

Accounting Theory

Conceptual Issues in a
Political and Economic Environment

Ninth Edition

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Leases

Learning Objectives

After reading this chapter, you should be able to:

- Understand the nature of the lease contract.
- Understand the arguments surrounding lease capitalization.
- Comprehend the evolution of lease accounting.
- Grasp the economic consequences of lease capitalization.
- Understand the G4+1 proposal on leases.
- Understand FASB and IASB Exposure Drafts on Lease Accounting.

Leases have been the subject of more accounting standards than any other single topic. The Committee on Accounting Procedure (CAP) issued one standard, the Accounting Principles Board (APB) issued five standards, the Financial Accounting Standards Board (FASB) issued ten, and it is now a major FASB-IASB convergence project that commenced in 2006 and is still under deliberations. The attention given to leases in accounting standards reflects the increased use of leasing in the business community and the need to clarify and standardize the accounting for this complex transaction. The first accounting lease standard, Accounting Research Bulletin (ARB) 38, was issued in 1949; however, it was only in the 1960s and 1970s that accounting policy makers responded to the lease accounting problem.¹ The basic accounting requirements are unchanged since the comprehensive Statement

of Financial Accounting Standard (SFAS) No. 13 was issued in 1976, although lease accounting continues to be controversial in the standards-overload debate.

Leasing is popular for a number of operating and financial reasons. From an operating viewpoint, some assets are available only under lease; others are too expensive for outright purchase. Two significant financing aspects are the tax advantages (lease payments as well as depreciation expense associated with some leases are fully deductible) and the possibility of off-balance-sheet financing, which occurs when leased assets and lease obligations are not reported in the financial statements. Off-balance-sheet financing results in better debt ratios and higher accounting rates of return than a purchase alternative could produce.

The accounting controversy about leases focuses on distinguishing between the economic substance of leases and their legal form. Prior to ARB 38, the accounting procedure for lease payments was to record them as periodic revenues for lessors and as expenses for lessees. Increasingly, however, some leases are viewed as the equivalent of purchases with debt financing. This view now dominates, and the focus of accounting standards is on defining those situations in which a lease is considered to be a purchase equivalent and in making such leases look like a purchase with debt financing. These types of leases are called *capital leases*, and the accounting procedure for them is called *capitalization*. Noncapitalized leases are called *operating leases*, and the lease payments are treated as periodic expenses.

From a lessor's viewpoint, capital leases may be one of two types, sales or financing. A *sales-type lease* arises when a manufacturer or seller of merchandise uses leasing as a financing instrument to effect what is considered to be the equivalent of a sale. In these situations, the accounting standards are first concerned with defining the criteria for sales recognition and then making the transaction look like the equivalent of a sale with vendor financing. A *financing-type lease* (also called a *direct financing lease*) occurs when a third party, typically a financial institution rather than a manufacturer or seller, finances a lease. In such situations, the financing party is the lessor and the accounting attempts to make the lease look like a loan with income realized through implicit interest in each lease payment. If a lease is not capitalized by a lessor, the payments are recognized as revenues when received.

This chapter begins with an examination of lease contracts and the capitalization argument and then reviews the evolution of lease accounting in the accounting standards, revealing an ever-finer attempt to achieve finite uniformity *vis-à-vis* operating and capital leases. Separate accounting rules have developed for the two types. This approach is defended on the grounds of representational faithfulness, in which a lease is interpreted to be either a simple rental agreement or a more complex capital lease. The economic consequences of lease accounting standards are then followed by an examination of the lease proposal made by the G4+1 standard-setting organizations. Finally, we examine FASB's and IASB's two recently issued Exposure Drafts (Exposure Draft 2010/9 and Exposure Draft 2013) and the current status of accounting for leases convergence joint project.²

The Lease Contract

A *lease* is a legal document conveying use of property for a fixed period of time in exchange for rent or other compensation. From a legal viewpoint, a lease is both a conveyance and a contract, with the contractual element dominating.³ It is a conveyance because the lessee acquires an interest in property for a fixed period of time. It is a contract because the lessor promises the lessee *quiet enjoyment* of the property during the lease term in exchange for the promise of periodic payments. Although it is not possible to define unambiguously a *true lease* in law, Exhibit 16.1 lists characteristics regarded as indicators of a true lease. Material variations from the characteristics listed in Exhibit 16.1 can result in regarding a lease as a conditional sale agreement or a debt instrument rather than a true lease. Capitalization criteria in accounting standards are concerned with many of these characteristics.

The Executory Nature of Lease Contracts

The legal form of a lease contract is an executory (unperformed) contract. A lessor (legal owner) transfers possession of a leased asset to a lessee for a fixed period of time in exchange for a series of rents. A lessee's performance is executory because future rents are due one period at a time. However, the performance question is arguable both ways with respect to the lessor. The distinction is important because it determines whether the contract is mutually unperformed or unilaterally unperformed. As indicated in Chapter 11, mutually unperformed executory contracts are traditionally excluded from the balance sheet.

It can be argued that a lease contract is fully executed by a lessor when possession of the leased asset is transferred to a lessee. This would make a lease contract unilaterally unperformed by the lessee in the case of default. Such contracts are recognized in the balance sheet because possession of a leased asset is both an obligation and asset of the lessee. SFAC No. 6 defines assets as probable future economic benefits and liabilities as probable future sacrifices of economic benefits, both arising from past transactions.⁴ A fixed-term lease contract grants property use rights, which may create future economic benefits even though property ownership does not exist. In the same manner, a lease contract also obligates the lessee to make future payments.

The following factors are considered to be indications that a lease agreement is, without doubt, a true lease:

If a lease is interpreted as a mutually unperformed executory contract, it can be argued that an asset and liability do not exist for the lessee. In such a situation, the lessor would be permitting use for each period at a time only if the rentals are paid by the lessee. This simply results in expensing current-period lease payments. Mutually unperformed future promises are excluded from the balance sheet on the grounds that these are future transactions that have not yet occurred.

The legal remedies available to lessors in the event of lessee default consider leases as mutually unperformed executory contracts. A lessee is not liable for future lease

Exhibit 16.1 ● Characteristics of a True Lease

1.	The absence of a provision for the transfer of the title to the lessee.
2.	The absence of any mention of interest as a factor in rental charges.
3.	Rental charges that are competitive with those charged by other lessors of similar equipment.
4.	Rental charges that are reasonably related to the loss of value due to the lessee's use of the equipment or that are based on production or use and not necessarily related to purchase price.
5.	The assumption of the risk of loss by the lessor.
6.	The lessor is required to bear the cost of insurance, maintenance, and taxes.
7.	The lessor retains the right to inspect the equipment during the term of the lease.
8.	If the lessee has an option to purchase:
	a. The option price approximates the predicted fair market value of the equipment at the time the option may be exercised.
	b. Rentals are not applied to the option price.
9.	The rentals charged under leasing plans without an option to purchase approximate the rental charged under plans with such an option.
10.	Government agencies recognize the lessor as the owner of the leased asset.
11.	The lessee considers, by his action, that he is a lessee and not a purchaser.

Source: *Characteristics of a True Lease*

Source: Financial Executives Research Foundation, Inc. (FERF) *Accounting for Leases* by David M. Hawkins and Mary M. Wehle (1973). Reprinted with permission by Financial Executives Research Foundation, Inc., <http://www.feif.org>.

payments in the event of default. A lessor must first mitigate the loss of rents by selling the asset or leasing it again. The lessee has a legal obligation to the lessor only for any residual losses after the lessor mitigates the loss. This makes leases significantly different from other debt agreements—for example, corporate bonds in which the borrower is obliged for the full amount of unpaid principal plus any accrued interest in the event of default.

The importance of the executory aspect of lease contracts is attested to in the second lease accounting standard, APB Opinion No. 5. The fundamental assumption underlying lease capitalization is noncancellability of the lease contract or other material equity factors, such as the presence of a bargain purchase option or a bargain lease renewal option.⁵ The existence of noncancellability clauses, it can be argued, supersedes the executory nature of lease contracts. If the promises under a lease contract are

noncancellable, the executory nature still exists, but it has been mitigated to some extent, and additional legal rights are created for both lessee and lessor in the event of nonperformance by the other party.

Although the executory nature of lease contracts is an important legal characteristic, its importance is supplanted by an overriding concern with the economic substance of lease contracts. This basic approach is the one taken by policy makers since the first lease accounting standard in 1949. ARB 38 recommended that where it was obvious a lease contract was in substance a purchase, both an asset and an obligation should be recognized in the lessee's balance sheet. This general theme continues in subsequent lease accounting standards.

Leases Compared With Purchase Arrangements

There are legal differences between true leases and purchase arrangements.⁶ Purchase arrangements include outright cash sales, credit sales, installment sales, secured credit sales, or conditional sales. Title passes to the user of the property in all instances except leases and conditional sales. So a lease and a conditional sale are very similar in this respect. In a conditional sale, title passes when final payment is made, but this does not necessarily occur with a lease. With respect to legal ownership, leases in which the title passes at the end of the lease term or in which a bargain purchase option exists are virtually the same as conditional sales. Also, leases that exist for substantially all of a leased asset's economic life are virtually identical with conditional sales agreements calling for installment payments over the economic life of the asset.

A strong argument for capitalization can be made for leases that resemble conditional sales agreements. Of course, many of these leases are not considered true leases in the eyes of the law. Even in law, however, the distinction is not always clear between a true lease and a sale. Both the Internal Revenue Service and the courts often deal with disputes about this issue. They interpret some lease contracts as conditional sales agreements, and vice versa. Capitalization of leases that are virtually conditional sales agreements is consistent with the true legal nature of the transaction rather than with their superficial resemblance to a lease. Capitalization treats *disguised* conditional sales like other conditional sales.

In the event of bankruptcy or default, credit sales and installment sales are identical. With both credit and installment sales, the seller is simply a general creditor of the buyer. A secured credit sale gives the seller a preferred claim or lien on the asset and a general creditor status for any amount of the obligation not covered by the value of the asset. In bankruptcy or default under a conditional sales agreement, the seller has a legal right to recover the property because title has not passed. In addition, the seller has a general creditor status for any difference between the unpaid obligation and the asset value. A lessor's claim is limited to provable damages (loss of lease payments), but the lessor must first mitigate these losses either through sale or a new lease of the repossessed property. In this latter way, a lease differs from a conditional sales agreement.

