

## COMMENTARY

# Lease Accounting Research and the G4+1 Proposal

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## INTRODUCTION

The Group of Four Plus One, or G4+1 for short, is a cooperative effort by national accounting standard setters from Australia, Canada, New Zealand, the United Kingdom, and the United States plus the International Accounting Standards Committee. Conclusions reached by the G4+1 are not recognized as GAAP in any financial reporting jurisdiction. However, by the very nature of its membership, its conclusions influence standard setting in many jurisdictions. Thus, publication of *Leases: Implementation of a New Approach* (Nailor and Lennard 2000) indicates that accountants may soon be redeliberating the appropriate accounting treatment for lease transactions.

Evidence from empirical academic research on lease accounting may be useful to regulators and their constituents as they redeliberate reporting standards for lease transactions. This commentary provides an overview of key results from prior research and, where appropriate, proposes possible future research topics in the leasing area.<sup>1</sup>

## LESSEE ACCOUNTING ISSUES

Most empirical research on financial reporting of leases concentrates on the lessee's use of operating vs. capital lease accounting. The term *operating lease accounting method* means that the lessee recognizes rent expense on the income statement and does not recognize lease assets or lease liabilities in the balance sheet. Under the alternative *capital lease accounting method*, the lessee initially recognizes a lease asset and a lease liability in the balance sheet and subsequently records interest expense on the liability and depreciation expense on the asset. On average, lessees seem to prefer operating lease accounting, and much of the empirical research investigates the implications of unrecorded lease commitments.

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<sup>1</sup> My scope is limited to empirical research relating to financial reporting. Thus, several extensive research streams are omitted, including (1) economic analysis of the lease versus buy decision, (2) how leasing can be used to minimize taxation, and (3) "thought pieces" on the merits of lease capitalization.

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Statement of Financial Accounting Standards No. 13, (FASB 1976) (hereafter SFAS No. 13) provides current guidance for lessees. Noncancelable leases that meet any one of four general criteria (transfer of ownership, bargain purchase option, lease term  $\geq 75$  percent useful life, present value of commitments  $\geq 90$  percent of asset's fair value) must be capitalized.<sup>2</sup> Future payments under both capital and operating leases must be disclosed in the notes.

Under the G4+1 proposal, lessees recognize the fair value of any assets and liabilities contained in a lease contract. Recognition begins when the lessor makes the property available to the lessee. Thus, lessee balance sheets are expected to reflect additional lease liabilities if this new approach is adopted. Evidence in Imhoff et al. (1993, 347) and others suggests that the additional lease liabilities could be substantial. Using the operating lease commitments disclosed under SFAS No. 13, Imhoff et al. (1993) constructively capitalize operating leases by estimating the present value of operating leases (PVOL) for a sample of 29 airlines and 51 grocery stores. The median PVOL is \$195 million for airlines and \$57 million for grocery stores, and these amounts are 35–40 percent as large as median total on-balance sheet liabilities.

### **Lessee Accounting Research: An Analysis of Three Decision Contexts**

The members of G4+1 agree that the purpose of financial reporting is to provide information for making economic decisions. Empirical research incorporates this view by identifying and estimating linkages between accounting information and actions taken by decision makers. In my discussion of research on lessee accounting, I decompose the research into three decision contexts—financial statement analysis of equity risk, financial statement analysis of equity value, and decisions/actions by management.

### **Research Related to the Risk of the Lessee's Equity**

Most empirical research on lessee accounting is based on financial statement analysis as the decision context, with particular emphasis on how unrecorded lease commitments might affect assessments of shareholder risk. Possible reasons for this emphasis are:

1. finance theory links debt-like obligations to risk;
2. unrecorded leases are large for some companies;<sup>3</sup> and
3. mandated disclosures facilitate estimation of the unrecorded obligations.<sup>4</sup>

The finance literature linking shareholder risk to leverage includes Modigliani and Miller (1958), Hamada (1969), Rubenstein (1973), Bowman (1979), and Christie (1982).<sup>5</sup>

<sup>2</sup> Prior to SFAS No. 13, guidance came from APB No. 5 (Accounting Principles Board 1964), ASR No. 147 (SEC 1973), and APB 31 (APB 1973). In addition, SFAS No. 13 spawned numerous interpretations and amendments. Note that for certain types of assets, such as real estate, a subset of the four criteria applies (SFAS No. 13, paras. 24–28).

