

LEASING AND ACCOUNTS PRESENTATION: DOES IT DISTORT INVESTMENT DECISIONS?

by

Trevor Wilkins

Senior Lecturer in Financial Accounting
University of Queensland

Banking groups have been writing equipment leases for many years, either directly or through leasing subsidiaries. In the last decade or so, an increased number of industrial companies have utilised leasing as an alternative to finance medium-term machinery and equipment acquisitions. Precisely how such leases fit into the determination of financial capacity is still unresolved.

The effect of the capitalisation of leases according to the 1976 U.S.A. Financial Accounting Standards Board criteria, on investment of loan officers' assessments of lessee firms' credit-worthiness and net worth, is also questionable. This issue has remained controversial in the financial and business communities in USA, Canada, UK, Australia and other countries where relative growth in lease financing over the last decade has been significant.

Lease accounting and disclosure requirements were debated vigorously before the issuance by the FASB of SFAS No. 13 in November 1976, and are of ongoing concern to FASB and the leasing industry. FASB Action Alert No. 79-10 (March 8, 1979) indicates that the FASB is possibly considering the imposition of more stringent lease capitalisation criteria. The basic issue of concern is the belief that capitalisation, which results in a deterioration in a company's investment ratios, may result in a deterioration in credit ratings and affect the consequent availability and cost of financing. This concern is apparently still very real. There is evidence that the perceived impact of capitalisation has induced companies to take actions to reduce the effects of leasing on reported debt/equity ratios. These actions include the renegotiation of existing lease contracts and the structuring of new contracts so that capitalisation criteria are avoided, as well as increasing purchasing relative to leasing and changing established methods of financing.

Although either lease capitalisation or disclosure of financial information about leases solely in notes to financial statements has the same economic effect on a company's total cash flows, the apparent belief is that the alternative methods of accounting *do* affect investment and loan officers' credit evaluations and decisions. Increased lease capitalisation, it is assumed, would make it more costly or more difficult for lessee companies to raise necessary finance.

This argument was repeatedly raised by those submitting positions and comments on previous FASB discussion memoranda and exposure drafts. Unfortunately, little empirical research has investigated whether loan officers would react differentially to lease capitalisation.

Commenting on this point, Sprouse noted:

... while we have obtained considerable information about how others think loan officers would react to any increased capitalisation of leases, relatively little information has been received thus far about how loan officers themselves think they would react. On this particular question there is an unfortunate lack of information from those who could offer the most convincing answers:¹ (Emphasis supplied).

The related issue for which there is also little relevant research is the question of whether financing by lease, rather than by term loan, has an effect on the ability of a company to raise additional finance. Lease brochures and pamphlets produced by lessor and lending institutions specialising in lease financing claim in some cases that lease financing has a number of financial advantages over alternative debt finance which enable a company to increase its aggregate volume of credit finance available. However, these claims rest on the premise that investment and loan officers do not perceive lease obligations as equivalent to obligations under term loan financing even though they are both essentially alternative methods of

financing which involve similar commitments of fixed payments against a company's future cash flows. These commitments, in turn, reduce a company's ability to meet obligations to other creditors.

This article covers a brief description and summary of the results of a study undertaken in Singapore. The study assessed the impact of alternative lease accounting methods (capitalisation and supplementary footnote disclosure versus footnote disclosure alone), and alternative equipment financing methods (financial lease versus term loan) on default predictions and lending decisions. The study was undertaken in Singapore where there are large numbers of corporate lenders available from the many international banks operating in the republic. Gaining the participation of experienced staff, who were either expatriates from overseas countries working in affiliate banks in Singapore or local Singaporeans who had been exposed to overseas training, policies and procedures, enhances the applicability of the research findings to other countries. The majority of the loan office participants in the study were volunteers from U.S. banks, although a number were from various other Canadian, European, Australian and Asian banks operating in Singapore. In the last decade, Singapore has developed into one of the world's leading financial and banking centers, with most of the top hundred banks in the world, represented in the republic. As a city, Singapore ranks fourth in the world in terms of number of banks present, next only to London, New York and Hong Kong.