Lease Capitalization

From a lessee's viewpoint, a lease must be accounted for as either (1) a rental agreement, or (2) a purchase equivalent with debt financing. For a lessor, the transaction must be treated as either (1) a rental agreement, or (2a) a sale equivalent with debt financing (if it is a sales-type lease), or (2b) a loan equivalent (if it is a financing-type lease). Choice (1) for both lessee and lessor interprets the lease contract as an operating lease and recognizes the mutually unperformed executory nature of lease contracts. Choice (2) treats the lease as a capital lease and recognizes the conveyance and financing aspects of leases. The simplicity of the basic accounting classification system forces a lease to be accounted for in one of these two ways.

The choice of accounting policy is described in the following manner:

At one extreme, there is the case of two physically identical items of equipment used by a business, one financed or partly financed by borrowing, and the other financed by a lease that is noncancellable for a period equal to the equipment's useful life. Almost every informed person would agree that it doesn't make much sense to report one of these items on the balance sheet and omit the other. At the other end there are ephemeral leases . . . which most everyone agrees should not give rise to a balance sheet item. The problem is to state a principle that will provide a conceptually sound and practical way of drawing a line somewhere between the two extremes.⁷

The heart of the present policy is classification of leases as either operating or capital leases—a classic example of attempting to establish finite uniformity and to account representationally for the real substance of the lease transaction rather than its superficial legal form.

One of the major arguments against lease capitalization is verifiability. Specifically, some believe that the use of present value discounting techniques introduces less reliable accounting numbers into the financial statements. This concern is exaggerated, however, because present value calculations are only used to make lease financing look like the equivalent of a loan with an equal repayment schedule. The present value technique as applied to lease accounting is illustrated later in the chapter, and, as we see, only one verifiability problem exists: the choice of interest rate used to discount the lease payments. There is some inevitable subjectivity in determining a lessee's rate, but it is certainly susceptible to close approximation. For a lessor, there is no subjectivity because the interest rate implicit in the lease is used. Verifiability is not considered to be a major issue with lease accounting today.

Capitalization for Lessees

Numerous criteria are proposed to support lease capitalization. A very good survey is found in the FASB's discussion memorandum on leases and is summarized in Exhibit 16.2.⁸ In general terms, the arguments for lease capitalization invoke the reasoning that certain leases are, in substance, purchases with debt financing. A lease is

Exhibit 16.2 • Lease Capitalization Criteria

1.	Lessee builds up a material equity in the leased property.
2.	Leased property is special purpose to the lessee.
3.	Lease term is substantially equal to the estimated useful life of the property.
4.	Lessee pays costs normally incident to ownership.
5.	Lessee guarantees the lessor's debt with respect to the leased property.
6.	Lessee treats the lease as a purchase for tax purposes.
7.	Lease is between related parties.
8.	Lease passes usual risks and rewards to lessee.
9.	Lessee assumes an unconditional liability for lease rentals.
10.	Lessor lacks independent economic substance.
11.	Residual value at end of lease is expected to be nominal.
12.	Lease agreement provides for lessor's recovery of investment plus a fair return.
13.	Lessee has the option at any time to purchase the asset for the lessor's unrecovered investment.
14.	Lease agreement is noncancellable for a long term.

simply another type of legal instrument to accomplish this end. Different arguments and standards are used to define purchase equivalents, but the differences really are little more than alternative points where the line is drawn between operating and capital leases. The many viewpoints can be simplified into three broad approaches: legal, material equity, and substantial transfer of ownership benefits and risks. These represent increasingly broader interpretations of capital leases.

Legal Approach

One way to resolve the lease classification problem is to treat true leases as described in Exhibit 16.1 as operating leases and to capitalize leases that are not true leases. This approach to lease capitalization resolves the problem by resorting to legal definitions and concepts. However, such an approach does not address the more fundamental question of whether true leases should be capitalized. It is argued that all noncancellable leases create legal property rights and obligations that should be in a lessee's balance sheet even if they do arise from a lease contract.⁹ It is pointed out in Chapter 11 that accounting theory and policy are not confined to legal definitions of accounting elements.

Material Equity

Historically, the argument for lease capitalization relied on the concept of material equity. This means that the terms of the lease are such that the lessee is clearly paying for more than the current period rental value of the asset. In other words, the lessee is acquiring an implicit equity in the leased asset through the periodic lease payments. Evidence for such a situation is rental payments in excess of yearly economic value or a bargain purchase option. The excess represents payment for the implicit property rights created by the lease. Also, noncancellability and a lease term for a significant portion of the asset's economic life support the material equity argument. Material equity, as applied in accounting standards in the past, limited capitalization to a small number of leases that were virtually conditional sales agreements with installment payments. As a result, there was very little difference between the legal and material equity approaches.

Transfer of the Benefits and Risks of Ownership

SFAS No. 13 took a broader approach to the capitalization argument. Leases that substantially transfer "all of the benefits and risks incident to the ownership of property should be accounted for as the acquisition of an asset and the incurrence of an obligation by the lessee and as a sale or financing by the lessor."¹⁰ The current definition has dropped noncancellability as a prerequisite for capitalization and deemphasized the concept of material equity. In spite of the attempt in SFAS No. 13 to disassociate the standard from earlier standards, the essence of the capitalization argument remains the same as was proposed in ARB 38—that a purchase equivalent has occurred. The difficulty, of course, is in agreeing on when this transaction occurs. The most recent deliberations by IASB and FASB as part of Joint Project have the Boards taking different approaches on lease accounting by lessee.¹¹ FASB's approach proposes that "lessee would account for most existing capital/finance leases as Type A leases (that is, recognizing amortization of the right of use (ROU) asset separately from interest on the lease liability) and most existing operating leases as Type B leases (that is, recognizing a single total lease expense)." In both cases, lessee would recognize a ROU asset and a lease liability. On the other hand, IASB has proposed a single approach for lessee accounting whereby all leases would be accounted for as Type A leases similar to FASB's proposal. Despite the differing approaches proposed by the two boards, it is still clear that the material equity concept remains in places and it is simply superseded by a somewhat broader concept and set of tests.

Capitalization for Lessors

A basic issue with lessor capitalization is symmetry with lessee accounting. *Symmetry* means consistent accounting by lessees and lessors for capital and operating leases. Some feel that symmetry, *per se*, is not necessary.¹² Others believe that the basic characteristic of a capital lease is consistent recording by both lessor and lessee.¹³ The absence of symmetry suggests that the basic classification of leases as operating and capital is inconsistent. Accounting standards are moving toward symmetry.

For sales-type leases, the same set of criteria applicable to lessees is proposed for capitalization by lessors because if a sales-type lease is a purchase equivalent to the lessee, it is a sale equivalent to the lessor. However, additional criteria must also exist before a sale is recognized. These criteria involve the usual assumptions underlying revenue recognition—mainly the certainty of cash collection and the absence of uncertainties regarding unincurred costs relating to the sale.

Financing-type leases present a different situation. The capitalization analogy treats such leases as the equivalent of debt financing. There is no sale revenue with financing-type leases, only interest revenue earned from the debt equivalent. Arguments for capitalization of finance-type leases are related more to the debt characteristic of the lease than to the sale characteristic. The main criterion proposed is the concept of *full payout*, which refers to a set of lease payments that returns a lessor's investment in the leased asset plus a reasonable interest on the investment.¹⁴

The Evolution of Lease Accounting Standards

A number of standards have been issued since 1949. We review them chronologically, first as they relate to lessees and then as they affect lessors. The ongoing deliberations by FASB and IASB on lease accounting are discussed later in the chapter.

Lessee Accounting

ARB 38

The first lease accounting standard, issued in 1949, was ARB 38. It was subsequently codified as Chapter 14 of ARB 43.¹⁵ The standard recommended capitalization for certain leases that were, in substance, installment purchases. Although it referred specifically to the installment purchase analogy, it was more applicable to leases that were *de facto* conditional sales agreements. The capitalization criteria were any of the following: (a) the existence of a bargain purchase option at the termination of the lease, (b) covenants that permitted the application of lease rentals to the purchase price, or (c) rental payments so high that a purchase plan was evident. The first criterion deals with lease terms that make a lease almost indistinguishable from a conditional sale. The second and third criteria refer to the material equity argument and could be analogous to either an installment sale or conditional sale, though in legal terms the resemblance is closer to a conditional sale. No details were given in the standard concerning the measurement of either the leased asset or lease obligation.

APB Opinion No. 5

As part of the research approach initially adopted by the APB, a study was commissioned on leases. This resulted in Accounting Research Study (ARS) 4, issued in 1962.¹⁶ ARS 4 took a legalistic approach to determining whether a lease was in substance a purchase. ARS 4 argued that noncancellability of the lease contract creates legal

property rights warranting capitalization. The next accounting standard, issued in 1964, was APB Opinion No. 5. APB Opinion No. 5 did not accept the basic argument in ARS 4 and reaffirmed the material equity argument of ARB 38. However, it did introduce noncancellability, except upon the occurrence of some remote contingency, as a precondition for capitalization. As suggested earlier in the chapter, this condition could be interpreted as mitigating the executory nature of lease contracts.

APB Opinion No. 5 also modified criteria for capitalization, although the stated objective was to clarify Chapter 14 in ARB 43, not change it. The intent was to capitalize any lease creating a material equity interest. Either of two primary criteria was listed: (1) a renewal option covering the useful economic life, or (2) existence of a bargain purchase option. Some secondary indicators were also identified: (a) the property was specially acquired by the lessor to meet the needs of the lessee, (b) the lease term corresponded to the useful life, (c) the lessee incurred executory costs (insurance, taxes, and maintenance), (d) the lessee guaranteed any lessor obligation with respect to the leased asset, or (e) the lessee treated the lease as a purchase under tax law. Apparently these secondary criteria were ignored in practice because of the way the standard was worded. As a result, APB Opinion No. 5 caused little change in the number of leases that were capitalized, even though it intended the opposite effect.¹⁷

APB Opinion No. 10

APB Opinion No. 10, issued in 1966, was an omnibus opinion.¹⁸ One paragraph dealt with leases and required the consolidation of certain subsidiaries that were principally engaged in leasing assets to parent companies. This standard was partially an amendment of APB Opinion No. 5, paragraph 12, and was concerned with lease contracts between related entities, such as parent and subsidiary companies. APB Opinion No. 10 required that subsidiaries engaged in sales-type leases to the parent company must be consolidated. In this way, it was not possible to avoid the reporting of leased assets by having unconsolidated subsidiaries write lease contracts. However, the consolidation of subsidiaries engaged in financing-type leases was left unresolved. As a result of APB Opinion Nos. 5 and 10, financing-type leases could be treated differently by the lessee, depending on whether the lessor was a subsidiary or an independent entity. Some leases were capitalized and some were not. The Securities and Exchange Commission (SEC) attempted to resolve this inconsistency with ASR 132, issued in 1972.¹⁹

APB Opinion No. 31

The next accounting standard for lessees was APB Opinion No. 31, issued in 1973.²⁰ This standard expanded disclosure of noncapitalized leases. APB Opinion No. 5 was criticized on the grounds that it excluded many leases that should be capitalized. The disclosures required by APB Opinion No. 31 included the amounts of future rentals at both undiscounted amounts and present values. The effect of this disclosure requirement was to create adequate supplemental disclosure to permit users to informally capitalize noncapitalized lease obligations if they so desired. Although this disclosure

expanded the reporting of information concerning noncapitalized lease obligations, it did not go so far as to formally place them on the balance sheet.

