



Accounting for Leases

(Relevant to AAT Paper 7 – Financial Accounting)

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This article deals with the accounting for leases and is written for students studying AAT Paper 7: Financial Accounting.

Nature of a lease

A lease is an agreement between two parties for hiring an asset. The lessor, who is the legal owner of the asset, rents out the asset to the lessee. For an agreed period of time, the lessee will pay a lease rental to the lessor in return for the right to use the asset.

Classification of a lease

In accordance with HKAS 17, the classification of a lease centres on whether the risks and rewards of ownership transfer to the lessee. All leases can be classified as either one of the following:

- **Finance lease** – This is a lease, according to HKAS 17, that “transfers substantially all the risks and rewards incidental to ownership of an asset”. At the end of the lease term, title may or may not be transferred to the lessee.
- **Operating lease** – It is any lease other than a finance lease.

It is necessary to review all the terms of the lease so that the substance of the lease agreement can be identified and then judgment can be made on whether the lease is a finance lease or an operating lease.

Example 1

On 1 January 2008 ABC Limited (ABC) entered into a lease with GHI Limited (GHI) in respect of Machine X. The terms of the lease are as follows:

- (1) ABC had to pay an initial deposit of \$1,600 and four further payments of \$2,000 each at 31 December of years 2008, 2009, 2010 and 2011.
- (2) ABC will be responsible for the insurance, repairs and maintenance of Machine X.
- (3) ABC has the option to buy the asset for \$500 at the end of the lease.
- (4) ABC has the right to extend the lease for one year at end of the lease term by paying \$800.
- (5) There is no break clause included in the lease term.

The following information is also available:

- (a) The asset has an expected useful life of five years at which time it will have a nil residual value. The estimated residual value of Machine X at the end of the lease term is \$1,500.
- (b) The interest rate implicit in the lease is 10%.
- (c) The cash price of Machine X was \$8,000.
- (d) Machine X is specially designed for the production line at Plant Z of ABC.
- (e) The director of ABC decided to exercise the option and to purchase Machine X at the end of the lease term.
- (f) The market rent for machines similar to Machine X is around \$2,000 per year.

Required:

Determine whether the lease between ABC and GHI is a finance lease or an operating lease.

Solution:

The lease between ABC and GHI is a finance lease for the following reasons:

- (1) At the inception of the lease the present value of the minimum lease payments ($\$1,600 + \$2,000 \times 3.169865 = \$7,940$) amounts to substantially all of the fair value (\$8,000) of the leased asset.
- (2) The lease term, which is four years, is for the major part of Machine X's economic life of five years. Moreover, there is no break clause in the lease and there is no doubt that ABC enjoys most of the future benefits of Machine X and only an immaterial residue value would be returned to the GHI at the expiry of the lease.
- (3) ABC is responsible for the insurance, repairs and maintenance of the asset and this indicates ABC's role as owner. That is, ABC has to bear the risks of ownership of Machine X.
- (4) ABC has the option to purchase Machine X at a price of \$500 that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable. The estimated residual value at the end of the lease term (\$1,500) is a reference for the fair value at the date the option becomes exercisable. Also, ABC expects to exercise the option upon entering the lease agreement with GHI. ABC will access the future economic benefits of Machine X even though the lessee does not have legal title.
- (5) Machine X is of a specialized nature since it is specifically designed for the production line at ABC's Plant Z. As a result, ABC can use the machine without major modifications.
- (6) ABC has the right to continue the lease for a secondary period of one year at a rent of \$800, which is substantially lower than the market rent of \$2,000.

Accounting for operating leases

In the lessee's book, the rent paid is recorded as an operating expense and included in the income statement.

Accounting for finance leases

Lessee

At the start of the lease, the lessee should recognize finance leases as assets and liabilities at amounts equal to the lower of the fair value and the present value of the minimum lease payments of the leased asset, determined at the inception of the lease. HKAS 17 defines minimum lease payments as the payments made by the lessee over the lease term that:

- exclude contingent rent, costs for services and taxes to be paid by and reimbursed to the lessor
- include, for the lessee, any amounts guaranteed by the lessee or by a party related to the lessee, or for the lessor, any residual value guaranteed to the lessor

HKAS 17 further specifies that the minimum lease payments comprise the minimum payments payable over the lease term and the payment for the option, if the exercise price is sufficiently lower than fair value of the asset at the date the option becomes exercisable and it is reasonably certain that the option will be exercised.