<sup>3</sup> The magnitude of the effect matters because empirical research cannot prove that a hypothesis is true; rather it seeks to provide reliable evidence that a null hypothesis is false. This is referred to as rejecting the null. If the effect being researched is small and the null cannot be rejected, then we do not know whether the null is indeed true or the tests used are incapable of detecting such a small effect.

<sup>4</sup> Unrecorded assets also occur under operating lease accounting, but research devotes less attention to the assets, possibly because the asset effects are more difficult to estimate (see Imhoff et al. 1991, Figure 2 and Table 3).

<sup>5</sup> Empirical evidence of association between financial leverage and shareholder risk can be found in Hamada (1972) and Beaver et al. (1970).

Ryan (1997, 87–88) provides an excellent intuitive explanation of this link. In essence, shareholder risk is the product of asset risk and financial leverage. Financial leverage measures the extent to which assets are financed with debt or other instruments that require relatively fixed payments for interest and principal. The fixed interest expense on debt or the fixed rental payment on the lease reduces the level of net income without changing its variability. Because acquiring assets with debt or long-term noncancelable leases reduces the amount of equity investment required to conduct operations, the volatility of net income per dollar of equity investment increases. Thus, additional financial leverage magnifies the risk inherent in the company's assets. Since the early 1900s, financial analysts recommend that coverage ratios<sup>6</sup> incorporate the unrecorded liabilities implied by long-term rental commitments (see Graham and Dodd 1934, 190).

Given the link between measures of financial leverage and shareholder risk, numerous researchers examine whether lease accounting matters in assessing risk. Bowman (1980) measures market risk as market Beta, the systematic risk faced by shareholders.<sup>7</sup> His measure of unrecorded lease liability comes from the Securities and Exchange Commission's (SEC) Accounting Series Release No. 147 (SEC 1973) (hereafter ASR No. 147). ASR No. 147 required lessees to disclose the present value of the minimum future lease commitments under "financing" leases<sup>8</sup> that were not capitalized under APB No. 5 (Accounting Principles Board 1964). Bowman (1980) regresses market Beta on accounting Beta (a proxy for asset risk), the carrying amount of debt, and the present value of unrecorded financing lease commitments (PVUFL). PVUFL is not significantly related to market Beta in Bowman's (1980) main tests of the null hypothesis that risk is unrelated to constructive capitalization. However, the failure to reject the null could be due to three factors. First, Bowman (1980) discusses how multicollinearity may mask the importance of PVUFL;<sup>9</sup> after controlling for this collinearity, Bowman (1980) finds that PVUFL is significantly related to market Beta. Second, PVUFL excludes potentially material amounts of unrecorded lease commitments that do not meet the definition of "financing lease" in ASR No. 147. Third, Bowman (1980) measures market Beta over five years ending in the year that ASR No. 147 became effective, but measures leverage at the end of this period, producing a potential mismatch between the dependent and independent variables.

Imhoff et al. (1993) use disclosures of operating lease payments to estimate the increases in liabilities and assets from constructively capitalizing operating leases.<sup>10</sup>

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<sup>6</sup> By coverage ratio, I mean not only interest coverage (pretax operating income divided by interest expense), but also ratios such as debt-to-equity or debt-to-asset.

<sup>7</sup> Beta captures the covariance of a company's returns with the returns of the market portfolio. The name systematic risk implies that this risk exists even in diversified portfolios. An alternative measure of risk is the standard deviation of the company's stock returns, which includes systematic and company-specific risk. For a more complete discussion of the differences in these measures, see Ryan (1997, 86).

