRS 16).

X Plc is unable to determine a revised interest rate implicit in the lease but its incremental borrowing rate is 9%.

Example (continued): Remeasuring the lease liability

The balances in X Plc's at the end of year 4 before the remeasurement of the liability are as follows:

Lease liability at year 4:

Year	Opening liability	Interest (8%)	Lease payments	Closing liability
1	426,494	34,120	(100,000)	360,614
2	360,614	28,849	(100,000)	289,463
3	289,463	23,157	(100,000)	212,620
4	212,620	17,010	(100,000)	129,630

Right of use asset at year 4

	\$
Balance on initial recognition	431,494
Less: 4 years depreciation (4 × ((\$431,494 - \$40,000) / 5 years))	(313,195)
	<u>118,299</u>

The lease liability is remeasured as follows:

Years (from the end of year 4)	Narrative	Cash flow	Discount factor at 9%	Present value at 9%
1	Year 5 rental on the original lease term	100,000	0.917	91,743
Year 1 of the extension of the	lease	110,000	0.842	92,585
Year 2 of the extension of the	lease	110,000	0.772	84,940
Year 3 of the extension of the	lease	110,000	0.708	<u>77,927</u>
				<u>347,195</u>

Remeasurement at end of year 4

	\$
Remeasured liability	347,195
Liability before adjustment	(129,630)
Remeasurement adjustment	<u>217,565</u>

This is achieved with the following double entry:

	Dr	Cr
Right of use asset	217,565	
Lease liability		217,565

The right of use asset after this adjustment is as follows:

	\$
Carrying amount before adjustment	118,299
Adjustment	<u>217,565</u>
Carrying amount after adjustment	<u>335,864</u>

X plc would account for the lease over the next four years (the last year of the original term plus the three years of the extension) as follows:

Lease liability over next 4 years

Year	Opening liability	Interest (9%)	Lease payments	Closing liability
1 (5)	347,195	31,248	(100,000)	278,443
2 (6)	278,443	25,060	(110,000)	193,502
3 (7)	193,502	17,415	(110,000)	100,918
4 (8)	100,918	9,083	(110,000)	0

Right of use asset at end of next 4 years

	\$
Carrying amount after adjustment	335,864
Depreciation in years (5 to 8)	
4 × (335,864/4 years)	<u>(335,864)</u>
	<u>nil</u>

Lease modification

Definition: Lease modification

Lease modification: A change in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease (for example, adding or terminating the right to use one or more underlying assets, or extending or shortening the contractual lease term).

Lease modification is different from the situations addressed by the previous section. A lease modification involves changes to the lease that were not part of the original terms and conditions of a lease.

Example: Lease modification

X Plc leases a building for an initial period of five years with an option to extend the lease for a further three years.

At the commencement date, X Plc concluded that it was not reasonably certain to exercise the option so the lease term was determined to be 5 years.

At the end of the fourth year of the lease X plc's circumstances have changed and it is now reasonably certain that it will exercise the option to extend the lease (meeting the conditions in IFRS 16).

X Plc must remeasure the lease liability but this is **not a lease modification** as it is a change that was part of the original terms and conditions of the lease.

Example: Lease modification

Y Plc leases a building for five years.

At the end of the fourth year of the lease X plc's circumstances have changed and it has contracted with the lessor to extend the lease for a further three years beyond the original lease term.

This is a lease modification as it is a change that was **not** part of the original terms and conditions of the lease.

Accounting for lease modifications

A lease modification might be accounted for as a new lease depending on circumstances.

A lease modification is accounted for as a new lease if the modification changes the scope of the lease by adding the right to use one or more underlying assets and charges a consideration which is commensurate with the stand-alone selling price of the additional right of use and reflects the circumstances of the contract.

Example: Lease modification – new lease

X Plc enters into a 6 year lease for 3 floors of an office block.

At the end of Year 4, X Plc and the lessor agree to amend the original lease for the remaining 2 years to include an additional floor in the same block.

The increase in the lease payments is commensurate with the current market rate for the extra floor as adjusted for a discount to reflect costs saved by the lessor in renting to X Plc. (For example, the lessor would save the marketing costs of finding new tenant).

