Fundamentals of leasing – part I

In the first of a two-part series, Jeremy Dean of the Western Group examines some of the fundamentals of lease financing.

New entrants to the world of treasury, and even experienced treasurers, often perceive leasing as technically complex and bedevilled by taxation pitfalls. In this first of two articles it is hoped that, in the context of major items of capital expenditure, these myths will be disproved and a wider understanding of the principles involved will be gained. As with many treasury concepts the essence of the economic analysis of a lease is a time value of money calculation. It is important, though, to understand the relevant legal and technical framework to use the lease financing option efficiently.

This article reviews some of the fundamentals of leasing. The next article will examine further the basis of the economic analysis of leasing transactions for lessees and review the parameters impacting on the calculation of lease rent as they may be expressed in the leasing contract itself.

A form of finance

A lease is a contract for the hire of an asset pursuant to which a lessee pays rent to a lessor in return for its use. In legal terms, it represents the bailment of an asset by its owner (lessor) to a third party (lessee).

For the lessee, leasing is thus a means of financing capital expenditure by procuring use, not ownership, of an asset. Companies often have two alternatives when acquiring a capital asset: to finance expenditure on the asset from cash flow, or to borrow money. Leasing is just one option in the funding mix in terms of how money might be borrowed and is akin to a tax-based loan.

Types of Leases

Most readers will be aware there are two types of lease:

- the finance lease or full pay-out lease through which rentals paid by the lessee will amortise all, or substantially all, of the lessor's investment in the asset. The full economic burdens and rewards of ownership are with the lessee and the lessee enjoys any residual value in the asset; and
- the operating lease which is any lease other than a finance lease. Rentals paid will not be sufficient to pay down the lessor's investment. It leaves the residual value in the asset at the end of the lease term with the lessor who will look to its disposition, (either by further letting or sale) to recoup the outstanding investment.

> The profile by which capital allowances are available means in its early years a lease will generate net tax losses, while in its later years, tax profits arise

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Finance leases can be applied to all forms of equipment. Operating leases are restricted to equipment with established secondary markets, for example, transportation assets, computers, printing presses and some manufacturing plant.

Capital allowances

When a company invests in qualifying plant and machinery, (broadly, a fixed asset to be actively employed within the company's trade and so excludes most buildings and structures) the making of that expenditure can be set against the company's liability for corporation tax. Accordingly, a proportion of 'capital' is allowed as a tax deduction. Capital allowances are generally available on a 25% reducing balance basis in respect of most types of assets. Special regimes apply in certain instances. Expenditure on various assets is usually aggregated together to create a capital allowance pool. As future investments are made, so expenditure gets added to the pool. As assets are sold, the pool is reduced by the value (if any) of sales proceeds received. This is illustrated in *Table 1*.

Who is entitled to it?

Generally, the owner of an asset is entitled to depreciate investment in that asset through the capital allowance regime. In the context of leasing transactions it is necessary to distinguish different types of ownership interests:

legal owner – the person in whom legal title to the asset is vested;
economic owner – the person who enjoys the economic burdens and rewards of the asset; and
fiscal owner – the person who is entitled to the benefit of tax depreciation.

These classes of ownership interests are best illustrated by an example. We can consider an investment in new

FIGURE 1

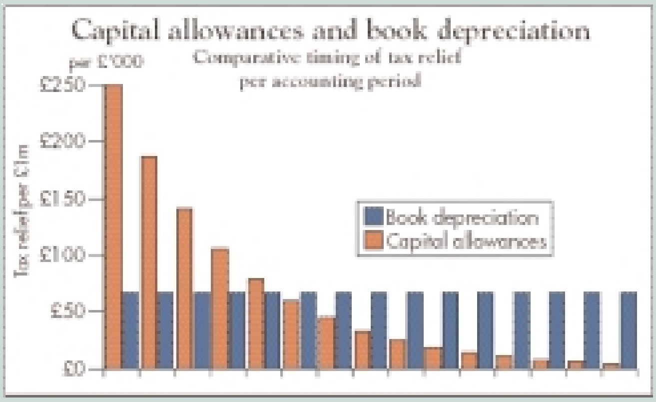

FIGURE 2

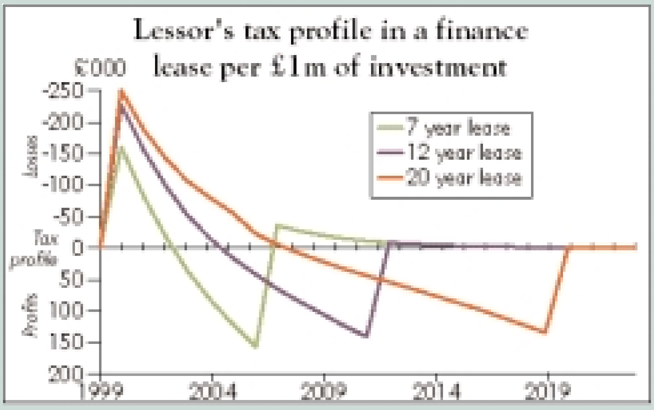

TABLE 1 Capital allowance pool

	Pool brought forward	Additions	Disposals	Pool at end of period	Writing down allowance at 25%	Pool carried forward
T^0	-	£1,000,000	-	£1,000,000	£250,000	£750,000
T^1	£750,000	-	-	£750,000	£187,500	£562,500
T^2	£562,500	-	£100,000	£462,500	£115,625	£346,875
T^n	£346,875	£200,000	-	£546,875	£136,719	£410,156

manufacturing plant which, to ensure its safe operation, has been set in concrete.