<sup>8</sup> A "financing" lease was defined "as a lease which, during the noncancelable lease period, either (i) covers 75 percent or more of the economic life of the property or (ii) has terms which assure the lessor a full recovery of the fair market value...of the property at the inception of the lease plus a reasonable return on the use of the assets invested" (ASR No. 147, section 4.3).

<sup>9</sup> Because PVUFL is correlated with leverage, the regression method has difficulty in determining whether the market Beta is being explained by PVUFL or leverage, causing the coefficient on PVUFL to be insignificantly different from zero.

<sup>10</sup> They use the methods from Imhoff et al. (1991). This approach assumes that the unrecorded lease asset is a fraction (roughly 60 percent to 80 percent) of the lease liability.

They examine total shareholder risk measured as the standard deviation of stock returns rather than market Beta, because the accounting leverage ratios are more akin to total risk and because the empirical importance of market Beta is controversial (see Ryan 1997, 83 and 86).<sup>11</sup> To avoid the need to control for asset risk, Imhoff et al. (1993) perform tests within the grocery store and airline industries. They find that shareholder risk is better explained by debt-to-asset ratios after being adjusted for off-balance sheet leases.

Ely (1995) examines the association between risk and unrecorded leases by regressing total market risk on the standard deviation of ROA, the level of recorded debt, and the present value of operating lease commitments. Since the ROA variable controls for asset risk, she can analyze companies from a variety of industries. By using PVOL, Ely's (1995) measure of unrecorded leases is more inclusive than PVUFL in Bowman (1980). Ely (1995) finds that PVOL provides significant additional explanatory power.

The link between shareholder risk and lessee accounting can also be examined by testing whether predictions of financial distress—filing for bankruptcy or engaging in a troubled debt restructuring—are improved by adjusting ratios for lease capitalization. Elam (1975) adds an estimate of the present value of future lease payments to the reported amounts of property, plant, and equipment, total assets, and long-term liabilities, and then recomputes any ratio that includes these balance sheet items. Constructively capitalizing leases rarely improves his ability to discriminate between distressed and nondistressed companies in years prior to the distress event. In contrast, Altman et al. (1977, 33) find that constructively capitalizing leases improves their bankruptcy prediction model: “[w]ithout a doubt, the most important and pervasive adjustment [to reported numbers] was to capitalize all noncancelable operating and finance leases.”

The bulk of the evidence finds that measures of shareholder risk can be better explained when one includes the financial leverage implicit in unrecorded leases.<sup>12</sup> The evidence supports the assertion in the G4+1 proposal that “the present accounting treatment of operating leases is not the most relevant of the choices available” (Nailor and Lennard 2000, 5). Financial statement users appear to constructively capitalize leases that fail to cross any of the four “bright-lines” in SFAS No. 13. One could use this evidence to argue against the G4+1 proposal—if the market is already incorporating operating leases, then broadening the lease capitalization criteria is unnecessary. However, this argument ignores the costs and inaccuracies that result from numerous analysts performing their own computations. It also ignores the fact that some contracts or regulations depend solely on recognized amounts. The representational faithfulness of a coverage ratio that ignores material amounts of operating leases is questionable given the empirical results to date.<sup>13</sup>

<sup>11</sup> Imhoff et al. (1993) report that, for their sample, leverage measures based on amounts recognized in the balance sheet are uncorrelated with an annual estimate of market Beta.

<sup>12</sup> While adjustments to leverage for unrecorded leases appear related to shareholder risk, similar adjustments to ROA do not consistently improve the relation between estimates of asset risk and shareholder risk (Ely 1995).

<sup>13</sup> In addition to studying the level of shareholder risk, Finnerty et al. (1980), Cheung (1982), and Murray (1982) examine whether the market changed its assessment of risk in response to additional information provided under ASR No. 147 and/or SFAS No. 13. Consistent with the market constructively capitalizing unrecorded leases, the new disclosures do not consistently affect risk estimates.