Analysis

The modification grants X Plc an additional right to use an underlying asset (an extra floor in the building) and the increase in consideration for the lease is commensurate with the stand-alone price of the additional right-of-use adjusted to reflect the circumstances of the contract.

Conclusion

The modification is a separate lease from the original 6 year lease.

Accounting consequences

Plc must recognise a right-of-use asset and a lease liability relating to the lease of the additional floor.

There are no adjustments in respect of the original lease of 3 floors as a result of this modification.

If a modification is not accounted for as a separate lease, the lease liability is remeasured by discounting the modified future cash flows using a revised discount rate.

The lease liability would be reduced by a modification that reduces the scope of the original lease. In that case, right of use asset is reduced by the proportionate reduction of the asset with any balance (gain or loss recognised in profit or loss)

The change in the lease liability for other lease modifications simply results in an adjustment to the right of use asset.

Example: Lease modification – reduction in scope (no separate lease)

X Plc enters into a 6 year lease for 3 floors of an office block at \$100,000 per floor per annum payable in arrears.

The interest rate implicit in the lease could not be readily determined. X Plc's incremental borrowing rate at the commencement date was 5% per annum.

The asset is written off on a straight line basis over the life of the lease.

At the end of Year 4, X Plc and the lessor agree to amend the original lease for the remaining 2 years to reduce the space to 2 floors only.

X Plc's incremental borrowing rate at the date of the modification is 6% per annum. **Analysis**

The modification does not result in a new lease as it does not add to the right to use one or more underlying assets.

Accounting consequences

The accounting treatment is as follows.

The lease liability was measured initially as follows:

Cash Year	flow	Discount factor at 5%	Present value at 5%
1 – 6	300,000	5.076	1,522,800

At end of year 4

The lease liability and right of use asset were measured as follows before the adjustment for the modification.

Carrying amount of the asset
(1,522,800 × 2 years/6 years) \$507,600

Carrying amount of the liability:

Year	Cash flow	Discount factor at 5%	Present value at 5%
1 – 2	300,000	1.859	557,600

The future rentals fall to \$200,000 and the right of use asset falls by 1/3.

The lease liability is remeasured as follows:

Year	Cash flow	Discount factor at 6%	Present value at 6%
1 – 2	200,000	1.833	366,600

The double entry is as follows:

	Dr	Cr
Lease liability (557,600 – 366,600)	191,000	
Right of use asset (1/3 × 507,600)		169,200
Profit or loss (balance)		21,800

- 01. Lease Classification **Para 63, 64**
- 02. Initial measurement (**Finance Leasing**)
 - By a Leasing or Finance Institution **Para 67**
 - By a Dealer or Manufacturer **Para 71**
- 02. Subsequent Measurement **Para 75**
- 03. Modification **Para 79**
- 04. **Operating Lease**
 - Measurement** **Para 81**
 - Modification** **Para 87**

**Lessor
accounting**

Lease Classification

Example: PV of future lease payments

A finance company has purchased an asset to lease out to a manufacturing company.

The asset cost \$500,000 and has an economic life of 10 years.

The lease is for 9 years at an annual rental (in arrears) of \$87,000 per annum.

The interest rate implicit in the lease is 10%.

Analysis: Lessor's view

Discount Time	Narrative	Cash flows	factor (10%)	Present value
Lessor's lease				
1 to 9	payments	87,000	5.759	501,033

This is more than the fair value of the asset. This lease is a finance lease (also note that the lease is for the major part of the expected economic life of the asset which is another finance lease indicator).

Example: PV of future lease payments

A finance company has purchased an asset for \$50,000 and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 4 years at an annual rental of \$10,000.

After the end of the lease to Company A the asset will be leased to Company B for 3 years at a rental of \$10,000. Company B is not related to Company A.

At the end of this lease the asset is expected to have an unguaranteed residual value of \$2,573.

The interest rate implicit in the lease is 10%.

Analysis: Lessor's view

Discount Time	Narrative	Cash flows	factor (10%)	Present value
Lessor's lease				
1 to 7	payments	10,000	4.868	48,680

This is 97.4% ($48,680/50,000 \times 100$) of the fair value of the asset which most would agree that this was substantially all of the fair value of the asset (though IFRS 16 does not give a numerical benchmark).

This lease is a finance lease.