DESCRIPTION OF THE STUDY

Fifty-two persons from 35 different banking groups operating in Singapore evaluated hypothetical loan applicants constructed as realistic cases. The impact of the alternative accounting and financing methods was assessed by presenting case materials with different accompanying sets of financial statements to three groups of participants. Those in Groups 1 and 2 received financial statements which reported that a significant proportion of the fixed assets were financed by financial leases. Group 1 financial statements capitalised these financial leases according to FASB criteria. Group 2 financial statements disclosed information about the leases only in footnotes. Group 3 financial statements reported that all fixed asset financing was by term loans.

Identical term loan applications and descriptive background information about the applicants which would normally be requested in a real lending context accompanied the different sets of financial statements

presented to the three groups. Differences in assessments of ability to repay specified term loan amounts requested and differences in maximum amounts that would be loaned to the applicant companies were then measured.

Two sets of financial statements were presented to each participant. The financial statements were constructed so that one company (LGL) would be perceived as "moderately" levered and the other (HGL) as "highly" levered. Besides allowing for the leverage effect to be assessed within each sample group, this step made the cases more realistic. Surveys of U.S., Canadian and U.K. firms reported by Ferrara et al indicate that more intensive leasing is associated with higher leverage, and that more highly levered, riskier firms anticipated a greater impact from FASB capitalisation requirements on their lease purchase decisions and capitalisation circumvention activities. Each participant then made assessments of each applicant company's ability to repay two separate term loan amounts requested, and a maximum term loan amount decision for each company.

The alternative methods of lease accounting resulted in material differences being reported in the two hypothetical loan applicants' leverage ratios. Total debt to equity ratios of both sets of financial statements for the three groups is shown in Table 1.

Table 1
Comparative Leverage Ratios

Company Financial Statements	Lease Capitalisation Group 1	Lease Footnote Group 2	Term Loan Financing Group 3
LGL Company "Moderate" Leverage	1.1	.5	1.0
HGL Company "High" Leverage	2.0	1.1	1.9

Questionnaire

The questionnaire asked participants to assess whether each of the two applicant companies would have the ability to repay two separate 4-year term loan amounts of five million and one million Singapore dollars respectively (US\$2.4m and US\$5m) on an 11 point scale ranging from 1 (= certainly will not repay) to 11 (= certainly will repay). The loan officers were also asked

to state the maximum amount they would be willing to lend to each applicant.

Applicant Firms

Three years of audited sets of financial statements, including summarised notes to the accounts, were constructed for each of the two companies. The companies were described as being engaged in the manufacture and sale of domestic electrical appliances in the home market and for export. This industry was chosen because a high proportion of loan officers in Singapore have had experience with term lending to companies in this and similar light manufacturing industries.

Loan Application

The loan applications by the respective companies were developed in consultation with experienced loan and investment officers. Sufficient information was given to allow the expected return from the loan to be calculated. The application stated that the interest rate would be 1 per cent over prime interest rate and collateral business the equivalent of an additional 1 per cent spread. Information on future collateral business, such as letters of credit, bills and foreign exchange dealings that would be directed to a bank by having the applicant as a customer, is important to an assessment of the overall return and is a consideration which also enters the loan decision process.

An assessment of risk associated with the loan could be made from other information provided which enabled survey participants to assess the respective company's past performances and to form an opinion of their management. Such other information given was

- (i) the purpose of the loans (4-year secured term loans [fixed charge] to purchase essential machinery and equipment in order to upgrade and increase capacity of assembly lines)
- (ii) three years of past audited financial statements
- (iii) information on security offered
- (iv) estimated cash inflows that would be generated by the new investments
- (v) information that the loans would place no restriction on dividend payout or working capital.
- (vi) a typical Singaporean credit report from the company's bankers of "satisfactory", and
- (vii) other information contained in the various company descriptions on the companies

activities, management, ownership, control, past growth rate, customers and suppliers.

Prior to being administered, the case problem was reviewed and pre-tested by an experienced staff officer. This ensured that the materials were realistic, included most of the character, collateral and capacity factors normally requested in a real term lending situation, and were expressed in bankers' jargon.