### Research Related to the Value of the Lessee's Equity

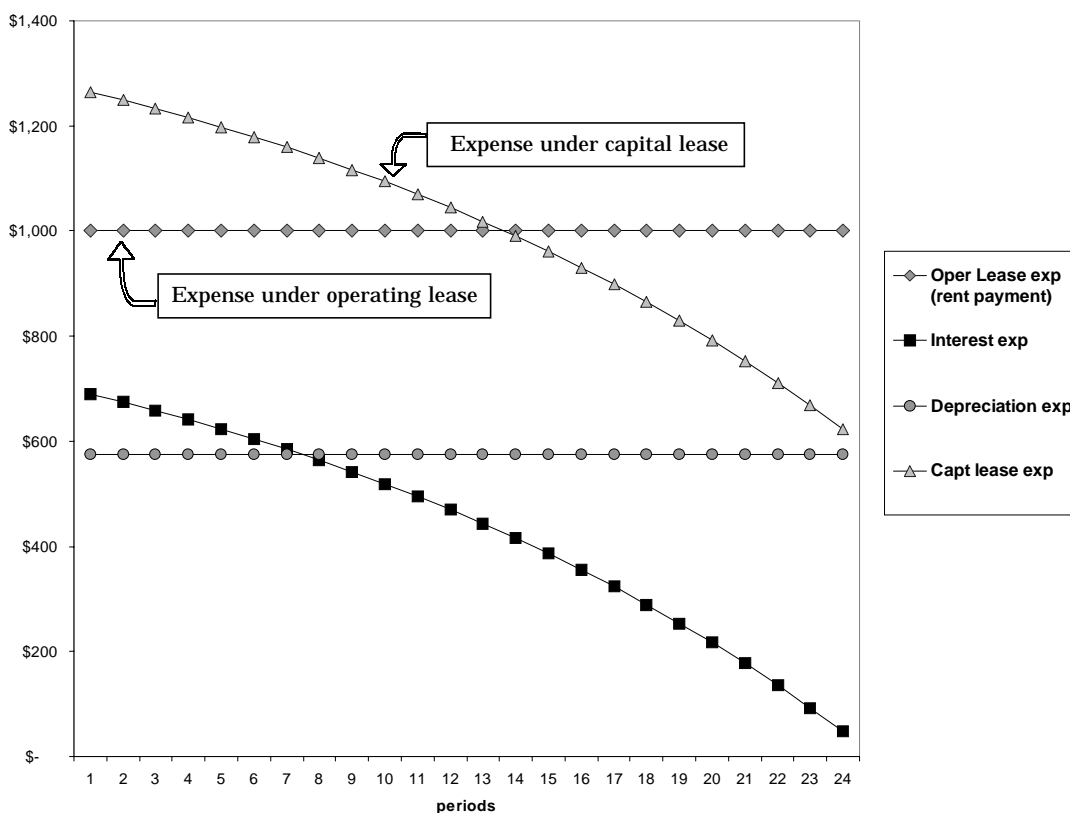
In addition to assessing risk, decision makers frequently estimate the intrinsic value of equity based on expected future performance. The analysis often uses measures of current and past earnings in developing expectations. Figure 1 describes how operating vs. capital lease treatment affects earnings.<sup>14</sup> Total recognized expenses over the life of the lease are the same under both methods. In early years, interest expense plus depreciation expense under capital lease accounting exceed rent expense (the lease payment) under operating lease accounting.<sup>15</sup> If a company's leasing activities are stable and if new leases are priced comparably with old leases, then recognized expenses are similar across methods.

<sup>14</sup> See Imhoff et al. (1991) for a similar graph with more detailed discussion.

<sup>15</sup> Under certain combinations involving short lease terms and significant amounts of guaranteed residual value, it is possible for expenses in the early years to be lower under the capital lease method.

**FIGURE 1**  
**Income Statement Effects Over Time under**  
**Operating and Capital Lease Accounting by the Lessee**

Amounts based on 24 lease payments of \$1,000, 5% interest per period.



Ro (1978), Cheng and Hsieh (2000), and Imhoff et al. (1993) find that, on average, net income decreases when unrecorded leases are capitalized. In contrast, operating income increases because it excludes capital lease interest expense. A natural question arises as to whether the difference between capital lease expense and operating lease expense is useful in making economic decisions.