Leases of land and buildings

A property lease usually includes both land and buildings. Each element should be classified separately. In other words, a property lease is viewed as a lease of land and a different lease of the building.

Leases of land and buildings are classified as operating or finance leases in the same way as leases of other assets.

Splitting the payments

It is necessary to split the rental payments for the land and building into the rental for the land and the rental for the building.

The lease payments are allocated between the land and the buildings elements in proportion to the relative fair values of the leasehold interests in the land element and buildings element of the lease at the inception of the lease.

The relative fair value of the leasehold interests is from the point of view of the lessee. This means that the relative fair value of the leasehold interests is not the same as the relative fair value of the land and the building.

Example: Land and buildings

A company leases a property for \$450,000 per annum (in arrears).

The lease is for 10 years and the useful life of the building is 5 years.

	Land (\$)	Building (\$)
Fair value	2,000,000	500,000
Fair value of leasehold interest	1,000,000	500,000

The rentals are allocated between the land and buildings in the ratio of 1,000,000 to 500,000 or 2 to 1

	\$
Rental for land ($\frac{2}{3} \times 450,000$)	300,000
Rental for building ($\frac{1}{3} \times 450,000$)	150,000

If this cannot be done the entire lease must be classified as a finance lease unless it is clear that both elements are operating leases, in which case the entire lease is classified as an operating lease.

If the land element is immaterial, the land and buildings may be treated as a single unit for the purpose of lease classification. In such a case, the economic life of the building is regarded as the economic life of the entire leased asset.

Initial & Subsequent measurement (*Finance Leasing*)

Illustration: Double entry on Initial recognition of a finance lease

Debit		Credit
Asset	X	
Cash/bank		X
Being: Purchase of the asset by the lessor		
Net investment in the lease	X	
Cash/bank		X
Being: Lease of asset to the lessee		

Subsequent measurement of the receivable

During each year, the lessor receives payments from the lessor. Each receipt is recorded in the ledger account as follows.

Illustration: Lessor receipts

Debit		Credit
Cash/bank	X	
Net investment in the lease		X

A finance lease receivable (net investment in the lease) is measured in the same way as any other financial asset. The balance at any point in time is as follows:

Illustration: Net investment in the lease

	\$
Amount loaned at the start of the lease (the amount recognised on initial recognition of the lease)	X
Plus: Interest accrued	X
Minus: Repayments (lease payments or rentals)	(X)
Repayment of loan principal	(X)
Amount owed to the lessor now.	X

Example: Total finance income

Ready Finance Plc agreed to lease a machine to X Plc commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of \$18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was \$80,000 and Ready Finance incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is \$10,000. The lessee has guaranteed an amount of \$8,000.

The interest rate implicit in the lease is 10.798%.

Total finance income

Lessor's lease payments:

Annual rentals (6 × 18,000)

Guaranteed residual value

Unguaranteed residual value

Amount on initial recognition

Initial direct costs

Total finance income

\$

108,000

8,000

2,000

118,000

(80,000)

(2,000)

(82,000)

36,000

Example: Calculating and allocating finance income

Ready Finance Plc agreed to lease a machine to X Plc commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of \$18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was \$80,000 and Ready Finance Plc incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is \$10,000. The lessee has guaranteed an amount of \$8,000.

The interest rate implicit in the lease is 10.798%.

Proof that interest rate implicit in the lease is 10.798%

Year	Narrative	Cash flow	Discount factor (10.798%)	Present value
1 to 6	lease payments			
6	Annual rentals	18,000	4.2553	76,595
6	Guaranteed residual value	8,000	0.54052	4,324
6	Unguaranteed residual value	2,000	0.54052	1,081
				82,000
	Fair value of the asset			80,000
	Initial direct costs			2,000
				82,000

Example: Calculating and allocating finance income

Ready Finance Plc agreed to lease a machine to X Plc commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of \$18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was \$80,000 and Ready Finance Plc incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is \$ 10,000 and the lessee has guaranteed \$8,000 of this amount.

The interest rate implicit in the lease is 10.798%.