In terms of land law, legal ownership of the asset would pass at the time the machine is set in its foundation to the owner of the freehold of the land on which the plant is situated – it has become a fixture. Economic ownership would be with the company using the plant for trade purposes. If investment in the plant had been financed out of cash flow or debt, then fiscal ownership and the right to capital allowances would also be with the company. However, if the machinery had been financed by way of a lease, fiscal ownership would be with the lessor.

In all leases the lessor's entitlement to capital allowances is reflected in the calculation of lease rent and the benefit derived passed back to the lessee.

(Special rules also govern contributions by a person [including lessors] towards capital expenditure incurred by a third party. In this instance capital allowances fall to the contributor, rather than the asset owner.)

Why use lease finance?

There are many reasons why companies might want to use lease finance: for example, improvement of cash flow by gearing the lease rental profile to the forecast economic contribution of the asset, or perhaps the diversification of funding sources, and in the case of operating leases, asset risk transfer. However, there is usually a fundamental desire to optimise the taxation position of the lessee. Leasing should therefore always be examined in terms of its post-tax consequences.

Effectively a lease enables a corporate to switch out of the capital allowance regime in terms of amortising the investment in an asset for tax purposes, and instead take tax relief in respect of lease rentals payable to the lessor. Current accounting standards require lessees to capitalise finance lease obligations in their accounts. Finance lease rent is then broken down into two constituent elements: that representing the implicit cost of finance, and that representing the capital element of rent. For such leases tax relief comes in two parts, as set out in the Inland Revenue Statement of Practice 3/91: a) the accrual in respect of the implicit cost of finance; and b) the capital element of rent is amortised by reference to book depreciation charged in the lessee's accounts. (In respect of operating leases, rent is allowed on a straight-line basis over the lease term.)

As with many treasury concepts the essence of the economic analysis of a lease is a time value of money calculation

Figure 1 shows the profile of 25% writing down allowances and book depreciation for an asset depreciated over 15 years. Using a discount rate of 7.5% pa the NPV of the tax shelter generated by each is shown in *Table 2*.

For companies that are wholly tax efficient, ie, those paying corporation tax at the full rate of 30%, taking tax depreciation through the allowance regime would ordinarily be economically advantageous. However, structuring of lease rents can, on a post-tax basis, alter the equilibrium of this calculation. For the tax-inefficient company (due to, for instance, surplus capital allowances, accumulated tax losses, or unrelieved ACT) passing entitlement to capital allowances to a lessor may mean that the deductions in respect of lease rent can be more efficiently utilised than writing down allowances, and so leasing becomes an economically viable financing option. To fully understand why this is so, it is useful to look at the tax profile of a lease from the perspective of a lessor.

The lessor perspective

Lease rental is subject to corporation tax in the hands of a lessor. Offsetting this will be tax deductions in respect of monies borrowed by the lessor to fund the investment in the lease (ie, the asset acquisition) and capital allowances. Over the term of a lease taxable

TABLE 2 NPV tax shelters

	Pre-tax NPV per £1m
25% writing down allowances	£823,200
Accounting depreciation	£632,610

TABLE 3 Lessor tax profile for finance leases with various terms

Lease term/ Economic life of asset	Pre-tax IRR	Post-tax IRR	
		30% Tax paying co	0% Tax paying co
7 years	6.79%	-2.86%	6.79%
12 years	6.10%	0.80%	6.10%
15 years	5.69%	2.95%	5.69%

Assumptions
- Lease start: 31 December
- Lessor cost of funds: 6.25% pa
- Lessor margin: 0.85% p.a.
- Rentals: annual in arrears with 5% compound escalation

receipts for the lessor will be greater than the tax losses generated by interest deductions and allowances – they have to be otherwise the lessor would not make a profit from the transaction. However, the profile by which capital allowances are available means that in its early years a lease will generate net tax losses for a lessor, while in its later years, as rental income exceeds deductions, tax profits arise. This asymmetry creates a tax deferral opportunity for the lessor, the benefit of which is reflected in the calculation of lease rent.

Table 2 shows the lessor tax profile for finance leases with various terms. Note the profiles all merge into a single curve after the end of the relevant lease period, reflecting the unwind of the capital allowance pool through time.

Pricing dynamics

To give a flavour of the pricing dynamics of the lease profiles shown in *Figure 2*, the implicit financing rate of each is shown in *Table 2* on a pre- and post-tax basis. The post-tax position is further examined from the perspective of the tax-efficient and tax-inefficient lessee.

Table 2 shows that the longer the lease the greater the benefit of tax deferral to the lessor seen in the lower pre-tax implicit rate in the lease. For tax-efficient lessees the shorter the lease the lower the post-tax implicit rate of finance. This reflects the acceleration of tax relief by reference to book depreciation charged in the accounts. However, this does not necessarily mean leasing will be economically more advantageous than the alternatives.

For the wholly tax-inefficient lessee, unable to obtain any benefit from the deductibility of either capital allowances or lease rent, the pre- and post-tax cost of lease finance will always be equal. If the pre-tax IRR of the lease is lower than the lessee's cost of debt finance, leasing will be the cheaper financing route.

Leasing is best analysed in terms of a time value of money calculation and this is where we will begin next month. ■

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