The SEC pressured the newly formed FASB to review lease accounting. Shortly after APB Opinion No. 31 was released (it was the last APB opinion), the SEC issued ASR 147.²¹ The SEC was critical of existing lease accounting standards, and ASR 147 amended lease disclosure for statutory SEC filings. ASR 147 was mainly concerned with financing-type leases. As mentioned before, APB Opinion Nos. 5 and 10 resulted in inconsistent capitalization of financing-type leases. ASR 147 required supplemental disclosure of noncapitalized financing-type leases on a basis that was equivalent to capitalization.

SFAS No. 13 (as Amended Through SFAS No. 98)

The FASB issued a discussion memorandum on leases in 1974, and after deliberations, SFAS No. 13 was issued in 1976. Criteria for lessee capitalization were revised again. This time there was a change in both concept and capitalization criteria. Noncancellability and material equity were abandoned in favor of broader tests representing substantive transfers of ownership benefits and risks—although, as indicated earlier, the underlying objective still seems to be the recognition of purchase equivalents. Perhaps the difference between APB Opinion No. 5 and SFAS No. 13 is better described as a change in where the line is drawn between operating and capital leases. SFAS No. 13 is quite clearly intended to capitalize more leases. There are four capitalization tests now applicable to both lessees and lessors:

1. Title passes to the lessee at the end of the lease term.
2. The lease contract contains a bargain purchase option.
3. The lease term is for at least 75% of estimated useful life, including any bargain lease renewal option (with the lease term covering more than 25% of the original economic life when new, if the lease pertains to an older asset).
4. The present value of minimum lease payments (the sum of minimum rentals excluding executory costs, a bargain purchase payment if one exists, penalty payment for nonrenewal if renewal is unlikely, and any guaranteed residual value at the end of lease term—plus unguaranteed residual value for lessors) is 90% of the fair market value of the lease property at the inception of the lease, less any applicable investment tax credit.

The discount rate for the lessee is the incremental borrowing rate. However, the lessor's implicit rate in the lease is used if it is obtainable and if the implicit rate is lower than the lessee's incremental borrowing rate. This represents conservatism because a lower interest rate causes a higher present value and can result in lease capitalization under the 90% rule. The lessor's implicit rate is defined in SFAS No. 13, paragraph 5k, and is illustrated later in the chapter. If *any* one of these four tests or conditions is met, the lease must be treated as a capital lease by the lessee.

SFAS No. 13 also details how to capitalize leases. The present value of minimum lease payments (defined in test 4) is computed using the interest rate determined as explained above. This amount is debited to leased assets and credited to lease obligations, subject to an upper limit of the asset's fair market value at lease inception. The asset is depreciated over its useful life if tests (1) or (2) are met. Otherwise, the depreciation period is the lease term with total amortization equal to the capitalized amount less any guaranteed residual value at the end of the lease term. During the lease term, each payment is allocated between interest expense and reduction of the lease obligation. The effective interest method described in APB Opinion No. 21 is used.²² Finally, any executory costs (taxes, maintenance, and insurance) are expensed as incurred. If lease payments include an amount for these costs, each period it is separated and expensed directly.

In this manner, the prescribed accounting makes the lease resemble a purchase of the asset with debt financing. The leased asset is depreciated over its useful life if it is being leased for substantially all its useful life. If the asset is leased for a shorter period, the shorter period is used as the amortization period. Executory costs are separated and expensed in the same manner as occurs with a purchase. Finally, lease payments are separated into the equivalent of principal and interest each period. The purchase analogy is illustrated with a numerical example in Exhibit 16.3.

Real estate leases are accounted for somewhat differently. Leases involving only land are capitalized if either test (1) or test (2) in SFAS No. 13 is satisfied. Otherwise, land leases are classified as operating. Land under lease is not treated as a purchase equivalent unless title is expected to transfer. The reason for this more restrictive test is due to the nondepreciable nature of land. When a lease includes both land and buildings, the capitalization test is more complicated. If test (1) or (2) is not met, an allocation is made between land and building based on relative fair market values. They are capitalized separately. If a real estate lease involving land does not meet test (1) or (2), but the fair market value of the land component is less than 25% of the total, the lease is treated as entirely attributable to the building for the purpose of applying tests (3) and (4) of SFAS No. 13. If either test (3) or (4) is met, the lease is capitalized. In other words, the land component is considered to be immaterial relative to the building component and the entire lease is capitalized. If the land component is 25% or more and if test (3) or (4) is met, the land and building are treated separately, with the land being an operating lease and the building being a capital lease. These rules represent somewhat arbitrary ways of dealing with nondepreciable land in real estate leases.

In addition to the prescribed accounting for capital leases, a number of supplemental disclosures are required by SFAS No. 13: (a) gross amounts of assets under capital lease, (b) future minimum lease payments (excluding executory costs) in aggregate and for each of the five succeeding years, (c) total minimum sublease rentals to be received under noncancellable subleases, and (d) total contingent rentals as they are incurred each period. Lease assets and lease obligations are reported separately from other assets and liabilities in the balance sheet. Lease obligations are subject to current and noncurrent classification requirements.

Exhibit 16.3 • Lease Purchase Analogy

A company may purchase an asset outright for \$100,000 with vendor financing. The note payable is paid off with three year-end payments of \$41,634.90. This represents an effective interest of 12 percent. An alternative is to lease the asset for three years with lease payments of \$41,634.90 at the end of each year. The asset's economic life is three years, and no salvage is expected.

Loan/Lease Repayment Schedule					
	(Col. 1) Beginning Principal	(Col. 2) Payment	(Col. 3) Interest (Col. 1 × .12)	(Col. 4) Principal (Col. 2 – Col. 3)	(Col. 5) Ending Principal (Col. 1 – Col. 4)
Year 1	\$100,000.00	\$41,634.90	\$12,000.00	\$ 29,634.90	\$70,365.10
Year 2	\$70,365.10	\$41,634.90	\$8,443.81	\$ 33,191.09	\$37,174.01
Year 3	\$37,174.01	\$41,634.90	\$4,460.89	\$ 37,174.01	-0-
Purchase Alternative					
Year 1					
Asset	100,000		Leased asset	100,000	
Note payable		100,000	Lease obligation		100,000
Note payable	29,634.90		Lease obligation	29,634.90	
Interest expense	12,000.00		Interest expense	12,000.00	
Cash		41,634.90	Cash		41,634.90
Depreciation expense	33,333.33		Depreciation—Lease	33,333.33	
Accumulated depreciation		33,333.33	Accumulated lease depreciation		33,333.33

(Continued)

Exhibit 16.3 • (Continued)

Loan/Lease Repayment Schedule					
	(Col. 1) Beginning Principal	(Col. 2) Payment	(Col. 3) Interest (Col. 1 × .12)	(Col. 4) Principal (Col. 2 – Col. 3)	(Col. 5) Ending Principal (Col. 1 – Col. 4)
	Year 2		Year 2		
Note payable	33,191.09		Lease obligation	33,191.09	
Interest expense	8,443.81		Interest expense	8,443.81	
Cash		41,634.90	Cash		41,634.90
Depreciation expense	33,333.33		Depreciation—Lease	33,333.33	
Accumulated depreciation		33,333.33	Accumulated lease depreciation		33,333.33
	Year 3		Year 3		
Note payable	37,174.01		Lease obligation	37,174.01	
Interest expense	4,460.89		Interest expense	4,460.89	
Cash		41,634.90	Cash		41,634.90
Depreciation expense	33,333.34		Depreciation—Lease	33,333.34	
Accumulated depreciation		33,333.34	Accumulated lease depreciation		33,333.34

A very important question whenever there is a major change in accounting policy is how it is implemented. With lease capitalization, a generous phase-in period was permitted. For new leases written after 1976, capitalization was required if the new tests were met. However, for existing leases, companies were given until December 31, 1980, to retroactively capitalize the leases and restate prior years' financial statements. Supplemental disclosures were required to detail what the pre-1977 lease assets and obligations were during the phase-in period, if they had been capitalized. The reason for a long transition period was due to the potential material effects of lease capitalization on some companies. SFAS No. 13 was less dramatic than expected because the new standard permitted companies some flexibility in complying with the new requirements. There was time to mitigate the impact on the balance sheet of lease capitalization. The final section of the chapter presents some evidence that this type of behavior (avoiding lease capitalization) did in fact occur.

A criticism of lessee accounting under SFAS No. 13 is that some leases are still not capitalized that should be. It can be argued that all leases in excess of one year should be capitalized, because assets and liabilities are created that are consistent with definitions of assets and obligations in SFAC No. 6.²³ One reason for avoiding this policy can be the costs that are imposed on companies if all leases are capitalized, although we believe, in this instance, that the benefits to users exceed the costs. An apparent compromise exists on this point in the form of supplemental disclosure. For noncancelable operating leases in excess of one year, SFAS No. 13 requires the following supplemental disclosures:

- Future minimum rental payments in aggregate and for each of the succeeding five periods
- Total minimum rentals to be received under noncancellable subleases
- Rental expense with separate totals for minimum rentals, contingent rentals, and sublease rentals
- A general description of the lessee's lease contracts

Supplemental disclosure of noncapitalized leases is not as great under SFAS No. 13 as it was under APB Opinion No. 31. The noncancellability requirement excludes some operating leases, and present value information is not required under SFAS No. 13. It is unclear why noncancellability was introduced as the overriding criterion for supplemental disclosure of operating leases since it was dropped as a capitalization criterion. Because many more leases are capitalized under SFAS No. 13, it may be that the need for supplemental information is not as great as it was prior to the issuance of SFAS No. 13. Still, it is puzzling why the supplemental disclosures of noncapitalized leases were reduced so much. The weak disclosures of noncapitalized leases create incentives to structure leases in such a way as to avoid both capitalization and supplemental disclosure. If this can be done, off-balance-sheet financing through leases is still possible. This issue is discussed later in the chapter.