Year	Opening net investment	Interest (10.798%)	Lease receipts	Closing net investment
1	82,000	8,854	(18,000)	72,854
2	72,854	7,867	(18,000)	62,721
3	62,721	6,773	(18,000)	51,494
4	51,494	5,560	(18,000)	39,054
5	39,054	4,217	(18,000)	25,271
6	25,271	2,729	(26,000)	2,000
		36,000		

The interest income is calculated by multiplying the opening receivable by 10.798% in each year (so as to provide a constant rate of return on the net investment in the lease).

The final balance on the account is the unguaranteed residual value.

Manufacturer/dealer leases

Manufacturers or dealers often offer to customers the choice of either buying or leasing an asset. A finance lease of an asset by a manufacturer or dealer lessor gives rise to two types of income:

profit or loss equivalent to the profit or loss resulting from an outright sale of the asset being leased, at normal selling prices, reflecting any applicable volume or trade discounts; and
finance income over the lease term.

Revenue

The sales revenue recognised at the commencement of the lease term is the lower of:

the fair value of the asset; and

the present value of the lessor's lease payments at a market rate of interest.

Cost of sale

The cost of sale recognised at the commencement of the lease term is the carrying amount of the leased asset less the present value of the unguaranteed residual value.

The deduction of the present value of the unguaranteed residual value recognises that this part of the asset is not being sold. This amount is transferred to the lease receivable. The balance on the lease receivable is then the present value of the amounts which the lessor will collect off the lessee plus the present value of the unguaranteed residual value. This is the net investment in the lease as defined earlier.

Costs incurred by manufacturer or dealer lessors in connection with negotiating and arranging a lease must be recognised as an expense when the selling profit is recognised.

Profit or loss on the sale

The difference between the sales revenue and the cost of sale is the selling profit or loss. Profit or loss on these transactions is recognised in accordance with the policy followed for recognising profit on outright sales.

The manufacturer or dealer might offer artificially low rates of interest on the finance transaction. In such cases the selling profit is restricted to that which would apply if a market rate of interest were charged.

Example: Manufacturer or dealer leases

Best Cars Plc is a car dealer.

It sells cars and offers a certain model for sale by lease.

The following information is relevant:

Price of the car in a cash sale	\$2,000,000
Cost of the car	\$1,500,000

Finance option:

Annual rental	\$804,230
Lease term	3 years
Interest rate	10%
Estimated residual value	nil
Lessor's cost of setting up the lease	\$20,000

Initial double entry:

	Debit	Credit
Revenue		
Lease receivable (Net investment in the lease)	2,000,000	
Statement of comprehensive income	0	2,000,000
Cost of sale		
Statement of comprehensive income	1,500,000	
Asset (Inventory)	0	1,500,000
Cost of setting up the lease		
Statement of comprehensive income	20,000	
Cash/bank		20,000

Example: Manufacturer or dealer lease (continued)

Net investment in the lease (over its life):

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	2,000,000	200,000	(804,230)	1,395,770
2	1,395,770	139,577	(804,230)	731,117
3	731,117	73,113	(804,230)	nil

The interest income is calculated by multiplying the opening receivable by 10% in each year (so as to provide a constant rate of return on the net investment in the lease).

Example: Manufacturer or dealer leases with unguaranteed residual value

The following information is relevant:

Price of the car in a cash sale	\$2,000,000
Cost of the car	\$1,500,000
Finance option:	
Annual rental	\$764,018
Lease term	3 years
Interest rate	10%
Estimated residual value	0
Lessor's cost of setting up the lease	\$20,000

Discount factors:

t3 @ 10%	0.7513148 (written as 0.751)
t1 to t3 @ 10%	2.486852 (written as 2.487)

Workings

W1: Revenue – lower of:

Fair value of the asset	\$ 2,000,000
Present value of the lease payments	
$764,018 \times 2.487$	1,900,000

W2: Present value of the unguaranteed residual value

Present value of the lease payments	\$
$133,156 \times 0.751$	100,000

Initial double entry:

	Debit	Credit
Revenue		
Lease receivable (Net investment in the lease)	1,900,000	
Statement of comprehensive income		1,900,000
Cost of sale		
Statement of comprehensive income	1,400,000	
Asset (Inventory)		1,400,000
Transfer		
Lease receivable (Net investment in the lease)	100,000	
Asset (Inventory)		100,000
Cost of setting up the lease		
Statement of comprehensive income	20,000	
Cash/bank		20,000

Example: Manufacturer or dealer lease (continued)

Net investment in the lease (over its life):

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
	1,900,000			
	100,000			
	2,000,000	200,000	(764,018)	1,435,982
2	1,435,982	143,598	(764,018)	815,562
3	815,562	81,556	(764,018)	133,100

The interest income is calculated by multiplying the opening receivable by 10% in each year (so as to provide a constant rate of return on the net investment in the lease).

