OFF-BALANCE SHEET ARRANGEMENTS – REVISITING CONSTRUCTIVE CAPITALIZATION OF OPERATING LEASES BY LESSEES

Bob G. Kilpatrick, College of Business, Northern Arizona University, Flagstaff, AZ 86011-5066, 928-523-7399, bob.kilpatrick@nau.edu
Nancy L. Wilburn, College of Business, Northern Arizona University, Flagstaff, AZ 86011-5066, 928-523-7399, nancy.wilburn@nau.edu

ABSTRACT

This study presents the 2004 financial statement impact of constructive capitalization of operating leases for nine firms originally included in a study by Imhoff, et al.[1] Results suggest that in 2004, constructive capitalization of operating leases has a larger, material impact on reported liabilities and financial ratios than in 1987. Indeed, large increases in absolute dollar measurements of debt created by capitalizing operating leases were observed. Moreover, relative changes, measured as the average percentage increase in total debt and by two key financial ratios, debt-to-assets and ROA, suggest that these firms use operating leases to a larger extent than in previous years.

INTRODUCTION

Pursuant to the Sarbanes-Oxley Act, SEC staff produced a report in June 2005 concerning arrangements with “off-balance sheet implications,” special purpose entities, and transparency of filings by issuers. Most notable among the areas of off-balance arrangements is accounting for operating leases. Indeed, the SEC study estimates that the total (undiscounted) cash flows committed associated with off-balance sheet operating leases for all U.S. financial statement issuers at over $1.25 trillion. The purpose of this paper is to document our study to determine whether the use of operating leases as source of off-balance sheet financing has increased on a *relative* basis over the past several years. In carrying out this study, we replicate the constructive capitalization of operating leases for nine companies originally examined by Imhoff, et al. [1]

CONSTRUCTIVE CAPITALIZATION OF OPERATING LEASES - PRIOR STUDIES

In a series of papers, Imhoff, et al. developed procedures for constructive capitalization of operating leases. This process involves using the operating lease footnote disclosures to estimate the amount of debt and assets that would have been reported on the balance sheet if the operating lease had been treated as a capital lease from its inception. A uniform set of assumptions was applied to a sample of of firms for the 1987 fiscal year. This constructive capitalization was based on six uniform assumptions:

A interest rate of ten percent for discounting the required minimum lease obligation;
An average remaining life of 15 years for operating leases;
End-of-year cash flows;
The unrecorded asset equals 70 percent of the unrecorded debt;
A combined effective tax rate of 40 percent; and
The net effect on the current period’s net income of zero.

DATA AND PROCEDURES

Of the 14 companies in the Imhoff et al. [1] study, five have since either ceased operations or were acquired by another company. We examined the 2004 financial statements of the remaining nine companies, using footnote disclosures to estimate the balance sheet impact of capitalizing operating leases using the same procedures employed in the Imhoff et al. [1] study. In two instances (A&P and Delta), the constructive capitalization of their operating leases was so large that they resulted in negative equity, thereby making comparisons of the traditional debt / equity ratio problematic (i.e., interpreting the percentage change in a debt / equity ratio that changes from a positive to a negative number is meaningless). Therefore, we recalculated the data from the Imhoff et al. [1] study to show percentage changes in total liabilities, total assets, and total equity, as well as converting the leverage ratio from their original debt / equity ratio to a debt / asset ratio. While the percentage changes resulting from constructive capitalization of the operating leases are not as dramatic (i.e., the denominator is a larger number), it did enable us to use all nine of the remaining companies.

IMPACT OF OPERATING LEASE CAPITALIZATION – 2004 COMPARED WITH 1987

The mean lease liability (discounted) for the nine companies rose from $722.6 million to $2,649.6 million, an increase of $1,927 million, or 267%. While this appears to be a staggering increase in the amount of operating lease liability, as a percentage of total liabilities, this amount represented 72.8% (1987) and 87.7% (2004), a *relative* increase of about 20%. The mean lease asset, as a percentage of total assets, rose from 32.4% to 36.7%, a *relative* increase of 13%, while the mean decrease in equity, as a percentage of total equity, rose from 21.4% to 30.0%, a relative *decrease* of 40%.

Impacts on the financial ratios are more moderate. The average percentage increase in the 1987 leverage ratios (total debt to total assets) for the nine companies was 28.9%, while the average percentage increase in the 2004 leverage ratios (total debt to total assets) for the nine companies was 33.6%, a 4.7 percentage-point increase. Similar impacts were found in the ROA measures. The average decrease in ROA in 1987 for the nine companies as a result of capitalizing operating leases was -23.7%. For 2004, the decrease in ROA was 25.0%, a 1.3 percentage-point decline.

SUMMARY AND FUTURE ANALYSIS

Results suggest that not only does operating lease capitalization continue to have a material impact on financial statements and the resulting financial ratios, but also that, relative to 1987, the impact is even more significant. These results provide further evidence suggesting that the FASB should reexamine the current all-or-nothing approach to classifying leases as either capital or operating and require capitalization of all noncancelable lease obligations. At a minimum, the FASB should require additional disclosures for operating leases to include the amount of implied interest in noncancelable lease obligations and the net book value of the related leased asset.

REFERENCES

[1] Imhoff, E.A., R.C. Lipe, and D.W. Wright, "Operating Leases: Impact of Constructive Capitalization", *Accounting Horizons*, 5(1) (1991), pp. 51-63.