Lessor Accounting

The initial impetus for lease capitalization was caused by a concern over lessee balance sheets. In particular, there was a desire to disclose lease obligations as debt equivalents. It was only belatedly that the lessor side of lease transactions was considered in accounting standards.

APB Opinion No. 7

APB Opinion No. 7, issued in 1966, was the first standard to address lessor accounting.²⁴ The equivalent of lease capitalization was required, but the criteria differed from APB Opinion No. 5. In addition, separate criteria existed for sales-type and financing-type leases. Sales-type leases were capitalized if three conditions were satisfied: (1) credit risks were reasonably predictable, (2) the lessor (seller) did not retain sizable risks of ownership, and (3) there were no important uncertainties regarding either costs or revenues under the lease contract. These three conditions differed from the lessee tests established under APB Opinion No. 5. As a result, it was possible for a lease contract to be capitalized by either the lessee or lessor, but not by both. This asymmetry between lessee and lessor accounting was criticized.

Financing-type leases are those that involve a third party who writes the lease contract. The lessor is the third party, typically a financial institution that provides the financing. The other two parties are the lessee and the manufacturer (or seller) of the leased asset. All financing-type leases were capitalized by lessors under APB Opinion No. 7; however, some financing-type leases were not capitalized by lessees under APB Opinion Nos. 5 and 10. As indicated earlier in the chapter, lessee accounting for financing-type leases was inconsistent under APB Opinion Nos. 5 and 10.

Leases capitalized under APB Opinion No. 7 were recognized as aggregate future rentals less the interest implicit in each rental. This represented the net present value of lease payments receivable. The effective interest method, as described in APB Opinion No. 21, was prescribed as the basis of interest revenue recognition. Each payment was separated into principal and interest, just as was required for lessees under APB Opinion No. 5.

Initial direct costs incurred by the lessor in originating a lease contract were deferred and recognized on a proportional basis consistent with the recognition of lease revenue. This applied to all leases and was an attempt to match lease-related costs to the revenue generated over the lease term.

APB Opinion No. 27

Criticisms of APB Opinion No. 7 regarding the noncapitalization of many sales-type leases led to the issuance of APB Opinion No. 27 in 1972.²⁵ The intent in APB Opinion No. 27 was to broaden the criteria for capitalization. The new criteria were

1. The collectibility of payments was reasonably assured.
2. No important uncertainties surrounded costs yet to be incurred on the lease.

3. Any one of the following:
 - a. Title passed at end of lease term.
 - b. A bargain purchase option existed.
 - c. The leased property or similar property was for sale and the present value of required rentals (excluding executory costs) plus any investment tax credits was equal to or greater than normal selling price.
 - d. The lease term was substantially equal to the remaining economic life of the property.

Two of the requirements under both APB Opinion Nos. 7 and 27 were similar and dealt with general revenue recognition criteria. Collectibility and the absence of uncertainties are generally assumed when accruing revenue in advance of cash collection. The third requirement of APB Opinion No. 27 replaced the second criterion of APB Opinion No. 7, the transfer of ownership risk, and was satisfied by any one of four conditions. The first two conditions reiterated the capitalization criteria of APB Opinion No. 5 for lessees. The last two were new and provided additional conditions that suggested the lease was a sale equivalent from the lessor's viewpoint. The addition of these two conditions was important because it represented a departure from the material equity argument and looked more broadly at the economic substance of the transaction. However, the newly broadened criteria for lessors were at variance with the narrower criteria for lessees established in APB Opinion No. 5.

SFAS No. 13

Finally, lessee and lessor accounting achieved near symmetry in SFAS No. 13. The four capitalization tests discussed earlier, which were only a slight modification of APB Opinion No. 27, were applied to both lessees and lessors. For lessor accounting, the two additional revenue recognition tests of APB Opinion Nos. 7 and 27 were also retained in SFAS No. 13. The existence of these two additional criteria means that it is possible for some leases that are capitalized by lessees to be treated as operating leases by lessors. However, it is unlikely that this occurs very frequently. Inconsistent capitalization of financing-type leases was also eliminated by SFAS No. 13. It should be remembered that APB Opinion Nos. 5, 7, and 10 created the potential for inconsistency.

Some asymmetry still exists between lessor and lessee accounting with respect to the choice of interest rate for calculating the capitalized value of leases. The lessor uses the implicit rate, which equates minimum lease payments plus unguaranteed residual value in excess of any guaranteed amounts with the sales price of the asset less any applicable investment tax credit. The lessee uses the lower of its incremental borrowing rate or the lessor's implicit rate (if it is obtainable), and only the guaranteed residual value is used. As a result, it is possible for the same lease to be measured differently in the financial statements of lessees and lessors. This disparity is justified on the grounds of conservatism since a lower interest rate increases the amount of the capitalized lease obligation. It can also be defended on the grounds that each party may not have the

Exhibit 16.4 • Financing-Type Lease

Assume the following:	
1.	Fair market value at lease inception is \$131,540.53.
2.	Lease payments are \$50,000 at the end of each of the next three years and include \$2,000 for executory costs.
3.	Estimated residual value is \$13,000, of which \$5,000 is guaranteed by the lessee.
4.	There are no significant initial direct lease costs.
Step 1—Calculate implicit interest rate.	
Fair Market Value = Present Value of minimum lease payments exclusive of executory costs, guaranteed residual value, and unguaranteed residual value.	
$\$131,540.53 = \frac{\$48,000}{(1+i)} + \frac{\$48,000}{(1+i)^2} + \frac{\$48,000 + \$5,000 + \$8,000}{(1+i)^3}$	
i = .09	
Step 2— Record gross amounts of minimum lease payments exclusive of executory costs, plus guaranteed and unguaranteed residual value, and the unearned interest calculated by the implicit rate.	
Lease Payments Receivable	157,000.00
Unearned Interest	25,459.47
Cash	131,540.53
To record asset payment and capital lease	
Step 3—Record yearly interest revenue and lease payments.	
Year 1	
Cash	48,000
Lease payments receivable	48,000
Unearned interest ^a	11,838.65
Interest revenue	11,838.65

Year 2									
Cash			48,000						
Lease payments receivable									
Unearned interest ^a			8,584.13						8,584.13
Interest revenue									
Year 3									
Cash			48,000						
Lease payments receivable									48,000
Unearned interest ^a			5,036.69						
Interest revenue									5,036.69
Asset			13,000						
Lease payment receivable									13,000
^a See schedule below.									
Implicit Principal Repayments Schedule									
									Net Lease Investment
	Beginning Net Lease Investment (Lease payments receivable less unearned interest)	Payment	Interest	Principal	Ending Unearned Interest	Ending Lease Payment Receivable			
Year 1	\$131,540.53	\$48,000	\$11,838.65	\$36,161.35	\$13,620.82	\$109,000			
Year 2	\$95,379.18	\$48,000	\$8,584.13	\$39,415.87	\$5,036.69	\$61,000			
Year 3	\$55,963.31	\$48,000	\$5,036.69	\$42,963.31	-0-	\$13,000			

same interest rates, owing to the different risks involved. Different residual values can also be justified because they represent different values to the lessor and lessee.

An area of apparent inconsistency in lessor accounting concerns initial *direct lease costs*, costs incurred in arranging the lease. SFAS No. 13 requires expensing of initial direct lease costs if the lease is a sales type. However, for financing-type leases, these costs are amortized over the lease term indirectly through the effective interest method.²⁶ A new implicit interest rate must be calculated that recognizes the remaining unearned interest using the effective interest method. The justification is that these costs are best matched against interest revenue in the case of financing-type leases because the lessor earns revenue from lease financing.

On the other hand, with a sales-type lease, the costs are considered to be selling costs attributable to the arranging of debt finance. The costs are considered necessary to make the sale. This is another example of finite uniformity, in which the same costs are treated differently because of different circumstances. In this case, the circumstances have to do with the nature of the lessor's operations and the classification of initial direct lease costs as either selling costs or as reductions of future interest revenue.

Measurement of capitalized leases for lessors is specified in SFAS No. 13. The first step is to calculate the implicit interest rate in the lease: the rate of interest that equates minimum lease payments with the asset's fair market value at lease inception, reduced for any lessor investment tax credit. Minimum lease payments are defined as the sum of future rentals (less any amounts for executory costs paid by the lessor), plus amounts to be paid under bargain purchase options, plus penalty payment for nonrenewal if renewal is unlikely, plus guaranteed residual value if the asset reverts to the lessor, plus any unguaranteed residual value. The fair market value of the leased asset is normally the cash selling price for both sales-type and financing-type leases. Minimum lease payments receivable plus unguaranteed residual value are recognized at the gross amount, and a contra account is created to recognize unearned interest. The net balance represents the present value of minimum lease payments receivable. Unearned interest is recognized each period, as the interest component is separated from the lease payment through the effective interest method. Lessor accounting for a financing-type lease is illustrated in Exhibit 16.4 and for a financing-type lease with initial direct costs in Exhibit 16.5.

The same procedures are used with a sales-type lease to account for the financing aspect of the lease. The present value of minimum lease payments receivable is computed and recognized in the balance sheet. Payments are separated into principal and interest components. However, in addition, revenue is recognized in an amount equal to the fair market value of the asset at lease inception. Normally this is the cash selling price. The cost of the leased asset is recognized as cost of goods sold. So gross profit on the sales-type lease is recognized in addition to the present value of minimum lease payments receivable and interest revenue on lease payments.

For all noncapitalized leases, the lessor must disclose the cost and book value of leased property (the assets are still recorded in the lessor's balance sheet if they are operating leases). Other supplemental disclosures required of lessors are the same required of lessees and reflect the reciprocal nature of capitalized lease contracts. These are

minimum future rentals from noncancellable leases, in aggregate and for each of the five succeeding years, and contingent rental income as it is recognized.