The balance on the account at the end of the lease term is the unguaranteed residual value

Initial & Subsequent measurement (*Operating Leasing*)

Example: Operating lease incentives

X Limited signed a contract to lease an asset to a customer on 1 January 2016.

The lease was for 20 years.

The first year is rent free with rentals of \$30,000 per annum payable in arrears thereafter.

The double entries would be as follows:

Year 1	Debit	Credit
Lease incentive	\$28,500	
Statement of profit or loss		\$28,500

$$\frac{(30,000 \times 19)}{20}$$

Years 2 to 20

Cash
Statement of profit or loss
Deferred credit

Debit	Credit
\$30,000	
	\$28,500
	\$1,500

$$\frac{(30,000 \times 19)}{20}$$

$$\frac{28,500}{20}$$

Allocating Lease Incentive Over the period

Sale under SLFRS 15

FV = SP Para 100

FV > SP Para 101 a

FV < SP Para 101 b

Sale not under SLFRS 15

Para 103

**Sale &
Lease back**

Illustration: Sale and lease back double entry

	Debit	Credit
Sale proceeds	X	
Original asset (carrying amount)		X
Right of use asset	X	
Lease liability		X
Gain on transfer (as a balancing figure)		X

Lease liability

The lease liability at the inception of the lease is measured in the usual way as the present value of the lease payments discounted at the interest rate inherent in the lease (if available) or the lessee's incremental borrowing rate.

Right of use asset

The seller/lessee has sold an asset but retained a right to use it. The right of use asset is a portion of the asset that has been sold.

The fair value of the asset is a measure of all rights inherent in the asset. The lease liability is a measure of the fair value of those rights reacquired through the lease. Therefore, the relationship between the two figures can be used to show the proportion of the rights retained.

This proportion is applied to the original carrying amount as follows to arrive at the right of use asset.

Illustration: Measuring the right of use asset

$$\begin{array}{r} \text{Carrying amount of the asset (before} \\ \text{the transfer)} \end{array} \times \frac{\text{Lease liability}}{\text{Fair value of the asset}}$$

Note that the right of use asset is not measured at its fair value but as a proportion of its original carrying amount.

Example: Sale and leaseback

X plc sells an asset and leases it back.

The transfer qualifies as a sale according to IFRS 15 criteria.

Details of the asset:

Carrying amount = \$1,000,000

Sale proceeds = \$1,300,000

Fair value = \$1,300,000

Terms of the lease:

annual payments of \$83,951.48 Interest rate implicit in the

lease = 5% (The 20 period, 5% annuity factor is 12.4622)

The transaction is accounted for as follows:

Step 1: Measure the lease liability as the present value of the lease payments.

Years	Cash flow	Discount factor	Present value
1 to 20	83,951.48	12.4622	<u>1,046,221</u>

Step 2: Measure the right of use asset

$$\text{Right of use asset} = 1,000,000 \times \frac{1,046,221}{1,300,000}$$

$$\text{Right of use asset} = \underline{804,785}$$

Step 3: Complete the double entry identifying the gain/(loss) on disposal as a balancing figure

	Debit	Credit
	\$	\$
Cash	1,300,000	
Asset		1,000,000
Lease liability		1,046,221
Right of use asset	804,785	
Gain on disposal (balance)		58,564
	2,104,785	2,104,785

Example: Sale (at above fair value) and leaseback

X plc sells an asset and leases it back.

The transfer qualifies as a sale according to IFRS 15 criteria.

Details of the asset:

Carrying amount of = \$1,000,000

Sale proceeds = \$1,500,000

Fair value = \$1,300,000

Terms of the lease:

annual payments of \$100,000 Interest rate implicit in the lease = 5% (The 20 period, 5% annuity factor is 12.4622)

Notes: The sale proceeds of \$1,500,000 comprise \$1,300,000 for the asset and additional finance of \$200,000.