A common test of decision usefulness estimates the amount of stock returns associated with a unit of earnings, known as the “earnings response coefficient” or ERC. Differences in associations between returns and earnings across accounting methods reveal which method best reflects the market’s perception of performance. However, the difference in earnings under the operating vs. capital lease methods is modest and unobservable for most lessees, and I am aware of only one published ERC study—Cheng and Hsieh (2000). They collect the income effect of capitalizing leases from retroactive restatements made when SFAS No. 13 was initially adopted. When the ERC is estimated using traditional linear regressions, the coefficient on the income effect is insignificantly different from zero. However, when a rank regression method is applied to the half of their sample with the largest income effects, the coefficient is significant.

Given the ambiguous results in Cheng and Hsieh (2000) as well as their limited sample size, it is difficult to draw definitive insights for the G4+1 proposal. I am confident that a few companies will report a nontrivial reduction in net income if all operating leases are capitalized; a high growth retail chain is a likely candidate. However, for the most part, the net income effects should be modest, and it is unclear whether traditional research approaches could detect stock market reactions to the income effects even if they exist.

Another research approach that uses stock returns as the dependent variable is the event study. Instead of estimating the relation between stock returns and earnings with and without capitalizing leases, an event study tests whether lessee stock prices changed in predictable ways during the deliberations of new accounting rules. Ro (1978) and El-Gazzar (1993) find evidence of some lessees experiencing negative abnormal stock returns around the issuance of ASR No. 147 and SFAS No. 13, respectively. Murray (1982) does not find significant abnormal returns for 18 lessees that changed their accounting in response to SFAS No. 13. Overall, the evidence suggests that companies with extensive unrecorded leases suffered declines in stock prices when lease accounting rules changed.

Should we conclude that shareholder value will be destroyed if the lease rules are changed again? I doubt it. First, as seen in a prior section, financial statement users appear to constructively capitalize operating leases using the SFAS No. 13 disclosures, so the market should anticipate the additional reported liabilities from adopting the G4+1 proposal. Second, the negative returns could reflect expected costs of violating debt covenants, but several authors, such as Frost and Bernard (1989), suggest that the costs of technical default due to mandated changes in accounting principles are small. Thus, I doubt that the returns studies to date yield many insights for the G4+1 proposal.

### ***Research Related to Actions by Lessee Management***

Positive accounting theory asserts that when managers have a choice between accounting methods, they attempt to minimize any adverse “economic consequences” of accounting (Watts and Zimmerman 1978).<sup>16</sup> Even in situations where accounting methods are not

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<sup>16</sup> Economic consequences refer to differences in the company’s cash flow caused by different accounting methods. The differences can be due to debt contracts, management compensation contracts, or regulatory interventions based on reported income statement or balance sheet numbers.

optional, anecdotal evidence suggests that managers alter real decisions or actions to obtain their desired accounting result. The new reporting mandated by ASR No. 147 and/or SFAS No. 13 eliminated some mechanisms for hiding unrecorded lease liabilities. For example, SFAS No. 13 could increase reported leverage because it added the 90 percent-of-fair-value criterion. Three studies provide evidence on managers' incentives for capitalizing leases.<sup>17</sup>

Imhoff and Thomas (1988) examine the following items from corporate financial reports in their study of whether financial statement preparers change their behavior in response to new accounting standards:

- (1) the present value of unrecorded financing lease commitments under ASR No. 147,
- (2) the present value of all financing leases (the liability recognized under APB No. 5<sup>18</sup> plus the disclosed but unrecognized amount under ASR No. 147),
- (3) the present value of capital leases under SFAS No. 13, and
- (4) the disclosed amounts of lease commitments that are not financing leases under ASR No. 147 or capital leases under SFAS No. 13.