The FASB issued a number of amendments and interpretations to SFAS No. 13, all of which are concerned with technical and specific issues.²⁷ In general, these additional rules clarified the implementation of lease capitalization arising from complex terms in lease contracts. These additional rules are not reviewed here since they pertain to narrower technical issues rather than general standards.²⁸

Sale and Leaseback

A sale and leaseback occurs when the owner of an asset legally sells it and enters into a lease agreement to lease the asset back. The lessor (new legal owner) and lessee (original legal owner) both use the standard criteria for classifying such a lease as

Exhibit 16.5 • Financing-Type Lease With Initial Direct Costs

Assume the same facts as in Exhibit 16.4; expect that initial direct lease costs of \$1,500 are incurred. The following entry is made in Year 1:

	Lease payments receivable		1,500		
		Cash		1,500	

It is then necessary to calculate a new interest rate using the effective interest method:

$$\$131,040.53 = \frac{\$48,000}{(1+i)^1} + \frac{\$48,000}{(1+i)^2} + \frac{\$48,000 + \$5,000 + \$8,000}{(1+i)^3}$$

By interpolation, $i = .08395$.

Revised Principal Repayment Schedule

						Net Lease Investment	
	Beginning				Ending	Ending Lease	
	Net Lease Investment	Payment	Interest	Principal	Unearned Interest	Payment Receivable	
Year 1	\$133,040.53	\$48,000	\$11,168.75	\$36,831.25	\$12,790.72	\$109,000.00	
Year 2	\$96,209.28	\$48,000	\$8,076.77 ^a	\$39,923.23	\$4,713.95	\$61,000.00	
Year 3	\$56,286.05	\$48,000	\$4,713.95	\$43,286.05	–0–	\$13,000.00	

^aIncludes adjustment for rounding error due to approximation of the effective interest rate.

operating or capital. A principle was established in APB Opinion No. 5 that no immediate recognition is given to any book gains or losses that the lessee might record in such a transaction. The general rule was that any gain or loss is amortized by the lessee as an adjustment of the lease rental if the lease is an operating lease and as an adjustment of lease depreciation if the lease is capitalized. The deferred gain or loss was reported in the balance sheet as a deferred credit or charge, respectively. One exception to this rule was that a loss was recognized if the asset's book value exceeded the fair market value at the time of the sale-leaseback. This, however, is nothing more than the application of conventional accounting conservatism through the lower-of-cost-or-market rule.

The reason for not recognizing a gain or loss is that the sale and leaseback are considered to be one transaction rather than two. Any book gains or losses therefore arise artificially from the accounting necessity of treating the transaction as having two separate parts. Since the lessee has the same asset as before (but leasing rather than owning), it is argued that no gain or loss should be recognized. To recognize such a gain or loss is the virtual equivalent of selling something to yourself and recognizing a gain or loss on the transaction. This approach was retained in SFAS No. 13. If a lease is an operating lease, the deferred gain or loss is recognized proportionally to lease payments. If the lease is capitalized, the deferred gain or loss is recognized proportionally to lease depreciation. An example of a sale and leaseback involving book gains and losses is illustrated in Exhibit 16.6.

SFAS No. 13 did establish conditions under which a gain or loss might be immediately recognized in a sale and leaseback. These tests are concerned with leases in which the original owner retains usage of a substantially smaller part of the total asset. It is argued that there really are two separate and distinct transactions when this occurs because the lessee no longer has the same whole asset as before.

Leveraged Leases

Leveraged leases are a special type of financing lease involving three parties instead of the usual two. With this type of lease, the lessor acquires an asset by borrowing money from a third party and combining it with its own capital. The third party is typically a group of lenders, and the financing is usually in excess of 50% of the cost of the asset. The lessor then leases the asset to the lessee. The debt to the third party is nonrecourse, but the lessor assigns a portion of the lease payments to cover the debt and interest payments. The debt to the third party can also be secured by the leased asset and sometimes by a guarantee from the lessee. At issue is whether this transaction should be accounted for as a conventional financing-type lease with an additional debt transaction or as a unique transaction warranting separate treatment.

From a lessee's viewpoint, a leveraged lease is not any different from other leases. The more difficult question concerns the effect of a leveraged lease on the lessor. One possible effect is that a leveraged lease is the same as a conventional financing-type lease with an additional debt transaction between the lessor and the third party. The other possibility is to regard a leveraged lease as a unique type of lease

warranting special rules applicable to its special circumstances. The FASB concluded in SFAS No. 13 that the financing-type lease plus debt transaction analogy was inadequate to report leveraged leases. It argued that reporting leveraged leases as two separate transactions, a financing lease and a loan, failed to portray the lessor's net investment in the lease. What is required by SFAS No. 13 is a complex procedure of reporting all aspects of a leveraged lease in a net amount as if it were one transaction. This represents another example of finite uniformity in which relevant circumstances determine the appropriate accounting procedures. The requirements are illustrated in SFAS No. 13, Appendix E.

Exhibit 16.6 • Sale-Leaseback

Assume the same facts as in Exhibit 16.3. In addition, assume that the lessee was the original owner and sold the asset for \$100,000 to the new owner, who is now the lessor.^a Assuming the asset had a book value of \$79,000 to the original owner (now lessee), the following entries are required by the lessee in addition to those illustrated in Exhibit 16.3.

1.	At Sale date:			
	Cash	100,000		
	Asset (book value)		79,000	
	Deferred gain on sale-leaseback		21,000	
2.	For each of the three years during the lease term:			
	Deferred gain on sale-leaseback	7,000		
	Depreciation—Lease		7,000	

^a Normally, any gain or loss is the difference between the original owner's book value and the selling price. In such cases, losses are always recognized immediately and the gains deferred. However, it is possible for the sales price to be set at some amount other than market value. For example, suppose in this example the selling price was \$85,000 and the estimated market value was \$75,000. The following entry is made by the original owner at the time of sales.

Loss on asset	4,000		
Cash	85,000		
Asset (book value)		79,000	
Deferred gain on sale-leaseback		10,000	

The effect of this entry is to recognize a loss of \$4,000 (\$79,000 – \$75,000) for the adjustment to market value, and to defer the gain of \$10,000 representing the payment in excess of market value by the buyer.

Assessing SFAS No. 13

The long-standing criticism of lease accounting is that many leases are not being capitalized but should be. This is no less true under SFAS No. 13 than it was under ARB 38 or APB Opinion No. 5. An inherent weakness of the finite uniformity approach is that some accounting methods are preferred by management over others. In these instances, companies are motivated to manipulate the relevant circumstances to get the desired accounting result. With leases, lessees continue to believe that there are advantages to off-balance-sheet financing through leases. This will always motivate companies to try to defeat the capitalization tests of lease accounting standards. Of course, debt covenants can be an issue motivating lessees to avoid capitalization.

It is not very difficult to structure a lease contract to defeat the four tests of SFAS No. 13 because the four tests are not stringent. A more challenging task, though, is to defeat lease capitalization tests for the lessee while satisfying them for the lessor. Lessors normally desire to capitalize leases and recognize sales revenue, but lessees prefer the effects of off-balance-sheet financing. One innovative method to accomplish both objectives is the use of third parties to guarantee residual values to the lessor: Such a procedure reduces the lessee's obligation under test (4) of SFAS No. 13 and, if significant enough, could lead to noncapitalization. However, there is no effect on the lessor because the lessor's accounting deals with the estimated residual value in total. No distinction is made between guaranteed and unguaranteed residual value.

Whenever accounting policies force unwanted results on companies, there is creative activity to circumvent the unpopular policy. This is certainly the case with lease accounting. Because of the existing "let's beat SFAS No. 13" attitude, a strong case can be made for rigid uniformity. One solution is to capitalize all leases that exceed one year. We already have suggestions for constructively capitalizing operating leases.²⁹ This unambiguous policy eliminates the game playing and also eliminates the somewhat artificial distinction still being made between capital and operating leases. As is indicated throughout the chapter, it is somewhat arbitrary where the line is drawn between capital and operating leases. Therefore, a rigid policy of capitalizing all leases is an arguable improvement because it eliminates both the arbitrariness of where the line is drawn and the motivation to circumvent the finite uniformity established in SFAS No. 13. Moreover, there is growing sentiment for this position within standard-setting circles.³⁰ Before it was disbanded, the G4+1 group issued a report recommending an end to the distinction between operating leases and finance leases. FASB's and IASB's initial deliberations on a converged lease standard seemed to favor elimination of the distinction between operating and financing leases. The Boards argued that use of operating leases results in understatement of leverage indicators. Discussions following the issuance of the Exposure Drafts seemed to suggest the Boards' possible change of mind with some discussions suggesting that leases be classified into two categories; finance leases and other-than finance leases.³¹ In their latest deliberations, the Boards have reached significantly different decisions with FASB favoring the retention of a dual model approach whereby lessee would recognize a right-of-use asset and a lease liability for all leases other than short term leases. FASB's favored approach would further require classify assets as either Type A (most capital

assets under current U.S. GAAP) or Type B (Most operating leases under current U.S. GAAP). IASB on the other hand agreed to account for all leases as Type A other than short-term lease.³² Despite the difference, the approaches suggested seem to affirm the Boards' original idea of classifying all leases as capital leases with the exception of short-term leases. It is obvious that, this topic fosters extreme positions in industry and with the Boards and a final consensus may not be achieved.

Economic Consequences of Lease Capitalization

From the viewpoint of a company preparing financial statements, there are at least two types of economic consequences of lease accounting. One is the costs of complying with lease capitalization. More detailed analyses are required by a company and its auditor in classifying leases as operating and capital. Recall that in Chapter 9 we saw that finite uniformity can impose a higher compliance cost than rigid uniformity. In addition, the accounting entries for each period are more complicated if leases are capitalized. There has been no direct study of these types of costs; however, in 1973, one large company estimated it would cost \$40,000 to install a lease capitalization system and \$25,000 to \$35,000 a year to operate it.³³

The more critical concern is whether lease capitalization can provide disincentives for leasing itself. From a lessee's perspective, leasing offered the possibility of off-balance-sheet financing for most leases prior to SFAS No. 13. A survey of lessees indicated that the effect on financial statements was a major reason for leasing.³⁴ Recent evidence from Australia indicates that when the Australian standard requiring lease capitalization was enacted, firms cut down on lease financing and substituted other forms of debt and used more equity financing.³⁵ A recent case study on two multinational companies further affirmed that capitalization of leases currently classified as operating would result in billions of dollars of additional liabilities that had previously appeared in footnotes.³⁶ Key ratios such as debt-to-equity and interest coverage ratios would also be adversely affected. Noncapitalization of leases improves debt ratios and accounting rate of return compared with a purchase/debt alternative. Some lessees also believed that noncapitalization of leases increased available capital because these leases do not affect borrowing restrictions in debt covenants and that the lower debt ratios that are achieved by noncapitalization result in better debt ratings and lower interest rates in the capital market. A study of pre-SFAS No. 13 lease accounting found that companies with high leverage levels were more likely to report their leases as operating rather than capital leases, which is consistent with the arguments above favoring off-balance-sheet financing.³⁷