Example 2

Use the information in Example 1.

Required:

Calculate the present value of the minimum lease payments of the leased asset for ABC.

Solution:

The present value of minimum lease payments of the leased asset is \$8,281.

Period		<u>Amount</u>	<u>Discount factor</u>	<u>Present value</u>
		\$		\$
1/1/08	Initial deposit	1,600	1	1,600
31/12/08	Annual rent	2,000	0.909091	1,818
31/12/09	Annual rent	2,000	0.826446	1,653
31/12/10	Annual rent	2,000	0.751315	1,503
31/12/11	Annual rent	2,000	0.683013	1,366
31/12/11	Option	500	0.683013	<u>341</u>
				<u>8,281</u>

The amount that ABC paid for exercising the option is included in the calculation because the exercise price is \$1,000 (\$1,500 - \$500) lower than estimated residual value of the asset at the date the option becomes exercisable and the option will be exercised.

Usually, the leased asset has to be depreciated over the shorter of the period of the lease and the useful life of the asset. The depreciation period depends on the period that the lessee acquires benefits from the leased asset.

The interest accrued should give a constant periodic return on the balance of the outstanding loan. The rental payment represents partly the repayment of the capital element of the loan and partly the finance charge on the loan.

Example 3

Following the information in Example 1, assume that it is the policy of ABC to depreciate the property, plant and equipment using the straight-line method.

Required:

Prepare the journal entries to record the lease transactions for the year ended 31 December 2008.

	\$	\$	Note
1 January 2008			
Dr. Leased machine	8,000		(1)
Cr. Lease obligation		8,000	
To record the leased asset and related obligation at the commencement of the lease.			
Dr. Lease obligation	\$1,600		
Cr. Bank		\$1,600	
To record the payment of initial deposit.			
31 December 2008			
Dr. Interest expenses	640		
Cr. Lease obligation		640	
To record finance charge on the outstanding obligation during the year. [(\$8,000 - \$1,600) x 10%]			

	\$	\$	Note
Dr. Depreciation expenses – Leased Machine	1,600		(2)
Cr. Accumulated depreciation		1,600	
To provide depreciation for the leased asset. (\$8,000/5)			
Dr. Leased obligation	2,000		
Cr. Bank		2,000	
To record the installment payment and the related reduction in lease obligation.			

Note (1): Since the fair value of leased asset at inception of the lease is lower than its present value of minimum lease payments, the fair value (that is, its cash price) of \$8,000 is used to record the leased asset and obligation.

Note (2): Since the director of ABC decided to exercise the option, ABC is able to access to the future economic benefits of the leased asset throughout it is expected useful life. The expected useful life, rather than the lease term, is then used for calculating the depreciation.

Lessor

When entering into a finance lease the lessor is in substance making a loan to the lessee to purchase the asset and the loan will be repaid by installments with interest. The lessor does not have access to the future economic benefits of the leased asset despite the fact that it has the legal title to the asset. Therefore, the leased asset should be recognized as a receivable at an amount equal to the net investment in finance leases.

Net investment in the lease refers to the gross investment in the lease discounted at the interest rate implicit in the lease. HKAS 17 defines gross investment in the lease as the aggregate of:

- (a) the minimum lease payments receivable by the lessor under a finance lease, and
- (b) any unguaranteed residual value accruing to the lessor.

Conclusion

Whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than the legal form of the contract. Finance leases are those that transfer substantially all risks and rewards of ownership to the lessee. In the case of a finance lease, the lessee should capitalize the lease at the lower of the fair value and the present value of the minimum lease payments. The rental payments of the finance lease include both the finance charge and the reduction of lease obligation. As for the operating lease, the lessee should record the rental payments as expenses. **T/D**