In 1978, the present values of SFAS No. 13 capital leases were on average smaller than the present values of all financing leases in 1976. If lease contracts remained constant over this time period, then the opposite result is expected because the capital lease criteria in SFAS No. 13 added the 90 percent-of-fair-value test as an indicator of a capital lease. Companies with large amounts of disclosed but unrecorded financing leases experienced the largest reductions in reported present values over this period. Concurrently, disclosed operating lease commitments increased during the transition from APB No. 5 to SFAS No. 13, and companies with larger unrecorded amounts of financing leases disclosed larger increases in operating lease commitments. Overall, the results point to a substitution of operating for capital leases during the lengthy transition period associated with SFAS No. 13. Managers apparently avoided the mandated capitalization in SFAS No. 13 by restructuring their unrecorded financing leases as operating leases.

El-Gazzar et al. (1986) examine whether the use of capital leases prior to SFAS No. 13 can be explained by various managerial incentives. They find a positive relation between the use of operating lease accounting and (1) several measures of leverage and (2) the existence of a management compensation scheme based on *after-interest* income. Recall from Figure 1 that after-interest income is lower under capital lease accounting in the early years, whereas pre-interest income is always higher under capital lease accounting.

Bazley et al. (1985) study the factors that led Australian lessees to voluntarily disclose their future lease payments prior to 1980. The probability of disclosure was higher for lessees that were (1) subsidiaries of foreign companies, (2) of medium size, and (3) members of the food, drink, and tobacco industries.

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<sup>17</sup> In addition, Imhoff et al. (1993) examine a different corporate decision: how to reward the CEO? The authors relate CEO pay to ROA and ROE ratios both before and after constructive capitalization. Constructively capitalizing leases does not help to explain executive compensation. Either compensation committees do not adjust for off-balance sheet leases, or the adjustments are too small to be detected with their research design.

<sup>18</sup> APB No. 5, *Reporting of Leases in Financial Statements of Lessees*, required leases with terms similar to installment sales to be recorded as capital leases.

How does this set of evidence relate to the G4+1 proposal? The evidence in Imhoff and Thomas (1988) that management modifies existing lease agreements to avoid crossing the threshold for capitalization seems very relevant. The four bright-lines in SFAS No. 13 provide targets for managers to shoot under.<sup>19</sup> Although the G4+1 proposal removes bright-lines from the lease accounting guidance, Example 7 (Nailor and Lennard 2000, 66-67) discusses how lessees could avoid capitalizing most long-term leases by adding nonsubstantive renewal options to the lease agreement. The evidence above suggests that if new accounting standards provide a loophole, lessees will exploit it.

### **Future Research on Lessee Accounting**

What aspects of lessee accounting provide future research opportunities? The basic question of whether shareholder risk reflects the leverage implicit in unrecorded lease commitments has been answered in the affirmative. Less is known about the corresponding lease asset or the negative effect on shareholders' equity from constructive capitalization. One possible asset-related study involves whether financial statement users make the obvious constructive capitalization adjustment—add the debt implicit in the operating leases—but fail to make the other more subtle adjustments—add a lease asset at an amount less than the lease obligation.

I see little future in studying decisions based on net income because companies must have rapidly growing portfolios of leases before the differences in net income are large enough to be amenable to empirical testing. However, studies of decisions based on the components of income could be fruitful. The use of capital vs. operating lease accounting systematically affects certain components of income. As shown in Figure 1, operating income is always larger under capital lease accounting because the yearly depreciation expense is less than the yearly rental payment for any positive implicit interest rate. Moreover, when EBITDA—earnings before interest, taxes, and depreciation—is used to measure corporate performance, leases cause a dollar-for-dollar reduction in performance under operating lease treatment, but the depreciation and interest expenses associated with capital lease treatment are ignored. Thus, if debt covenants, management compensation contracts, or other decision contexts use either pre-interest or pre-depreciation measures of performance, then we may rightly expect lease accounting to make a difference. El-Gazzar et al.'s (1986) finding that lease capitalization is less likely for companies with bonus plans based on post-interest income provides an example of the benefits from focusing on the components of income.