The participants evaluated the cases in the presence of the researcher at conference rooms/meeting rooms at their various banks. Each was requested to "think aloud" while evaluating the cases. This allowed insights into the computational and cognitive adjustments made while evaluating the financial statements prepared according to the alternative lease accounting and financing methods to be gained.

Data Analysis and Results

Table 2 shows an analysis of the maximum loan amounts that the loan officers stated they would lend to each of the two companies.

Table 2
Maximum Amounts that would be Loaned
(Sing \$'million)

Company	Group 1 Capitalisation	Group 2 Footnote	Group 3 Term Loan Financing
<i>LGL</i>			
Mean	5.88	5.52	5.41
Std. Deviation	4.12	2.12	2.43
<i>HGL</i>			
Mean	2.00	1.82	2.17
Std. Deviation	1.62	1.62	2.42

Table 3 shows an analysis of the ability to repay assessments (on the 11 point scale) for each of the two separate term loan amounts.

Relevant statistical tests (Analysis of Variance), using ability to repay and maximum amount loaned as the respective dependent variables, were used to assess the effects of the alternative methods of lease accounting or different methods of financing among the three groups. The effects of the differential leverage and amount of loan requested within each of the three groups were similarly assessed by this

Table 3
Ability to Repay Assessments

Company	Term Loan Amount	Mean and Std. Deviation	Group 1 Capitalisation	Group 2 Footnote	Group 3 Term Loan Financing
LGL	\$5 m	Mean Std. Deviation	8.35 1.16	8.05 2.01	7.76 1.56
	\$1 m	Mean Std. Deviation	9.17 1.28	9.47 1.28	9.76 .75
HGL	\$5 m	Mean Std. Deviation	5.17 2.45	4.29 2.22	4.47 2.52
	\$1 m	Mean Std. Deviation	7.00 2.52	6.35 2.39	7.23 2.77

statistical test. Results of these tests indicated no significant difference among the three groups regarding method of lease accounting or financing, but a significant difference within groups. While the participants apparently perceived the high-levered company as a risky proposition and responded differently to the differences in "real" leverage and amount of loan requested, they did not respond differently to either the alternative methods of lease accounting or to the alternative method of financing.

Interpretation of the participants statements and the nature of the adjustments to financial statements and calculations made also supported the statistical results of the study. Leases, whether capitalised or disclosed only in footnotes, were similarly treated as liabilities in debt/equity and other related ratio calculations and cash flow projections. Similarly, amortisation of leased assets was added back to net profits together with depreciation of other fixed assets in the same manner as depreciation of fixed assets financed solely by term loans. Participants in all groups appeared to be cognizant of the liability and future cash flows impact of the (equivalent) capitalised or footnoted lease payments or term loan principal and interest repayments in their evaluation and/or computations.

Conclusion and Implications

Results of this study suggest that investment officers are not "misled" by the alternative methods of lease accounting, and perceive leases to be essentially a form of funded debt. It appears that most are well

aware of the negative impact of non-capitalised financial leases on the debt-equity ratio, and make appropriate adjustments to financial ratios and cash flow profiles when analysing and evaluating applicant lessee companies.

The statistical and verbal results of this study also support what is commonly stated in the literature and internal bank training manuals that leasing is really a form of debt financing, and that both leasing and debt financing's required fixed payments, which have a comparable impact on a company's subsequent ability to finance, are equivalent determinants of financial risk. Claims of lessor and lease finance companies with respect to "greater credit-worthiness" of lease financing over alternative debt financing, as well as "off balance sheet financing" may thus be overstated.

While it appears that evaluations and financing decisions are not affected by lease capitalisation requirements, prescription of capitalisation may be of benefit to this financial statement user group. Time involved in adjusting financial statements is no longer necessary, and comparisons with industry "benchmark" ratios published by mercantile agencies are facilitated.

SELECTED REFERENCES

- Ferrara, W.L., J.B. Thies and M.W. Dirsmith, *The Lease-Purchase Decision*, (NAA, 1980).
 Sprouse, R.T., 'Role of the FASB', *Journal of Commercial Bank Lending*, (January, 1976), pp. 26-34.