The argument against lease capitalization was presented to accounting policy makers in the following manner:

The effects of treating leases as debt would extend beyond lessees to consumers and other parts of the economy. Increases in reported debt would tend to lead to an increase in interest rates and require an increased investment of equity capital requiring an even greater rate of return. This could contribute to inflationary

pressures and act as a deterrent to investment in modernized or expanded plant and equipment.³⁸

Neutrality tends to mitigate the preceding argument. Commenting on lease accounting, a former SEC chairman made these remarks:

We recognize the usefulness of leases as a financing device. Economic objectives—including tax considerations—of two parties are frequently better satisfied by a lease arrangement than a purchase or sale. But leasing should not be made more attractive than it really is simply because of the way it is accounted for.³⁹

It should not be the accounting *per se* that makes leasing attractive. If it is, the arguments favoring leasing are specious. The alleged advantages of off-balance-sheet financing are not entirely supported by research evidence. For example, a survey of analysts indicated that the debt implication of noncapitalized leases is factored into the evaluation of companies.⁴⁰ In particular, the debt equivalent of leasing for lease-intensive industries was very well understood by analysts, even prior to SFAS No. 13. The general feeling was that lessees were usually within reasonable debt limits, even when lease effects were considered. So the survey evidence suggests that analysts were not fooled by off-balance-sheet lease financing even though company management seemed to believe otherwise. Consistent with these views, there is empirical evidence to support the view of leases “as if” they are debt equivalents in the pricing of stocks and bonds.⁴¹

The FASB commissioned a comprehensive research study of the economic and behavioral effects of SFAS No. 13.⁴² One finding was that financial ratios and accounting rate of return of companies showed the expected changes owing to increased lease capitalization, although the change was smaller than anticipated. It was suggested that SFAS No. 13 had less impact than anticipated because pre-1977 leases did not have to be capitalized until 1980. This gave companies time to restructure leases as operating and to alter their capital structures to lessen the effects of capitalization on ratios. There was strong evidence that this type of behavior occurred; it reflects a belief in the naïveté of the market. Yet analysts surveyed in the same study professed that they were not fooled by (operating and capital) lease accounting differences having no cash flow differences. The sophisticated-user viewpoint is also supported by a capital market study included in the assessment of SFAS No. 13 that showed no evidence of new information content in lease capitalization; that is, there was no abnormal security price response to the lease capitalization requirement. This is consistent with the efficient-markets hypothesis, particularly since similar information was required as a footnote disclosure under APB Opinion No. 31 prior to SFAS No. 13. In other words, the form of disclosure (footnote as in APB Opinion No. 31 or balance sheet as in SFAS No. 13) is not as important as the existence of disclosure *per se*.

Two other capital market studies offer additional evidence on lease accounting. One found that APB Opinion No. 31 disclosure requirements caused prices of affected companies to drop.⁴³ This can be interpreted to mean that the new lease disclosures of

APB Opinion No. 31 had information content and that investors responded negatively to the revelation of hidden debt through lease financing. Such a finding is not surprising since the debt equivalent of most leases was not reported very well prior to APB Opinion No. 31. The second study found a negative price response during the time of the FASB's public hearings on leases in late 1974.⁴⁴ It was argued that the negative price response may have been caused by restrictive debt covenants that would have been violated if leases were capitalized. Such a situation was hypothesized to have possible adverse indirect cash flow consequences on the firm and its stockholders. This is an agency theory type of argument, and it does contradict survey evidence that analysts are not fooled by alternative accounting policies. The explanation may be that, prior to APB Opinion No. 31, analysts were really unaware of leases because there was very little reporting of them. But after APB Opinion No. 31, it mattered very little if the disclosures were made in footnotes or in the body of the balance sheet.

Another study evaluated the usefulness of lease capitalization in bankruptcy prediction.⁴⁵ Financial ratios, with and without lease capitalization, were compared to determine if the lease-adjusted ratios were better predictors. The study was made prior to both APB Opinion No. 31 and SFAS No. 13, so the effects of lease capitalization had to be approximated from rather limited footnote information. The results are interesting because they suggest that for bankruptcy prediction, at least, lease capitalization had no significant effect on the usefulness of accounting information. This finding partly contradicts survey research indicating that users believe lease capitalization is useful in predicting future cash flows and assessing debt-paying ability.⁴⁶

Concerns about the adverse effects of lease capitalization seem to be exaggerated, although the four-year phase-in period permitted companies to mitigate the anticipated adverse balance sheet effects. Management often continues to believe that non-capitalization offers some advantage, although user surveys and one capital market study suggest that lease capitalization has no adverse impact. Holding aside the possible impact of lease capitalization on debt covenants, it could be argued that it is irrelevant whether lease information is disclosed as a footnote or in the body of the balance sheet. However, one prominent academic observed that footnote disclosure can give the impression that accountants do not know how to account for leases, so they absolve themselves of the problem through extensive disclosures.⁴⁷ Difficult accounting problems should not be dealt with through disclosure simply because disclosure is expedient and less controversial. The mandate of standard-setting bodies exists because of their technical competency and expertise in deciding controversial accounting issues. That mandate can easily be revoked if they fail to demonstrate competence and resolve.

The ferment over leases remains quite strong with respect to the so-called standards-overload problem. In a survey of private companies, the FASB reports that SFAS No. 13 is by far the most objectionable accounting standard to owners and auditors of the private companies surveyed.⁴⁸ The FASB also hinted at a comprehensive review of lease accounting from time to time, but so far this has not occurred, although a recent study sponsored by major standard-setting organizations is bound to receive attention. We turn to this report next.

The G4+1 Report on Leases

Nailor and Lennard prepared a position paper on leases for the G4+1.⁴⁹ The G4+1 consist of the major standard-setting bodies from Australia, Canada, New Zealand, the United Kingdom, United States, and the International Accounting Standards Board. A position paper indicates that the topic is of great interest and importance, although there is no guarantee that the paper's recommendations will be put into effect by any of the member organizations. Nevertheless, as a position paper of the G4+1, the report occupies a very prominent place, even though the G4+1 was terminated in 2001.

The report can be summarized by saying that it eliminates the distinction between operating and capital leases by making all leases capital leases. It moves leases from the area of finite uniformity to rigid uniformity. In addition, for the lessee it results in showing what are now classified as operating leases as assets, which is certainly the case since they embody the definition of assets from the conceptual framework (see definitions of SFAC No. 6 in Chapter 7) as containing "probable future economic benefits . . . controlled by a particular entity. . . ." Also, leases are liabilities since they result in "probable future sacrifices of economic benefits. . . ." Hence the ability of the enterprise to tailor lease contracts as operating leases with the nonappearance of debt curtailed in the balance sheet. Without the ability to hide debt, the balance sheet is more truthful and comparability enhanced.

Nailor and Lennard begin by separating leases from their possible classification as executory contracts discussed earlier. Once the lessor has delivered the property to the lessee, he or she has performed his or her portion of the contract, and the lessee has an obligation to pay for the property, hence a liability is created.⁵⁰ Other aspects of their approach also require scrutiny.

Renewal and Purchase Options of Lessees

Nailor and Lennard are generally against including renewal and purchase options in the initial asset and liability valuations of the lessee.⁵¹ The reason for this, according to Nailor and Lennard, is that valuable options are reflected in the lease rentals themselves.

In the case of an option to purchase at estimated fair market value, the option is not overly valuable, although it does have some usefulness for the lessee. We agree with Nailor and Lennard on not booking this type of option.

However, we disagree with them on bargain purchase options. It is true that lease payments reflect this type of option, but not wholly. If no bargain purchase option is included, lease payments are certainly lower; but if the property reverted to the lessee at the end of the lease period, lease payments are certainly higher. Of course, it is not clear at the inception of the lease whether the option will be exercised, but the presence of a bargain purchase option certainly indicates a high probability of exercise. Obviously we are in the realm of future events (Chapter 12) but usefulness of financial statements requires, we believe, inclusion of these values where a relatively high probability of exercise is present. Our position on booking the expected value of lease options where the probability of exercise is relatively high is in agreement with the American Accounting Association (AAA) Financial Accounting Standards Committee.⁵²

Lessor Accounting

Lessor accounting, as envisaged by Nailor and Lennard, is generally the mirror image of lessee accounting. Operating leases are, of course, gone. Where a residual interest in the asset exists for the lessor, the assets include a financing asset—the lease receivable—and a property-type asset for the residual value. Different interest rates prevail based on whether the residual value is guaranteed or unguaranteed. Unguaranteed residual values require a higher interest rate due to the greater risk borne by the lessor pertaining to the value of the asset at the end of the lease period.

Other Aspects of the G4+1 Report

The interest rate used by the lessee for discounting the asset is its incremental borrowing rate, which reduces the lease asset and liability to fair market value because the rate includes risk inherent to the lessee.⁵³ The report does not state that the lessee should use the lessor's rate if (a) it is known to the lessee, and (b) it is lower than the lessee's rate. This second aspect of the lessee's discount rate is used in SFAS No. 13 and attempts to promote conservatism (higher carrying value of the liability) rather than comparability, which results from the one rate.

Nailor and Lennard continue the single-transaction view of the sale-leaseback transaction discussed previously. Gains and losses arising from the sale by the lessee are recognized immediately by the lessee rather than the SFAS No. 13 conservative approach of losses recognized immediately but amortizing gains over the life of the lease.

One additional consequence arises from the Nailor and Lennard lease proposal. Corporations no longer need to hire a battalion of consultants to help them structure leases so that they qualify as operating leases. From our viewpoint, capitalization via rigid uniformity is the best way to go. Operating lease consultants represent an uneconomic use of resources from the public standpoint.

Nailor and Lennard (and the G4+1) made a signal contribution to lease accounting. While we disagree with the nonbooking by the lessee of significant option values held by the lessee, it is clear that this is an important report, which, hopefully, leads to a careful scrutiny of the entire spectrum of lease accounting.⁵⁴

FASB and IASB Joint Exposure Drafts on Accounting for Leases

The G4+1 report was a good starting point for a new converged standard on accounting for leases by both FASB and IASB. The process started in 2006 when accounting for leases was placed in the Memorandum of Understanding (MOU) between the two Boards and subsequently placed in the convergence agenda.⁵⁵

Exposure Draft 2010/9

Exposure Draft 2010/9 (ED 2010/9)⁵⁶ was issued in August 2010 after considerable discussions and feedback responses that both bodies received as a result of the issuance of a Discussion Paper on this topic in March 2009.⁵⁷ Several thousand organizations and individuals were engaged both before and after the issuance of the Exposure Draft and more than 700 comment letters on this issue were received.