### **LESSOR ACCOUNTING**

In contrast to the many and varied empirical research studies of lessee accounting, I know of only two empirical studies on lessor accounting, and both are descriptive in nature.<sup>20</sup> I speculate that the lack of lessor research occurs because the effects of lessor accounting choices are more subtle and less visible. Reporting the rental agreement as a capital lease instead of an operating lease does not add new liabilities or assets to the lessor's balance sheet. Instead, amounts are reclassified from "property under lease" to "lease receivable." These amounts are similar at lease inception. As time passes, operating

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<sup>19</sup> Due to the widespread abuse of these bright-lines, a survey of accounting academics, regulators, and practitioners found that SFAS No. 13 was voted the least favorite FASB standard (Reither 1998).

<sup>20</sup> Shanno and Weil (1976) analyze the "separate phases" approach to computing lessor income under a leveraged lease, but they do not conduct empirical tests.



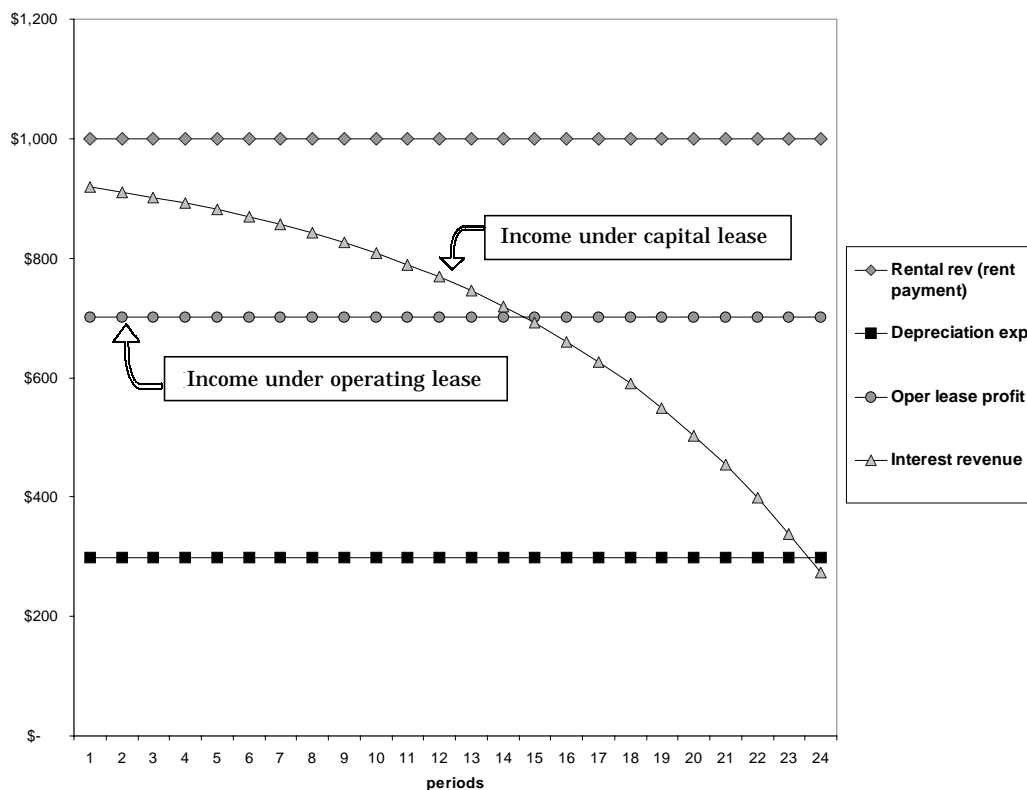
leases produce rental revenue and depreciation expense, whereas capital leases generate interest revenue. These income flows are displayed in Figure 2.<sup>21</sup> Capital lease accounting causes the lessor to recognize larger amounts of income in the early years of the lease. The “front-loading” occurs because interest income is recognized using a constant rate times a shrinking lease receivable.

The G4+1 proposal requires lessors to capitalize all noncancelable leases and to separately identify the present values of the lessee commitments vs. the residual value of the leased asset. In addition, the proposal appears to limit amounts of income the lessor could recognize at inception (Nailor and Lennard 2000, 100).