The present value of the annual payments discounted at the interest rate implicit results in a total liability which is made up of the lease liability proper plus this additional finance. The lease liability proper is calculated by subtracting the additional finance from the total liability.

The transaction is accounted for as follows:

Step 1: Measure the total liability as the present value of the annual payments.

Years	Cash flow	Discount factor	Present value
1 to 20	100,000	12.4622	<u>1,246,220</u>

Step 2: Identify the lease liability.

	\$
Extra finance	200,000
Lease liability	<u>1,046,220</u>
PV of payments (12.4622 × 100,000)	<u><u>1,246,220</u></u>

Step 3: Measure the right of use asset (as before)

Right of use asset =	1,000,000	×	<u>1,046,221</u>
			<u>1,300,000</u>
Right of use asset =	<u>804,785</u>		

Step 4: Complete the double entry

	Debit	Credit
	\$	\$
Cash	1,500,000	
Asset		1,000,000
Right of use asset	804,785	
Liability (extra finance)		200,000
Lease liability		<u>1,046,221</u>
Net gain		58,564
	<u>2,304,785</u>	<u>2,304,785</u>

Tutorial notes:

The existence of the extra finance component does not affect the other aspects of the transaction.

The difference between the solution in this example and the previous example is a simple double entry of \$200,000 between cash and a liability for the extra finance.

The payments in this example are higher than those in the previous example in order to pay off the extra \$200,000.

It is not needed to solve the above example but the annual payments of \$100,000 can be prorated between the two components of the liability as follows:

	\$
Extra finance ($\$100,000 \times 200,000/1,246,221$)	16,049
Lease liability ($\$100,000 \times 1,046,221/1,246,221$)	83,951
	<hr/>
	100,000

Example: Sale (at below fair value) and leaseback

X plc sells an asset and leases it back.

The transfer qualifies as a sale according to IFRS 15 criteria.

Details of the asset:

Carrying amount of = \$1,000,000

Sale proceeds = \$1,200,000 (\$100,000 less than fair value)

Fair value = \$1,300,000

Terms of the lease:

annual payments of \$75,927 Interest

rate implicit in the lease = 5%

(The 20 period, 5% annuity factor is 12.4622) The

present value of lease payments is \$946,221

Note: The sale proceeds of \$1,200,000 are \$100,000 less than the fair value of the asset. In effect, this is an extra amount being paid by X Plc in addition to the annual payments in order to obtain the right of use asset. The lease liability proper is made up of the present value of the lease payments plus the shortfall.

The transaction is accounted for as follows:

Step 1: Measure the total liability as the present value of the annual payments.

Years	Cash flow	Discount factor	Present value
1 to 20	75,927	12.4622	<u>946,221</u>

Step 2: Identify the lease liability.

	\$
Lease liability (balancing figure)	1,046,220
Lease prepayment	<u>(100,000)</u>
PV of payments (as above)	<u>946,221</u>

Step 3: Measure the right of use asset (as before)

Right of use asset =	1,000,000	×	$\frac{1,046,221}{1,300,000}$
Right of use asset =	<u>804,785</u>		

Step 4: Complete the double entry

	Debit	Credit
	\$	\$
Cash	1,200,000	
Asset		1,000,000
Right of use asset	804,785	
Lease prepayment	<u>100,000</u>	
Lease liability		<u>1,046,221</u>
PV of the lease payments		946,221
Net gain		58,564
	<u>2,004,785</u>	<u>2,004,785</u>

Tutorial notes:

The existence of the lease prepayment does not affect the other aspects of the transaction. The difference between the solution in this example and the example at market terms is a simple double entry of \$100,000 between cash and a lease prepayment.

The payments in this example are lower than those in the first example as \$100,000 has already been repaid.

Buyer/lessor accounting for transfers that are a sale

The lessor must account for the purchase of the asset by applying applicable accounting standards.

The lease back is accounted for using lessor accounting as previously described.

Accounting for transfers that are not a sale

This is accounted for using loan accounting by both parties. IFRS 9 applies to the financial liability recognised by the seller and the financial asset recognised by the buyer.