ED 2010/9 proposed fundamental changes not just the way leases are accounted for, but also the way lease contracts are defined. ED2010/9 defined a lease as “a contract in which the right to use a specified asset or assets is conveyed, for a period of time, in exchange for consideration.” Just as in the G4+1 report issued in 2001, the ED2010/9 proposed elimination of the distinction between operating and capital leases by making all leases capital leases and also required all leases be accounted for as financing leases with the exception of short-term leases (lease term of 12 months or less).

Lessee Accounting

ED2010/9 proposed that lessee account for all leases as finance leases by recognizing a liability in the financial statements and a right-of-use-asset both measured at present value of lease payments.⁵⁸ Effective method of amortization would be used to measure liability in subsequent periods and depreciation of right-to-use asset would be consistent with the consumption of the asset's expected future economic benefits. This treatment would not only result in larger income statement impact due to interest expense and depreciation of the asset, but it would also be consistent with treatment assigned to other intangible assets and financial liabilities.⁵⁹ According to Whitehouse, this would be synonymous with an installment purchase whereby an asset is recorded in the balance sheet as well as recorded as a liability to be paid down over time.⁶⁰ It would also essentially be the same way capital leases are accounted for under current U.S. GAAP. The accounting treatment would be applied to all leases other than short-term leases. The Board acknowledged the need for extensive disclosure of additional information and they deferred until the future any discussions pertaining to disclosure requirements. Initially, ED2010/9 proposed recording of short term leases at undiscounted amounts on the balance sheet although the Boards were also leaning towards excluding short-term leases from the balance sheet altogether.

Lessor Accounting

After pressure from the public, the Boards agreed to include accounting by lessors in ED2010/9.⁶¹ The exposure draft proposed use of one or two accounting models. The first approach which was favored mostly by IASB was a *derecognition* model which would be used when the lessor has “delivered the right to use the underlying property to lessee at lease commencement.”⁶² FASB members leaned more towards a two approach model similar to operating and sales-type leases.⁶³ ED2010/9 was criticized heavily for its lack of symmetry in accounting for the same transaction by lessee and

lessor Most respondents to the Exposure Draft also felt that the proposal for accounting for lessor was really not an improvement

Other Aspects of the ED2010/9

In the Exposure Draft, the Boards proposed that variable lease payments be included in computing lessee's liability and lessor's receivable. Respondents overwhelmingly expressed concerns on the complexity and unreliability of using the longest likely lease term. Subsequently, the Boards backed away from use of variable lease payments and were in favor of reverting to minimum lease payments in computing lessee's liability and lessor's receivable.⁶⁴ Other than resulting in unreliable estimates, variable lease payments introduce subjectivity in the financial statements and reduce comparability.

The Exposure Draft proposed use of lessor's discount rate at lease commencement to measure lessee's liability and lessor's receivable. They also agreed that the discount rate should be reassessed when either purchase option is exercised or if it is likely to be exercised. Although the Boards did not address how the discount rate would be determined, we agree with respondents who suggested that the discount rate used should promote comparability.⁶⁵

Regarding lease term options and purchase options, the Boards tentatively agreed that both lessee and lessor consider various factors in determining whether lessee has incentive to exercise those options. Factors to consider are similar to those considered in the initial lease liability and receivable measurement but also include other contract-based and entity-based factors. We agree with this recommendation that "a significant economic incentive for the lessee to exercise the purchase option" should be demonstrated before the option price is included in the initial measurement of the liability and receivable for the lessee and lessor, respectfully.⁶⁶

Exposure Draft 2013

Responding to the criticism of ED2010/9, the Boards agreed to continue with the public outreach and redeliberation of accounting for leases by issuing Exposure Draft 2013 (ED2013) in May 2013.⁶⁷ In this draft, the Boards proposed use of a dual model approach for lessee accounting as well as some significant changes in the accounting for lessors. ED2013 also proposed changes in lease term estimation, new lease classification criteria, and some significant changes in variable lease accounting.

Lessee accounting

ED2013 proposed recognition of an asset and a liability by lessee for leases whose term exceeds 12 months. The right-of-use asset would represent lessee's right to use the leased asset (the underlying asset) and the liability would be an obligation to make payments (the lease liability). Further, lessee accounting would also depend on whether the leased property is expected to consume more than an "insignificant portion of the economic benefits embedded in the underlying asset."⁶⁸ To clarify this requirement, the Boards

proposed use of Type A and Type B leases whereby Type A would represent leases of assets other than property and Type B would represent lease of property. For both types, the Boards proposed use of present value of lease payments to initially value recognized right-of-use asset and lease liability. For Type A, the Boards proposed that lessee recognize discount on lease liability separately from amortization of the asset while combining the discount on lease liability with amortization of asset on Type B leases.⁶⁹

Lessor accounting

Just like accounting by lessee, accounting by lessor would also depend on whether the lessee is expected to consume more than an “insignificant portion of the economic benefits embedded in the underlying asset”. For Type A, the lessor would “derecognize the underlying asset and recognize the right to receive lease receivable and residual asset”.⁷⁰ Lessor would also recognize interest income from lease receivable and residual asset as well as profits at lease commencement date. For Type B leases, the Boards proposed use of an approach similar to the existing operating leases approach whereby lessor would continue to recognize the asset and record income over lease term.

Other Aspects of the ED2013

The Boards proposed that assets and liabilities arising from a lease be measured over a noncancellable lease term that is covered by an option to extend or terminate the lease if the lessee has a significant economic incentive to do so. For lease payments, the Boards proposed that they include both fixed and variable payments as long as the variable lease payments were dependent on an index or a rate such as the Consumer Price Index. This was meant to alleviate concerns from the respondents of ED 2010/9 who felt that measuring variable payments was both complex and unreliable.⁷¹ Consistent with the current standard, the Boards proposed use of lessor’s implicit rate or lessee incremental rate as the discount rate by lessee. For lessor, they would use implicit rate, if available, or a discount rate that takes nature of transaction into consideration if the implicit rate is unknown. The proposal also defined economic life as “either period over which asset is expected to be economically usable or the number of production or similar units expected from the asset”.⁷² Leases with a purchase option that is likely to be exercised would be classified as Type A otherwise they would be Type B if the underlying asset is property (land, building or part of a building) or Type B if the underlying asset is not a property.

More than 600 comment letters were received after issuance of ED2013. Most respondents indicated that the proposed accounting by lessee was still allowing off-balance sheet financing and thus lacked transparency.⁷³ Commenters also seemed to be in favor of leaving accounting for lessors unchanged with some arguing that symmetry for lessor and lessee model may not be necessary. We feel that ED2013 makes major strides in bring all leases on-balance sheet which is consistent with long held belief that operating leases amounted to off-balance sheet financing. However, the proposed draft is quite complex and will likely result in significant costs for preparers. There is also the possibility of differences in classification of leases by lessor and lessees, which would result in asymmetrical treatment of similar transactions.

Post Exposure Draft Deliberations

Deliberations between the two Boards are still ongoing. They have agreed on a few issues but there are some issues they have disagreed on. On accounting by lessors, they Boards have a tentative converged decision whereby they agreed to abandon both exposure drafts but instead leave major aspects of lessor accounting substantially unchanged. If this proposal is adopted into a standard, it means that lessor will account for most leases as executory contracts or just as operating leases. For lessees, the Boards have failed to converge with FASB favoring a dual model approach similar to the one in ED 2013.⁷⁴ IASB on the other hand is in favor of a single model approach whereby lessee accounts for leases as Type A lease other than short-term leases.⁷⁵

Improving Accounting Standards

The attempt by the combined Boards to improve accounting for leases is proving more difficult than expected. Discussions by the Boards subsequent to the issuance of the Exposure Drafts confirm why accounting for leases remains a subject with more accounting standards than any other topic. For the most part, the Boards seem to be holding their ground on capitalizing all leases. However, it remains to be seen what the final product will be an improvement to the existing standard and whether various constituents will view it as a step forward.

Summary

Lease accounting represents a classic example of the search for meaningful finite uniformity. Using a broad classification of leases as operating or capital, the search has taken the direction of defining the criteria for classification. This leads to an emphasis on economic substance rather than legal form. The substance of capital leases is argued to be a purchase equivalent with debt financing for the lessee. For the lessor, a capital lease is analogous to a sale with vendor financing if it is a sales-type lease, and to a loan equivalent if it is a financing-type lease. It is somewhat arbitrary where the line is drawn between operating and capital leases. Over time, the criteria have changed, which clearly reflects the subjective nature of the criteria and the difficulty in achieving finite uniformity.

Because the distinction between operating and capital leases is somewhat arbitrary, the economic consequences of lease capitalization are very important in evaluating lease accounting standards. Management attitudes frequently show a belief in the market's naïveté—specifically, the advantages of off-balance-sheet financing. The evidence, however, supports the supposition that users are sophisticated with respect to lease reporting and that they are not fooled by lease accounting differences, at least after APB Opinion No. 31. Finally, there is survey and capital market research to support the position that the reporting of capital leases is useful and relevant. However, a strong case can be made for capitalizing all leases extending beyond one year. This

type of rigid uniformity eliminates the attempts to circumvent SFAS No. 13. This is exactly what the G4+1 special report advocated and was the original intent by FASB and IASB to issue a converged standard. This move is long overdue; it will be interesting to see what is included in the final standard.

Questions

1. What is the argument for finite uniformity in accounting for leases? Why is finite uniformity difficult to achieve? Explain what the relevant circumstances are in accounting for different types of leases.
2. Why is the aspect of conveyance of leases emphasized in capital leases and the contractual element emphasized in operating leases?
3. What are the similarities and differences between leases and other means of property acquisition? How can these similarities and differences be reported in the financial statements?
4. Is the executory nature of lease contracts important in assessing lease accounting? How have leases been interpreted? Why might noncancellability override the executory nature?
5. Review the evolution of capitalization criteria in lease accounting standards. Why did APB Opinion No. 5 have little impact? What impact has SFAS No. 13 had? Has there been an underlying theme in the development of lease accounting?
6. Does it matter if capital leases are reported in a footnote or in the body of the balance sheet? What research evidence exists to help evaluate this question?
7. Does symmetry exist between lessors and lessees under SFAS No. 13? Should symmetry be a goal of lease accounting?
8. How is representational faithfulness achieved in the capitalization requirements of SFAS No. 13?
9. Is there a measurement reliability (verifiability) problem with lease capitalization?
10. Evaluate the manner in which initial direct lease costs are accounted for under SFAS No. 13 for sales-type and financing-type leases.
11. Why was there reason to expect some negative economic consequences arising from lease capitalization? What is the role of neutrality in such a situation? What is the response based on research findings to date?
12. Does the reporting of capital leases have value to users of financial statements? Why are there costs of reporting capital leases?
13. What considerations motivated the FASB to grant a four-year transitional period in capitalizing pre-1977 leases meeting the capitalization tests of SFAS No. 13? What other political behavior is evident in the evolution of lease accounting?