<sup>21</sup> Figure 2 depicts a direct-financing capital lease before taxes. Under a sales-type capital lease, the lessor also recognizes income at inception equal to the present value of future lease payments plus the expected residual value minus the lessor's book value of the property. The timing of tax benefits such as deductions for accelerated depreciation and (in the old days) the investment tax credit greatly complicates the picture.

**FIGURE 2**  
**Income Statement Effects Over Time under**  
**Operating and Capital Lease Accounting by the Lessor**

Amounts based on 24 lease payments of \$1,000, 5% interest per period,  
residual value of \$2,000, direct financing lease.



### **Evidence Concerning the Accuracy of Residual Value Estimates**

The two empirical studies of lessor accounting address the role of residual values. When the residual value is overestimated, the lessor records a loss at the end of the lease term, thereby overstating income during the earlier periods. By overestimating residual value, lessors can front-load their income under either operating or capital lease accounting. Financial statement users are then surprised by the loss recognized at the end of the lease.

Powers and Revsine (1989) perform simulations based on Comdisco, a lessor of mainframe computers. They find that when the ratio of residual value to original cost is 5 percent lower than expected, Comdisco's income in the last year of the lease declines by 114 percent. Johnson et al. (1993) analyze data from the Survey of Industry Activity published by the Equipment Leasing Association. They find that the ratio of expected residual value to original cost increased after the Tax Reform Act of 1986. The authors speculate that lessors increased their expected residual values in order to offset the higher costs of leasing imposed by the new tax rules. Interestingly, the average reported recovery of residual value exceeds 100 percent, and thus most lessors are not overstating near-term profits by assuming excessive residual values.

The two studies on lessor accounting lend some support to the G4+1 proposal to separately report lease receivables and estimated residual values. In addition, recommendations 8D–8F of the proposal (Nailor and Lennard 2000, 100) limit the recognition of gains at lease inception. Thus, the proposal appears to address the researchers' recommendations that financial statement users need better information about residual values.

### **Future Research Related to Lessor Accounting**

Lessor accounting provides several opportunities for future research. One avenue is the link between estimated residual value amounts, earnings quality, and decision making, although a lack of consistent and meaningful disclosures limits the availability of historical data. A related study could decompose the lessor's asset into the receivable from the lessee and the residual claim on the asset to see whether decision makers place different weights on the components. Although several researchers examine the value relevance of balance sheet components, I do not recall any decompositions based primarily on the riskiness of the underlying future benefits.<sup>22</sup>

### **SUMMARY**

The main finding from past research is that academics and analysts are well aware that operating leases provide lessees with off-balance-sheet financing. Several studies report that market measures of shareholder risk are associated with the obligations implicit in the lessee's unrecorded leases. One can view this evidence as supporting the representational faithfulness of capitalizing all lease commitments as proposed by the G4+1. Also, several studies report links between management actions and the classification of their leases. Evidence that managers are willing to modify lease contracts to avoid capitalization (Imhoff and Thomas 1988) suggests that the debate over a new approach to lease accounting should recognize that loopholes are likely to be exploited.

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<sup>22</sup> Chaney and Jeter (1994), among others, separate deferred tax liabilities and assets from the rest of book value, but their concern is the failure to incorporate the time value of money.

Future research on lease accounting is warranted in several areas. The paucity of existing research makes lessor accounting a fertile area. The main issues are how the front-loading of lessor income and the decomposition of the lessor's asset affect decision makers. Such tests could use archival data in a valuation context or laboratory data in a behavioral experiment. In addition, the literature could benefit from some descriptive information of how lessors' incomes and assets change under operating vs. capital lease treatment.

The most obvious opportunities in lessee research relate to the components of income. This is because capital vs. operating lease treatment has small and unobservable effects on bottom-line income for most lessees. Performance measures such as operating income and EBITDA are systematically higher under capital lease accounting. Such "above-the-bottom-line" performance measures are being emphasized more often in corporate earnings releases (Weil 2001). Whether the incentive to report a better performance measure is sufficient to reverse lessees' past preference for operating lease accounting remains to be seen.

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