14. Should valuable lease options of lessees be capitalized?
15. Why is the G4+1 like the Big Ten (a.k.a. Western Athletic Conference)?
16. Why is the IASB standard on leases (IAS 7) substantially shorter than the FASB's standard (SFAS No. 13)?
17. Current discussions by the Boards leave room open for two *Accounting for Leases Standards*, one for lessee and another one for lessor. Should two *Accounting for Leases Standards* be issued? Support your response?
18. Current discussions by the Boards point to a possibility that a converged standard on leases will not be achieved. How will lack of converged standard on leases affect the Boards' Joint Project?

Cases, Problems, And Writing Assignments

1. Human Genome Sciences, Inc., a biopharmaceutical company, discovers, develops, and markets new gene and protein-based drugs. Its 1998 annual report showed property, plant, and equipment net of accumulated depreciation of \$20,965,000 with total net assets of \$244,247,000.
2. A note on operating leases revealed the following: Operating Leases
3. The Company leases office and laboratory premises and equipment pursuant to operating leases expiring at various dates through 2017. The leases contain various renewal options. Minimum annual rentals are as follows: Years Ending December 31,

1999	\$5,990,790
2000	6,074,955
2001	6,197,186
2002	6,278,051
2003	5,353,707
Thereafter (2004–2017)	35,001,144
	\$64,895,833

Required:

- a. Assume that the company's cost of debt is 10% and that operating lease payments between 2004 and 2017 are equal amounts per year. How much does Human Genome Sciences' property, plant, and equipment and its total net assets increase on December 31, 1998, if these leases are capitalized?

- b. Assume that the company's net income for 1998 is \$20 million. What is its return on assets (ROA) (1) before, and (2) after capitalizing the operating leases? Use straight-line depreciation over 14 years for the capitalized leases. Operating lease expense for 1998 is \$5,900,000.
2. Wright Company leases an asset for five years on December 31, 2000. Annual lease cost of \$10,000 is payable on each December 31st, beginning with the year 2001. In addition to the annual lease cost, the lease contract calls for a guaranteed residual value of \$3,000. The asset has an economic life of seven years. Wright's incremental borrowing rate is 8%. The asset has an acquisition cost of \$45,000. There are no purchase options.

Required:

- a. As things now stand, is this a capital lease or an operating lease? Show figures.
- b. What can Wright do to convert this lease to an operating lease? Explain and show figures.
- c. Will lessee and lessor's accounting for this lease be symmetrical (capital lease for both lessor and lessee or operating lease for both lessor and lessee)? Explain.
- d. Do you think that Wright's action in (b) represents a loophole to avoid capitalization or is it a useful part of the present leasing rules? Explain.
3. Assume the following facts concerning a sales-type lease:
- The lease term is three years and qualifies as a capital lease for both lessor and lessee. The asset reverts to the lessor at the end of the lease term. Assume straight-line depreciation by the lessee.
 - Payments are \$50,000 at the beginning of each year, plus a guaranteed residual value of \$10,000 at the end of the lease term. The lessor estimates a total residual value of \$15,000. Lease payments include \$4,000 for executory costs under a maintenance agreement.
 - Initial direct costs associated with the lease are \$2,700.
 - Cash sales price of the asset is \$137,102.50. Lessor's manufacturing cost is \$100,000.
 - The lessee does not know the lessor's implicit rate, but its own incremental borrowing rate is 11%.

Required:

- a. Prepare the accounting entries for both lessor and lessee for the three years. What happens in Year 3 if residual value is only \$8,000?
- b. Assume the same facts as before except that the asset is first sold to a finance company, which then leases the asset to the lessee. Prepare the required entries in all three years for lessor and lessee.
- c. Evaluate the differences between requirements (a) and (b) as well as the differences between lessor and lessee.

4. One of the four capitalization tests of SFAS No. 13 is that the lease term is 75% or more of the asset's remaining economic life. *Lease term* is defined as follows in SFAS No. 13 (as amended by SFAS No. 98, para. 22a):

The fixed noncancellable term of the lease plus (i) all periods, if any, covered by *bargain renewal options*, (ii) all periods, if any, for which failure to renew the lease imposes a penalty on the lessee in an amount such that renewal appears, at the *inception of the lease*, to be reasonably assured, (iii) all periods, if any, covered by ordinary renewal options during which a guarantee by the lessee of the lessor's debt related to the leased property is expected to be in effect, (iv) all periods, if any, covered by ordinary renewal options preceding the date as of which a *bargain purchase option* is exercisable, and (v) all periods, if any, representing *renewals or extensions* of the lease at the lessor's option; however, in no case shall the lease term extend beyond the date a *bargain purchase option* becomes exercisable. A lease which is cancellable (i) only upon the occurrence of some remote contingency, (ii) only with the permission of the lessor, (iii) only if the lessee enters into a new lease with the same lessor, or (iv) only upon payment by the lessee of a penalty in an amount such that continuation of the lease appears, at *inception*, reasonably assured shall be considered "noncancellable" for purposes of this definition. [All italics added.]

Required:

How can this test be circumvented through either the structuring of the lease contract or interpretation of the test? What are other ways in which lease capitalization can be avoided through the structuring of lease terms or interpretation of the tests? What problem does this exercise illustrate?

5. This problem shows the significance of considering the importance of converting operating leases to capital leases for the purpose of financial statement analysis. It is based on the techniques developed and illustrated in Imhoff, Lipe, and Wright (1991 and 1997), although it is much simplified from their presentation.

Assets (net)	\$80,000	Liabilities	\$45,000
		Owners' equity	35,000
Assets	\$80,000	Liabilities and equities	\$80,000

McAdoo Restaurants is a large franchise. Its balance sheet showed the following on December 31, 2000 (in thousands).

Net income after taxes was \$6,500 for 2001. McAdoo's marginal tax rate is 35%. On December 31, 2000, McAdoo entered into several major lease contracts. These leases were all for 10 years and were operating leases. Starting in 2001, total annual lease payments, due on each December 31, are \$3,000. McAdoo's marginal

cost of capital rate is 10%. No change in liabilities occurred during the year, and there were no transactions with owners.

Required:

- a. Convert the operating lease to a capital lease that is one year old. (Hint: Use the present value of a 10-year ordinary annuity.) Assume that straight-line depreciation is used for both book and tax purposes. There is a zero salvage value.
 - b. Determine the net income after taxes if the leases are treated as capital leases.
 - c. Determine the return on assets under the (1) operating lease assumption, and (2) capital lease assumption.
 - d. Determine the debt-equity ratio under the (1) operating lease assumption, and (2) capital lease assumption.
 - e. Do you think it is useful to convert operating leases to capital leases for financial statement analysis purposes? Discuss.
6. SFAS No. 98, which contained some amendments to SFAS No. 13, passed by a 4 to 3 vote. The following dissent to the opinion was made:

Messrs. Beresford, Lauver, and Swieringa dissent because this Statement prescribes different accounting for certain sale-leaseback transactions based on a distinction between active (as defined) and other use of leased property by a seller-lessee. That distinction is without economic substance and is used to arbitrarily preclude sale-leaseback accounting when a seller-lessee subleases the leased property.

Paragraph 48 acknowledges that a leaseback is a form of continuing involvement with leased property but argues that the form of that involvement is different if the seller-lessee intends to sublease that property. In a sale-leaseback transaction, the seller-lessee has exchanged ownership rights for lease rights, and the rights to use the leased property and to benefit from that use are the same regardless of how that property is used. Moreover, any guarantee of the cash flows related to the leased property is lodged in the lease contract and is not altered by what the seller-lessee does with that property.

An objective of financial reporting is to achieve greater comparability of accounting information. Paragraph 119 of *FASB Concepts Statement No. 2, Qualitative Characteristics of Accounting Information*, states that this objective is not to be attained by making unlike things look alike any more than by making like things look different. The moral is that in seeking comparability accountants must not disguise real differences nor create false differences.

Messrs. Beresford, Lauver, and Swieringa believe that *SFAS No. 98* makes things look different by prescribing different accounting for certain sale-leaseback transactions based on the distinction between active and other use of leased property, a distinction not relevant to the accounting. Because that distinction arbitrarily limits the extent to which sale-leaseback accounting is permitted, the effects of accounting for identical sale-leaseback transactions will be different.

The majority's position was expanded on in Paragraph 48 of *SFAS No. 98* in the section on "Basis for Conclusions":

Some respondents to the Exposure Draft noted that the nature of the continuing involvement associated with a normal leaseback does not change because of the seller-lessee's intent to occupy the property. The Board acknowledges that the leaseback is a form of continuing involvement with the property that serves as support for the buyer-lessor's investment.

Accordingly, the Board believes that transactions accounted for as sales should be limited when a sale-leaseback of property exists; otherwise, the effectiveness of paragraph 28 of Statement 66 is compromised. Occupancy of the property by the seller-lessee provides a basis for distinguishing among sale-leaseback transactions involving real estate, including real estate with equipment.

The Board believes that the intent to sublease the property represents a different form of continuing involvement than does the intent to occupy and use the property in the seller-lessee's trade or business. When the property is subleased, the form and consequences of the seller-lessee's continuing involvement are equivalent to those of a real estate investor or developer whose ultimate source, timing, and amount of cash flows from the use of the property are different from those realized by a tenant. Based on those differences, the Board decided to reaffirm the Exposure Draft's provision to allow sale-leaseback accounting when the seller-lessee occupies the leased property.

The positions of both the majority and the dissenters center on issues of uniformity and comparability.

Required:

- a. Using the perspective on uniformity developed in Chapter 9, analyze the rigid versus finite uniformity approach to the distinction between the two positions.

Critical Thinking and Analysis

1. "All leases beyond a year be capitalized!" Evaluate this position.
2. Bauman and Francis (2011) propose several improvements to lease accounting standards. Evaluate their proposals and add ones that they may have missed.
3. Zechman (2010) studies firms using synthetic leases. How might her findings influence the setting of lease accounting standards?

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